

MIDLANDS STATE UNIVERSITY



FACULTY OF ARTS

DEPARTMENT OF DEVELOPMENT STUDIES

**DISSERTATION TOPIC: LIVELIHOOD STRATEGIES FOR COMMUNITIES IN
DROUGHT PRONE AREAS. A CASE OF MWENEZI DISTRICT ZIMBABWE**

BY

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SUPERVISION ACKNOWLEDGEMENT FORM

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LIVELIHOOD STRATEGIES FOR COMMUNITIES IN DROUGHT PRONE AREAS: A
CASE OF MWENEZI DISTRICT, ZIMBABWE

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A dissertation submitted to the Department of Arts, Midlands State University in partial fulfilment of the requirements for the Bachelor of Arts Honours Degree in Development Studies.

DEDICATION

I dedicate this project to my lovely mother, Siyzeneni Mbedzi and my uncle Mufaro Mbedzi.

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I am very grateful for the diligent assistance, guidance and mentorship that I was given by my supervisor Mr. Munhande who made the writing of this dissertation a sounding success. I would like to acknowledge the guidance of the good Almighty God in my life. Without you God, I would not have made it. Teach me to love you more. I would like also to acknowledge the steadfast love, caring and financial support I received from my mother. She vehemently stood with me throughout the challenges that I faced. May God bless you. To my sister Bianca, I owe it to you and you will soon enjoy the benefits of my struggle. I appreciate your help and may God bless you all. I also want to acknowledge the people in Mwenezi district for providing me with data during this study. I would also like to thank my friends Delight Runyowa, Joseph Makari ,Charles Mtandwa and Ireen Madara . Your unwavering support made my project a success.

ABSTRACT

The study focused on the investigation of the livelihood strategies of people living in Mwenezi district. The study looks at the challenges in implementing the livelihood strategies. It identified the vulnerabilities to drought that people face in Mwenezi. Interviews were conducted and each respondent from a selected household was asked questions and responses were organized so that conclusions can be drawn. The study also attempted to highlight challenges of drought in Mwenezi. Agriculture and the economies in Sub Saharan Africa are highly sensitive to climatic variability. Drought in particular represents one of the most important natural factors contributing to malnutrition and famine in many parts of region .Literature has shown that drought has been the most devastating condition that poses the greatest natural hazard. The study went on to investigate the sustainability and effects of the livelihood strategies implemented in Mwenezi. The overall study findings show that despite having increased livelihood interventions in Mwenezi, the extent to which they contributed to livelihood improvement was limited. The study shows that despite the decline in agricultural production, it remains the major livelihood activity. Agricultural activities such as small grain production and livestock rearing experienced a decline but were partially revived through external support from both the third sector and the government.

LIST OF FIGURES

Figure 1: Evidence showing loss of biodiversity in Mwenezi.....

ACRONYMS

FAO	Food and Agriculture Organisation
IPCC	Intergovernmental Panel on Climate Change
ZIMSTAT	Zimbabwe National Statistics Agency
ZIMVAC	Zimbabwe Vulnerability Assessment Committee
HIV	Human Immunodeficiency Syndrome
ISAL	Internal Savings and Lending
AIDS	Acquired immune Deficiency Syndrome
NGO	Nongovernmental Organisation
CA	Conservation Agriculture
AREX	Agricultural Extension Officer

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INTRODUCTION

Zimbabwe suffers from El Nino phenomenon time again and over the years communities in Zimbabwe have evolved livelihood strategies in order to cope with the adverse effects of the vagaries of the weather caused by El Nino induced droughts. Areas in Masvingo Province, Matabeleland South, Matabeleland North and Midlands recurrently suffer below normal rainfall which impacts negatively on foods. Droughts in these areas leave communities food insecure and their livestock especially cattle ravaged by lack of adequate grazing land .Such drought effects also cascades down to other services such as negative impacts on school attendance by pupils as well as causing early marriages, prostitution ,migration , broken families as well as spread of diseases like HIV/AIDS.

Communities in Zimbabwe have taken steps to ensure survival against droughts in their areas albeit seemingly insurmountable challenges. Droughts have caused a domino effect by triggering other challenges .According to National Drought Monitor Centre (2005), drought is considered to be a major instrument driving people into chronic poverty and keeping them in the state for many years even after the breaking of the drought. Droughts in Southern parts of the country of which Mwenezi is part of has caused migration of family heads and young men to South Africa .This leaves families without enough labour to produce their own foods resulting in malnutrition, prostitution, diseases and ultimately deaths. Thus in this context ,this study is focusing on the community induced livelihood strategies in drought prone areas in Zimbabwe in general and Mwenezi district in particular.

BACKGROUND

Drought is Africa's principle type of natural disaster. Droughts however defined are frequent and severe in many African countries as a result of the extreme variability of rainfall in the extensive arid and semi-arid areas of the continent and the poor capacity of most African soils to retain moisture. Droughts accounts for only 8% of natural disasters globally, it poses the greatest natural hazard in Africa accounting for 25% of all natural disasters on the continent occurring between 1960 and 2006. According to IFAD (1994) Widely quoted estimates suggest that at least 60 percent of Sub Saharan Africa is vulnerable to drought and perhaps 30 percent is highly vulnerable. Hulume (1992) suggest that moreover, parts of the Sahelian belt have been coping with an increasingly dry regime, rainfall is significantly below the norms of the period prior to the 1960s. Since the 1960s rainfall in parts of the Sahel and Southern Africa has been significantly below the norms of the previous 30 years. Moreover the prospects of an El Nino effect has led to more focus on the impact of drought in Sub Saharan Africa. According to the United Kingdom Department of International Development, 326 million people suffer drought conditions time and again.

Furthermore, the World Bank postulates that Sub-Saharan Africa is largely drought prone which calls for innovation in order to cope with the negative aspects of droughts. Sub Saharan Africa is largely drought prone because of high levels of poverty which worsens livelihoods. Sub Saharan Africa by virtue of being poor is vulnerable. Rural areas suffer most due to their reliance on rain fed agriculture. The vast majority of small holder farmers in Sub-Saharan Africa are dependent on rain fed agriculture for their livelihoods and they are often afflicted by the vagaries of climate change. For this reason, Africa is now associated with drought and its major accomplice, poverty. Drought impacts are more noticeable in Sub Saharan Africa. A drought in 2012 that affected more than 20 million people galvanized the international community to act

In Southern Africa, El Nino induced drought have caused havoc on livelihoods on communities in the region .Food insecurity will persist and actually get worse in some regions over next years. According to the Famine Early Warning Systems Network, food insecurity will worsen between January and March 2017.Drought has typically been perceived as a problem principally of agriculture in particular food supply. Droughts accounts to 80% of the loss of life and 70% of the economic losses in Sub Saharan Africa. Droughts directly affect production, lives, health livelihoods, assets, infrastructure that contribute to food insecurity and poverty. In Lesotho, 709 000 people were identified by the Lesotho Vulnerability Assessment Committee as to be food insecure at the height of the lean season. People living the HIV/AIDS are more moderately malnourished. In Malawi 6.5 million people are expected to be in need of humanitarian food assistance. The latest food security and nutrition carried out by the Mozambican government indicates that 2.3 million people are already food insecure in Mozambique. The Zambia's Disaster mitigation and management unit identified 975 000 people who are suffering from drought in Zambia. The Zimbabwe Vulnerability Assessment Committee estimates that 2.2 million people require immediate food assistance across 60 rural districts of Zimbabwe. Results from the Swaziland Vulnerability Assessment Committee indicate that 350 000 people are in need of emergency food assistance in Swaziland.

Such drought impacts make it imperative to devise livelihood strategies for vulnerable communities. What exists in Southern Africa wholly are stop gap measures or ad hoc measures. The livelihood strategies lack sustainability which worsens impacts and drought conditions recur again. Drought has a covariate or widespread nature which can cross national borders making informal risk management arrangements ineffective. This has led to an increase in the number of people affected, rising economic costs and increasing humanitarian assistance for the rising numbers of affected people. Over the four decades

since the 1960s, Africa stands first in drought frequency with a total of 382 reported drought events that affected 326 million people.

