Livelihood Challenges (vulnerability) Among the Datoga Pastoralists in Basutu and Basodesh Ward (Tanzania)
LIVELIHOOD CHALLENGES (VULNERABILITY) AMONG THE DATOGA PASTORALISTS IN BASUTU AND BASODESHI WARD (TANZANIA)

BY:
MAULID B. MPAMBA

DEPARTMENT: NORAGRIC

Master Thesis in International Development Studies
Norwegian University of Life Sciences
Department of International Environment and Development Studies, Noragric
COPYRIGHT

The Department of International Environment and Development Studies, Noragric, is the international gateway for the Norwegian University of Life Sciences (UMB). UMB has eight departments, associated research institutions and the Norwegian College of Veterinary Medicine in Oslo. Established in 1986, Noragric’s contribution to international development lies in the interface between research, education (Bachelor, Master and PhD program) and assignments.

The Noragric Master thesis are the final theses submitted by students in order to fulfil the requirements under the Noragric Master programs in International Environmental Studies, Development Studies and other Master programs.

The findings in this thesis do not necessarily reflect the views of Noragric. Extracts from this publication may only be reproduced after prior consultation with the author and on condition that the source is indicated. For rights of reproduction or translation contact Noragric.

© Maulid B.Mpamba, May 2015
maulidyb@yahoo.ca

Noragric Department of International Environment and Development Studies
P.O. Box 5003
N-1432 Ås
Norway
Tel. +47 64 96 52 00
Fax: +47 64 96 52 01
Internet: http://www.nmbu.no/noragric
Declaration
I, Maulid B. Mpamba, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature………………………………………

Date…………………………………………
Acknowledgements
I would like to express my gratitude to my supervisor professor Peter Gufu Oba for his guidance, useful comments and remarks that has been vital in completion of this paper. I am also extending my thankful to staff from NORAGRIC department for their academic support. I would further like to thank Mulbadaw farm managers (Mnyawi and Yotam) for their support during my stay in the field and providing with relevant information. Mr Nchimbi (WEO) for his tireless work of organizing respondents each day. I am also thankful DALDO of Hanang district, VEO from Mulbadaw and Galangala. Thanks goes to the people of Basutu and Basodeshi ward for taking their valuable time to talk to me, sharing their opinion openly and wisely.
Special thanks to my parents for their moral and financial support and encouragement towards this journey, my sister Jacq, my aunty and uncle in Trondheim for your support all the time. Thanks to Ane and your family for your moral support, I really appreciate.

My thanks and appreciation goes to my friends Felton Manani, Mossess Mungure and Conosolata Muraa, Tanzanian community in Ås, Irene Shumbusho thanks for the comfort.
Abstract

This thesis is about pastoralist’s risks to their livelihoods under scenarios of expected climate changes and non-climate change in resource tenure. The study aimed at exploring the livelihood challenge facing by Datoga pastoralists and potential for livelihood improvement. The study also examined at the current and the future situation of pastoralists in regard with the current policies. The study used mixed method research in data collections framed within the subject of sustainable livelihood framework for analyzing multifaceted relationships that exit between assets, livelihood strategies and outcome. The study found out that pastoralist are confronted by many livelihood risks such as lack of access to resources that are needed for their sustainability of their livelihood such as poor market conditions, lack of health services, and limited access to safe and clean water. Land has been the scarcest resource because investors and farmers own the huge part of village land. Conflicts between pastoralist and other land users are common, although the magnitude might not be so alarming as often claimed. Much of pastoralists’ problems of land use could be addressed by improved policies. The problem remains that there are no specific policies to promote pastoralism, while encouraging livestock keeping as commercial ranches. This thesis concludes that the continued marginalization and deprivation of the Datoga pastoralists was a result of lack of appreciation and acknowledgement of the pastoralism sector to the economy by the government. Pastoralists were denied all essential services for improvement of their livelihood.
Table of contents

Contents

COPYRIGHT .................................................................................................................. 1
Declaration .................................................................................................................. i
Acknowledgements ..................................................................................................... ii
Abstract ...................................................................................................................... iii

1.1 Introduction ............................................................................................................ 1
1.2 Scattering of pastoral society in Tanzania ............................................................. 2
1.3 Situating the study into a broader context .............................................................. 2

2 CHAPTER TWO ......................................................................................................... 4
2.1 Pastoralist land use and land tenure in Tanzania .................................................... 4

3 CHAPTER THREE ..................................................................................................... 8
3.1 RESEARCH METHODOLOGY ............................................................................. 8
3.2 Study community .................................................................................................. 8
3.3 Study area and setting .......................................................................................... 8

3.2.1 Methods ......................................................................................................... 9
3.3.1 Limitations and challenges of the study ............................................................ 13
3.3.2 Ethical considerations ...................................................................................... 15

4 CHAPTER FOUR ...................................................................................................... 16
4.1 DATA FINDINGS, PRESENTATION, ANALYSIS ............................................... 16
4.2 Findings as per research questions ....................................................................... 16

4.2.1 Livelihood challenges faced by pastoralists in Basutu and Basodeshi ward .......... 16
Access to reliable market ............................................................................................ 18
Access to financial services ....................................................................................... 19

4.2.2 Land ownership between pastoralists and agro-pastoralists and farmers, who owns
more land? .................................................................................................................. 21

4.2.3 How did land use result in conflicts and how were the conflicts managed? .......... 23

4.2.4 What are the Policy implications of the findings? ............................................. 25

5 CHAPTER FIVE ......................................................................................................... 28
5.1 5.0 DISCUSSION .................................................................................................. 28
5.2 What are the livelihoods challenges that pastoralist in Basutu and Basodeshi ward in Hanang
district were confronted with ..................................................................................... 28
5.3 Land ownership between pastoralists and agro-pastoralists, Farmers, who owns more land? 31
5.4 How did land use result in conflicts and how were the conflicts managed? ...................... 32
5.5 What are the policy implications of the findings? (Policy dilemma) .............................. 33

6 CHAPTER SIX ............................................................................................................. 35
6.1 Conclusion and recommendations ............................................................................ 35
  6.1.1 Conclusion ........................................................................................................ 35
  6.1.2 Recommendations ......................................................................................... 37

7 References .................................................................................................................. 39

APPENDICES ............................................................................................................... 41
  Appendix 1: Household interview questionnaire ....................................................... 41
  Appendix 2: Focus group discussion ......................................................................... 47
  Appendix 3: Key informants interview ..................................................................... 50
  Appendix 4: Specialised informants interview ......................................................... 51
  Appendix 5: The citizen news paper, clash in morogoro ......................................... 52
List of Tables and Figures

Tables
Table 1: village name * Do you have health service in your village ........................................ 16
Table 2: Distances from the villages to the hospitals ................................................................. 17
Table 3: village name * how do you consider the distance to the market .................................. 19
Table 4: Village name * do you have reliable access to clean and safe water for domestic use? ................................................................. 20
Table 5: Gender of respondents in relation to land ownership .............................................. 21

Figures

Figure 1: Sustainable Livelihood framework (Adopted and modified from (DFID 1999; Scoones 1998). .................................................................................................................. 7
Figure 2: Map of Hanang district showing Basotu and Basodesh ward ...................................... 9
Figure 3: Water problem at Galangala village source Field (2013) (photo M.Mpamba) ............. 20
Figure 4: land access in relation to village ................................................................................. 22
Figure 5: Is there any conflict in your village? ......................................................................... 24

LIST OF ABBREVIATIONS

DALDO District Agriculture and Livestock Development Officer
DFID Department for International Development
FGD Focus Group Discussion
MMR Mixed Methods Research
NAFCO National Agricultural and Food Corporation
NLP National Livestock Policy
RQ Research Question
SUA Sokoine University of Agriculture
SLF Sustainable Livelihood Framework
URT United republic of Tanzania
VEO Village Executive Officer
WEO Ward Executive Officer
CHAPTER ONE

1.1 Introduction

This thesis analyses pastoralist’s risks to their livelihoods under scenarios of changes in resource tenure. For general readers, my definition of pastoralism follows Toulmin (1983). She defines pastoralism as a method of production whereby humans being rely on livestock production and livestock make use of natural resources for their survival. According to Scoones (1996) pastoralists in Africa get their livelihood from ecologically highly variable environments. The environmental that pastoralists occupies are arid and semi-arid land that lack forage and water for their livestock. These areas are not very suitable for many livelihood options but pastoralism has managed to adopt well (Kirkbride & Grahn 2008). However, due to environmental variability of arid and semi-arid environment drives pastoralists’ to keep large herds so that they can secure their livelihood particularly in dry years. Consequently large herd size requires vast amount of land for grazing, and practising mobility. The pastoralists have used mobility as a means of climate variability. According to De Jode and Sahel (2010) the main motives for mobility is to maximize livestock productivity. Mobility helps to find the best forage and water points. In addition, mobility helps pastoralists to exploit the best and most nutritious grass spatially distributed in the dry lands. As shall be shown later in the thesis, pastoralists do not only rely on their livestock to sustain their livelihood but diversification into crop cultivation and trade were common.

Wisner et al. (2004) argued that high poverty rate, economic, political and social inequalities are amongst the contributors of livelihood challenges to pastoralist communities. Pastoralists have been resilient to droughts and have continually adapted to adverse climatic and environmental changes in the past (Lynn 2010). They have developed strategies different from the way crop cultivators cope with climate adversity. However, from the evidence of the past, when pastoralists adaptive capacities collapsed there was a tendency for the stockless pastoralists to migrate to urban centres. We should appreciate other factors that undermined pastoralist’s livelihoods were associated with losses of their grazing lands to alternative forms of land use, particularly those instigated by the state. Disputes over land have existed due to failure to handle land related conflicts on time and the lack of proper policies and laws concerning land use and land management. Conflicts over land always left pastoralists at a disadvantage since their rights to access and ownership is limited (Benjaminsen et al. 2009).
The purpose of my thesis is therefore to examine the risks of livelihoods and the lack of appropriate policies in the pastoral lands in Tanzania. This thesis examines risks to pastoralists’ livelihoods, where the emphasis of the national policy is on crop cultivation but not on pastoralism.

1.2 Scattering of pastoral society in Tanzania

In this thesis, my focus is on the Datoga or Barbaig, the names often used interchangeably. They inhabit the arid and semi-arid land in northern and central regions such as Manyara and Singida. In Hanang district of Manyara region more than 70% of Datoga pastoralists can be found (Ndagala 1991:71 (Young 2008). The Datoga experienced pressure over land from large and smallholder farmers. Crop intensification and expansion is pushing them out of their grazing lands. For example, land taken over by wheat grower National Corporation and Food Crops Organizations (NAFCO) estimated to be 40,000 hectares and later increased to 100,000 hectares that were previously the grazing territory of the Datoga. The remaining pasturelands are not sufficient to support the Datoga’s livelihoods (Ndagala 1991; Young 2008). The landless Datoga are being forced to migrate to Dodoma, Morogoro, Mtwara and Lindi and Singida, are areas which are already under pressure from agricultural developments. In this thesis, one of my overarching aims is to understand what the local pastoralists think about the losses of their land. In order to place the study into context, I will situate the background to the general problem of competition and conflicts over land that will ultimately pose risks to pastoralists’ livelihoods.

