

INVESTIGATING THE DOUBLE INJUSTICE OF CLIMATE CHANGE AND GENDER INEQUALITY

SAULOSI SAIDI

Thyolo

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DISSERTATION APPROVED BY:

SUPERVISOR:

Mr. M. Mkandawire Signature: 

ASSESSOR:

Signature: _____

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ABASTARCT

This study chose adaptation to changing climate as a societal response of Kamphande, Kasankha and M'bwana, T/A Namkumba in Mangochi district in investigating and explaining the injustices of climate change and gender inequality. Adaptation to climate change requires equal participation, equal access to resources such as land and credit, therefore, it can be easily used to detect the causative agent (gender inequality) to reduced responses to climate change. Gender inequalities define the access of economic activities in these villages and these are the major emitters of GHGs. This therefore means that, in these villages, women are not involved in emissions of greenhouse gases or disruption of climate but when the impacts of climate change come women suffers a lot than those who caused it. Because of poor access to resources, poverty is increasing at an alarming rate to more women, and this increases their vulnerability to climate change, this is what is being called double injustice of climate change and gender inequality.

This study was conducted based on its significance that it will help the climate practitioners and policy makers to make policies that are firm at abolishing practices that perpetuate gender inequality. It was also done by looking at its ability to help our societies to understand that, the main aim of ending gender inequality in issues to do with climate change it's not solely on support for women, it is rather a matter of creating balance in a society such that everyone is able to adapt to the impacts of climate change. The research used qualitative data that was collected through interviews and answering of questionnaires. Its analysis was done using Statistical Package for the Social Sciences (SPSS) and Excel. The researcher found out that, really there are practices that accelerates gender inequality in these villages and the developed gender inequalities compromise adaptation to climate change and finally, empowerment, education and increasing women power of decision making and participation can help women also to adapt to climate change. The researcher would want to recommend that further researches are need no the topic with full and good time and resource allocation, and that timing should also be considered when conducting further researches as this was done at a time when people were very occupied with farm activities.

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To proceed with this paper without making any mention of the following war men and appreciating their most job well done in the making of this paper, would be considered an act of war to these war men. Therefore, as an act of honour to these people, I would to love to recognize them by at least mentioning their names.

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ACCRONYMS/ABBREVIATIONS

1.	T/A	Traditional Authority
2.	IPCC	Intergovernmental Panel on Climate Change
3.	FAO	Food and Agriculture Organisation
4.	WHO	World Health Organisation
5.	UN	United Nations
6.	SDG	Sustainable Development Goals
7.	MDG	Millennium Developmental Goals
8.	DRR	Disaster Risk Reduction
9.	SFDRR	Sendai Framework for Disaster Risk Reduction
10.	NDC	National Determined Contribution
11.	USAID	United States Agency for International Development
12.	UNDP	United Nations Development Programme

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CHAPTER ONE: GENERAL INTRODUCTION

1.1 Introduction.

Our societies respond to the impacts or to the changing climate through the following three main ways; the first one is reducing greenhouse gases in the atmosphere (mitigation), second option is to reduce greenhouse warming through climatic engineering and the third one is adaptation to changing climate. Climate change mitigation refers to efforts to reduce or prevent emission of greenhouse gases. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behaviour. Climate engineering involves the approaches to change the albedo (reflectivity) of the earth (e.g. a technology that sends micro-particles into the atmosphere to increase albedo) or increasing the rate of removal of greenhouse gases.

Adaptation includes all adjustments in all responses in various aspects of human life (ecological, social, or economic systems) aimed at reducing the impacts in response to actual or expected climatic stimuli and their impacts. These adjustments can be in terms of changes in processes, practices, or structures to monitor or offset potential damages or to take advantage of opportunities associated with changes in climate.

Therefore, this study chose adaptation to changing climate as a societal response of Kamphande, Kasankha and M'bwana, T/A Namkumba in Mangochi district in investigating and explaining the injustices of climate change and gender inequality(as how men and women adapts to climate change, how does the treatments from the society of these two counterparts affect their adaptation to climate change, who is more vulnerable, more exposed to the changing climate and why, and is gender inequality accelerating all these?). This is because adaptation to climate change requires equal participation (men and women), equal access to resources such as land and credit and can be easily used to detect the causative agent (gender inequality) to reduced responses to climate change. Therefore, adaptation in this study has been defined as the inclusive adjustments by individuals and the collective behaviour of socio-economic systems to reduce the vulnerability of communities or activities to climatic change by looking at the following

three sections; what causes gender inequality in our societies, how is gender inequality compromising adaptation to climate change and what is it that women can do in the adaptation of climate change?

1.2 Background information.

Research clearly shows that women throughout the world are particularly vulnerable to the threats posed by a changing climate and these threats are accelerated by gender inequality. In countries where there is marked gender inequality, four times as many women as men die during floods (IPCC, 2001). Therefore, the extent to which changing climate brings more risks to some parts of human populations than the others greatly portrays that the inequities of wealth and power of our economies and political systems affects our societies. It is also well known that in many of the world's poorest communities, gender defines one's influence on decisions and access to resources such as land or credit (Mayesha Alam et al., 2015). These kinds of discrimination determine what opportunities people have and what obstacles they face in dealing with the impacts of an increasingly changing climate.

The dangerous effects of climate change, such as extreme temperatures and floods in these villages, poses greatest threat to people already living in poverty and who are at a disadvantage because of their state of being a woman. Therefore, adaptation to climate change seems to be a challenge in Mangochi, mostly in T/A Namkumba in villages Kamphande, Kasankha and M'bwana, because of gender inequality and poverty. These villages are filled with high cases of gender inequality mostly because of their traditions and culture, hence the need for the adjustments in these practices.

Gender inequality is a root cause of poverty, (Otzelberger, 2014) and therefore poverty hinders one's ability to learn how to adapt to climate change and its impacts. The culture in these villages expects men to be more successful than women, more educated and dominate everything including in issues to do with climate change.

This puts women at more risk to the changing climate, increases their vulnerability and exposure to the impacts of climate change. As per say, we cannot deliver sustainable development without adapting to climate change, and we cannot adapt to climate change without tackling gender inequality, (Bonewit, 2015).

The double injustice is that gender inequalities are deeply related to the unequally distributed causes and impacts of climate change on people living in poverty, mostly women, as rightly noted by Agnes Otzelberger,2014.

Poverty in our communities is generally being driven by gender inequality, this is being accelerated by climate change. Therefore, it is becoming more impossible to achieve a sustained life for many women in our communities because of these injustices of climate change and gender inequality. This is because the impacts of climate change are more devastating to people who are more vulnerable and more exposed even though they are not involved in its causing. And we now know that gender inequality, accelerated by the impacts of climate change, is one of the main reasons why disasters such as floods and extreme temperatures affect some people more than others.