Agriculture in Zimbabwe contributes to 19 % to the country's Gross Domestic Product .According to Madzvamuse (2010) approximately 80% of Zimbabweans depend on agriculture which is mostly rain fed for their livelihoods. Once Zimbabwe was a food exporting nation with the country recording surpluses in food production almost every year. In recent years, the nation's crop production largely declined and one of the main contributing factors of this has been attributed to erratic and sub normal rainfall amounts. Of late, droughts have been crippling the nation and have contributed to the already low life expectancy levels and high level of emigration. The cumulative occurrence of droughts in rural Zimbabwe since 2002 has culminated in the stagnation of rural livelihoods which have been enormously agro based .This deliberation has not only entrenched rural poverty but has seen the introduction of new strategies such as conservation farming and food handouts all of which have failed to usher comprehensive remedy primarily because of the palliative nature of the solutions.

Droughts have been by far the most significant threat to Zimbabwe compared to other natural disasters with huge economic, environmental and social costs. More than half of the population live in rural areas where the general quality of living is low and less prepared to deal with problems brought about by droughts. The government and Non-governmental Organisations lack sustainable livelihood strategies in many parts of Zimbabwe. The government through the ruling party has tended to offer food packages based on political lines endangering of those not inclined to the ruling party. These measures only serve the communities temporarily such that they suffer again as soon as drought recurs.

According to Moyo (1998) the land resettlement program of year 2000 though noble was rather chaotic without proper planning of land use patterns and training of new farmers. Also NGOs in Zimbabwe have done a noble job in ensuring drought mitigation but they have been at odds with the ruling party being accused of wanting to foster regime change agenda. NGOs have also put their focus on peripheral issues that do not emphasize sustainability should the NGOs leave the area.

One major issue in Zimbabwe's drought prone areas has been the negative impact of the donor syndrome. Communities are now over reliant on donor support in almost everything such that ability to produce own food has been eroded. Also donor assistance has resulted in torn apart communities since donors only seek the very vulnerable rather than to feed the whole community .In this context , sustainable livelihood strategies require a serious examination and this study seeks to do just that with focus on rural Mwenezi .

Masvingo Province experiences worst food deficits as it falls under agro ecological region 5 characterised by low and erratic rainfall, averaging 350mm per year according to the Metrological Services Department. Communities are battling with the scorching heat and have not been spared from the El Nino induced drought as hunger is stalking the province. The majority of the district are not expecting to harvest anything as drought ravages in the rural areas.

Droughts will always continue to occur and this calls for well thought out livelihood strategies .The area under focus is remote, former tribal trust land of Nuanetsi (Mwenezi) and largely dry and throughout the large part of the year. The drought prone district has a population of 126 000 approximately and largely poverty stricken. Literacy levels are low, although the government program of education for all has improved access to education. The area is well known for its beef industry in good rainfall years but these good rainfalls are

sparse. The area therefore needs a relook on livelihood strategies due to the increase incidence of drought.

According to the Zimbabwe Vulnerability Assessment Committee, Mwenezi District was rated number three on food insecurities .Mwenezi District is in region five which experience erratic rainfall patterns .The hard hitting drought in Mwenezi has backtracked developments villagers concentrate all efforts and resources on securing food due to the El Nino induced drought. Drought is a situation that is feared and that alone makes it makes it worse .It must be taken as a situation to bring about development. The majority of households in Mwenezi depend on agricultural production and cattle reeling The small amounts of rainfall have created a desire amongst households in Mwenezi to shift more towards livestock farming especially cattle and goats although the majority of households indicate that they have not been able to restock since the drought of 1992.According Zimstat, Mwenezi has an average of 80.9% drought prevalence.

PROBLEM STATEMENT

The majority of rural households in Mwenezi depend on rain fed agricultural production and livestock rearing. The erratic weather patterns have shifted and backtracked agriculture leaving people in dire poverty. According to Nangombe (2001), more than half of the population live in rural areas where the general quality of living is low and are less prepared to deal with problems brought about by droughts. Hence villagers in Mwenezi by virtue of being poor are vulnerable to drought and are less able to cope with the effects of drought.

AIM

To explore livelihood strategies of drought prone communities in Zimbabwe.

OBJECTIVES

- To establish livelihood strategies in Mwenezi district
- To assess sustainability of livelihood in Mwenezi District
- To establish effects of livelihood strategies on the general development of the area

QUESTIONS

- What are the livelihood strategies implemented by people in Mwenezi?
- What challenges do they face in the implementation of livelihood strategies?
- What are the effects of the livelihood strategies?

SIGNIFICANCE OF THE STUDY

This study aims to provide a new focus to sustainable livelihood strategies to rural communities in Mwenezi District in particular and Zimbabwe and the region in general. It seeks to inform the donor community about a refocus on possible livelihood strategies in areas they operate. The study informs policy makers on the need to shift the traditional ad hoc approach to livelihood strategies and adopt new thinking that promote sustainable livelihood strategies. This study should be viewed as a contribution to the research community on livelihood strategies in drought prone areas like Mwenezi district .It should provoke thought and trigger further research. Communities themselves should also benefit from the study.

RESEARCH METHODOLOGY

This section presents methodological approaches that are to be employed in carrying out the study. It outlines the approaches that are to be taken in gathering relevant data and information for this study. It also presents the analytical tools that are to be employed in analysing the data in line with the objectives of the research. Therefore, this research is

grounded in qualitative methodology and its research design is case study. According to Parker in McQueen et al (2002) qualitative research demands the greater involvement of the researcher. Dawson et al (2002) defines a research as a structured enquiry that utilizes acceptable scientific methodology to solve problems that create new knowledge that is generally applicable. Irny et al (2005) pinpoint that research methodology is a way to systematically solve the research problem. The strengths of using qualitative methods are that they generate rich, detailed data that leave the participants' perspectives intact and provide a context for their behaviour. Respondents provide their own explanations in a participatory exchange with interviewers. According to Creswell (2009) qualitative believes in words and open-ended questions and it is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem.

Targeted Population

The research will be conducted in Mwenezi district, which is located in Masvingo Province. Each district is divided into political and administrative boundaries called wards. These wards are subdivided into VIDCOs or villages. Therefore, the study is carried out in all the wards .The population of the drought prone area is estimated to be 126 000.

Sampling design and sample size

A sample refers to a smaller proper subset of the population and sampling therefore refers to the systematic selection of cases for inclusion in the study or this is a process of choosing participants for the performance of the study. The sample size depended on the total number of the target population from which the sample was drawn. Sampling is the inclusion or exclusion criteria for certain components from a population. Punch (1998, p193) argues that sampling size is very important because one cannot “study everyone everywhere doing everything”. Sampling can be used as a method that can limit the amount of data collected to

achieve the aims of the study. This is because of time frame and financial constraints. Therefore, the targeted sample size was 10 people in each ward accessed by the researcher.

Sampling Technique

Random sampling technique was used to select respondents from each household for interviews. The researcher picked respondents at a regular interval. According to Panneerselvan (2004) random sampling is a form of probability sampling whereby each unit of the population has a probability of being selected as a unit of sampling. The researcher used random sampling because it can give the most reliable representation of the whole population and it is free from bias (Williman 2005). Random sampling was also used by the researcher because the population is very large and it is homogeneous whereby all targeted people are more vulnerable to drought. Therefore, not all people in Mwenezi district were chosen.

Research Techniques

These are steps taken in administering instruments and collection of data from subjects under study. Data collection is the gathering of information needed to address a research problem (Chiromo, 2004). The researcher used household interviews, questionnaires, interviewing key informants such as Chiefs and Headman and personal observations. Personal observations are used to see the lands from which people derive their livelihoods. The survey can also provide detailed demographic profiles to shed further light on some grey areas. The researcher will be an instrument for data collection, via methods such as household interviews

Ethical considerations

The Researcher shall uphold confidentiality of participants through promoting anonymity like not writing their names on the questionnaire. There will not be any sharing of any participant

to a third person. All information will be collected in confidence and will be reported in anonymity, with no direct reference to respondents' identities. The researcher also respects the privacy of respondents by upholding their autonomy. This is because the invasion of privacy can lead to the infringement of individual's autonomous right to protect what is personal to them, according to Kelman in Hammersley et al (2012). Permission to carry out the study will be sought from the councillors, Headman and District Administrator.

Literature review

Drought has been a very sensitive issue in Zimbabwe in general and a major cause of concern on Zimbabwe's history in particular. As such, various literatures have been written down by various scholars in an endeavour to conceptualize the concept of drought as well as its impact on communities. An evaluation of these views given by scholars discloses a number of interesting arguments.

Gadgil and Yadaman (1987) defined the drought with a period having less than 10% probability of occurrence of rainfall. Thiruvengakachari (1988) confirmed that the rainfall use efficiency varies both over time and space thus limiting the use of rainfall as a sole indicator of drought. Palmer (1965) defined drought as a situation when the actual rainfall is less than the rainfall which is climatically appropriate for the existing conditions. Louks and Vasiliades (2004) suggest that there are four main types of droughts namely meteorological drought, hydrological drought, agricultural drought and socio economic drought.