1.3 Situating the study into a broader context

Land loss perhaps more than any other factors has marginalized herders. This is particularly critical considering that, Policy makers are implementing inimical policies that infringe pastoralist livelihoods. However, some policies alienate pastoralist from their ancestral land that they used for grazing to supporting their livelihood (Tenga et al 2008:30-31). In addition, pastoralist face other risks such as limited social services, limited access to natural resources that might be attributed by population increase which drive for more agricultural land that contribute to risks of livelihood. Less attention was however given to pastoralist access to land. Due to these multiple challenges many pastoralists have lost adaptive strategies to cope
with environmental variability. Land privation remains the greatest threat to their adaptive strategies. I can use an example here.

Pastoral societies in Tanzania practiced transhumance to manage their herds sustainably on limited pasture. Transhumance was very common in the past because population was low and land was available. However, land use policy has aggravated the situation when Tanzania implemented a radical policy to resettle pastoralist in the selected villages. The settled herders lacked essential services needed. In the case of the Datoga changes in land use towards promotion of agriculture (Ndagala 1991:74) and particularly privatization of huge pieces of land for agricultural production in Hanang and Shinyanga couped with the villagization program that settled about 8000 villages had displaced the herders from their ancestral land. The perception of the state was that settling pastoralists would conduct more productive production than mobility, ignoring the ecological reasons why the Barbaig pastoralists were mobile (Ndagala 1991:75; Young 2008). I posed four questions

1. What are the livelihoods challenges that pastoralist in Basutu and Basodeshi ward in Hanang district were confronted with?

2. Between pastoralists and agro-pastoralists and farmers, who owns more land?

3. How did land use result in conflicts and how were the conflicts managed?

4. What are the policy implications of the findings?
2 CHAPTER TWO

2.0 THEORHETICAL AND CONCEPTUAL FRAMEWORK

2.1 Pastoralist land use and land tenure in Tanzania

Since colonial period, there was misconception about pastoralist land use and land tenure. Pastoralists were considered as unproductive and environmentally unfriendly (Goodman 2002). The perception that pastoralists are less productive group to occupy and use land increases pressure for grazing land to pastoralists. Land administration since colonial time has side lined pastoralist and small scale farmers over the ownership of land to sustain their livelihood and improve productivity.

Land administration in Tanzania started a way back before colonial rule, however during colonial rule, policies related to land ownership were changed according to the demand of the colonial master. Land ownership was centred on customary holdings and tribal chiefs were conferred administrative power over land on behalf of the communities but during colonial regime land tenure changed accordingly. The power vested to tribal chiefs and headmen on land issue were limited due to the introduction of land tenure system by colonial government and governor was the sole responsible for land matters, indigenous were not given right of ownership over land by colonial government (Hayuma & Conning 2006). Since both Germany and British colonized Tanzania respectively, both had different land tenure system to match the colonial policies. However according to Shivji (1998) and Hayuma and Conning (2006) had argued that under the Germany colonial rule all land were declared as a crown land. Whilst under the British rule, during the League of Nations, land administrations were changed but some of the clauses related to land were not changed and land were declared as public land. The British introduced Land Ordinance Cap in 1923. Under this system of governance land tenure were regulated by governor, he was responsible for issuing right of occupancy to land that lasted up to 99 years. and land were declared as public good (Maghimbi et al. 2011:p26; Shivji 1998:p3-4).

After the end of colonial period when Tanzania gained its independence in 1961, she did not change the entire land legislation, some of the clauses from the Cap Ordinance, they adopted British land tenure system Mattee and Shem (2006) and Shivji (1998) , the adopted land tenure system did not give more access to land to rural people. In 1985 when a new government came into power they felt a need to liberalize economy in order to attain
economic development, therefore they had to change land legislation (Sendalo 2009; Sulle & Nelson 2009). Therefore Tanzania had to formulate land policies that will attract more investors and ensuring their security of tenure to potential economically investors. Many investors wanted to intensify food crops production hence wanted a huge piece of land (Kaijage & Tibaijuka 1996). Pastoralists’ land that was owned traditionally were the first to be privatised, land privatisation scenario had exacerbated pressure for land among pastoralists. Under the new land reform, lands were categorized into “General land, Reserve land and village land” (Benjaminsen et al 2009:8). According to Mattee & Shem (2006), Shivji (1999:2) the new land policy of 1995 maintained the fact that land in Tanzania is regarded as public land and controlled by the state (president) as a trustee on behalf of the citizens.

**The livelihood framework**

This thesis is subjected to sustainable livelihood framework. According Carney (1998) and Ellis (2000) sustainable livelihood framework can help to identify the multifaceted relationship that exit between assets, livelihood strategies and outcome. Therefore, my decision to choose SLF is based on broad capability of the model to capture and conceptualise the interaction between different groups in relation to productivity. Thus it is imperative to know the livelihood opportunities and assets that available for pastoralist and its relevance to the pastoralists’ livelihood. Scoones (1998) drawing on Chambers & Conway 1992:6) had defined sustainable livelihood framework as “A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress, shocks, maintain or enhance its capabilities or assets while not undermining the natural resource base and provide opportunity for the next generation that contributes net benefit to other livelihood at local and global levels in a short and long term”.

The SLF start by looking vulnerability context. The framework discusses three key features of vulnerability. According to the model, the vulnerability context is made up of sub components such as shock, trends and seasonality. Under the component of trends the two main things to be discussed which are relevant to this study, the increase of population in the study area and depletion of common resources (communal grazing land). The increase of population in the study area has led to demand for more agricultural land. The depletion of resources is contributed by the increase of population that put more pressure on the limited land available
hence over consumption of resources particularly land. Land scarcity has resulted to conflicts over land use.

Another sub component of vulnerability context to be discussed is shock. Shock can be a result of several factors, but in this thesis shock can be a result of climate variability that can lead to droughts, floods and conflicts. Pastoralist from the study area experienced a prolonged drought that had forced majority of pastoralist to migrate to another areas looking for favourable conditions. The last part of vulnerability context is seasonality; this can include things like prices, employment opportunities and health service access.

The second part of SLF is about transforming structure and process. Transforming agent in this study can be government department such as (ministry of livestock, district livestock development department) NGOs and private institutions. Those transforming structures can help to improve the situation in rural areas in regards to resources access. Whilst under the process section, the model suggests that there are some policies and laws need to be modified (amended) to match the current situation of demanding for more natural resources. To link this with my thesis, research question (RQ) three that discusses the relevance of the current policies to pastoralism will be analysed through this part of the framework. Through this framework, we will be able to see whether the current policies that cut across pastoralism are participatory and whether they play fair ground to pastoralist societies for improvement of livelihood.

The last part of the model shows the livelihood outcome. The model considered that the livelihood of the people will be improved if they have access to livelihood assets. The model suggested that the access to natural resources, market and financial capital will help to increase people’s income. In addition, the model explains improvement in the wellbeing of the people. This is due to access to health services, good infrastructure system and networking to social groups. Therefore this part of the model will be used to analyse RQ one that discusses the livelihood challenges, land ownership and the potential for improvement for better livelihood. Generally SLF as developed by DFID (1999) is a useful model to analyse research questions for this study because the SLF helps to understand and
Livelihood Assets

- **Natural capital**
  - Land
  - Water
  - Livestock

- **Physical capital**
  - Market access
  - School
  - Infrastructure

- **Human capital**
  - Health Access
  - Skills & Knowledge

- **Social capital**
  - Participation
  - Networking
  - Mutual support

- **Financial Capital**
  - Access to saving
  - and borrowing

**Vulnerability context**
- Shock, trend & seasonality

**Transforming structure & Process**
- Institutional, Laws, policies, institutions, private, public, NGO

**Livelihood outcome**
- Income increase, improve wellbeing of people
- Poverty reduction, reduce conflicts over resources

*Figure 1: Sustainable Livelihood framework (Adopted and modified from (DFID 1999; Scoones 1998)).*

The figure above shows the livelihood interactions based on the available resources. A household can engage in different livelihood activities depending on the available livelihood assets (Ellis 2000). Christensen and Pamela (2008) discussed five elements that compose livelihood assets. The access to livelihood assets is the key factor to uplift people from poverty. Therefore, available livelihood assets can influence the livelihood alternatives (possibility) of the society. Those livelihood capital assets are natural capital, Physical capital, human capital, social capital, and financial capital. Moreover, the five livelihood assets alone are not sufficient enough to attain sustainable livelihood. There should be other conditioning factors to influence the access livelihood assets such as better market conditions, favourable market prices of herds at the market centres, strong institutions to support pastoralism, improved security of tenure and robust policies. According to the model above, if all the additional conditions or inputs are met, they will bring positive impacts to the livelihood of people. The positive impacts might be increases of household income, enhance strategies for adaptations and resilient against shock and stress, improve wellbeing of households, poverty reductions and reduces conflicts over resources access particularly natural resources.


3 CHAPTER THREE

3.1 RESEARCH METHODOLOGY

This chapter covers research methodology that were used; it includes study area, research design, targeted population, sample and sampling procedures, data collection methods and data analysis techniques, as well as limitations and ethical considerations.

3.2 Study community

The Datoga are subsistence pastoralists. However, with the current economic changes many of them are being forced to engage in different economic activities to sustain their lives such as farming, business and employment in towns. Young, Alyson G (2008), stated that some of the Datoga communities are practicing semi nomadic lifestyle where they engage in the growing of crops to produce extra food in addition to rearing animals\(^1\). Moreover Young (2008), Sieff (1997) and Ndagala (1991) further suggest that even though Datoga has been marginalized economically and socially they have established good relationship with their surrounding neighbours. For the reason it is common for the Datoga to intermarry with Iraqw that may have contributed to the diversity of households and livelihood strategies.

3.3 Study area and setting

The study was conducted in Hanang district, Manyara region, and covered two wards whereby two villages were selected in each of the wards. The wards covered are Bassutu and Basodeshi while the villages are Galangala, Mulbadaw, Basutu and Gidamambula.