1.3 Problem statement.

Over the past few years, different studies have indicated that men and women are oppositely affected by climate change. Women are affected worst by changes in climate because they are overrepresented among the poorest people in the world. This reduces their capabilities to protect themselves and their families against the impacts of climate change. It has also been noticed that women are being affected in every way by climate change problems but are never given any chance to participate in any adaptive ways of climate change. There are too much people living in poverty, mostly women, due to gender inequality and climate change is accelerating this. There is no equal access to resources between men and women in issues to do with climate change. Climate change is not affecting us equally; women are more negatively affected than men. There is also a risk that young girls have to quit school in order to help their mothers in water collection and some agricultural chores in these villages.

There are also a number of problems that specifically women face in these villages because of gender inequality, these problems are accelerated by climate change:

1.3.1 Water problems

In villages Kamphande, Kasankha and M'bwana, it's women's responsibility to collect water for the family.

In cases where there is less clean and quality water due to floods or dry spells, mostly in M'bwana village which is a little bit far away from the lake, women and their daughters have to travel long distances to find water.

This influences their workload and the time they have for other activities.

1.3.2 Agricultural problems

Climate change influences agriculture through various parameters; temperature, humidity, wind and rainfall. Crops respond very fast to the changes of climate and this have the consequences that it can no longer be possible to produce certain crops in certain areas. In these three villages, women are also responsible for producing food for the family. Therefore, with this local agriculture, women depend on natural resources and due to lack of access to resources, they cannot invest in an irrigation system and this makes them more dependent on rain. The accessibility of natural resources is influenced by climate change. If the harvest fails or diminishes due to climate change, these women earn less money and also have less food for their families.

1.3.3 Disaster problem

Changes in climate result in more extreme weather events and natural disasters. Generally, these disasters have more female than male victims. This is due to the lower socio-economic status of women that come about as a result of unequal access to resources and other necessities. Poor women can, for example, not afford protective measures against natural disasters. Moreover, the traditional role of women as caretakers makes it more difficult for women to flee because they also have to protect children or the elderly.

Justification

Since 2007, there has been more attention at international level to the human aspects of climate change, (Bonewit, 2015). During international negotiations, climate change has primarily been addressed as an economic and technical problem.

However, civil society has started to raise awareness that it is also a socio-economic issue, which affects people's lives.

Although climate change is often assumed to be gender neutral, there is evidence that women and men are affected differently. Existing gender inequality created by cultural roles and more limited access to education, resources and ownership make women particularly vulnerable. This can be explained by the dependency of these women on natural resources and their traditional household roles and caring responsibilities. Besides being victims, women have a key role to play in finding solutions, yet are underrepresented in local negotiations and policy making on climate change.

When there are any climatic disasters in rural settings, men tend to leave their communities to search for employment outside (Mayesha Alam et al., 2015). Then women become the heads of households and assume responsibilities traditionally assigned to men, but often do not have the same authority, decision-making power, or access to community services, education, or financial resources (Mayesha Alam et al., 2015). For example, a drought in Kenya where men migrated away from rural communities with livestock in search of water and pasture, and women were left in charge of households with very few resources (Mayesha Alam et al., 2015).

All these gender inequality problems in relation to climate change are primarily influenced by the beliefs, values and social expectations of these three villages that have already left women in disadvantaged states. The practice of believing that only men can own land and other big assets, run business, our communities expecting only men to go to school not girls and how our societies value men and women. These affects the direction of the community in whatsoever happens, including dealing with climate change.

1.4 Research Objectives

1.4.1 General objective

The main objective of this study was to investigate the double injustice of climate change and gender inequality that is happening to a particular group of people, mostly women in villages Kamphande, Kasankha and M'bwana, in T/A Namkumba, Mangochi.

1.4.2 Specific objective

- To determine the causes of gender inequality in a social setup.
- To identify the ways gender inequality is compromising the adaptations to climate change.
- To find out the participation of women in mitigation and adaptation of climate change.

1.5 Research questions

As each and every study is directed by what it will address, this study aimed at answering the following questions,

- What causes gender inequality in our societies?
- How is gender inequality compromising adaptation to climate change?
- What is it that women can do in the adaptation of climate change?

Significance of study

In general, the poor rely on the environment, for their livelihood. More than men, women rely on environmental resources because in many cultures they hold a smaller share of private property due to beliefs and some social expectations that perpetuates gender inequality. Women, as users of common property, are better placed to associate economic security with the value of the environment for livelihood for a range of interests. With this research, our communities will learn and understand to put aside the differences and work together towards climate change adaptation.

The climate practitioners and policy makers will also be able to make policies that are firm at abolishing practices that perpetuate gender inequality. Bridging the gap between men and women will also be possible by balancing the access to resources such as land and credit and some other important private properties, which will lessen the vulnerability of women to climate change impacts.

Our societies will also be able to understand that, the main aim of ending gender inequality in issues to do with climate change it's not solely on support for women, it is rather a matter of creating balance in a society such that everyone is able to adapt to the impacts of climate change.

CHAPTER TWO: LITERATURE REVIEW

The Injustice of Gender Inequality

The low economic status of women means that they have fewer assets, inadequate resources and no motivation. These prevents them from effectively responding to the impacts of the changing climate. Women's access to resources such as land and credit is still challenged by the gender-based discrimination (FAO 2011). Studies have also shown that in 155 out of 173 economies, there is at least a law which blocks the economic opportunities of women (World Bank 2015).

Therefore, when women lack these assets, they become disproportionately exposed and vulnerable to the impacts of climate change. For example, enjoyment of land rights is different between men and women, thus denying women a potential resource for poverty reduction because largely women depend on agriculture even though their access to land is very minimal.

This also substantiate the statement that even though women make half of the agricultural labour force in these villages, their ownership to land is not very much interesting (FAO 2011; World Bank 2011). Low socio-economic status and poverty combined puts women in a very disadvantaged state when it comes to adapt to the impacts of climate change. Roles and responsibilities of women and men at a household and community level also largely contribute to the gendered impacts of climate change.

Our societies construct norms and values that often makes women more vulnerable to the impacts of climate change. All these impedes women's power or abilities to make decisions when the impacts come because they still look forward to men to make decisions about the way forward. It is also believed that in a disaster, women and children are 14 times more likely to die than men (Brody et al. 2008) but still our societies still teach only to boys the surviving skills. In a similar manner, there are also roles and responsibilities that were defined as for women only, for example; collecting water and fuel. These makes women more directly dependent on natural resources which are often high sensitive to climate change. These activities certainly expose women and girls to different health risks such as indoor pollution and prenatal mortality (WHO 2016; WHO 2014).

The Injustice of Climate Change.

Climate change does not affect everyone equally, it affects the rich and the poor differently, men and women also differently and developed and developing nations also differently. This entails also that adaptation of these different sectors of a community is different. For the impacts of climate change to be felt, there must be the following conditions available; vulnerability, exposure and risky. There are exists huge and volatile connections between these sectors of the society and climate change in terms of vulnerability and exposure to these impacts of the changing climate and the ways of responding to them.