Agriculture in Zimbabwe contributes to 19% of the country's GDP .According to Madzvamuse (2010), approximately 80% of Zimbabweans depend on this agriculture which mostly rain is fed .Once Zimbabwe was a food exporting nation with the country recording surpluses in food production almost every year. According to Chipindu (2008), of late

droughts have been crippling the nation and have contributed to the already low life expectancy levels and high levels of emigration.

Chipindu (2008) further suggests that the cumulative occurrence of droughts in rural Zimbabwe since 2002 has culminated in the stagnation of rural livelihoods which have enormously been agro based. According to Unganai (2012) droughts have been by far the most significant threat to Zimbabwe compared to other natural disasters with huge economic, environmental and social costs. Zvigadza et al (2010) suggests that the agricultural sector is usually the first one to be affected by droughts given its dependence on soil and water which can be rapidly depleted during extended dry periods. The approximately 80% of the total population which depends on agriculture in Zimbabwe are the most susceptible to shocks from droughts occurrences. Zvigadza et al (2010) further suggests that more than half of the population live in rural areas where the general quality of living is low and less prepared to deal with problems brought about by droughts. He goes on to assert that children and women are more affected as compared to men whom most work in town.

The Sustainable Livelihood Framework is an analytical framework that provides a way of understanding the factors that influence people's ability to achieve sustainable livelihoods in a chosen circumstance. It offers both a conceptual and programming framework for sustainable poverty reduction. Unlike more traditional approaches that have sought to tackle poverty by identifying and addressing needs of poor people, the SLF seeks to improve their lives by building on what they have, their assets according to the UNDP(1999). Baumann (2000) points out that the SLF was not intended to be a sophisticated model for theoretical analysis, but one oriented towards a comprehensive and practically focused understanding of grounded realities that could directly or indirectly inform development interventions. Chambers (1995), who introduced the concept of sustainable livelihoods in a 1987 paper, indicates that the SL approach facilitates a holistic view of what resources, or combination of

resources, are important for the poor, including not only physical and natural resources but social and human capital as well.

DFID (2002) notes that the SLF is founded on a belief that people require a range of assets to achieve positive livelihood outcomes. No single category of assets on its own is sufficient to yield all the varied livelihood outcomes that people seek. Ellis (1998) points out that access to livelihood assets determines the level and extent of diversification in any situation. The particular context determines accessibility and control of these assets and the direction of diversification.

CHAPTER 1

VULNERABILITY FACTORS FOR PEOPLE IN DROUGHT PRONE AREAS

Naumann et al (2013) is suggestive of the fact that understanding people's vulnerability to drought is complex because this depends on both biophysical and socio economic drivers of drought impact that determine the capacity to cope with drought .Sen (1999) argued that, prevalence of drought and decline in food availability should not necessarily lead to famines and loss of livelihoods. Whether food availability decline would lead to disaster will depend on capability failure which in turn depends on market access and people's social, economic and political entitlements. According to Eskuri (2005) because of heavy dependence on rain fed agriculture, about 60% of Sub-Saharan Africa is vulnerable to frequent and severe drought.

In the case of Mwenezi, site visits, newspaper reports and interviews carried out by the researcher have unearthed quite a number of vulnerability factors in this drought prone area. By vulnerability, it is meant the inability of a system or unit to withstand the effects of a hostile environment According to the Federation of Red Cross and Red Crescent societies, vulnerability can be defined as the diminished capacity of a group to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard. A drought prone area is defined as one in which the probability of a drought year is greater than 20%.Vulnerability factors include poverty, desertification, natural disasters ,diseases, low rainfall , extreme weather and climatic conditions as well as famines.

1.1 Desertification

Local leadership lamented a slow but sure death of the district through desertification. According to Tadesse (1998), if crops fail, subsistence farmers have no alternative means to

provide food, rather they are forced to exploit land resources including fragile ones for survival and inevitably they become both the victims and willing agents of environmental degradation and desertification. A recent site visit to Mwenezi indicated that many crop fields got water logged as a result of cyclone induced downpours. The crops simply wilted and people are starring famine of unprecedented proportions. According to the Department of Agriculture and rural extension (AREX), 93% of cultivated land was negatively affected by cyclone Dineo in the district. Vegetable gardens were washed away.

Mwenezi suffers from an El Nino phenomenon. El Nino is the warming up of the Equatorial Pacific Ocean resulting in extreme weather conditions across the world. According to the European Commission, the intensification of El Nino will see growing desertification .Desertification is the turning of productive land into a desert .According to United Nations Convention to combat Desertification, deserts are growing by 150 square kilometres a day especially across Africa. Mwenezi is a dry land where the impact of climate change and desertification are more pronounced.

Deforestation due to man's decisions to expand cultivation and ranching to meet an increasing demand for land forced by an ever increasing population has cumulated desertification in Mwenezi .According to chief Maranda ,people are moving to settle in Mwenezi area hence they cut down trees in order to make houses and other tasks. According to Zvigadza et al the uprooting of fodder shrubs for fossil fuel puts man and livestock in direct competition with each other and this coupled with destructive grazing results in environmental destruction. Desertification in Mwenezi results in persistent degradation of dryland and fragile ecosystems. Mwenezi is well known for cattle ranching hence overgrazing is the major cause of desertification. There are too many cattle that are grazing in same spots that makes it difficult for the plants to grow back.

Also desertification in Mwenezi has been attributed to incorrect farming practices such as stream bank cultivation as well as ploughing too deeply along the slopes. This is evidenced by riverbanks which were washed away during the cyclone Dineo. Climate change is another cause of desertification in Mwenezi. As the days get warmer and periods of drought become more frequent, desertification becomes more and more eminent. The area is developing into no tree zone except only small thorn trees which are not helpful to the survival of people are thriving as illustrated by the picture below.

Fig 2: Evidence of loss of biodiversity in Mwenezi



1.2Poverty

Poverty makes people vulnerable and limits their choices. Hellemuth et al (2007) argues that generally, high levels of chronic poverty contributes to low adaptive capacity to drought and threatens their lives and livelihoods of the poor more than other social groups. Poverty

remains high with national poverty rates of more than 40%. According to Zimbabwe Vulnerability Assessment Committee 2015 assessment, Mwenezi is one of the most food insecure district with an estimated prevalence of 31% at the peak of 2015-2016 lean season. This is indicated by low income, social vices like early marriages, and prostitution and high levels of school dropouts. The Masvingo mirror reported that Mwenezi tops the household poverty prevalence rate with 79.4% of its inhabitants being poor while 26.2% of them are extremely poor. According to Zimstat, Mwenezi had an average poverty prevalence of 80.9%. It has been reported that since 2010 or so poverty stricken Mwenezi villagers resorted to eating baboons. The animal is still under threat from the villagers who in 2016 were still feeding on baboons.

According to the United Nations anti desertification chief, increasing drought and aridity linked to climate change and land degradation are becoming a major threat to food security and poverty reduction efforts. In addition in one of the Mwenezi's main centres, Rutenga, the evidence of those escaping from rural poverty for the few opportunities at the centres is evidenced. For a place that is frequented by travellers, prostitution is rife and the charge is as little as 2 dollars per sex session. Also poverty in the district is caused by remoteness to urban centres and other modern factors like electricity and also unfair trade for their livestock and crops.

Comment [s1]:

1.3 Low rainfall

According to statistics from the Meteorological department, Mwenezi lies in region 5 generally characterized by low rainfall. Apart from the 2016- 2017 agricultural season, other seasons have seen highs of only 50mm of rainfall per year. The district is prone to drought and experiences low mean annual rainfall. The rainfall in the district is too low and erratic for the reliable production of even drought resistant food crops and farming has to be based

on the utilization of veld alone .This rainfall is little by Zimbabwe standards and vanishes before crops ripen leaving villages without enough food provisions.

Rainfall is a major contributor to better yields .Its shortage brings untold suffering to the community for they depend on rain fed agriculture for their survival .Coupled with poor sand soils lower rainfall amounts quickly enable moisture stress in crops to come in, also high rainfall leaches the soils .According to Gumbo (2016) Zimbabwe's economy is agro based and climate change may negatively affect agricultural production systems. According to the World Food Program, Mwenezi is one of the most affected district by the impact of poor rainfall linked to El Nino .The district is in region 5 and therefore receives low erratic and poorly distributed rainfall averaging 350 mm in a normal year. Yields from rain fed agriculture have been reduced in Mwenezi as a direct consequence of such scenarios as low rainfall.