\(^1\) Datoga keep cattle, goats, sheep and donkeys of which cattle are considered the most important as they provide milk, meat and income through selling to sustain their lives (Sieff 1997; Young, Alyson G 2008).
Figure 2: Map of Hanang district showing Basotu and Basodesh ward

The study area was purposively selected because historically it was dominated by pastoralists (Barbaig, Datoga and Iraqw), currently, the area has pastoralists and agro pastoralists. Thus we will able to see the ecological constrains that Datoga pastoralists are facing due to forceful sedentary. Both the pastoralists and the agro pastoralists are subsistence farmers whose activities aim at food sufficiency at the family level. As for the pastoralists, they sell some of their animals when they have a pressing issue that needs money, while the agro pastoralists would usually sell surplus of their grain, if they have any, or in the worst case scenario they would sell some of their produce to meet that need.

These villages were selected to understand resource conflicts that exist between these two groups: pastoralists and agro pastoralists.

3.2.1 Methods

This study used a mixed methods research (MMR), according to Creswell (2014:pp4) Mixed method research is an “approach to inquiry including collecting qualitative and quantitative data” in relation to the study’s research questions. I used Mixed Method Research (MMR) looking at the livelihood risks facing by Datoga pastoralist from two different dimensions.
Moreover mixed methods help to neutralize the weakness, biases and limitations of using one method. The targeted population for this study were the households in the villages mentioned in the section (3.2). Since I could not involve the whole population in this study, a representative sample was taken from the population concerned. This is essential in order to generalize the study findings. In order to select a representative sample for this study, I used both simple random sampling and purposive sampling. I used Simple random sampling to give every element an equal chance of being selected for the study so as to avoid bias (Berg & Lune 2012; Walliman 2006). While Purposive sampling was used to select a certain group of people who I knew possessed the knowledge and expertise relevant to the study (Berg & Lune 2012). My sample comprised household heads, government officials and traditional leaders (village elders). Thereafter, I categorized my informants into three groups: household informants, key informants (traditional leaders or village elders) and specialized informants (government officials) District Agriculture and livestock Development Officer (DALDO), Ward Executive officer (WEO) and Village Executive Officer (VEO). Specialised informants were referred from one to four accordingly. The VEOs as specialised informants one and two, WEO and DALDO, while key informants A and B were traditional leaders from each ward.

Simple random sampling was used to select a sample of 40 households to participate in the study from a list of households in the area understudy which was provided by the village secretary. After I obtained a list of all households from the Ward Executive Officer for each ward, we decided to choose the villages with most of the respondent related to my study. Then each household from the list were assigned numbers for each village. The first village was Galangala with 180 HH, number were assigned from 1 to 180 to each HH. Since my plan was to sample 10 household in each village, then 10 random numbers were generated online from http://stattrek.com/statistics/random-number-generator.aspx. The procedure was the same for rest of the villages. Therefore the households selected for this study were those that were randomly selected from the online generated numbers. However, adjustments were done in case of the missing informants. Adjustment was possible because during the time this study was conducted it was a dry season when majority of the households had migrated to other regions with favourable conditions. Purposive sampling was used to select key informants and specialized informants. I interviewed key informants in order to get more critical views on livelihood challenges that are confronted by pastoralist in Basutu and Basodeshi ward. I considered someone to be a key informant due to their knowledge and experience of the area.
Before conducting formal interviews, I performed a pilot testing of few households to check the quality of the responses. After the pilot testing, the necessary amendments were made to the questions and then I conducted the interviews. This study used both structured and semi-structured interviews. The use of structured interviews with specialised informants gave me a comprehensive picture of the livelihood challenges confronted by pastoralists in the selected wards. Furthermore, structured interviews improved the reliability of the collected data. Through structured interviews I was able to use closed questions and the respondents were required to provide short and precise responses, while I used semi-structured interviews to collect data from households, key informants and focus group discussion (FGDs). Through the semi-structured interviews with open ended question I was able to ask respondents to explain their answers and follow up question were applied (Berg & Lune 2012). Furthermore, semi-structured interviews allowed me to engage in discussions of issues which were not originally part of the study but resulted into bringing in insights into the study. All interviews were face to face to make it more interactive and participatory. In total forty six interviews were conducted whereby forty (40) were in-depth semi-structured HH interviews, 4 were specialized interviews and 2 were key informant interviews. On average, one interview lasted between 45 and 60 minutes depending on the flexibility of the respondents and their willingness to corporate and provides information. At the end of every interview respondents were given a chance to provide suggestion on how to improve their livelihood. I also allowed some questions from my informants and most of them were excited to know the outcome of this study and whether the government will do something to improve their conditions. I conducted three FGDs in three villages. During the FGDs every member was asked to contribute something to avoid one person dominating the discussion. The focus groups consisted of 8 to 10 members depending on their willingness to participate and the availability. However gender composition in the FGDs was a challenge due to the culture of Datoga where men are responsible for decision making and as such women were not willing to come forth to participate. My FGDs included people from various backgrounds and age so as to tap on their vast experiences. This gave me an opportunity to get diverse opinions on the topic understudy. Follow-up questions were used to bring clarity and in-depth understanding to the responses provided.

Participant observation was also used in this study. Before the formal interviews, I made a visit to the two villages where I was able to have a friendly chat, interact with local people, and establish rapport. I wrote down in my field note book different issues relevant to this
study that I had observed during a particular visit. Furthermore, during the interviews as I moved from one HH to another I was also making observations which gave me a chance to get more data and also verify some of the issues raised during the interviews. This was also recorded in my field note book. I observed the problems of drought, water shortage and the long queues of people waiting to fetch water for domestic use. I also observed the poor infrastructure and poor market condition.

Secondary data from published reports, newspaper articles and online data bases were also used. Particularly, for policies related to livestock and land use, government reports were reviewed.

3. 3 Data analysis

Following the data collection, the next stage is to analyse the qualitative data. Data that I collected from FGDs, household interviews, key informants and specialised informants were analysed through content analysis. According to Berg and Lune (2012: pp349) content analysis means a systematic way of examining particular themes so that specific patterns can be identified and content can be coded to generate data that will address the RQ. First data that I collected were entered into excel sheet to reduce its bulkiness and to make it more manageable data for analysis. I disaggregated the data into themes until I got the right themes and labelled them accordingly. For each RQ, I identified theme to be used for analysis such as “livelihood risk”, “conflicts”, “Land ownership” and “policy implications” respectively. Thereafter I established categories for each RQ. Categories means anything that related or connected to the main theme identified above were noted. Themes were further examined through conceptual analysis. Conceptual analysis is a branch of content analysis whereby a concept is selected for analysis, and analysis involves quantifying and tallying of concept. The main idea of conceptual analysis is to examine the frequency of occurrence of the particular concept or term in a phrase of word or texts.

Quantitative data were analysed with the statistical package SPSS. I coded the data and entered them into statistical package. I used SPSS to make cross tabulation, frequency tables and histogram that depicted clear picture of the findings. SPSS was selected for this study due to its ability to analyse data in different ways. I used SPSS because I am conversant with it.
than the other statistical packages. In addressing Research Question I that intended at exploring the livelihood risks of the pastoralists in Basodeshi and Basutu I used conceptual analysis which is a type of content analysis whereby I chose a concept for analysis which is “livelihood risks” and different categories of livelihood risks. I used SPSS in addressing RQ II that intended to examine about the access and ownership of land’. However, I compared both male and female in each ward and villages to know which group had more access and ownership of land.

In addressing RQ III, that examined the existence of conflicts in the area, again conceptual analysis were used, concept where established which “conflicts”. I managed to group similar themes together from the transcribed data. For instance, causes and management of conflict were coded with different colour and causes of conflicts and handling of conflict were categories therefore each category was placed on the right place.

In addressing RQ IV, that examined the relevance of the current policies in promoting pastoralism and reduces vulnerability, I referred to some secondary data and hold critical discussion with specialised informants. Specialized informants were able to criticize the current policies that they limit the freedom of pastoralist in accordance to resources access.

3.3.1 Limitations and challenges of the study

In conducting any research studies there are some challenges and limitations to be encountered during the way by the researcher. Challenges were the physical conditions of the area that influenced the methodology or the overall research process.

First of all my plan was to work with the EPINAV project in Mulbadaw farm, Hanang district, to research on cattle fattening and the way local people could benefit out of it. However this research was not possible after realising that the project was just at its early stage. It was hard to get sufficient data because local people were not yet trained on how to fatten their cattle. Therefore I had to change my entire research. This was caused by lack of sufficient information about the project and what is really happening at the ground. After the discussion with one of the lecturer at SUA, who was the head of the project, we agreed not to carry on with the cattle fattening project and I had to change my research.

Another challenge was lack of cooperation. My initial plan was to collect data for this study for the period of two months. Nevertheless, due to bureaucracy and lack of cooperation from one of the lecturer at SUA to issue an introductory letter I had to waste one month waiting for
the letter. I had to travel to Morogoro from Dar es Salaam three times as well as make several phone calls to ask for the letter. These made me to incur unnecessary costs. At the end I decided to travel to the field without an introductory letter, thanks to Mulbadaw farm manager for his help. I had then only one month in the field to collect data. This resulted in me having to work intensively to compensate the time lost.

High transport cost and poor roads was another challenge that I encountered throughout my research. Most of the roads in the area were seasonal and in a very bad condition during the rainy seasons and sometimes impassable. This led to high transport costs. To solve the problem of poor roads I was using a motorcycle and this helped me to access most of the remote areas though the cost was high. The distance from the guest house to the villages is also high and this resulted into high transport costs. In addition village executive officer and wards executive officer were expected daily allowance from me. Sometimes they say don’t be stingy with your money

Language was sometimes a barrier, especially with the older respondents. However, most of the respondents were easy to communicate through Swahili. The village chairperson had to act as my local translator to overcome the problem of language. The problem with translation is that sometimes key information is lost; unfortunately I had to rely on information given by the translator. To reduce losing key data I was simplifying the questions as much as possible.

Another big challenge that I encountered was to control the FGDs at Galangala village after wrong information was sent out by the village chairman. He informed people that there was a village council meeting with agricultural officer from SUA. Hence many people showed up. I had to tell them that I am not an expert from SUA, rather a student doing a research for my academic career. This angered them and many left. Those who were left to participate in the FGD had raised tempers as well and this affected the discussions and how they related to each other. Consequently two people wanted to fight as the pastoralists blamed the farmers for causing conflicts and vice versa. I had to cancel the FGD because of this.