The response can be of mitigation, climatic engineering and adaptation to those impacts of climate change. And these conditions are discussed below;

Vulnerability

This is defined as the susceptibility to harm and lack of capacity to cope and adapt a climatic disaster.

Exposure

Refers to the nearness of people, properties or communities to a hazard zone that can lead them to suffer potential impacts in space and time.

Risky

> The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable condition.

Climate justice means to act in accordance with the right standards already agreed upon even if climatic impacts commands more far-reaching and costly implementation conditions than expected when fundamental human rights treaties were adopted and made officially valid. Injustice in issues to do with climate change belongs to a situation where there are people who are least involved in greenhouse gas emissions and are more affected and more vulnerable to the impacts of climate change but they have fewer capacity to adapt.

Therefore, climate justice can be of inter-nations, inter-societal and inter- generations. The main focus here is on the inter-societal injustice of climate change. Intra-societal injustice therefore refers to the relationships of different groups between or within societies. This is when part of the group is exposed unequally to the impacts of climate change, to which they are least responsible in its causing. Climate injustice leads to double discrimination in a society as it has been rightly reported by UN Human Rights Council that women, children and indigenous people in developing countries are more vulnerable to the impacts of climate change.

The request being made in this kind of respect it's not only to refer to the equality part, but also participation based on the understanding of the information about climate change and the will to act. There needs to be an establishment of the equal distribution of the impacts of climate change, such as the recipients and the burden-bearers. If you pollute then you must pay for that. There is much imbalance in our societies such that people who are responsible for causing the harm do not receive it and the resources to adapt to the climate change impacts are not also balanced as well.

2.3 The Double Injustice of Climate Change and Gender Inequality.

Although there have been efforts to deal with problems of gender inequality associated with climate change, their implementation lags behind. For example, a highly aspirated sustainable development agenda was developed in directing development activities for the coming 15 years through the 17 Sustainable Development Goals (SDGs). They (SDGs) put much attention on poverty, inequality and violence against women as key challenges of the 21st century (UN 2015). These goals were launched to end these injustices by ending poverty, inequality and deal with climate change by 2030. Similar efforts were also made in the Sendai Framework for Disaster Risk Reduction (DRR) and encouraged a stronger role of women in building resilience. The United Nations Framework Convention on Climate Change (UNFCC) also received submissions from Nationally Determined Contributions (NDCs) that embodies the need for considering gender in climate actions (USAID 2016; UNDP 2016).

Gender inequality prevents women from accessing resources in our communities as a result this accelerates poverty for women. Poverty in turn is making women more vulnerable and exposed to the impacts of climate change.

Therefore, the double injustice is coming in because gender inequality is accelerating poverty for women and poverty is making women more susceptible to the impacts of climate change. As much as climate change affects everyone, the vulnerability and exposure of different individuals also differs in different locations. This is what makes the impacts of climate change affect people differently, and it happens that those who are more affected are not involved in the emissions of greenhouse gases. This is now what is called the injustice of climate change.

However, many women are poor because of the inequalities that exists in our communities; unequal access to resources such as land and credit affects their economic life. This therefore entails that most of the economic activities that are available in our communities are owned by men and they emit more than women. Due to these inequalities women sort to do local agriculture for daily living and this agriculture is directly affected by any change in climate. Therefore, the impacts of climate change are

affecting more people who are not contributing to its change but because of their condition; being male or female and where you are born.

Therefore, the fact that women are the ones facing these problems, it also implies that they are ones that are more involved in proposing different solutions to climate change to enable them continue with their local activities of daily living. Therefore, the climate injustice is when these impacts of climate change affects more people who are not involved in its destruction and affect least those who are leading it, and these people have high adaptive capacity than the ones being more affected.

CHAPTER THREE: METHODOLOGY

3.1 Research design

The solely aim of this research was to investigate and explain the injustices of climate change and gender inequality that is happening to a particular group of people in villages Kamphande, Kasankha and M'bwana. Therefore, this study involved the use of only qualitative data and analytical analysis of the investigated data to explain these injustices, by trying to build a connection between climate change and gender inequality. And therefore, in accordance with this, the study followed the following design.

The research was designed to involve three villages selected from this chosen area of study (Namkumba T/A), and these villages were selected randomly. The participating people/research elements were divided into 3 groups according to their respective villages. They were located in groups A, B and C. Each group or village was given a climatic problem to adapt to. Therefore, participants in each group were asked to provides ideas on how they can adapt to that kind of a climatic problem.

The researcher then used the questionnaires to enquire from each individual about the climatic problem, what they know and if they were able to relate climate change and gender inequality. From the questionnaires, participants were requested to answer questions on what they think were causes of gender inequality in our communities, how is gender inequality compromising adaptation to climate change and what is it that women and everyone can do to adapt to climate change and its impacts.

For the ease of communication, the researcher also had to use Youth clubs, Bank Mkhonde clubs and other Focus groups available in the village to at least have the large sample of the population and easy access to a large population in an instant time. Considering the fact that the study wanted to hear from people who have good experience of the topic in question, the researcher payed much attention to the participants of the age of 16 up to 55. This age group was chosen because it is still fresh and can be involved in practicing changes in our communities.

The study area.

This study was conducted in villages of Kamphande, Kasankha and M'bwana in T/A Namkumba, in Mangochi. The figure 1 below shows the map of the area.