1.4 Extreme weather and climatic conditions

Mwenezi district is also vulnerable to extreme weather and climatic conditions. Climate change threatens both frequent and severe events in Mwenezi. According to Williams et al (2011) the increased frequency of drought events over the past years is likely to continue as long as global temperatures continues to rise. This poses increased risk to the communities in Mwenezi who frequently face potential food shortage. The 2015-2016 agriculture season witnessed a series of heat waves recording temperature averages of record breaking 45 degrees yet the yearly average sits around 29degrees. Water sources in Mwenezi are drying up and villagers are forced to walk 15 kilometers to where pockets of water are still available. Children have been forced to drop out of school due to the food and water shortages rather they help their parents walk long distances to fetch water. One of the respondents mentioned that children fetch water 10kilometers from home and walk 15 kilometres to school. This has

adversely affected the health of the people especially women. Most respondents complained of suffering from chronic headaches due to walking long distances in the heat and carrying heavy buckets of water.

Also according to the meteorological department 2016-2017 records of over 200 millimetres of rainfall in a day is too extreme judging by the fact that the district usually gets only 50 millimetres on average per year. This has left farmers unable to plan ahead as fields are being water logged due to the heavy rains. The farmers were not able to go to the fields in fear of the heavy down pours which took away the rooftops of heir huts. Malaria is also ravaging communities as well due to flooding caused by cyclone Dineo in Mwenezi. Moreover climate change will greatly exacerbate weather risk poverty relations as poverty limits the capacity of people to manage weather risks while the same risks contribute to locking people under poverty.

Comment [s2]:

1.5 Diseases

The remoteness of the district from other areas has not spared it from the scourge of HIV/AIDS. Cases of the malady have been reported to be on the increase in recent years as the highly mobile youth that venture to South Africa in search of jobs gets exposed to the virus and bring it back. According to the Vulnerability Assessment Committee, the increase in poverty is compounded by HIV/AIDS pandemic. An estimated 25-30% of the productive 15-49 year old age group is living with HIV .HIV has lowered life expectancy in Mwenezi as young girls have resorted to prostitution as a livelihood strategy. According to some sources they get paid as little as 50cents per sex session. The life expectancy has been lowered from 61 years to 43 years presently.

In addition, designation of Rutenga growth point and Mwenezana estates as focal points of development attracted a significant number of development players through both formal and

informal employment .However, concentration of people at designated growth points has been associated with the promotion of the spread of HIV/AIDS. Major roads and railway lines pass through the district bringing in inflows of human traffic, a potential conduit for HIV infection.

Malaria is also ravaging communities in Mwenezi because of flooding. Mwenezi district recorded a high number of cases in 2017 due to the flooding caused by cyclone Dineo. Also four cases of cholera have also been reported in Mwenezi in 2016 as a result of rain shortages and low fresh water supplies. People resort to drinking contaminated water. Tuberculosis is another diseases ravaging the communities in Mwenezi. It is a contagious bacterial lung diseases that occurs mainly in areas of poverty and deprivation and spreads via the coughs and sneezes of an infected person. TB becomes a threat to the district as the affected do not finish their treatment regimes according to the sister in charge at Neshuro hospital. When these diseases strike, there are two immediate consequences which are a rise in health cost and a drop in labour supply.

1.6 Conclusion

In conclusion the community in Mwenezi is succumbed to quite a number of vulnerabilities. Drought remains to be the most important threat to food production and nutritional securities .Drought represents one of the most important natural factors contributing to famine, water stress as well as disasters .Its effects are inter temporal and long lasting .Farmers are prevented from adopting profitable technologies and practices that are perceived risky hence creating a nexus that increases the cycle of vulnerability and depletes the capability to overcome hunger and poverty.

CHAPTER 2

DOMINANT LIVELIHOOD STRATEGIES IN MWENEZI

Despite the continuing economic centrality of agriculture in the district, people engage and pursue diverse non-farm livelihood activities to cope with diverse challenges and risks such as drought. According to Scoones (1998), the combination of livelihood resources (different livelihood assets) are resulting in the ability of people to follow the combination of livelihood strategies. According to Ellis (2000), households adopt different strategies according to their particular asset and asset status. The people in Mwenezi have adopted various livelihood strategies which include agriculture which is the dominant one, conservation farming, small livestock production, water harvesting, off farm activities, migration to mention a few.

2.1 Agriculture

Mwenezi district people engage in various livelihood strategies just like many other people across Africa. Studies done elsewhere for example in Ethiopia and India concluded that people living in drought prone areas engage in agriculture as the dominant livelihood strategy. Agriculture is the most important activity in Ethiopian economy constituting 46% of GDP and more than 80% of exports. India ranks second worldwide in farm input. Zimbabwe is an agricultural country as over 90% of its people till the land for survival. According to Hansen et al (2004), agriculture is the cultivation and breeding of animals, plants and fungi for food, fibre, biofuel, medicinal plants other products used to sustain and enhance human life. Jury (2000) suggests that agriculture was the key development in the rise of sedentary human cultivation, whereby farming of domesticated species created food surpluses that nurtured the development of civilization.

The same with Mwenezi as remote as it is, agriculture is the dominant livelihood strategy. They produce small grain and some nuts which they consume or sell. Almost every home in

the district practice agriculture. Agriculture is a positive program that not only contributes to the uplifting of the rural communities but also protecting the trees enhancing the protection of the planet earth through conservation of the natural resources. It promotes economic self-reliance and has become a life sustaining source of income and livelihoods particularly the poor.

Small grains include millet, rapoko and sorghum. Food security for each home is judged by the amount of produce .According to Chief Maranda, even those in other areas trade their products for grain, hence the dominance of agriculture . Other households have indicated that they have used their surplus maize to purchase livestock especially during these drought times .Reflections of Chief lands officer for the district indicates that no other livelihood strategy surpasses agriculture.

It is a known fact that access to agricultural inputs and technology enhances yields provided that the rains are good. In Mwenezi all the respondents reflected that the government has been providing inputs however on partisan lines. Fertilizers and improved seeds are known to increase yields, but their absence to some of the community members is making crop cultivation uneasy for the farmers. The source of seeds as well as fertilizer has been through formal markets but the prices are prohibitive and as such farmers' yields are low.

In addition conservation farming is a system or practice aimed at conserving soil and water by using surface cover or mulch to minimize surface runoff and erosion and improve the conditions for plant growth .According to FAO it's a concept of resource saving agriculture crop production that strives to achieve acceptable profits together with high and sustained production levels while concurrently conserving the environment .It minimizes crop loss in drought and improves food security .According to farmer Sithole in Mwenezi , the World Food Program is implementing a small grain promotion program under the Food security

climate resilience facility (FoodSecure) during the 2015-2016 lean season with the practice of conservation farming methods. It involves planting crops directly into the land which is protected by mulch using minimum tillage or no tillage techniques. Farmer Sithole is now a target of beggars this season as he boasted of plentiful sorghum and millet flourishing on the small piece of land at his homestead.

Small grain production is the way to go in Mwenezi .Farmer Sithole harvested enough for consumption and surplus for sale. The practice of conservation farming methods to fully utilize the little moisture can yield plenty. Farmers were exposed to smart agriculture practices through training on production of small grains and conservation farming, reaper time system and hand hoe basin. The small grain production pilot program launched in Mwenezi district in October 2015 in partnership with Agritex has benefitted more than 550 small holder farmers and boosted crop production even amidst the harsh season and El Nino induced drought.

2.2Water harvesting

Water harvesting is another relevant livelihood strategy in the district. The purpose of harvesting water is for watering gardens, for livestock, irrigation as well as domestic use. Small dams are an aspect of every ward. In interviews done with the chief lands office gleaned information show that all 27wards in the district have at least one small dam project. Some like ward 9 has 3 dams .The District Development Fund (DDF) has sunk over 500 boreholes in the district to assist communities .Farmers were encouraged to use water harvesting techniques so as to improve the efficiency of the little rains they are receiving. According to Janiwiak (1988), rainwater harvesting it is the accumulation and deposition of rainwater for re use rather than allowing it to run off. It is one of the simplest and oldest methods of self-supply of water for household usually financed by the user.