Moreover, during my interviews many households asked me the contribution of my research to their lives especially in combating their livelihood challenges. Many said that they are tired with fake promises from the past with the same kind of people who came under the umbrella of being students. They need people who can make impact in their livelihoods because they share a lot of information with them. It should be a win - win situation on both sides.
3.3.2 Ethical considerations

Before conducting interviews I had to seek consent from the participants by telling them what the study was all about. Participant selections to this study were based on the random selections. However participation to this study was optional no one was forced to take part. Respondents were free not to answer the questions that they were not comfortable with. I managed to maintain anonymity and confidentiality of the respondents and the recorded data. No participants name or physical address was recorded. This helped not to link anyone information with their identities. Confidentiality of respondents and information were also maintained. I tried to prevent access of information to the people who are not part of this study.
CHAPTER FOUR

4.1 DATA FINDINGS, PRESENTATION, ANALYSIS

This chapter gives a detailed presentation and analysis of the findings. The presentation and analysis of the collected data in this study are based on the RQ that act as a benchmark for critical discussion. Therefore, this research will present the findings based on the research questions.

4.2 Findings as per research questions

4.2.1 Livelihood challenges faced by pastoralists in Basutu and Basodeshi ward

The researcher was also interested to know the main livelihood challenges faced by the pastoralist societies at Basutu and Basodeshi ward in the four selected villages. The following section presents these livelihood challenges.

Access to reliable and affordable healthcare

Respondents were asked to mention if they had either a hospital or a dispensary in their villages and the distances to the nearest health centre.

Table 1: village name * Do you have health service in your village

<table>
<thead>
<tr>
<th>Village Name</th>
<th>Do you have health service in your village?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Basutu</td>
<td>Count 1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>% of Total 2.5%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Mulbadaw</td>
<td>Count 1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>% of Total 2.5%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Galangala</td>
<td>Count 2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>% of Total 5.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Gidamambula</td>
<td>Count 0</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>% of Total 0.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Count 4</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>% of Total 10.0%</td>
<td>90.0%</td>
</tr>
</tbody>
</table>

(Source: own field work 2013)
This study found that access to health service in all four villages is limited. Majority of the respondents had difficulties in accessing to health services. From Table 3 below, it might be shown that 15% of respondents from Basutu ward had an access to health services as compared to 85% that had no access to health service. Conversely, 5 % of respondents from Basodeshi ward agreed to have access to health service and 95% of the respondents disagree to have access to health services. However, about, 2.5% of respondents from Mulbadaw village had a dispensary. The study found that 2.5% of respondents from Basutu and 5% of respondents from Galangala had access to health service but it lacked essential equipments or medicine, while in Gidamambula lacked health services accessible to their village. The below table explain the details.

According to the response from key informants, specialised informants and FGD, Basutu and Basodeshi pastoralists are confronted with several livelihood risks; these livelihood risks are homogenous in all four villages however there are some variations in each villages. They mentioned lack of health services, poor market conditions, limited access to clean and safe water for domestic use, limited land for grazing, lack of access to financial resources. Respondents further said government should extend services delivery to the rural people to improve their livelihood.

The researcher was further interested to know the distance from each village to the main hospital either Hydom Lutheran hospital or Katesh district hospital. The table below illustrates the distances from the respective villages to the hospital.

<table>
<thead>
<tr>
<th>Village</th>
<th>Hydom Hospital</th>
<th>Katesh Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mulbadaw</td>
<td>50km</td>
<td>35km</td>
</tr>
<tr>
<td>Gidamambura</td>
<td>70km</td>
<td>40km</td>
</tr>
<tr>
<td>Basutu</td>
<td>20km</td>
<td>48km</td>
</tr>
<tr>
<td>Galangala</td>
<td>65km</td>
<td>45km</td>
</tr>
</tbody>
</table>

(Source: Own Field Work, 2013)

From the table it shows that pastoralists in the four villages have to cover long distances to get to the hospitals for better health care. This could also jeopardise their health status. In addition
to long distances covered, respondents also lamented about high consultation fees at the hospitals which make it difficult for majority to access reliable health services.

All in all, accessing health services in the area is difficult due to lack of health facilities in the study area, long distances covered to hospitals as well as high consultation fees in hospitals.

**Access to reliable market**

This study has found that access to a reliable market in Basodeshi and Basutu ward is a challenge. The market is held once a month where animals are auctioned. Furthermore the study found that price of the animals can sometimes be decided by the buyers, and the seller has to accept the offered price, though there is a room to negotiate. Nevertheless many respondents especially women complained about lack of negotiating skills hence ending up being victims of lower price takers. Only a few respondents in each village claimed to have access to a reliable market. However, even though these respondents claimed to have an access to a reliable market, they still complained about the low market prices offered for their herds they went on and say that “we are selling to meet our daily needs and not to sustain our future needs, it is a distress sale”. Most of the respondents reported that they are sometimes forced to go back home with their herds if the offered price is too low. The study further found out that the respondents believe that middlemen are a source of the low prices being offered in the market as they are the ones who buy the cattle and sell them again with higher prices. Generally, most of the respondents were not happy with the market environment because it gives them low market returns and made them feel inferior group to be exploited in the society. Respondents from Galangala and Gidamabura complained about long distance to the market which is located at Basutu centre which brings fatigue to themselves as well as their animals. As a result of this, the animals do not look health when they get to the market and hence low prices being offered by the buyers. The below table explain the result in terms of distances that were complained.
Table 3: village name * how do you consider the distance to the market

<table>
<thead>
<tr>
<th>village name</th>
<th>how do you consider the distance to the market</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Close</td>
<td>Very close</td>
</tr>
<tr>
<td>Basutu</td>
<td>Count</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>5.0%</td>
</tr>
<tr>
<td>Mulbadaw</td>
<td>Count</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>15.0%</td>
</tr>
<tr>
<td>Galangala</td>
<td>Count</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>0.0%</td>
</tr>
<tr>
<td>Gidamambula</td>
<td>Count</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

(Source: Own field work 2013)

Access to financial services

As regards to access to financial services such as bank loans and micro credits, all respondents (100%) reported that they do not have access to financial services to boost their capital (restocking). One of the reasons for not having such an access being that they fail to meet the conditions set by the banks. Many argued that, “we are lacking financial knowledge and physical asset (land) to use as collateral as a requirement to secure bank loans”. The study also found out that most of the respondents lacked formal education and as a result it was difficult for the financial institutions to provide loans to them. Lack of financial capital boost has made it hard for pastoralists to intensify productivity.

Access to clean and safe water for domestic use

This study found that water is very scarce resource in the area understudy. All respondents complained about the challenge in accessing clean and safe water for domestic use. Only 5% from Galangala and Basutu had an access to clean and safe water for domestic use compared to 20% of respondents from Gidamambura who had no access to clean and safe water for domestic use. Generally 57.5% of respondents in all four villages had no access to clean and safe water, 17.5% agree to have access to clean and safe water for domestic use. They went on to say that sometimes they had to walk for more than an hour to get to water wells. At the time this study was conducted many respondents argued that the problem was worsened by prolonged drought and shortage of rain. In terms of gender, the study found out that the
problem of water shortage affects women and children more because they are the ones who look for it at household level for domestic use. In addition few respondents in Galangala said that they sometimes get water from NAFCO once a week at lower cost which is not reliable. The below table explain the findings

**Access to clean and safe water for domestic use**

<table>
<thead>
<tr>
<th>Village name</th>
<th>Do you have reliable access to clean and safe water for domestic use?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Basutu</td>
<td>Count</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>5.0%</td>
</tr>
<tr>
<td>Mulbadaw</td>
<td>Count</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>7.5%</td>
</tr>
<tr>
<td>Galangala</td>
<td>Count</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>5.0%</td>
</tr>
<tr>
<td>Gidamambula</td>
<td>Count</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>17.5%</td>
</tr>
</tbody>
</table>

(Source: Own field work 2013)

Therefore these findings signify that the problem of water delivery in rural Tanzania is still a chronic problem. The photo below shows the lines of empty water containers at a water kiosk in Galangala village depicting the extent of the water problem in the study area.

Figure 3: Water problem at Galangala village source Field (2013) (photo M.Mpamba)
4.2.2 Land ownership between pastoralists and agro-pastoralists and farmers, who owns more land?

Access to natural resources is a key element of livelihood among the pastoralists. This section looks into land availability, access and ownership by pastoralists’, moreover in this question I was examining who owns more land between pastoralists and farmers in the study area.

Land Ownership

The analysis revealed that the majority of the pastoralist in Basutu and Basodeshi do not own land, while only 27.5% of respondents owned land. About 40% do not own land while only 32.5% rented land. When gender is put into perspective regarding access and ownership of land, the study found that male headed households had more access to land, owned more land and had a higher chance of renting land than female headed households in all the four villages. Between female and male respondents it was found that 40% of male respondents had more access to land, owned and rented land while only 20% of female respondents had this chance. Only 12.5% of all male respondents claimed to have no access to land compared to 27.5% of female respondents in all four villages. Generally, I can say that farmers own a many times more land compared to pastoralists. The figure below summarizes these results.

Table 5: Gender of respondents in relation to land ownership

<table>
<thead>
<tr>
<th>gender of respondent</th>
<th>Do you own land?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Male</td>
<td>Count</td>
<td>8</td>
</tr>
<tr>
<td>% of Total</td>
<td>20.0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Female</td>
<td>Count</td>
<td>3</td>
</tr>
<tr>
<td>% of Total</td>
<td>7.5%</td>
<td>27.5%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>11</td>
</tr>
<tr>
<td>% of Total</td>
<td>27.5%</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

(Source: Own Field Work 2013)

The respondents blamed the governments for not considering pastoralist societies on land distribution (ownership). Lack of land access and ownership impeded pastoralist to effective involvement in economic undertakings.
The figure below shows the land ownership or access in each village. The results shows that respondents in Basutu village had more access and ownership of land compared to other villages. Respondents in Mulbadaw had limited access over land out of all four villages. This means that land access and ownership by pastoralists is big problem in the area.

However, all key informants and specialised informants agreed that farmers owns big portion of land compared to pastoralists. For instance Murjanda farm, Mulbadaw farm and Basuntu plantations, moreover according to specialised informants there are some individual farmers owns significant amount of land compared to pastoralists. Therefore I can say that there is unequal distribution of land in the study area.

Figure 4: land access in relation to village

Grazing land

All respondents claimed that there is not any land identified for grazing by the village or central government. They feed their herds randomly, wherever they can find grass, or sometimes they feed on other people’s farms after harvesting (farm residues). Most of the respondents said that majority of their colleagues had migrated to other places where land is enough with green pasture for their herds and other essential services like better market conditions. In addition specialised informants were asked about implementation of the village land use plan. According to VEOs, they acknowledged the program, but they said it was impossible to implement since there were no land to demarcate. However, WEO said they have partly implemented the program due to lack of enough land in their ward. According to DALDO reported that the district office has ordered the village land use plan to be
implemented in the entire district and assured me some of the villages has completed the implementation of the program like Mogitu and Endasak villages. Therefore lack of demarcated land for grazing has exacerbated livelihood risks among pastoralists.