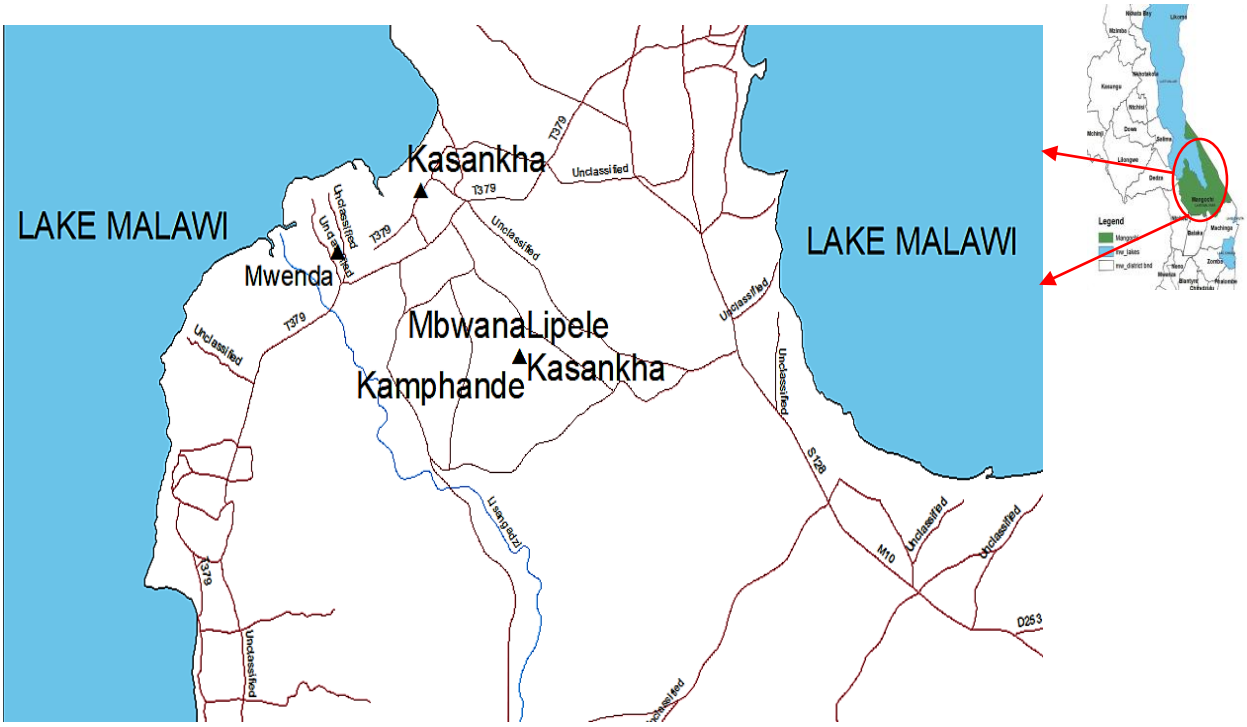


Figure 1: The map of the study area.

3.2 Materials and methods

This research studied males and females in their respective states and came up with connection between these two elements and how they aid or prevent one from taking certain positions in the community. The stand here was to go into the community, interact with it and find out if our societies know the importance of working together as a team towards climate change adaptation. The researcher believes that societies are built with different beliefs, expectations and different values towards men and women, as such, this affects or directs how societies conduct their activities. The researcher tried to look into the buildup of the general society, in order to investigate and explain why some people are given more chances than the others, more access to education, resources and credit than the others and finally how all these practices are connected to climate change adaptation. To address the research questions, the researcher used different methods and materials to collect, analyse and interpret data. Since this study required the use of qualitative data, the researcher then used questionnaires and interviews to collect data from the chosen area of study.

The study was conducted in three villages of Kamphande, Kasankha and M'bwana in T/A Namkumba, Mangochi district. The study required 150 participants with 50 from each village. The eligible participants had to be of the age of 16 and above up to 55 years old. These people were obtained through the use of focus groups like Bank Mkhonde and Youth Clubs in collecting data instead of doing door-to-door approach, for easy turn up of the required participants. The participants were equally informed about the study and that the participation was voluntary and out of their will through the use of appropriate informed consent documents that were also given to the village heads of each village. The researcher also wants to make it clear that the turn up of people was not much promising mainly because the study was done in time of harvest where most people, actually, the women themselves, were more involved in farm work. The researcher used questionnaires and interviews which were developed in English but the researcher had to translate them into Chichewa language for easy understanding with the participants.

The participants were instructed to tick or write, were appropriate, to give out their views about the topic of climate change and gender inequality. The researcher used the Grounded theorem to analyse data and the Statistical Packages for the Social Sciences (SPSS) in coming up with visual representation of the data and Microsoft Excel.

3.2.1 Grounded Theory

Grounded theory is defined as the use of systematical yet flexible guidelines for collecting and analysing qualitative data to construct theories grounded in the data themselves. It is an inductive, iterative, interactive, and comparative method geared toward theory construction (Charmaz, 2006). This theory was used to state relationships between abstract concepts such as; gender inequality and climate change; inequality and adaptation to climate change and the role of women in adaptation to climate change.

This theory also helped in achieving the aim which was to investigate and explain or understand how is climate change connected to gender inequality, what are the injustices of climate change and gender inequality that are happening to a particular group of people, bringing to the societies and finally, if we can attribute the lack of adaptation skills in women to gender inequalities.

The inductive logic of grounded theory helped the researcher to start studying individual cases of gender inequality at a household level up to a community level from which the researcher developed abstract concepts and make comparison between these concepts. The method of Grounded theory is of so many versions but in this study the researcher used the Constructivist Grounded Theory developed by Kathy Charmaz.

Therefore, this method involved the use of comparisons and theoretical sensitivity in data analysis and collection. Comparisons involved comparing one interview with the other, comparing data and the developed concepts and also comparisons between concepts themselves. Theoretical sensitivity involves the creation of categories or theories from the developed concepts. The process is done in three stages whereby the collected data, whether from interviews or questionnaire, was used to develop concepts and the concepts

underwent the same process of comparisons to create theories. The whole of this process is what is called theoretical sensitivity.

However, the researcher recognizes that time limitation was a very important factor in data collection and its analysis, that it was not possible to reach each and every member of the three villages, as such, the results somehow might not give a 100% true reflection of the nature of the situation in these villages.

The researcher also would like to recognize the complex work that was there when analysing data that is culturally and socially motivated in climate change adaptation in these villages because the amount of information and material was limited.

Therefore, the Constructivist Grounded Theory analysis and the use of SPSS and Excel in visualizing the data collected through interviews and questionnaire and any conclusions made from them, were made based on the availability of time, information and materials allocated to this study.

3.3 Data Analysis

This research used data that was in form of words not numbers, therefore, analytical analysis was used to analyze data. One of the theories that was used to do the analytical analysis was the Grounded theory. Grounded theory method was used so as the researcher should be able to foster on creating an analytic edge to the research.

Stated simply, grounded theory methods consist of systematic, yet flexible guidelines for collecting and analyzing qualitative data to construct theories 'grounded' in the data themselves. Therefore, the researcher used the following guidelines that offers a set of general principles and heuristic devices rather than formulaic rules (Coffey and Delamont, 2003). The defining components of grounded theory practice included:

I. Simultaneous involvement in data collection and analysis.

- This process was used to simultaneously collect data while the analysis was also happening. The processes of analysing and collecting data were done simultaneously. This helped the researcher to develop concepts and pin point areas that brought augments in the research. For example, different cultures brought different views into the research in terms of gender and its relation to

climate change. Some cultures saw nothing wrong with women having no access to resources and credit and cannot attribute the impacts of climate change that women felt to their access to resources.

II. Constructing analytic codes and categories from data, not from preconceived logically deduced hypotheses.

III. Using the constant comparative method, this involves making comparisons during each stage of the analysis.

IV. Advancing theory development during each step of data collection and analysis.

Engaging in these practices helped the researcher to control the research process and to increase the analytic power of the research as it was rightly stated by Kathy, 2006. Therefore, through the use of these guidelines, the research helped to bring the double injustice of climate change and gender inequality in villages Kamphande, Kasankha and M'bwana to the surface such that required measures have been devised and recommended to uproot these injustices, providing room for women to put their views in mitigating and adapting to climate change. And finally, the researcher made use of tables and graphs for data presentation.