In Matande village a garden project made possible by the World Food Program under the productive assets creation program with the Mwenezi Training Centre has seen water harvesting as a success. The project began in 2012 where 250 people were involved in the rehabilitation of the dam extension of the garden and the construction of a weir .In order to harness more water, another weir was built at the foot of the nearby Matande hill to catch all the running water from the inselberg .According to the Matande garden chairperson Mr Taurai Moyo, villagers' lives have been transformed and the project has gone a long way in alleviating hunger in the dry region. Apart from providing food and nutrition security, Matande irrigation provides villagers with a reliable supply of water for livestock and domestic use. The water harvesting project has not benefitted villagers in the Makande area only but more than 500 people are also benefiting in Makotore village following the rehabilitation of Tsvimborume weir dam.

However some dams like Manyuchi dam, the 4th largest in the district still remains a white elephant. There are no irrigation schemes around it despite the fact it is at the centre of the district. Its waters are used by large concerns like Tongaat Hullets to irrigate sugarcane or by Sabot for their wild animals. According to Councillor Gilbert Gondo, the only benefit for some locals is to poach fish at the risk of being eaten by vicious crocodiles.

2.3Off Farm activities

With soaring summer temperatures and unreliable rainfall in the district making it difficult to harvest anything from the field, many people have been forced to think outside the box in Mwenezi district. This has led to livelihood diversification through involvement in off farm activities which have managed to transform people's lives. It involves participating in income generating projects. According to Chambers (1983), capabilities, assets and activities constitute livelihoods required for one to earn a living. According to Fabella (1986), off farm

income refers to the portion of farm household income obtained off the farm. Ghimire (1992) is suggestive of the fact that stagnant agricultural productivity and low returns in farming have led rural residents in Africa to look for alternative or supplemental income opportunities primarily through off farm employment. Eapen (1994) asserts that off farm employment has thus been accepted as a reliable strategy for improving the livelihood of rural households. Off farm activities like the formation of micro finance are community based livelihood strategies aimed at mitigating against low incomes for vulnerable people. Micro finance has become an important economic empowerment tool for reducing poverty across the globe .The assumption is that by improving access to credit, poor households will be able to set up micro enterprises that will generate income that is aimed at reducing poverty both at household and community levels.

There are small scale financial projects in which communities pool up their resource and give loans. These are internal Savings and Lending Scheme like Savings and Credit Cooperatives (SACCO) as well as Fushai in Mwenezi. Informal micro finance modes have become very popular with the rural population due to their accessibility, affordability and community involvement .According to the respondents in Mwenezi , they have been able to pay school fees for their children through their participation in ISALS. There are also immeasurable benefits that women gain status within the household, acquire the power to make decisions and not heavily depending on their husbands for decision making. Internal savings group have opened doors that were previously closed to the marginalized groups according to chief Maranda .Allens (2005) suggests that the availability of emergency loans permits households to avoid devastating disruption in their income generating projects. Also there is an increase in small livestock and agricultural equipment.

Off farm activities like cross border trading have also been undertaken by women. Women in Mwenezi district travel to many cities around South Africa to sell agricultural produce and

products made from natural resources .Marketing produce in South Africa is favoured because it is more profitable than marketing locally where prices are low and it earns foreign currency as well as providing access to reasonably priced goods that can be readily sold at home. Gold panning is common in Mwenezi as it has rivers whose sources are on Zimbabwe's mineral rich Great Dyke which is a rich gold belt. Young men are involved in gold panning especially during the off farm season. People in Mwenezi practice mainly alluvial gold panning. It is done especially in Wedza block, the western part of the district. This diversification is a strategy for adaptation to climate change and variabilities .According to Barnabas et al (2008) the rural off farm activities are seen as an important pathway out of poverty .Gold panning generate cash income for the rural livelihoods.

In addition, beekeeping is another off farm activity practiced in Chitanga village in Mwenezi. The opportunity has been driven by the existence of tall trees and wild plants that develop flowers in the village which attract bees. According to Wilhite et al (2000), beekeeping is an ecologically and traditionally appropriate form of income generation for communities in some of the poorest areas in African countries such as Malawi, Kenya and Mozambique. Due to recurrent unreliable rainfall pattern, the community has been forced to venture into beekeeping since they have been realizing low yields from crop farming. Most people in Chitanga village have found refuge in beekeeping as they are now able to meet the basic requirements of life. This is because of the benefits accruing to the villagers such as food, bi products, medicinal, income generation through the sale of honey. According to Kubari (2004) people in Chitanga village rely on clay pot and wood hives with each beehive producing about 15kg of honey on average and approximately 12kg once processed. Decanted into bottles of 500grams this equates to 24 bottles and sold at a market price of \$4 a bottle producing an income of \$96 making beekeeping a thriving business that is contributing invaluablely to household income. Also honey and beeswax are used to make secondary

products such as candles because selling a secondary product brings a far better return than a raw commodity.

2.4 Small livestock production

Cattle ranching is also an important activity in the area. However the community also focuses on small livestock production. According to Asresie (2015), they are domesticated animals raised in an agricultural setting to produce commodities such as food, fibre and labour .Small live stocks like sheep and goats are highly adapted to harsh conditions .According to the local authority, sheep and goats have adaptive capacities to survive in difficult environments be they extremely cold. Also there is a huge market for small livestock in Mwenezi hence it can be a viable livelihood option for the Mwenezi farmers. According to the respondents, the goat is a multi-purpose animal producing meat, hide, fibre and manure. Small livestock are also cheaper to maintain as they do not require much medical attention compared to large animals .According to Lebbie (2004), sheep and goats play a significant role in the food chain and overall livelihoods of rural households where they are largely the property of women and their children.

There is also keeping of poultry in Mwenezi .According to Sere (2009), keeping small livestock is not only a pathway out of poverty for the rural poor but also a means of spreading their risk and increasing their assets and resilience in order to cope with climate, market and disease shocks. They provide meat and eggs as well as a source of income. Poultry is usually highly marketable during the festive season where people gather and feast on Christmas as well as New Year .Almost everyone is involved in poultry keeping and selling which makes it difficult for the villagers to market their poultry. The ability to forage for themselves and natural desire to stay around the house put chickens, guinea fowls among the most vital resource of rural Mwenezi. The goat has been termed the cow of the poor in Mwenezi. It is

called so because of the animal's rusticity and cheap price. It however raises some cash to help people pay school fees for their children as well as medical care.

2.5 Interventions by the Government and Third Sector

The community in Mwenezi has been receiving maize grain through the drought relief program. The drought relief program coincides with the distribution of inputs under the presidential inputs scheme specifically meant for the vulnerable. The government through the department of social welfare is distributing drought relief aid to different parts of the country including Mwenezi where people are doing some food for work programs and projects. Villagers have praised the government for helping them through the hard hitting drought of 2016 through to 2017.

Furthermore, the World Food Program introduced small grain farming. According to the WFP donor relations and communications officer Sophia Robele, the food secure programme in Mwenezi will go a long way in changing the lives of the farmers. According to chief Maranda, the shift from maize production to drought resistant crops in Mwenezi will help mitigate the El Nino induced drought wreaking havoc. The respondents applauded small grain production as yields have improved hence boosting food security as well as health wise. The Agritex officer Mr. Godfrey Tore suggested that the adoption of small grain like millet under the WFP will alleviate food insecurity in the drought prone district. The small grain project financed by the Food Secure facility was piloted in October 2015. The objective of the project is to ensure household food and nutrition security for small holder farmers in marginal areas such as Mwenezi through capacity building and increased production of small grains. Small grains such as pearl millet and sorghum are tolerant to low moisture and drought conditions currently experienced. WFP has so far assisted 50 lead farmers and 500 ordinary farmers with seed and fertilizer under the project in Mwenezi. Small grains have

contributed significantly on household income according to the respondents. They are always on demand as people purchase them for consumption due to health reasons as well as to feed poultry. They sell them at \$15 per 20litre bucket.

Despite Mwenezi area having large water reservoirs they have remained unused. Now the villagers are harvesting the water for income generating projects following the introduction of fishery project by a local non-governmental organization, Aquaculture Zimbabwe in partnership with World Vision. The chairperson of the Mushonganeburi fishery project Mr Matausi noted that the community is now benefiting from the water in the area and this has not only improved their nutrition. Those involved in the fishery project sell dried as well as fresh fish and the amount depends on the size and quantity of the fish. According to the respondents, the fish business is highly marketable and they have been able to earn money for school fees and other needs in their households. The project with five fish ponds started in 2015 after being given 10 000 fish as a start.