4.2.3 How did land use result in conflicts and how were the conflicts managed?

This section looks at whether there are conflicts in the study area between the pastoralists and the farmers and if there are any, how are they handled. These conflicts could arise when they are looking for pasture, water and market for their herds (Stock driving).

The result shows that conflict related to land use exists between herders and other land users. About 82.5% of the respondents were in agreement that conflict over land use existed while according to 17.5% disagreed as per figure (5) below. However, in response to the same question, specialised informant (VEO) and (WEO), and key informants named “B” as traditional leaders disagreed on the existence of conflict in the area because they demarcated land for different activities. In addition, specialised informants, i.e VEOs and DALDO and key informants named “A” as traditional leaders agreed the existence of minor conflicts claiming headers to be the source of conflicts. They further said “conflicts between the two ethnic groups is unavoidable due to the lack of sufficient grazing land, they all cornered in a limited land”. Specialised informant DALDO further said people were “optimistic about land use plan”, but this is only temporary solution because there is always overconsumption of common resources because many animals are kept in a limited land, hence pastoralists should control the movement and size of their stock. In FGD at Basutu majority of participant agree with the existence of land use conflicts in their villages. Those who said yes went on to say that the nature and magnitude of conflict differ from time to time and from person to person. However, majority of the respondents said that the magnitude of the conflict is small compared to other places like Kilindi, Kilosa and Dodoma where it involved killings of people, herds and imprisonment of pastoralists. The study further found that the main conflict is between herd and NAFCO (Mulbadaw farm). Firstly Conflict between individual pastoralists and small farmers and secondly conflict between individual pastoralist and NAFCO and Murjanda (investors).
The researcher was interested to know the causes of conflict in the villages. Households’ respondents, key informants and specialised informants have mentioned different reasons that cause conflict in the villages. The following reasons were mentioned by the respondents, Competition between grazing land and agricultural land, this was mentioned several times (repeated 38 times) by all respondents (household informants, key informants and specialised informants) under the study area which is 82%.

i. Mistreatment of pastoralist societies by calling them invaders, many respondents in all villages lamented about being called invaders by politician, they referred a statement issued by one of the parliament member when he was addressing the parliament. They argued that kind of statement has exacerbated hatred between pastoralist and other people.

ii. Respondents also said that conflicts were influenced by trespassing to other people’s farm looking for pasture and destroying crops. Sometimes when migrating to other areas during dry season they cross through crops farms and destroy crops. Furthermore, respondents said they are encountered with conflict during stock driving to water point

**Handling conflict**

The researcher was also interested to know the way conflict is being handled in the area.

It is important to know the method applied to solve the conflict and whether it’s agreeable by pastoralist. The majority of the respondents were not happy with the way conflict was handled in the study area. Traditional leaders (elders) and the village government are responsible for
settling conflicts. They decide over the fine to be paid as a compensation for destroyed crops. The respondents noted, however, that there is no standard as to how compensation is reached at with others paying more than the actual value of the crops destroyed while others pay less. Some respondents claimed that there is corruption being practised and also collusion of leaders and farmers to exploit pastoralists. Hence some element of injustice conduct to pastoralists can be noted, for this reason pastoralists want to be treated with discretion on handling the conflicts.

The findings from key informants, specialised informants said that conflict is normally handled at the village level whereby Village security committee, traditional leaders and village chairperson sit together and assess the extent of destructions before they set the fine if needed. Sometimes district office sends representative to witness the matter.

4.2.4 What are the Policy implications of the findings?

This section looks at the relevance of the current policies in Tanzania towards sustainability of pastoralism and its future

In terms of knowledge and understanding of the existence of policies to support pastoralism, all respondents (100%) informed me that they know nothing about the existence of policies to support their production system. One of the respondents in Basutu wondered by saying that “if there is a law or policies to support pastoralist, why are we kicked everywhere, why are we oppressed by our government as if we are not citizens of this country”. Moreover many lamented about lack of participation in policy formulation because they are the ones either to benefit or to be affected by the policies. Respondents in the study area further said they are doubt if there is any law or policies that have been implemented to address pastoral livelihood risks. “Laws has been implemented in this country to favour farmers and marginalize pastoralist”. Furthermore when I further asked respondents about the existence of pastoralist organizations (NGOs) to conduct seminars on policies awareness, all respondents said no pastoralist organization has been down to the area educating people about policies or collecting their opinions about the policies. Also majority of the respondents in the study area believed that policies are not on their favour because they are now being restricted to graze in several places that they used to graze freely in the past. They complained about their grazing land being taken by investors in different places. In addition, many have lamented being chased away to graze from areas close to national parks and other protected areas due to environmental protection issues because pastoralist mobility is regarded by many
environmentalists as being environmentally unfriendly. Generally, all respondents consider current policies to have no positive benefits to their lives but are responsible for the misery that the pastoralists are going through. According to DALDO and key informants, they stated that “majority of pastoralists have limited strategies for coping with livelihood challenges (vulnerability). The only way is to migrate to other regions where they can find pasture, water and good market to sell their herds”. Respondents suggested that future of pastoralism is not sustainable and will be more difficult due to the following reasons below,

**Rangeland problems**

Specialised informants argued that the future of pastoralists will become harder because of the limited amount of grazing zone in the study area. They further said in the past pastoralists used to live nomadic lifestyles and graze in protected areas (wildlife reservations), there was no herds control movement. Incidentally, the continuation of policy change the government has banned grazing in the protected areas. Therefore pastoralists obliged to accommodate themselves in a reduced area. Consequently, government is pushing pastoralist to adopt for sedentary lifestyle and reduce the herd size to align with carrying capacity. In the long run pastoralist will look for alternative livelihood strategies for income generation. However specialised informant 4 argued that policies has been there during colonial period the problem was on the implementation and strengthen the policies is what many people see it as a problem. However, specialised informant DALDO argued that policies has been there during colonial period the problem was on the implementation and strengthen the policies is what many people see it as a problem. DALDO further said that pastoralist should agree with national livestock development policies that need pastoralist to stop archaic style of grazing (migration) and practice sedentary. “Move with the current situation of land demand for different activities”.

**Expansion of crops agriculture**

Informants argued that the expansion of agriculture in different places with a favourable amount of rainfall is making it difficult for pastoralists to find land for grazing because many people migrate to areas with fertile land and push the pastoralist into less fertile land with less vegetation cover. Likewise even the less arable land were turned into arable land and occupied by farmers due to agricultural mechanisations. The demand for more agriculture was a result of rapid population increase in the country which needs for more food crops to be produced to meet the demand and government policies to promote agriculture. Hence
pastoralists have to migrate to other places to find for pasture in a limited land. Therefore there is a high possibility that many pastoralists will reduce the number of their herds and opt for agriculture (agro pastoral) and they will try to manage their environmental sustainably.

This study revealed that respondents are very concerned about the current and future situation of pastoralism due to the current complexities that are posed by the policies. All informants argued that the future of pastoralism is uncertain and not promising due to the increase in their vulnerability and a lack of robust policies to promote pastoralism. However, informants believed that more pastoralists will start diversifying their income generating activities in the future to cushion the negative impacts that government policies have on pastoralism.

**Personal reflections**

This thesis acknowledge other factors beyond that have been mentioned concerning the livelihood risks facing by pastoralists in the area understudy, such factors are climate variability, shortage of veterinary services (VETAID) and lack of cattle dips just to mention a few.

Before going to the field I had perception that pastoralists are unfriendly and dangerous to the environmental. However, after going down to the field I came to learn that many pastoralists problem are both internal and external set thus originate from pastoralist themselves or engineered by external factors. Internal set means that pastoralist themselves have some weaknesses such as lack awareness about what is going on economic change, mobility is no longer viable due to several climatic and infrastructure changes. Other reasons are advance of technology which demands for more commercial ranches which keeps small number of stocks with high returns. While external set is due to lack of policies and strategies to promote and protect the rights of pastoralists hence increases pastoralists’ vulnerability.
5  CHAPTER FIVE

5.1  5.0 DISCUSSION

5.2  What are the livelihoods challenges that pastoralist in Basutu and Basodeshi ward in Hanang district were confronted with

In Basutu and Basodeshi ward there were many livelihood challenges (risks) facing by Datooga pastoralists. This study discuss the following key drivers for livelihood risks in the study area as mentioned by the respondents,

Access to broad range health services is vital in promoting human health. Rural people are always in critical conditions when they need to access healthcare service. There are several reasons that restrict rural residents to access improved healthcare services such as poor infrastructure, distance and high consultation fees. This study evidenced that pastoralists in Basutu and Basodeshi ward had poor health services provision, only one dispensary is in operation in Basutu. In order to get reliable health service, people had to go more than 30 to 70 kilometres either Mbuyu (Hydom Lutheran hospital) or Katesh district hospital. It is risks in case of the eruptions of communicable disease because many people will be affected in a short time, for instances 85% of respondents had no access to healthcare services in the area. Even those with access to healthcare in the study area complained about high consultation fees paid at the hospital while the service offered was poor and they lack medical facilities, they referred consultation fees as “exorbitant prices”. Moreover during discussion with key informant DALDO said that “government has tried to extend healthcare in the study area by recruiting more human doctors and veterinary officers but many quitted the job due to poor environment” and they call it a “hardship working centre”. Extension of healthcare services should go together with expansion of other essential services so that the newly recruited officials would be attracted to stay, for instance apart from their basic salary there should be hardship allowance to motivate them to stay in such kind of environment. Therefore it is hard to turn around pastoral economy if healthcare improvement is not substantial in areas resides by pastoralists and rural areas general.