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Results

The study was conducted in villages of Kamphande, kasankha and M'bwana in Mangochi. The design was such that the research should involve fifty participants from each village making it a total of 150 participants. The following is the representation of the data that was used in the research.

4.1.2 Demographic Data.

This presents the data of both three villages that participated in the research and their daily activities.

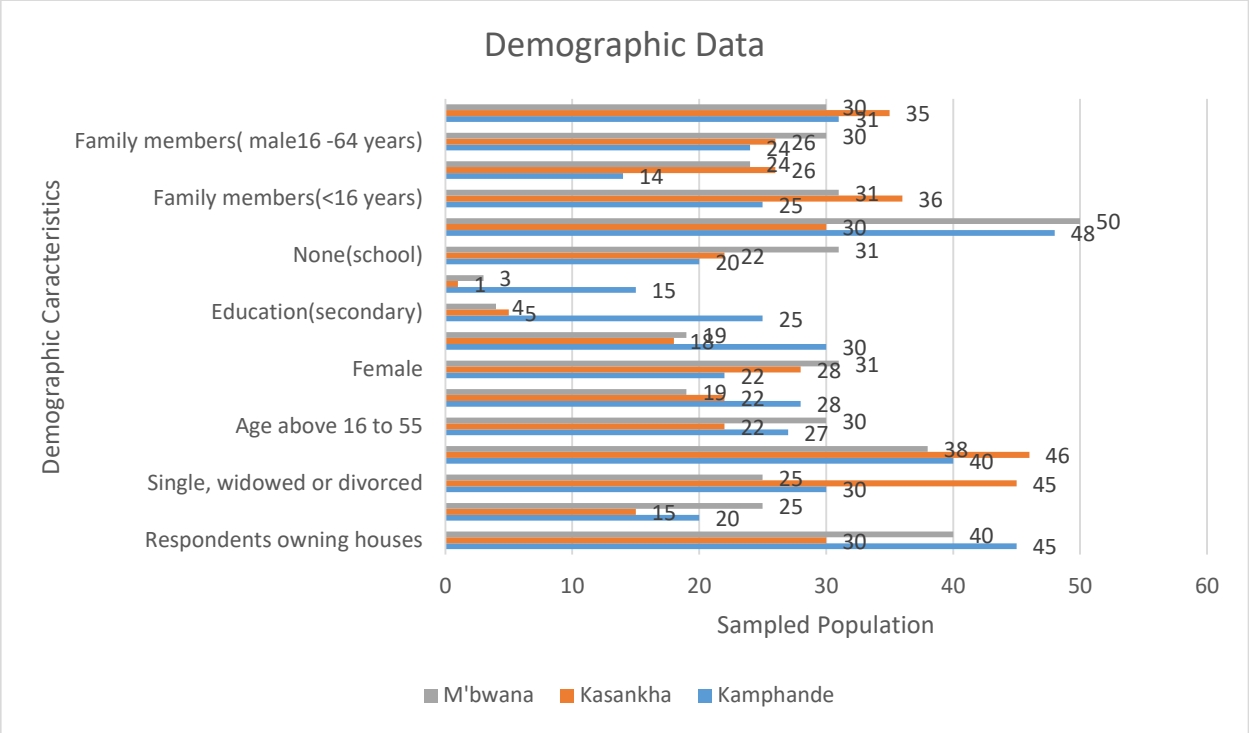


Figure 2: Demographic data

The figure 2 above shows the details and the number of women and men who took part in the research in each village. The farming activities and also the education levels between men and women in each village was also recorded.

To confirm with the issues of gender inequality in the villages, the study also looked at the distribution of resources or economic activities in villages in order to establish a pattern of allocation of these resources in these villages. The distribution of resources indicated that indeed women are being sidelined or that there is unequal access to resources. The equal access would've meant that both men and women are being considered in daily activities in the villages and in the issues to do with climate change.

However, the unequal distribution of resources shows that most economic activities are owned by men which implies that, these activities if they are to emit then the largest part of emission is being done by men who are owning these activities. Consequently, these emissions disrupt the functioning of the environment leading to climate change that affects people who are not contributing to its causing.

Women are being most affected by climate change because in these villages, their duties are most related or connected to climate, for example, agriculture and water access. Any changes in climate definitely have an influence in their lifestyle. The figure 3 below shows the gendered distribution of resources in these three villages.

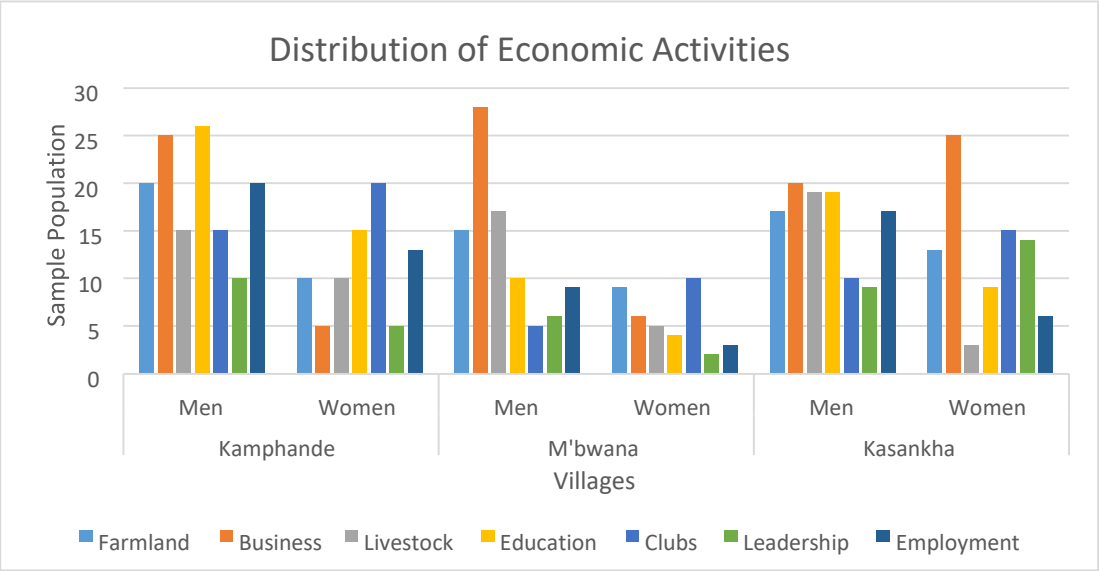


Figure 3: Distribution of economic activities

4.1.3 Causes of Gender Inequality in Kamphande, Kasankha and M'bwana.

The researcher believes that there are some practices that determine the course of all general activities in the villages and these activities perpetuates gender inequality.

There are some cases in the villages that are undermining the well-being of certain individuals but they are regarded as normal. Therefore, this section presents some of these activities that perpetuate gender inequality but still have the audacity to be regarded as normal practices. Based on the questionnaire that was used, this was regarded as Section A and that the questions were based on what the researcher deemed as the major causes of inequalities. The essence was to look into these villages if these practices exists and how they accelerate gender inequality and if the people agrees or recognizes that these practices leads to segregated living lifestyles.