In addition Heifer international a local NGO donated 26 cows to the members of the Garikai Heifer Project group in Mwenezi. According to the local authorities the aim of the project is to raise standards of living of villagers by empowering them. The Heifer project has benefited quite a number of people in the Hariyoumba village in Mwenezi. Respondents have reported that they have been able to pay school fees for their children through selling beef and milk. Therefore the government and the third sector are offering meaningful livelihood strategies in Mwenezi.

2.6 Remittances

According to the World Bank, remittances can be defined as money and goods that are transmitted to households back home by people working away from their communities of origin. Literature has discussed the importance of remittances in rural livelihoods through

migrant labour and even recorded the growing role that they are playing in rural households. Remittances have been documented to contribute to agricultural production in supplying inputs and have emerged as an alternative form of financial relief for household's productivity in Mwenezi. According to the respondents in Mwenezi almost every family has a relative who migrated to South Africa. They also acquire support in the form of food stuffs as well as medication .A significant proportion of participants indicated that cash and food remittances from labour migrants in neighbouring countries were an important source of income in Mwenezi. Berkvens (1997) study in rural Zimbabwe similarly found that most smallholder farmers diversify through migration to neighbouring countries. Although remittances are ranked the least important income source in Mwenezi, information gathered shows that a lot of people in Mwenezi are dependent on remittances from migrant labour.

2.7 Dependence on natural resources

According to Gunter et al (1990), rural livelihoods are predicted upon rural people's accessibility to natural resources such as land, water and biotic resources. The improvement of people's lives and meeting their needs has been the most crucial and priority task in the district. In rural areas livelihoods are natural resource dependent. Most of the people in Mwenezi are poor and they rely more heavily on subsistence products such as wood fuels and wild foods and on products harvested from natural areas. According to FAO, rural households throughout developing countries use food, fuel, construction materials, medicine and other products from forests and other natural non cultivated environments to meet subsistence needs and generate cash income. Access to natural resources is a fundamental concern for rural people .Natural resources play a key role in the livelihoods of local people such that when access to these natural resources is denied, local livelihoods will be greatly compromised and threatened. According to Corbeels (2014) the direct dependence on natural resources by rural communities has created a direct and close relationship between nature and

people within their localities .Women in Mwenezi travel to cities in South Africa to sell products made from natural resources.

Saith (1992) asserts that environmental resources contribute a significant portion of household income and act as a means to reduce income inequality. They provide a safety net or pathways out of poverty. Some of the respondents indicated that resources extracted from the environment contributed about the same amount of income as agricultural crops. Thus the natural environment plays a significant role in rural Mwenezi, too important to be ignored if rural livelihoods are to be understood. In the case of harvest failures, natural disasters, households engage in temporary sale of natural products for example wild fruits like mathwe in Mwenezi. The harvesting of wild fruits also provide food for immediate consumption. Also harvesting of mopane worms which are sold at a much higher price across the borders. Mopane worms harvesting is an important but seasonal activity .It used to be the golden worm but of late unscrupulous middle men rob peasants and rake huge profits themselves. Middlemen under price mopane worms from villagers and resell in lucrative markets. A 20kg bucket is sold at \$15.Nevertheless most villagers have managed to earn a living through the selling of mopane worms .According to the respondents they have managed to buy solar panels in South Africa so as to charge their mobile phones.

2.8Migration

Migration has long been an important livelihood strategy for the people in Mwenezi .According to Robison et al (1982) migration is the movement of a group of people from one place to another for different reasons .In the case of Mwenezi people migrate to work and provide for their families. The district has been characterized by seasonal migration to South Africa prior to 1980.Interviews conducted in Mwenezi revealed that the district has been greatly affected by labour migration because of drought and the district's proximity to South

Africa. This is supported by Miguel et al (2008) who estimated that by 2050, 250 million people would be forced to flee their homes due to drought, desertification, extreme weather events and climate related conflicts. According to respondents, some children deterred by the long distance and hunger drop out of school and eventually cross the border to South Africa for a livelihood. Sen (1999) has argued that if people cannot exchange their labour for a livelihood, migration will result as people exchange their labour entitlements for food. Young couples, girls and boys are migrating from the district and the remaining depend on proceeds from this labour. The criminal activities which occur in South Africa, Zimbabweans feature high. They tend to make a livelihood through stealing and at Christmas they bring goodies to their families. School fees for the remaining children is paid from South Africa, making migration a viable livelihood strategy.

Migration is seen as an enhancement strategy mainly intended to put households and their members in a better position. According to Scoones et al (2010), young men would flock to the mines in South Africa in search of work. Education in the district has been affected by these treks to South Africa because neither young men nor young women see the value of walking long distances to school in some villages when they can cross into neighbouring South Africa and get menial jobs that enable them to survive and feed their families back home. The movement is characterized as transitory. Transitory mobility is mostly undertaken by women who enter South Africa so that they can sell their produce and other items in order to feed their families.

2.9 Diversification

According to Barret et al (2001), recent studies indicate that asset, activity and income diversification characterize the livelihood strategies of rural smallholders in Sub Saharan Africa. Niehof (2004) asserts that diversification is therefore associated with both livelihood

survival and distress under deteriorating conditions as well as with livelihood security under improving economic conditions. Diversification of livelihood is a major livelihood strategy practiced by more than half of the respondents. Due to the frequency of drought a majority of households in Mwenezi undertake many activities. According to FAO (2008), the rationale for diversification is to create a portfolio of livelihoods with different risk attributes so that drought risk can be managed.

In addition, crop diversification is another strategy used in Mwenezi. According to Miguel et al (2008), crop diversification is an important farm strategy for managing production risk in small farming systems. According to Yaro (2006), it is aimed at securing better living standards by reducing risk, vulnerability and poverty increasing income, enhancing security and increasing wealth. Thus depending on one or two kind of crops considerably increases the vulnerability of farming households. The researcher asserts that crop diversification is the panacea to climate variability challenges. Given the prevalence of risk in Mwenezi, diversification may often be a strategy for survival or coping with risk especially when agriculture fails to offer sufficient means of livelihood.

2.10 Conclusion

In conclusion, drought remains to be the most important threat to food production in Mwenezi. Residents in Mwenezi district are involved in a mix of strategies to shield themselves from drought induced shocks. These livelihood strategies include agriculture, off farm activities, diversification, migration, small livestock production to mention a few. The government with compliments from the third sector has also played a pivotal role in the livelihoods of the people in Mwenezi district. Mwenezi is drought prone therefore different livelihood strategies are implemented so as to escape from drought.

CHAPTER 3

EFFECTS AND SUSTAINABILITY OF THE MWENEZI LIVELIHOOD

STRATEGIES

This chapter presents and discusses the effects and sustainability of the livelihood strategies implemented in Mwenezi district .It includes the description of the impacts of the livelihood strategies on Mwenezi people. According to Van Den Berg et al (2006) sustainability is when a project becomes self-sustaining well after an intervention has stopped. Research has shown that sustainability is a difficult task to achieve and many livelihood strategies usually disappear as soon as they start. Mwenezi District has implemented a number of strategies in trying to address the effects of drought that it is currently facing .Some of the strategies that are being implemented are conservation farming, small livestock production, agriculture, off farm activities , migration to mention a few. These strategies were effective though to a lesser extent since Mwenezi district is still succumbed and prone to drought.

Off farm activities

Testimonies from members point to a positive impact of these livelihood strategies. They also benefit in time of eventualities like deaths or sickness with cash. These internal lending and savings schemes have contributed significantly to the development of the Mwenezi area as quite a hive of activities is going on .A lot of members have boosted their shop businesses as they own cars which are always rushing up and down to buy grocery orders in Musina ,South Africa. Ordinary people have also benefited by borrowing small loans for orders and selling as well as for buying food for consumption. Some of the Fushai and Sacco members are in the brick moulding business and supplying them as well as poultry projects. According to the interviewed members, these ISALs are improving their financial security as they are an immediate solution to their cash problems. Respondents also highlighted that women are

being empowered as they are able to access funds to start up their own businesses without depending much on men therefore changing gender relations in the community.

However, records from SACCO suggest a myriad of challenges which compromises even sustainability of this activity .According to one of the Maranda SACCO board member, there is serious member drop out for various reasons. The respondents highlighted that, the 2016 cash crisis has resulted in the drop out of active members of SACCO hindering development in the area. According to the members, records prove that SACCO has been over borrowed with the steering committee being 90% borrowers. According to the respondents, repayment is a problem and the institution has simply lost its health. The respondents went on to asset that the institution has been succumbed to the 2016 cash crisis as members failed to repay the large amounts borrowed.