As a matter of fact market access plays a crucial role in promoting the livelihood of rural household whether they are pastoralists or none pastoralists. Market can be discussed into three parameters, such as market reliability, nature or conditions of the market and market accessibility. Many rural household (pastoralists) claimed that a deplorable market condition
has impeded livelihood improvement to a large extent. This study indicates that pastoralists in the study area had a serious problem in accessing the reliable market as lamented by many respondents. The market is not reliable and poorly developed hence limit the possibility of pastoralist to interact with different traders or to meet with potential buyers who could offer good prices for the herds. Many respondents complained about the low market prices for their herds because the market is less competitive and therefore pastoralists became the price takers and buyers dictate the market prices of the herds, it is a monopsonistic market. Presence of few buyers into the market has automatically pushed pastoralists to accept whatever price offered by the buyers, it is difficult for pastoralists to tap the economic benefits of their cattle for this kind of market. On the other hand presence of the middlemen in the market is a serious problem because middlemen negotiate with both sides (seller and buyer), and then offers low prices to the seller and sell at a higher prices and pocket the differences. Mostly pastoralists sell to meet their daily obligatory and not to sustain their future needs. Apart from being unreliable due to lack of potential buyers and presence of middlemen to dictate the prices, the distance to the market was another constrained faced by pastoralists in the study area, more than 60% of the respondents complained about the distance to the market to be far or very far, the market is located at Basutu centre all seller and buyers had to meet in this centres from different places. The infrastructure system in this study area was observed to be poor, hence some of the respondents claimed that they had to walk for more than three hours with their herds before they arrived at the market centre. Consequently some arrives late at the market when the buyers already gone and therefore they had to go back with their herds and wait until the next auctions month. In addition poor infrastructure and seasonal roads restricted many people to engage in the market due to high transport cost and more time they spent on travelling. In general, the study area lack good road network that would connect the market centres with many buyers from different places to make it more competitive. Lastly, market is carried out in an auction basis. Auctions market needs people with good negotiating skills to get better prices and benefit out of market. Many pastoralists in the area understudy lack negotiating skills due to poor knowledge and lack of formal education that would enable them to fully engage in market hence majority of the pastoralists become inactive participant in the market and gave room to middlemen to exploit them. In general good market conditions would create a platform that will enhance economic benefit to pastoralists in the area and improve their livelihood.
Access to financial capital resource is a vital factor to enrich economic development and at the same time help with poverty alleviation in rural areas. Financial market access will enhance the ability of pastoralists to engage in a range of economic activities that will improve their livelihood. Hence it is difficult for pastoralists and non-pastoralists to break through the poverty circle without access to financial services because their investment strategy depends on financial boosts to be realised. However lack of education and limited financial knowledge was noted as a barrier in access to financial institutions and borrowing ability among the pastoralist in Basutu and Basodesh ward. To be more precisely pastoralist in Basutu and Basodeshi ward owns little financial (cash) capital due to lack of banking services that they could save and borrow money. Most of their financial capitals are in terms of livestock keeping; this is very risk especially during catastrophes because their livestock will suffer over the consequences of disasters. For instances all respondents which is 100% had no access to financial market. Therefore I can say that government has failed to fully incorporate pastoralist in Basutu and Basodesh ward into a cash economy. Cash economy system would help pastoralist to sell their herds during the dry seasons, save their money and restock during the rainy seasons when the pasture is green. Government should create environmental that will attract financial institution to operate in rural areas. Most of the financial institutions are less willing to operate in rural areas without guaranteed of potential customers and high risk of low returns.

The importance of access to clean and safe water for pastoralist and non-pastoralist societies is well known. Access to safe and clean water is vital in promoting human health. Lack of piped water supply might contribute to water borne diseases such as cholera and typhoid. Therefore this study evidenced that the study area is facing a big challenge to access clean and safe water for domestic use. The water pump in Galangala village is dried up and no effort by the village or district government to drill another water well (revive). Women and children suffer more with the problem of water shortage in the study area because they are responsible for collecting water no matter the distance covered. Distance remains to be a big constrains in access to clean and safe water. Many women claimed that they had to walk for long distances fetching water, hence they spent more time for example many said, they had to walk for more than three hours one way to get water. This activities of fetching water from long distances has limits pastoralists and none pastoralists (women) the possibility to engages into different
economic activities. Though, few respondents had admitted that they are getting water once a week from NAFCO, they have to pay around TSHs.100-200 per 20litres, and long queue at NAFCO water point was observed were women and children spend hours before they get water. Yet this source is not very reliable because during the period of prolonged drought they don’t give water to pastoralists. Apart from the problem of water for household use, the area has a problem of accessing water for their herds. Many claimed that they were prohibited to take their herds for watering at Lake Basutu in order to protect the environment even though the water is bit salty which is not good for the health of their herds. However, respondents suggested that change of precipitation had contributed to water scarcity in the study area; normally they used to harvest rain water for domestic use and for their herds. Water scarcity in the study area was connected with prolonged drought. During the rain seasons many respondents harvest the rain water and store them in traditional way hence reduces the time and distance to collect water. Therefore more function water wells are needed in the area in order to reduce water shortage problem this will help to reduce vulnerability among Datoga pastoralist and will improve their wellbeing.

5.3 Land ownership between pastoralists and agro-pastoralists, Farmers, who owns more land?

Land is one of the key resources in promoting pastoralism sector because pastoralist relies on land to obtain pasture and water. However lack of land access has shifted pastoralism sector to unsustainable one. Pastoralists in Basutu and Basodeshi ward had a problem of accessing and ownership of land, for instance only 27.5% of all respondents owned land and 32.5% had a chance of getting land through renting. Female household are more vulnerable in land access and ownership only 20% of female respondents owned and rent land compared to 40% of male responds. This might be influenced by several factors, but the major one being the culture practice which oppresses women and marginalization of pastoralists. However, it is clear that farmers own more land compared to pastoralists, for example Mulbadaw farm alone owns more than 100,000 acres of land.

Meanwhile the human and livestock population increase has exacerbated competition for resources access particularly land. The inflow of people to the area for acquiring agricultural land has led to the increase of human people which exacerbated the problem of land ownership. Even the land that were considered as inhospitable and for agriculture were converted to arable agriculture land due agricultural mechanization hence majority of pastoralists had migrated to other places due to land loss. However the problem is not only on
ownership of land, but also accessing land for grazing is serious problem in the area which needs to be address. The huge part of the village land (100,000 acres) was given to wheat grower such as NAFCO and Basutu plantations, this left majority of pastoralist with limited land to sustain their lives and competing for small communal land. Moreover government lacks some appreciation of pastoralism when they allocate land to other users at their expense. Therefore farmers own more land than pastoralists, serious measures need to be taken to improve the situation of land access otherwise it will further accelerate violent conflict in the future. The village land use plan should be implemented so that many people can get access and ownership of land.

5.4 How did land use result in conflicts and how were the conflicts managed?

Conflict between pastoralists and other land users particularly farmers are very common and are escalating at a high rate in different places in Tanzania. The clashes between the two groups has claimed the lives of several people and left many innocent people severe injured, dead, lost their properties and livestock. The nature of the conflict between the two groups are multi-faceted due to the fact that pastoralists needs land for grazing their herds, while other land users, like farmers, need to grow their crops. However the extent and magnitude of conflicts is not uniform in all places in Tanzania as it varies from place to place. In some places, the conflict is very violent and intense, for example in Morogoro region, for example the citizen newspaper (2013) has reported violent conflict which involves killing of people (appendix5). According to Ndagala (1992) identified sources that trigger conflict between pastoralist and other stakeholders as Population growth, implementation of conservation programs that have made most of the areas inaccessible, land alienation and encroachment, resettlement programs and commercialization of agriculture. Meanwhile 82.5% of the respondents in Basutu and Basodesh ward mentioned the existence of conflict in their villages; normally the conflict is between individual pastoralist and NAFCO. Among the main reasons that contributed to the occurrence of conflict in Basutu and Basodesh as mentioned by the respondents was the limited access to grazing land, lack of land use plan (limited communal grazing land), unapproved grazing after the harvest and the intentional crops damage which is done by herds at night during migration or stock driving for water. In addition, excessive drought led to water scarcity and limited pasture has forced many pastoralists to migrate towards areas with sufficient water and pasture. This migration has caused tension between farmers and pastoralist who are desperate looking for fresh pasture and water for their herds. Pastoralist
claimed to be oppressed when it comes to resources access that are needed to support their livelihood, their right of access to land has been denied by local leaders and politicians due to their controversial statement they issued hence they influenced conflicts. Many times the question of land access for grazing by pastoralist is being politicised with no best solutions to the problem, this has influenced the occurrence of conflicts between the two groups in the area. Moreover leader’s laxity and weak policies are among the factors for escalating conflict in Basutu and Bashodesh ward. Hence respondents blamed the government that has failed to handle the matter with discretion. Generally the existence of conflicts between these two groups tells us that the traditional ties that existed for decades between pastoralists and farmers are no longer in place. Pastoralists used to feed their herds on crop residues (after harvest), at the same supplying manure to the farmers. Traditional leaders and local village leaders are the mediators of the conflicts in the area. However the traditional leaders lack the required skills and competencies to perform this role. Many households are not happy with the overall process of conflict resolution, they are charged with hefty fines or sometimes their livestock are confiscated. They suggested that implementation of proper laws or bylaws to deal with these kinds of small conflicts would help to reduce the occurrence of conflicts. They insisted on government involvement before its menace.

5.5 What are the policy implications of the findings? (Policy dilemma)

Policies that cut across pastoralism has caused a gigantic challenge to pastoralists due to the fact that the policy makers are less willing to involve pastoral communities during policies formulation and implementation. According to Union (2010) ineffective, inappropriate pastoralism policies and weak institutions are among the reasons that pastoral livelihood is worsening. Most of the implemented policies have failed to take into account lifestyle of the pastoral communities hence reduced their mobility. According to Benjaminsen et al. (2009) since the colonial period Tanzania policy discourse has been manipulated by modernizations that have negative perceptions towards pastoralists that are dangerous and unfriendly to the environment and less productive groups to own land. Government put more emphasis and encourage people to engages in big scale farming (commercial agriculture) that needs huge land size and a lot more resources, for example “Kilimo kwanza policy (Agricultural first)”. This kind of policy put pastoralist into a disadvantage group against farmers. Among the pillars of Kilimo Kwanza is to set aside land that will be used for agricultural transformation in the country.
The livestock sector and development strategy of 2010 and National Livestock Policy (NLP) of 2006 had the aim of promoting the overall livestock sector. The policies put more emphasis and focus on development of commercial ranches and least emphasis on pastoralism (traditional livestock keeping). However, less has been achieved from the main goal of NLP (URT National Livestock Policy 2006:4). Additionally according to Matte & Shem (2006), past and current policies have wrong perceptions of pastoralism as unsustainable land users and thus mobility would lead to environment problems hence concluded that they need to be converted to sedentary. Implementation of Policies without considering the pastoral communities can either result to support or impinge livelihoods of pastoralists in different places in Tanzania. For instance investment policy which opened the door to foreign investors has witnessed many foreign investor engages in big land deals purchase, those land deals to a great extent has denied the right of local people to access and own land, environmental conservation restricted mobility of pastoralists and villageisation program which resulted to family disintegrations and loss of ancestral land by pastoralists. In area understudy huge part of village land was given to NAFCO for wheat plantation. Initially the investors manage to grab 40,000acres of land then later on expanded to 100,000 acres. Basically these policies can be considered as anti-pastoralists policies and have had detrimental effects to the livelihood of pastoralist society in Tanzania because they limit pastoralists’ mobility (flexibility). In most cases policy makers choose what they consider as best for pastoralists “one size fits all” without making community assessment this has led to policy failure (Hesse & Odhiambo 2006). Policy makers Several times government officials and policy makers has issued controversial statement about pastoralism, for instance in a parliament session on 7th February 2015 some of the parliament members accuse pastoralist as a source of land conflicts in the country. Moreover it is believed by many policy makers believe that mobility among pastoralist can influence conflicts and environmental degradation. However in one of the study done in Cameroon by Moritz (2008) has disagree with the perception that mobility of herds can lead to environmental degradation but rather argue that mobility should be considered as the best and sustainable way for consuming natural resources.