Therefore, the questions were framed in a way that the responses of the participants should indicate that they agree or disagree to the presence of these practices and that they cause gender inequality or not.

Therefore, based on literature, the major causes of gender inequality that the questions were framed upon were:

- Beliefs
- Values

Therefore, the participants were asked if they agree that these practices exist in their villages and if they play any role in gender inequality. The figure 4 below illustrates the responses.

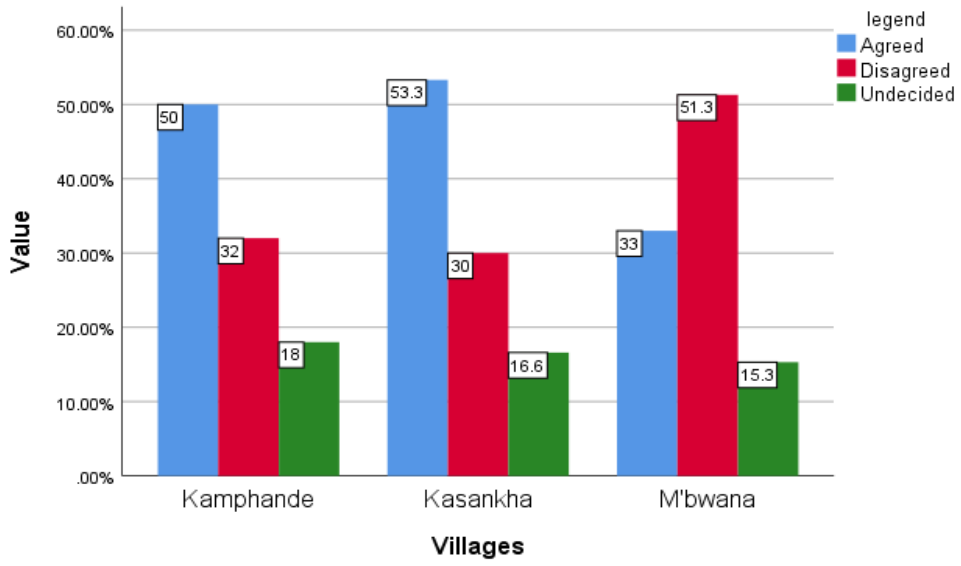


Figure 4: Views on the existence of the causes of gender inequality

This figure 4 above is just showing the numbers of people in these three villages who feels that indeed these activities exists in our societies and are leading to gender inequality.

4.1.4 Gender Inequality compromising adaptation to climate change.

The researcher believes that if the practices that are associated with gender inequality are present in a society, then it implies that gender inequality exists in that area.

Therefore, based on the responses that were found in research question one, the researcher was forced to proceed with research question two, which emphasizes that gender inequality compromises adaptation to climate change. This argument was made by the researcher based on other researches that indicates that women throughout the world are particularly vulnerable to the threats posed by a changing climate and these threats are accelerated by gender inequality.

In countries where there is marked gender inequality, four times as many women as men die during floods (IPCC, 2001). Therefore, the extent to which changing climate brings more risks to some parts of human populations than the others greatly portrays that the inequities of wealth and power of our economies and political systems affects our societies. It is also well known that in many of the world's poorest communities, gender defines one's influence on decisions and access to resources such as land or credit (Mayesha Alam et al., 2015). All of these substantiate the argument made by the researcher which says that gender inequality compromises adaptation to climate change.

Therefore, in the questionnaire, this was referred to as Section B and the questions were also formed based on the evidence that indeed gender inequality compromise adaptation to climate change and the participants were asked if they agree to this argument and if they observe it in their villages. The figure 5 below illustrates the responses.

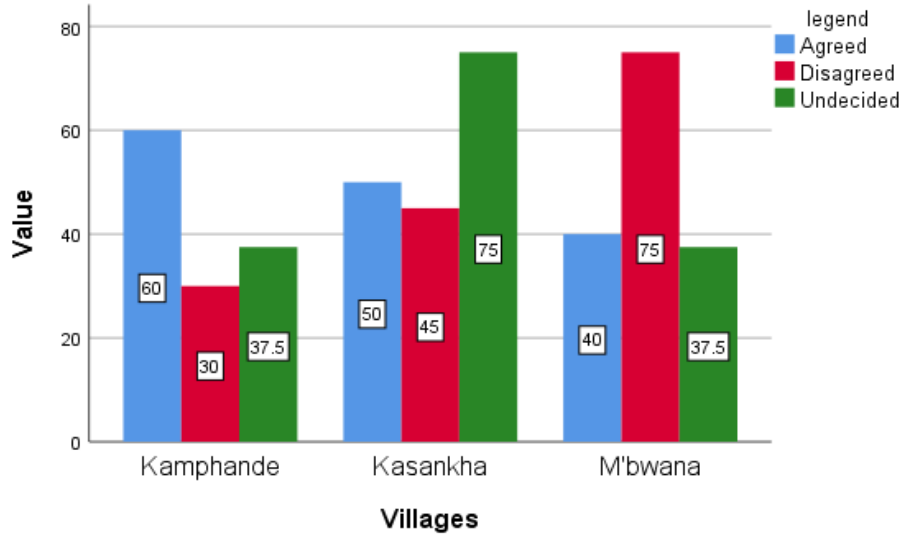


Figure 5: Views on gender inequality compromising adaptation to climate change.

The figure 5 above shows the numbers on people's views and their thoughts on the argument made by the researcher that gender inequality is compromising adaptation to climate change.

4.1.5 What women can do in adaptation to climate change.

From the research questions one and two, the researcher was able to suggest ways that can women and everyone do to adapt to climate change and to get rid of gender inequality in the process.

Therefore, the researcher also made arguments or suggested ways on what can these people do and if they can agree to those suggested ways. Therefore, the responses were also grouped in numbers based on what percent of the population is agreeing to the proposed ways and what part of the population is disagreeing. Therefore, the researcher used the following suggestions and tried to compare the views from the participants:

- Educating women
- Empowering women
- Increasing women's access to resources and credits
- Increasing women's participation in issues to do with climate change
- Increasing women's involvement in making decisions about the way forward of the society in relation to climate change and adaptation.

The figure 6 below illustrates the responses.