In addition there is no clear substantiating evidence to prove that micro finance programs have positive impacts on poverty reduction. According to the questionnaires, the available ISALS are exclusionary in that they do not assist the poorest members of the society. The community laments the fact that microfinance have not yet fully penetrated the poorer strata of society. According to chief Maranda, the marginalized people living below the poverty datum line derive fewer benefits after borrowing as they use loans more for consumption purposes.

To add more respondents argued that the micro finance program leaves participatory households in a worse off situation than before. Kiriti (2005) argues that by taking credit, people become more vulnerable since they would have exposed themselves to debt. Kiriti further argues that participation in microfinance may cause people to lose their assets since they may end up selling them to offset outstanding credits when their business ventures fail to raise enough profit. Morduch (2008) assert that micro finance is not a miracle worker of

quick fix solution against poverty and it produces different results for different people in different locations.

Small livestock production

Arex records also prove that there has been a huge uptake of small livestock production in Zimbabwe, Mwenezi in particular. In ward 9 centred at Maranda Township, peasant farmers have taken up production of goats, chicken and even pigeons. According to Farmer Mbedzi, and they sell them on market days making sizeable income. According to respondents, in 1980, average goat numbers per Family stood at 5 per homestead. Currently figures stand at a staggering 30 per household. Goat meat consumption has also increased in the district as highlighted by the respondents. According to the respondents meat is preserved by drying and smoking and can be used when other food sources are scarce. Some of the respondents testified there is a huge market for goats in nearby towns like Masvingo and Beit bridge. The prices range from \$30-\$40. This demonstrated that small livestock production can be a viable livelihood option for the Mwenezi farmers.

However, there is phenomenal increase in poultry production but it is coming as a cost. According to the respondents, most residence now rush for broilers which mature quickly and ignore indigenous breeds of fowls. According to the Chief Lands Officer of Mwenezi district, indigenous breeds play a pivotal ecosystem role and ignoring them has had negatives on the ecosystem. He argued that help clean the environment and reduce termites. According to the respondents goats and sheep no longer fetch much income on the market. They are sold at very cheap prices which cannot sustain a family for long.

According to interviewed respondents, changes in climate have altered the patterns of disease in animals as a result of change in the emergence of new parasites and syndromes and prevalence of existing diseases, putting greater pressure on livestock production and survival.

According to the local chief ,it is difficult for people in Mwenezi to control these diseases as it is costly and diseases left uncontrolled can reduce livestock numbers drastically .It therefore hinders food productivity.

According to Brooks et al (2005), livestock rearing as a tool for poverty alleviation and food security is poorly understood and is not well researched in most rural communities. Very little work has been done to further explicate poor livestock keepers as a distinct and important subset of the poor. Chambers (1989) argues that it is increasingly recognized that the application of livestock as a means of poverty alleviation, for every benefit, there is direct cost for the poor households involved. According to the Chief Lands Officer in Mwenezi district, livestock owners face increased household expenditure for animal's healthcare, fodder and water in Mwenezi. The poor farmers cannot afford to buy required injections for sick livestock hence there are little or no disease control measures in the rural areas. According to the questionnaires households in Mwenezi are poor and often lack the labour needed for sustainable livestock production.

Agriculture

Rain fed agriculture is the major livelihood strategy. According to the Chief lands officer, due to continuous cultivation for centuries and poor land management practices as well as unpredicted rainfall, the agricultural activities are not able to feed the community. The smallholder farmers earn a living in degraded areas. Land degradation often stems from the nexus between poverty and lack of capacity to invest in more sustainable agricultural practices and change extractive land use systems. According to the respondents, due to the insufficient land resource to absorb the household's full labour force endowment and rainfall pattern variability in the area, the agricultural sector is becoming a risky economic activity which has low returning incomes .Thus the farming people in the Mwenezi area are

compelled to seek out of farm or non-farm income source. According to the respondent's households in Mwenezi they have shifted more towards livestock farming due to low amounts of rainfall. Some respondents argued that agriculture however remains a dominant source of livelihood as they have focused on small grain production by practicing smart agriculture.

Agriculture on its own has stood the test of time in the district. Government has called on farmers to go for small grains in this drought prone area to have food security. However the need for making farming an income generator is surely compromising government efforts. According to chef Neshuro, in the 2014-2015 season, millet production increased but people sold much of it to raise cash for other necessities. Now people face famine induced by cyclone Dineo as they don't have grain reserve, hence small grains production is not wholly sustainable. According to IPCC (2012), an important share of the population in developing countries is dependent on agriculture for its livelihoods making these people particularly vulnerable to extreme weather events resulting from changing climatic conditions. The same can be said for Mwenezi.

According to Riebsame et al (1995), although expanding irrigation is an important strategy to reduce vulnerability of agriculture to climate risks, water resources are inextricably linked with climate and the prospect of global climate change has serious implications for water resources. According to the respondents, although Mwenezi has a huge water resource, there is a large variation in its spatial and temporal distribution. According to Barret (2004), African countries are expected to face water stress, scarcity and vulnerability by 2025 indicating that water resources are highly dependent on and influenced by climate.

Interventions by the government and third sector.

Quite a sizeable number of Mwenezi District people seek government jobs as well as employment in the third sector. This becomes a livelihood as people rely exclusively on jobs. Evidence on the ground show a number of domestic employment which people rely on for a living .Interventions by the government and the third sector have become so permanent as to warrant mention as a livelihood strategy .In Mwenezi third sector has become important to the extent of some vulnerable people depending entirely on donors and government for survival .Poverty stricken households survive entirely on government and donor handouts and this qualifies it as a livelihood strategy .According to respondents ,because of the drought they depend on handouts from the government as they are able to feed their families. According to the local chief, beneficiaries continue to appeal to government and the third sector to continue assisting them with food as it is important to them. Respondents reiterated that food aid is helping the villagers in feeding for their families.

However some of the respondents highlighted that the distribution of food aid does not offer any long term to the predicament of Mwenezi rural community. According to the questionnaires food aid is a quick fix that addresses the immediate symptoms of a much more fundamental problem. In its most unbridled and cynical manifestation it extends dependency ,distorts local markets and undermines the will of communities to adopt the farming systems that offer them the opportunity to extricate themselves from the indignity of depending upon others to feed them. According to the interviews, worse still food aid is given on partisan lines which creates enmity in the community. According to chief Maranda, non-governmental organizations are introducing tailor made projects which are partially helping the community. According to a source at Maranda high school , the school authorities requested for a school block to be built from a certain donor , instead the donor donated off layers and built a fowl run which if they are sold the money won't be enough to build a class room block. Also the

Heifer project is said to be harbouring many diseases like new castle and tick borne diseases which need to be controlled well after the donor has left. According to that respondents, it burdens the community as vaccines are very costly and none can afford them.

In addition, the NGOs operating in Mwenezi district had been spending a lot of resources from year to year but they were not able to bring feasible change on the livelihood of the community. According to chief Neshuro, this was due to the fact that lack of information on what exactly constitutes the livelihood strategy of different socio economic groups and the natural factors such as drought. The lack of such information in turn was constraining effective decisions on the type and nature of interventions and the target beneficiaries.

Migration

According to the questionnaires majority cross the border into South Africa for small jobs which has become their livelihoods. Thousands of young men and women have taken South Africa as their second home. Their families back home rely on South Africa based incomes for survival. According to the respondents, this livelihood strategy has become sustainable as school fees for children is paid straight from South Africa. Food stuffs are sent to the remaining family during Christmas holidays as well as some money to buy other necessities.

However according to chief Maranda, migration has been a catalyst in the rapid spread of HIV. According to Decosas et al, the spread of infectious diseases that are transmitted from person to person will follow the movement of people. Young men in Mwenezi leave their newly brides to go and work in South Africa to come back with this infectious disease and end up dying young. According to the respondents, HIV/AIDS is likely to sustain and even increase poverty in Mwenezi. Illness and taking care of sick family member's forces productive members of the household to give up their jobs and households may lose their

income and labour. At the same time, the household will have to spend more on health care, medicine and funeral services.

Also through migration, valuable labour is benefiting South Africa. There is no valuable labour contribution to Zimbabwe. The Zimbabwean governments invests in the education of its citizens but they go and work, buy in bulk, eat in South Africa which is a major advantage to South Africa's economy and Zimbabwe's economy is losing out. To add more there is no much remittances paid back to Zimbabwe. The South African rand is undervalued in Zimbabwe especially on the black market. Also young able bodied men and women migrate to South Africa leaving the Mwenezi community without those who are able to actively work in the fields.