This study can authenticate that there is not any significant difference between colonial policies and current state policies in promoting, safeguarding and involvement of pastoralists’ communities for better livelihood. Most of the policies and program implemented has been of catastrophic to pastoralists.
6 CHAPTER SIX

6.1 Conclusion and recommendations

6.1.1 Conclusion

This study has explored the livelihood challenges that were confronted by the Datooga pastoralist in Basutu and Basodeshi ward and the potential for livelihood improvement. However challenges were both climate and non-climatic change scenario. The focus of this study was to explore on non-climatic change challenges. The challenges were related to resources access both financial and non-financial resources access such as conflicts on land use, policy dilemma and health services provisions. In order to achieve the intended goal of this study, three broad research questions were administered to this study. In addition, this study adopted and modified SLF that was developed by DFID 1999 to analyse the livelihood components. Below I am going to give summary of the study by looking each research question.

The studies found out that pastoralist are confronted by many livelihood challenges such as lack of access to resources that are needed for their sustainability of their livelihood. Land has been the scarcest resource because the huge part of village land is owned by investors and farmers. Pastoralist had to migrate to another areas looking for pasture for their herds and sometimes they have to graze at other people`s farms otherwise their herds will die due to lack of pasture.

Access to water for domestic consumptions was another big challenge faced by Datooga pastoralist. Due to prolonged drought that was caused by climate variability has caused the severe water shortage in Basutu and Basodeshi ward hence women and children had to walk for more than three hours looking for water.

Generally the area is characterised by poor provision of social services such as school, hospital and infrastructure. Market conditions were observed to be very poor and unreliable. Many pastoralists complained about market conditions and low price offered to their herds.

This study found that, the area has conflict between pastoralist and other land users. However the magnitude of conflict is small. But that does not mean that it should be ignored. Conflicts are caused by many reasons such as trespassing to farmer`s field, competing for land between
herders and farmers, crops destruction. Moreover lack of land use plan and limited communal grazing land was mentioned as some of the factors attributes to conflict. Conflict is handled by village leaders and traditional leaders (Village elders) at the village level and most of the time pastoralist had to pay hefty fine. However the conflict mediators Lack of legal knowledge (skills), as a result many pastoralist are not happy with the way conflict is being handled and claimed injustice conduct.

Policies were found to be a challenging to pastoralist. Many policies have negative perceptions towards pastoralism. There is no specific policy to promote pastoralism but rather promoting and encouraging livestock keeper in commercial ranches. To a large extent policy has negative impact on livelihood of pastoralist due to some archaic and anti-pastoralist policies are being practiced for instance “Kilimo kwanza” (Agricultural first) promote agricultural mechanization which needs huge land, conservation policy which denied access to pasture and water for pastoralist, privatization and investment policy resulted to huge part of pastoralist ancestral land to be given to investors hence reduce pastoralists mobility.

Therefore, from the above presentation and discussions of the result for this study and summary of the result as per research questions, a number of broad conclusions can be drawn in this study. Starting with “hostility” which exists between herders and farmers were ignited by government due to their failure of handling conflicts in time and using less competent personnel to handle the matter. Also, it was clear that pastoralist had less access and ownership of land in the area, women being the most affected. That means there are some weaknesses on Land tenure system in recognition of traditional ownership of land. Government should open up more reserved land for public use. Moreover lack of land use plan in the area might have been contributed to several land problems in regard to access and ownership. Thirdly, Government has failed to extend social services equally in rural areas particularly areas reside by pastoralist regardless of many efforts to do so in different places. Finally, this study found out that many anti pastoralist policies has impinged pastoralist livelihood in regard to resources access. Policy makers consider pastoralism as unsustainable land user, unfriendly to environment. However no clear evident if pastoralism are harmful to the environmental.

In general the continuation marginalization and deprivation of Datoga pastoralist was a result of lack of appreciation and acknowledgement of the pastoralism sector to the economy by the
government. Pastoralists were denied by all essential services for improvement of their livelihood. Moreover archaic policies has denied the right of mobility to pastoralists while looking for forage and water, policy makers do not involved pastoralist during policy formulation and decide what is best for pastoralists which lead to policy failures and increases of vulnerability to pastoralists.

Generally the findings of this study and the recommendations below can be used to improve the livelihood of the pastoral community in different places in the country and other places with similar uncertainties. Livelihood can be improved when the mentioned challenges are overcome. Some of these recommendations below were suggestion from the field by respondents. The findings of this study can further help to improve on policy failure and policy review that will accommodate people from the grassroots level.

6.1.2 Recommendations

There should be a critical policy review and some archaic policies should be amended to match the current growth rate. Before policy implementation there should be a community assessment. Policy makers, donors and NGOs should go down and discuss with people about what they need to be done by policy, all the relevant suggestion from the people should be taken into considerations. In addition, policy formulation should use a bottom up approach. Bottom up approach will ensure participation of people from the grassroots level. Participation of people will help in making policy that are friendly and accepted by people because of its practicality.

Land use plan should be strengthen in all villages. Land use plan will help to demarcate land for different activities at the area. Large number of respondents suggested for land use plan that should be preceded by land surveying and open up the underutilised land for public interest. Tanzania has huge amount of unsurvey and underutilised reserved land therefore it is worthless to continue having conflicts over land between these two ethnic groups. Unnecessary reserved land should be surveyed and demarcated for public use, herders and farmers should get equal access and ownership of land. During the survey and setting of boundaries government should consult local people who are very familiar with their areas.

This study also recommends the extension of necessary social services to the areas resides by pastoralist in order to control their mobility and improve of rural livelihood. Social services such as health services, establishing of veterinary centres, water supply through constructions of boreholes and digging of water wells, school and financial services are important in
improving the livelihood of the society. Financial services can be extended through the introduction of saving and borrowing schemes known as SACCOS will help rural pastoralist and non-pastoralist to save and borrow money when they need it. Borrowing money can help pastoralist to boost their capital when they want to restock. In addition according to Blench and Marriage (1999) on their working paper they suggested for training of “paravets” who can be located in remote areas and treat minor diseases in order to control the spread of diseases. The program already implemented in some African countries such as Kenya, Somalia and Chad with some different level of success.

This study further recommends on knowledge transfer to pastoralist communities through group training. Government through the livestock development department should train pastoralist in groups on how to raise high breed cattle that can weigh more and can bring more profit rather than the current style of keeping large stock that weigh less and produce little profits. For instance the program of cattle fattening which is done by Mulbadaw farm can help to transform knowledge to local people. When the pastoralist acquire skills and knowledge it helps to transform their lives by keeping few number of high breed cattle with better returns at a lower cost. More awareness and education to pastoralist should be given on how to reduce the stock size and how to restock in a sustainable way. This will help to make pastoralism more sustainable and promising good fortune to more generation and at the same time will help to reduce the problem of forage and grazing conflicts.

Government should employ qualified personnel with basic knowledge of legal matters in handling conflicts. This will help fair conduct and judgement during conflict resolutions. Retired lawyers can be the best alternative in conflict resolution because they have legal skills and knowledge.

Finally I recommend that government should establish small scale industries in areas reside by pastoralist. These small industries should provide market for pastoralists’ product and thereafter those industries should process the product for mass consumptions in the country. Examples milk processing industries, meat and cattle skin. This will ensure reliable market with no middlemen hence the livelihood will improve at the same will control mobility.
References


Young, A. G. (2008). *Young child health among Eyasi Datoga: Socioeconomic marginalization, local biology, and infant resilience within the mother-infant dyad: ProQuest.*
APPENDICIES

Appendix 1: Household interview questionnaire

Household Questionnaire
For
Livelihood Challenges (vulnerability) Among the Datoga Pastoralists in Basutu and Basodeshi Ward (Tanzania)

Questionnaire No._______________

A. Basic information

A: I. Interview

<table>
<thead>
<tr>
<th>Village:</th>
<th>Questionnaire number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place of interview:</td>
<td>Name of interviewer:</td>
</tr>
<tr>
<td>Starting time:</td>
<td>Finishing time:</td>
</tr>
<tr>
<td>Date:</td>
<td></td>
</tr>
</tbody>
</table>

A.II. Interviewee
1. Sex of respondent (Tick the box in accordance with the given answer. Do so the whole way through when responses are organized in boxes like below)

<table>
<thead>
<tr>
<th>0=Male</th>
<th>1=Female</th>
</tr>
</thead>
</table>

2. Age of respondent: ________years

3. Education (Number of years in school)_________years

4. Marital status

|----------|----------|------------|-------------|------------|-------------|

5. Main occupation: (multiple answer)

<table>
<thead>
<tr>
<th>1.Agro pastoral</th>
<th>2.Pastoralism</th>
<th>3.stall/small business</th>
<th>4.Other (Mention)</th>
</tr>
</thead>
</table>
6. Number of household members___________________Size of agricultural land used by the household____________________

B. General Knowledge and Views of the livelihood risks

7. WHAT DO YOU CONSIDER AS A LIVELIHOOD CHALLENGES YOU ARE FACING IN YOUR DAILY LIFE.
   i.__________________________________________________________
   ii.________________________________________________________
   iii._______________________________________________________
   iv._______________________________________________________
   v._______________________________________________________

b. How do you overcome those mentioned challenges? (Adaptation strategies)
   i.__________________________________________________________
   ii.________________________________________________________
   iii._______________________________________________________

8a.DO YOU HAVE ACCESS TO HOSPITAL OR DISPENSARY IN YOUR VILLAGE?
   I. YES   II. NO

b. How long is it the distance from your house to the nearest hospital or dispensary?
   __________________________________________________________

c. What can you say about the service offered by hospital/ dispensary?
   __________________________________________________________

d. Do you pay for consultation fee? What do you think about the service costs?
   __________________________________________________________

e. Apart from consultation fee, is there any extra cost to pay at the hospital/ dispensary?
   __________________________________________________________

f. have you attendend any seminar or training on how to control livestock diseases?

g. if YES how many times?