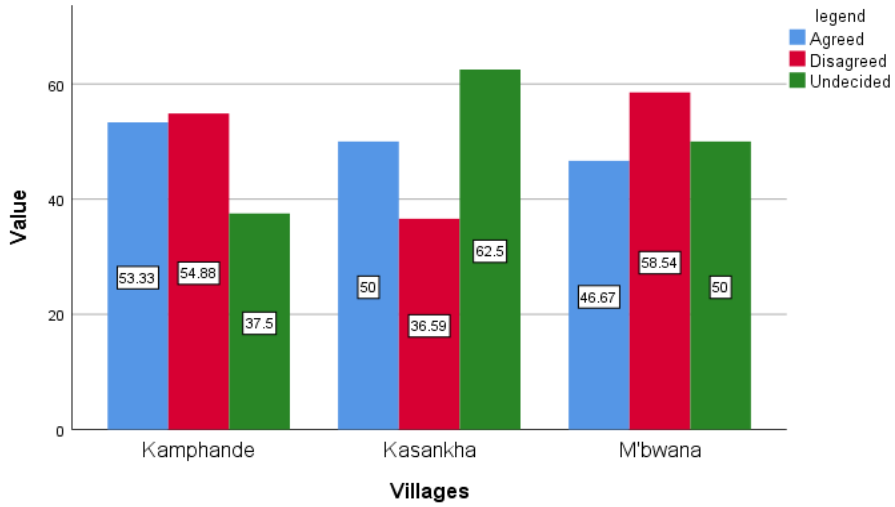


Figure 6: Views on what women can do in adaptation to climate change.

The figure 6 above shows the views of different people in these three different villages on what can be done that will enable women and everyone to participate in issues to do with climate change adaptation.

5.2 Discussions.

Based on the outcome of the research, the researcher tried to make some points out of the output and try to look into the way forward and if there can be some more research on the topic. Therefore, the following statements portrays the views and only the views of the researcher.

Existence of the causes of gender inequality in our societies.

It can be stated right here that based on the findings in results section above, there are more people in the study area that believes that indeed there are practices in our societies that leads to segregated ways of living, also called gender inequality. There are numbers in villages of Kasankha and Kamphande that really agreed to the argument that society's beliefs, expectations, values and setup really accelerates the evils of gender inequality. It was only in one village that the research met its overturn where people expressed different views from the other villages that it was normal for people to be living like that. That women are not supposed to be equally empowered and educated as men do, that women

cannot lead or make decisions in any spot of the community, that is including in issues to do with climate change adaptation.

Figure 4 shows these numbers of people in red colour, and it is only in M'bwana where the results indicates the huge percent of the population of the people who are not agreeing to this argument. Therefore, this only implies that, the mindset and social beliefs of people can really determine the way forward against climate change. For example, in villages where people believed that really these practices causes gender inequality, there are more actions that are showing that really people need to change on how they think about their society and what role can everyone play, women inclusive, in dealing with climate change adaptation. This only implies that, really people are being directed mostly by their way of living and how they deal with day to day activities, and these therefore, this will in turn affect how societies deal with climate change adaptation.

Gender inequality compromising adaptation to climate change.

In villages where people really believed that their way of living and other practices accelerates gender inequality, there were cases that showed that indeed presence of gender inequality in our societies compromises adaptation to climate change.

In all these three villages, there have been cases where women have failed to help in issues to do with climate change adaptation, not that because they don't have the solutions, but because the society doesn't allow them to do so.

There were also cases where women were forced to follow decisions, not even regarding how bad they are, just because they are coming from men. This is how our societies treats women, the presence of all these gender inequalities consequently disturbs processes of dealing with climate change. From results section above, figure 5 indicates that, in villages of Kamphande and Kasankha people really believe that gender inequality is compromising adaptation to climate change. It is only in M'bwana where people don't recognize this connection. The relationship is based on the fact that, if people recognizes that in their societies there are practices or beliefs that accelerates gender inequality, then it is also very simple for them to see how these gender inequalities compromises adaptation to climate

change. Therefore, villages of Kamphande and Kasankha really see these connections unlike M'bwana. As such, the numbers in figure 5 shows that really in M'bwana there is luck of recognition of the presence of the practices that accelerates gender inequality and in turn these destroys the arguments that gender inequality compromises adaptation to climate change since gender inequality doesn't exists in their village.

What women can do in adaptation to climate change.

From the basis of understanding on what can women and everyone do in adaptation to climate change, the researcher suggested ways that can be used and asked people on their views to those proposed ways through the questionnaire. With these suggestions in mind, the researcher used the same relationship between recognizing the presence of the causative factors of gender inequality and how the developed gender inequality compromises adaptation to climate change.

It was only in these two villages that showed interest and agreed with these suggestions that if our societies can educate, empower, increase women's access to resources and credits and their power of making decisions in big situations and even in issues to do with climate change, then we can increase the level of adapting to climate change as a society.

The results section in figure 6 still shows that M'bwana village is still adamant to the fact that women are critically important in issues to do with climate change adaptation by denying these facts of developing women power. This only implies that, the most portion of the sampled population that was involved in the research really indicates the need to abolish first the causative agents of gender inequality in our societies and then we can all deal with climate change.

CHAPTER SIX: CONCLUSIONS AND RECOMMEDATIONS

Reaching at this juncture, the researcher is now able to make some of the generalizations about this research. The research intended on reaching the aim of investigating the double injustice of climate change and gender inequality in villages of Kamphande, Kasankha and M'bwana, in T/A Namkumba in Mangochi district. The researcher was convinced to reach this aim through the answering of the following questions; are there practices in our

villages that accelerates gender inequality, how are the developed gender inequalities compromises adaptation to climate change, and finally, the research was supposed to answer the question on what can women do to adapt to climate change. With all variables constant, the research managed to meet its intentions to a required extent that helped the researcher to make conclusions, that really there are injustices of climate and gender inequality in villages of Kamphande, Kasankha and M'bwana. In summary, the findings showed that, out of the three villages involved, only two villages showed that indeed there are practices in our villages that perpetuates gender inequality and these gender inequalities compromises adaptation to climate change and there is something that can be done to alleviate these injustices.

The researcher was involved in this kind of research regarding its significance to our societies. The researcher considered the fact that, the research can be used to help the climate practitioners and policy makers to make policies that are firm at abolishing practices that perpetuate gender inequality. Bridging the gap between men and women by balancing the access to resources such as land and credit and some other important private properties, to lessen the vulnerability of women to climate change impacts.

The societies will also be able to understand that, the main aim of ending gender inequality in issues to do with climate change it's not solely on support for women, it is rather a matter of creating balance in a society such that everyone is able to adapt to the impacts of climate change.

However, the researcher wishes to recognize the limited time and resources allocated to this research such that it was not possible to reach the 100% of the sampled population, as such, the results might not give the true reflection of the activities in the societies. The turn up of the participants was also not that much interesting as the research was done at a time when the people were much occupied with farm activities. Therefore, the researcher would love to recommend that, the further research on the topic with good time and resource allocation need to be done, and must also consider the timing to have full turn up of the participants not as what the researcher did.