In addition plenary discussions revealed that some households whose members are migrants did not benefit from remittances. This shows that having migrant household members does not guarantee remittances. According to Manyani (2010) migrant labour leads to de agrarianisation and this is worse if there are no remittances coming to the household .The absence of young men who are likely to have responsibility for important elements of production and animal husbandry reduces available labour .Most women participants agreed that it was better if their husbands and sons were at home helping the family to survive rather than migrating to neighbouring countries to look for work especially if they are sent no money back. This shows that migrant labour may indeed lead to marital breakdown and the weakening of some social bonds.

Diversification

This strategy has proved to be successful in Mwenezi with a number of respondents highlighting that they have moved to new crop varieties that are relatively drought resistance and hence can withstand the long dry spells that are rampant in Mwenezi. From the

questionnaire distributed the researcher observed that diversification of crops in Mwenezi helped vulnerable communal people secure food and at least some income even in the case of extreme events. Hence people cultivate a wide range of traditional and new cereals and pulses to spread the risks of crop failure. Crop diversification reduces the chance of total crop failure.

According to the respondents, although diversification is a common livelihood strategy in Mwenezi, not all households enjoy equal access to high return opportunities. According to Jayne et al (2010) many rural households have limited possibilities for remunerative non-farm work. Barret et al (2001) suggests that, the constraints and opportunities are unevenly distributed socially and geographically and households with better asset endowments are more likely to access better opportunities for diversification for example good market access. According to the local chief, not all people in Mwenezi are able to access the market to sell their farm produce.

Conservation Farming

In Mwenezi, district donor partnership sponsored conservation farming is practiced. This involves digging of small pits then filling them with manure before planting. This dug area is then covered with grass to conserve moisture. Due to its labour intensive nature, many people have abandoned it for traditional cropping systems. Mwenezi's farming land is very dry because of the ever scorching heat hence it becomes very difficult for the villagers to dig those pits. According to chief Maranda, only a few focal persons still practice conservation farming. Nevertheless, during the research, the researcher also noted that conservation farming in Mwenezi though it was viewed by many people as a blessing to them as postulated by Chief Maranda's wife who said that 'I am confident that by using conservation agriculture I will harvest more with limited farming inputs' while others viewed it as an additional burden to them because of its labour intensive nature.

TOWARDS EFFECTIVE LIVELIHOOD STRATEGIES FOR COMMUNITIES IN DROUGHT PRONE AREAS

Considering the research findings discussed in this study, there is no doubt that a lot is desired to be done especially in the semi-arid areas of Zimbabwe such as Mwenezi. The following recommendations should be put in place to improve the status of people in drought issues. Off farm target based livelihood strategies should have to be developed, strengthened and farm households should have to gain training on how they can run business and engage on the activities to cope with drought. All credit providing schemes in the area should have to reach the marginalized groups by constantly expanding the availability and accessibility of credit through promoting and strengthening cooperatives and the loan should also have flexible entrance criteria, duration and interest rates suitable to households who have different needs and capabilities. There is need to involve the local people in the planning of projects and decision making in order for them to feel ownership of the project instead of passing on all decision for them. There is also need for an exit plan by the implementing donor so that implemented projects will not die away with the departure of the donor .

Conclusion

Drought is a pertinent issue affecting the livelihoods and food security in human suffering due to the destruction of natural resource base upon which many livelihoods depend on. Drought impact touches the lives of all people in the society. What makes people more vulnerable to drought is the failure of the agricultural sector which is the dominant livelihood strategy in Rural Zimbabwe. People depend on climate sensitive sectors that are threatened by drought. They have limited financial, natural, physical and social capital needed for drought adaptation. Therefore Zimbabwe needs to focus on extensive research and development programs to facilitate swift responses to drought.

Drought remains to be the most important threat to food production and nutritional security .It represents one of the most important natural factors contributing to malnutrition and famine that affects the most vulnerable communities especially women and children. Risk of drought prevents farmers from adopting profitable technologies and practices that are perceived risky hence creating a nexus that increases the cycle of vulnerability and depletes the capability to overcome hunger and poverty. This is mainly because small scale farmers often prepare for the possibility of climatic shocks by engaging in conservative risk management strategies ex ante at the cost of low productivity and profitably gains. This inability to accept and manage risk and accumulate retain wealth locks vulnerable populations in poverty. Traditionally, Mwenezi households have used a mix of strategies to shield themselves from drought induced shocks. These methods have proved to be insufficient and fail to protect livelihoods in drought prone areas at times made worse by undermining investments in new technologies and practises.

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**Appendix 1: Questionnaire for Household
Livelihood strategies for communities in drought prone areas of Zimbabwe. Case of
Mwenezi district**

Introduction

I am Sandra Tembo, a fourth year student at Midlands State University doing Development Studies Honors Degree. It is prerequisite for final year students to undertake research project. I am asking your contribution by providing relevant information regarding to the livelihood strategies to drought in Mwenezi. The aim is to understand your knowledge, perception and experience of drought. The information that you are going to provide will only be used for the purposes of this survey.

Fill in the table below

1. Age Group

- a) **Below 18**
- b) **19- 29**
- c) **30- 39**
- d) **40- 49**
- e) **Above 50**

2. Level of Education

- a) No formal education
- b) Completed primary school education
- c) Completed secondary school education
- d) College or University

3. What is your source of income?

4. What is your average family income per month?

- a) \$10- \$20
- b) \$21- \$30
- c) \$31- \$40
- d) \$41- \$50
- e) >\$51

5. How does drought affect your

- a) Household food security.....
- b) Local food security.....
- c) Entitlements.....

6. How does drought change affects your climate-sensitive sectors?

a) Water sources.....

b) Forests.....

c) Gardens.....

d) Fields.....

.....

7. Are there any situations in your area whereby children may have to drop out of school to reduce family expenses caused by drought? Yes No

a) If yes what are the problems.....

.....

.....

8. What livelihood strategies are you implementing in your area?

a) Growing of drought resistant crops

b) Irrigation

c) Conservation agriculture

e) Off-farm activities

f) Early and late planting

g) Gardening

h) Growing of short season crop varieties

i) Crop diversification

9. How do your livelihood strategies you have chosen above help you to cope with the negative effects of drought?.....

.....

10. How sustainable is your livelihood strategy (ies)?.....

.....

11. What determines livelihood strategies you have chosen above? a) Education

- b) Household size**
- c) Farm size**
- d) Soil fertility**
- e) Access to credit**
- f) Access to extension services**
- g) Wealth**
- h) Climate change variables**

12. What challenges are you facing in your area in trying to cope with drought impacts?

- a) Lack of education**
- b) Lack of access on decision-makings**
- c) Lack of ownership and control of resources**
- d) Lack of access to financial resources**
- e) Lack of power and freedom of actions**
- f) Poverty**

g) Economic dependency

h) Gender roles.

13. Can you explain how each of the challenges you have chosen above affects your possibility of

adaption to drought?.....

.....

14. What are the possible knock-on effects on women as a result of the implementation of livelihood strategies in your area?

- a) Child betrothal
- b) Forced marriages
- c) Withdrawal of children from school especially girls
- d) Increased HIV as a result of survival sex
- e) Increased domestic violence as a result of beer brewing (mukwerera)

15. What awareness and/or education programs do you participate in, initiated at local government level on livelihood strategies to drought through land management?

.....

.....

16. In your own opinion, explain the effectiveness of these programs if they do exist

.....

.....

17. In your opinion, what can be done to improve the status of people in relation to drought issues?.....

.....

Thank you for your time and for agreeing to respond to this questionnaire

Appendix 2: Interview guide for Household

Interview date..... (Interviews done after consent by respondents)
Age.....years

1. What are the indicators of drought in your area?
2. How does drought affect your household food security?
3. How does drought affect your climate-sensitive sectors?
4. What livelihood strategies are you implementing in your area?
5. What challenges are you facing in trying to cope with the effects of drought?
6. What determines livelihood strategies you are implementing in your area?
7. What awareness or education programs do you participate in, initiated in your community on livelihood strategies to drought through land management?
8. What is the effectiveness of these programs?
9. What can be done to improve the livelihood strategies to drought related issues?

Appendix 3: Interviews guide for key informants

Interview date..... (Interviews done after the consent by the respondents)

Age.....years

1. What are the indicators of drought in your area
2. What livelihood strategies are implemented in your area?
3. What challenges faced by community in trying to cope with the effects of drought?
4. What determines livelihood strategies implemented by the community?
5. What awareness or education programs do the people participate in, initiated in your community on livelihood strategies to drought through land management?
6. What is the effectiveness of these programs?