h. if NO, why?
9. DO YOU HAVE ACCESS TO SAFE AND CLEAN WATER FOR DOMESTIC USE (Piped- treated)?
   I. YES
   II. NO
   a. Do you have tap water or other source of domestic water supply? ____________________________
   b. How much do you pay for water services per month in your household? ____________________________
   c. If other source of water supply, Is it time consuming? (Explain your answer) ____________________________
   d. Is the source mentioned reliable?
      i. YES
      ii. NO
      iii. Please explain your answer ____________________________

10. WHERE DO YOU TAKE YOUR HERDS FOR WATER?
    ______________________________________________________________________
    c. How many times in a week? ____________________________
    ______________________________________________________________________

11. DO YOU HAVE A RELIABLE MARKET FOR SELLING YOUR HERDS?
    i. YES
    ii. NO
    a. How many times in a month? ____________________________
    b. Are you comfortable with the market price of your herds? ____________________________
    c. What is the nature of the market? ____________________________
    d. What can you say about market accessibility? ____________________________
    e. What is your opinion about the market condition? ____________________________

12. DO YOU HAVE ACCESS TO FINACIAL SERVICES? (ACCESS TO CREDIT) IN YOUR AREA (Micro credit)?
    i. YES
    ii. NO
a. What is your knowledge about the financial market?______________________________________

b. Are you engaged in any microfinance group activities eg. SACCOS
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

C. GENERAL KNOWLEDGE ABOUT LAND USE PLAN, ACCESS AND OWNERSHIP

13. DO YOU OWN LAND?
   I. YES     II. NO     iii. Rented

b. How many acres______________________________________________________________

c. Do you know anything about land use plan?
   i. YES
   II. NO
   iii. Please explain your answer________________________________________________


   d. Is there any land use plan implemented in your village?
      i. YES
      II. NO
      III. DON'T KNOW

e. What is your suggestion about land use plan? (If any)
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

14. HOW MANY ANIMALS DO YOU OWN?

b. What type?
   I. Cattle       iii. Sheep
   ii. Goat       IV. Donkey

15. DO YOU HAVE ACESS TO GRAZING LAND?
I. YES II. NO
b. Where do you graze your herds?
   I. Randomly
   II. Communal land (special grazing land)
   III. Other (explain)

16. IS THERE ANY PROBLEM OF OVERGRAZING IN YOUR VILLAGE?
   I. YES
   II. NO
   III. DON’T KNOW
b. How do you control overgrazing?

D. Knowledge about Conflicts and how conflicts were handled
17. IS THERE ANY CONFLICT IN YOUR VILLAGE?
   i. Yes
   ii. No
b. What are the causes of conflicts? (Please explain)

c. How is conflict handled in your village? (Please explain)

d. What are your perceptions on conflicts?

18. WHERE DO YOU TAKE YOUR HERDS FOR WATER?
   a. How many times in a week?
      ______________________________________________________________
   b. Do you pass many agricultural lands when heading to water sources?
   c. Do you think there are enough water sources for all animals in the village?

E. Knowledge about Policy issues
18. WHAT IS YOUR THOUGHT ABOUT THE FUTURE OF PASTORALISM IN RELATION TO CURRENT POLICIES

19. WHAT IS YOUR SUGGESTION (S) FOR LIVELIHOOD IMPROVEMENT? (IF ANY)
EXTRA QUESTIONS

Q1. Who set the fine?
Q2. Are you ready to reduce the number of herds and to have a few high breed (fattening?)
Q3. Can you compare the situation in the past and the current one, which one is better? And why?
Q4. How much is the price for cattle and how much is for goat
Q5. Are you involved in village meetings? Have ever consulted during implementation of new policies?
Appendix 2: Focus group discussion

“Livelihood Challenges (Vulnerability) Among the Datoga Pastoralists in Basutu and Basodesh Ward (Tanzania)”

FOCUS GROUP DISCUSSION WITH PASTORALISTS COMMUNITY

Max: 10 People

INTRODUCTION (Guide to Facilitator)

Thank you for participating in this focus group discussion today. Your attendance shows how much you care about your community.

Today we are having a discussion concerning livelihood vulnerability in your community. The information you provide will be used to help the community, District council, Policy makers and Government in general, understand more about the issues affecting pastoralist society taking your community as one of the examples. This will help different stakeholders to implement effective solutions.

As a result of these discussions, we as a community will have a better understanding of the issues, risks, conflicts and challenges, and we will think together about what causes these issues and what are the ways to address those.

Explain to the participants:

- Your participation is voluntary. You do not have to take part if you do not want to.
- You do not have to answer a particular question if you don’t want to. There are no rights or wrong answers.
- The report will not mention any of your names.
- We encourage you to discuss issues freely. Please respect the opinions of others and keep the discussion confidential after the focus group ends.
- The findings will be written into a report and shared back with the community.
- If you have any questions after the interview about the discussion, you can talk to me (tell participants how they can contact you).
The discussion today will be in ________________, and will last approximately ____________ hours.

Do you have any questions before we begin the discussion?

Please note: The questions below are suggestions only. They should not all be used, as it would take far too long to investigate them all in the time allotted to a FGD. Use the guiding questions as the primary questions. As time permits and as the discussions indicate, use the supplementary questions.

Land Use plan and Conflicts

1. Can you explain the administrative structure of your village and land use committees?
2. How are members elected/appointed to the positions?
3. What is the role of the land use committee in relation to grazing activities?
4. How often do you hold meetings and who are invited to these meetings? On average how many people attend?
5. How was the land use planning carried out in your village? To what extent were the villagers involved.
6. What percentage of land/forest in your village has been demarcated for grazing activities so far?
7. Do you think the land demarcated for grazing activities is enough for the village?
8. Do you think that the land demarcation has left the village with sufficient land to engage in other activities like agriculture, collection of fuel wood and other?
9. How would you describe the relationship between the pastoralists and farmers in your village?
10. Are all community members including women, youth and the elderly are participating in decision making process?
11. Are community members following their previous rules or do you think that you have switched to the new rules concerning land use plan. Can you explain some of the old rules that are still being followed in your village if any? Are these in conflict with the new rules?
12. What systems are in place to ensure that the rules are followed - i.e. how are the new rules enforced?

Livelihood Risks and Vulnerability
13. What do you consider as livelihood challenges in your community?
14. Do you have access to electricity, clean and safe water for domestic use?
15. How much do you pay for water services per month in your village?
16. Do you have tap water or other source of domestic water supply?
17. If other source of water supply, Is it time consuming? (Explain your answer).
18. Who is responsible for water fetching?
19. Is there any reliable and affordable hospital/dispensary in your community?
20. How would you describe health services in your area?
21. How many primary and secondary schools do you have in your village?
22. Do you think it’s important for a child to go to school? Why? (explain your answer)
23. What are the main economic activities in your community?
24. What other economic activities your community is engaged in?
25. Do you have access to banking and microfinance services?
Appendix3: Key informants interview
INTERVIEW GUIDE FOR KEY INFORMANTS

Livelihoods Challenges (vulnerability) Among Datoga Pastoralists in Basutu and Basodeshi Ward

QN.1
WHAT ARE THE LIVELIHOOD CHALLENGES FACED BY PASTORALIST IN BASUTU / BASODESHI WARD?

QN.2
IS THERE ANY CONFLICT BETWEEN HERDERS AND FARMERS IN THE ABOVE MENTIONED WARD? WHAT ARE THE CAUSES?

QN.3
DO YOU HAVE ANY PROBLEM OF OVERGRAZING IN THE MENTIONED WARDS?

QN4
IS THERE ANY PROBLEM OF CLIMATE VARIABILITY IN YOUR AREA (CLIMATE CHANGE)?

b. HOW DO PASTORALISTS COPE WITH VULNERABILITY?

QN.5
THE PRESENCES OF NUMEROUS POLICIES RELATED TO ENVIRONMENTAL CONSERVATION AND PROTECTION OF RANGE LANDS MANAGEMENT, DO YOU THINK PASTORALISTS ARE AFFECTED BY THE PRESENCE OF SEVERAL POLICIES THAT CONTRADICT EACH OTHER?
Appendix 4: Specialised informants interview
LivelihoodsChallenges (vulnerability) Among Datoga Pastoralists in Basutu and Basodeshi Ward

SPECIALISED INFORMANT INTERVIEWS
VEO / WEO/ DALDO

1. What are the main economic activities in this area?
2. What type of livestock people keep in this area?
3. Do you involve pastoralist in development activities?
4. Are there any conflicts in your area? (between pastoralist and farmers)
   a. what are the causes?
   b. how do you control conflict in your area when arise?
   c. what are the challenges do you face in making sure this groups corporate well?
5. Do you have a land use plan in this area?
6. Do you have a problem of overgrazing in your village?
7. Which group between pastoralist and farmers owns a big portion of land? Why?
8. What are the livelihood challenges confronted by the pastoralist in your area?
9. What should be done to improve the livelihood of the pastoralist societies in the future? How do people cope with vulnerability?
10. Do you have school or hospital in your area? What about its accessibility? How about the rate of children drop school? Or generally the rate of absenteeism?
11. Do you know anything about livestock and development policies? Do you think pastoralists are affected by conservation and many other policies?
12. Apart from the national livestock policy and NLSDP, which strategies do you have as a district to improve the livelihood of pastoralist in your area?
One shot dead, 39 injured in dispute

Speaker Malindia announced that a committee would be formed to find a lasting solution.

Mzogoro, Farmers in Mzogoro Village, Mzogoro District, on Monday refused to elect an order by the minister for Livestock and Fisheries Development, Dr David Malapu, to release 800 head of cattle that were seized during an operation to remove unauthorized livestock from the district.

Not even as Mzogoro villagers disagreed with the minister, at that time a person was allegedly shot dead and 39 injured in a confrontation between farmers and police officers to remove 800 head of cattle in Mzogoro District in the region, according to the district commissioner, Mr Anthony Simba.

The violent confrontation pitting farmers and livestock keepers, which Mzogoro regional police commander, Mr Simba, also confirmed, came days after some 800 head of cattle were removed without the government’s order to end the conflict.

Speaker of Parliament Anise Malindia announced on Friday that a select committee on agriculture would be formed to find a lasting solution for agriculture between farmers and livestock keepers.

On Tuesday, the livestock minister visited the village to remove their cattle due to unpaid Sh100,000 fine per each animal instead of Sh120,000 as proposed in previous by-laws. The minister had settled in the village on Tuesday after receiving reports of the release of livestock by the village authority.

The cattle belonged to Mr Magoma, a resident of the village who allegedly hired the area through Dorset Village from the Coast Region.

On Thursday, the village members complained that the cattle doesn’t belong to their village, and the minister decided to remove the cattle from the area.

The minister urged eviction, compensation, and the need to change the by-laws of the village to ensure that the farmers are compensated and receive a clear understanding of their rights.

THE CITIZEN NEWS PAPER
THURSDAY 17th NOVEMBER 2013