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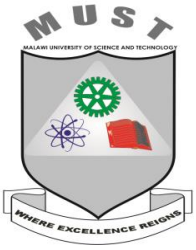
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Appendices
Appendix 1: Questionnaire



INVESTIGATION OF DOUBLE INJUSTICE OF CLIMATE CHANGE AND GENDER INEQUALITY

Questionnaire for Participants

Instructions to the interviewer

1. Tick or write the response to each question
2. Take note of additional instructions in bold italics against some questions
3. Write notes on the qualitative questions that have been asked

Introduction and Informed Consent

Hello. My name is **Saulosi Saidi** and I am a student at Malawi University of Science and Technology (MUST). I am studying Meteorology and Climate sciences and I'm in my final year. I am doing my research to investigate the double injustice of climate change and gender inequality that happens to a particular group of people, mostly women, preventing them from participating in the adaptation of climate change. I would very much appreciate your participation in this study. The study actually will take about 30 minutes to complete.

Participation in this study is voluntary, and if we should come to any question you don't want to answer, just let me know and I will go to the next question; or you can stop the interview at any time. However, I hope that you will fully participate in this study since your views are highly important.

At this time, do you want to ask me anything about this study?

Do you agree to participate in the study?

If the respondent agrees to be interviewed, then proceed with the interview. If the respondent does not agree to be interviewed, thank the respondent and move to the next person.

Investigation of Double Injustice of Climate Change and Gender Inequality

Questionnaire number_____

Village(location)_____

District_____

Respondent name_____

Date_____

SECTION A: DEMOGRAPHY CHARACTERISTICS

Q.No	Questions	Description	Responses
A01	Are you living at your own house?		Yes ☐ Under parent ☐ Others(specify)……
A02	What is your marital status?		Married ☐ Single ☐ Divorced ☐ Widowed ☐ Others(specify)……
A03	How old are?		Age…….
A04	What is your sex?		Male ☐ Female ☐ Others(specify)……..

A05	What is your tribe?		Chewa ☐ Ngoni ☐ Yao ☐ Lomwe ☐ Ngonde ☐ Tumbuk ☐ Others(specify)……
A06	What is your level of formal education?		None ☐ Primary school(not complete ☐ Primary school(completed) ☐ Secondary school ☐ Post-secondary school ☐ Others(specify)……
A07	What is your principal occupation for the household?		Farming ☐ Business/Trade ☐ Regular salaried job ☐ Temporary job ☐ Sel-employed ☐ Retired ☐ Others(specify)……
A08	What is the main source of income of your household?		Farming ☐ Social grant ☐ Pension ☐ Remittance ☐ Salary/wages ☐ Others(specify)……
A09	How many are you in your family?		Chilldren(<16 years)…….. Female(16-64 years)…… Male(16-64 years)…… Male and Female(>64 years)……

SECTION B: THE EXISITANCE OF GENDER INEQUALITY IN OUR SOCIETIES

Q.No	Questions		Responses
B01(a)	Have you ever heard of gender inequality?		Yes ☐ No ☐
(b)	If yes, from where?		Radio ☐ School ☐ Friends ☐ Parents ☐ Others(specify)……
B02	Personally, do you think that there is any difference between a man and a woman?		Yes ☐ No ☐
B03	Is it right to say that men are capable of doing anything than women?		Yes ☐ No ☐
B04	Is there any work or activity that you think is for men or women only?		Yes ☐ No ☐
B05	In your area, is it allowed for a woman to own big things like land, hold leadership or business?		Yes ☐ No ☐ Others(specify)……
B06	Personally, do you think it's a good idea for a woman to have access to things mentioned in Q B05?		Yes ☐ No ☐ No idea ☐
B07	Are you in favor of the idea of empowering women?		Yes ☐ No ☐
B08	Do you think that a woman can lead anything?		Yes ☐ No ☐
B09(a)	Are you in support of the idea that a woman should be involved, participate		Yes ☐ No ☐ Others(specify)……..

	and share some views in our day to day activities?		
(b)	Is it right to say that men handle things or problems better than women?		Yes ☐ No ☐ No idea ☐
(c)	Do you know anything that failed because women were involved?		Yes ☐ No ☐
B10	As humanity, do you think it's a good idea that men and women should be working together in everything, be given equal access to education and business?		Yes ☐ No ☐ Others(specify)……

SECTION C: GENDER INEQUALITY COMPROMISING ADAPTATION TO CLIMATE CHANGE

Q. No	Questions		Responses
C01 (a)	Have you ever heard of climate change?		Yes ☐ No ☐ No idea ☐
(b)	if yes, from where?		Radio ☐ School ☐ Parents ☐ Friends ☐ Others(specify)……..
C02	Personally, what is your idea about climate change?		……
C03	What do you do about climate change?		……

C04(a)	Are there any clubs or projects in your area that deals with climate change?		Yes ☐ No ☐
(b)	If yes, is there any club that is led by a woman?		Yes ☐ No ☐
C05	Do you support the idea that women are more involved in farming to feed families in your area?		Yes ☐ No ☐ No idea ☐ Others(specify)……
C06(a)	Have there been any flood or drought in your area that destroyed all your crops?		Yes ☐ No ☐ No idea ☐
(b)	If yes, who suffered more?		Men ☐ Women ☐ Everyone ☐
C07	Are you supporting the idea that we should include both men and women in adapting to climate change?		Yes ☐ No ☐ Others(specify)……
C08	Is it right to say that in your area, gender inequality prevents women from participating in anything, owning businesses?		Yes ☐ No ☐ No idea ☐
C09	Do you think that gender inequality also prevents women from gaining skills to adapt to climate change?		Yes ☐ No ☐ None of the above ☐

C10 (a)	Are you supporting the idea that ending gender inequality is the solution to climate change adaptation?		Yes ☐ No ☐ No idea ☐
(b)	Is it a good idea to say that adaptation to climate change is possible if everyone is involved?		Very true ☐ False ☐ No idea ☐

SECTION D: WHAT CAN WOMEN DO IN ADAPTATION TO CLIMATE CHANGE

Q.No	Questions		Responses
D01	Are you in favor of the idea of giving women chances to participate in issues to do with climate change?		Yes ☐ No ☐ None of the above ☐
D02	The decisions to run a group, a family or any another club, do you think it's a good idea for women to participate in their making?		Yes ☐ No ☐ Others(specify)……
D03	Is it right to say that women are weak and bad at making decisions about climate change adaptation?		Yes ☐ No ☐ Somehow ☐
D04	Are you supporting the idea that women also can make policies that can help us to adapt to climate change?		Very true ☐ False ☐ No idea ☐
D05(a)	Do you think it's a good idea to give women and men equal access to resources and education?		Yes ☐ No ☐ None of the above ☐

(b)	Is it right to say that most women are being left out in major activities in your area?		Yes ☐ No ☐
(c)	If yes, why do you think it is like that?		……
D06	Do you think that it's a good idea to say that women can also have diverse source of income as men do that will assist in adaptation to climate change?		Very true ☐ No ☐ Others(specify)…….
D07	Are you in favor of the idea that women are bad in school and business?		Yes ☐ No ☐
D08	Are you in support of the idea that we need everyone(male or female) for greater good of this world?		Yes ☐ No ☐ No idea ☐

END OF INTERVIEW

THANK YOU FOR YOUR COOPERATION