

**DEVOLVED GOVERNANCE AND PASTORALIST LIVELIHOOD
DIVERSIFICATION IN MOYALE, MARSABIT COUNTY, KENYA**

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Social Sciences of Africa Nazarene University**


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DECLARATION

I declare that this document and the research that it describes are my original work and that they have not been presented in any other University for academic work.

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DEDICATION

I humbly dedicate this thesis to Ibrahim Hassan Sora, my husband. I am forever grateful for your support and belief in me.

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TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	xi
LIST OF FIGURES	xii
ABSTRACT.....	xiii
DEFINITION OF TERMS	xiv
ABBREVIATIONS AND ACRONYMS	xvi
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Introduction	1
1.2 Background to the Study	1
1.3 Statement of the Problem	9
1.4 Purpose of the Study	11
1.5 Objectives of the Study	11
1.6 Research Questions	11
1.7 Significance of the Study	12

1.8 Scope of the Study	13
1.9 Delimitations of the Study	13
1.10 Limitations of the Study	14
1.11 Assumptions of the Study	15
1.12 Theoretical Framework	15
1.12.1 Agency Theory	15
1.12.2 Citizen Participation Theory	17
1.12.3 Institutional Theory	20
1.13 Conceptual Framework	22
CHAPTER TWO	24
LITERATURE REVIEW	24
2.1 Introduction	24
2.2 Review of Literature	24
2.2.1 Forms of Livelihoods among the Pastoral Communities	24
2.2.2 Effectiveness of Devolved Governance System on Pastoralist Livelihood Diversification	28
2.2.3 Challenges Pastoralist Communities Experience in Livelihood Diversification	

	34
2.3 Summary and Research Gap	42
CHAPTER THREE	43
RESEARCH METHODOLOGY	43
3.1 Introduction	43
3.2 Research Design	43
3.3 Research Site and Rationale	44
3.4 Target Population	45
3.5 Study Sample	45
3.5.1 Sample Size	46
3.5.2 Sampling Procedure	47
3.6 Data Collection	48
3.6.1 Data Collection Instruments	48
3.6.2 Pilot Testing of Research Instruments	48
3.6.3 Instrument Reliability	49
3.6.4 Instrument Validity	49

3.6.5 Data Collection Procedure	50
3.7 Data Analysis and Presentation	51
3.8 Legal and Ethical Considerations	52
CHAPTER FOUR.....	53
DATA ANALYSIS, RESULTS AND DISCUSSION	53
4.1 Introduction	53
4.1.1 Response Rate	53
4.2 Background Information	54
4.2.1 Distribution of Respondents by Gender	54
4.2.2 Distribution of Respondents by Age	55
4.2.3 Highest Education Level	56
4.3 Forms of Livelihood	58
4.4 Effectiveness of Devolved Governance System Structures	62
4.5 Challenges Pastoralist Communities Experience	67
4.6 Pastoralist Livelihood Diversification	72
CHAPTER FIVE.....	75
SUMMARY, DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS	75

5.1 Introduction	75
5.2 Summary of the Findings	75
5.2.1 Forms of Livelihood	75
5.2.2 Effectiveness of Devolved Governance System Structures	76
5.2.3 Challenges Pastoralist Communities Experience	77
5.2.4 Pastoralist Livelihood Diversification	78
5.3 Discussions	78
5.3.1 Forms of Livelihoods	78
5.3.2 Effectiveness of Devolved Governance System Structures	79
5.3.3 Challenges Pastoralist Communities Experience	80
5.4 Conclusions	81
5.5 Recommendation	82
5.6 Area for Further Research	83
REFERENCES.....	84
APPENDICES.....	96

Appendix 1: Questionnaire for Head of Pastoral Households	96
Appendix 2: Committal Letter	101
Appendix 3: School Recommendation Letter	102
Appendix 4: Interview Guide for Key Informants	103
Appendix 5: Focus Group Discussion Guide	104
Appendix 6: NACOSTI Research Permit	105
Appendix 7: Map of Study Area	107

LIST OF TABLES

Table 3.1: Target Population	45
Table 3.2: Sample Size.....	47
Table 3.3: Data collection procedure	50
Table 4.1: Response rate	54
Table 4.2.1: Distribution of respondents by Gender.....	55
Table 4.3 : Statement on forms livelihood	61
Table 4.4 Effectiveness of the devolved governance system on pastoralist livelihood diversification	65
Table 4.5 Challenges pastoralist experience and the impact on pastoralist livelihood diversification	70
Table 4.6: Pastoralist Livelihood Diversification.....	73

LIST OF FIGURES

Figure 1.1: Conceptual Model demonstrating the relationship between independent, dependent variables.....	23
Figure 4.1: Respondents Age.....	56
Figure 4.2: Education Level	57

ABSTRACT

Devolved governments facilitate sustainable, equitable and high-quality services for all citizens. The Schedule (Article 18) clearly states and specifies the distribution of functions between the two levels of governance (National and County). The objective of this study was to assess the effect of Devolved Governance on Pastoralist Livelihood in Moyale Sub- County, Marsabit County, Kenya. The specific objectives include: determining the forms of livelihoods among the pastoral communities; examining the challenges pastoralist communities experience in livelihood diversification and assessing the effectiveness of the devolved governance system on pastoralist livelihood diversification. The study was anchored on three theories namely the citizen participation theory, institutional theory, and the agency theory in analyzing the link that the theories had on the study. The study employed a descriptive research design. The target population included 1771 household heads stratified as per their role in the pastoralist communities. Simple, random and purposive sampling techniques were utilized in select a sample size of 315 respondents informed by the Kothari Formula. The researcher collected primary data using questionnaires for households, interviews for elected leaders and Focus Group Discussion schedules (FGDs) to collect both qualitative and quantitative data. Quantitative data was analyzed descriptive statistics while qualitative data was analyzed using content analysis. Quantitative data was first coded, then entered into Statistical Package for Social Science (SPSS) version 23 for analysis. The researcher later conducted content analysis on qualitative data from the interviews whose content were grouped and consequently analyzed into themes. The findings were presented in graphs, charts and tables as per the study objectives while applying narrative presentation in form of verbatim for the discussions and interviews. The study found that livestock-based livelihoods of pastoral and agro-pastoral communities in Moyale, Marsabit County are increasingly becoming unsustainable and highly vulnerable to natural disasters. The study further established that although the Devolved Governance had initiated measures that could catalyze livelihood diversification, such as educating the locals on livelihood diversification measures and budgetary allocation on livelihoods diversification programmes, the impact made by these strategies were less than 20% (mean =1.96 SD=1.00). This may be due to failure to consult the community members, insecurity, insufficient allocation of budgets and insufficient feasibility studies. Results from 63% of the respondents indicated that close collaboration was required from both County and National governments in addressing challenges like the insecurity and market and human capital policies for the development of livelihood diversification change to occur. The study showed that pastoralists in the study area experienced considerable challenges in an effort to embrace livelihood diversification that include livestock diseases, drought, lack of business skills, lack funds for capital to diversify into other economic activities, climatic variability, inter-tribal conflicts and degradation of land. The study concluded that there was need to conserve climate and diversify into alternative sources of livelihood to attain a better quality of life for the people. The study recommends that the Devolved Governance initiates measures that could help in catalyzing livelihood diversification. In this regard, the County Government of Marsabit needs to consider providing the necessary infrastructure and resources for livelihood diversification change to occur. The study findings may benefit the National and County governments on issues around pastoralism and livelihoods as well as contribute to knowledge generation in the area of peace and governance.

DEFINITION OF TERMS

Decentralized Governance Structures: A shift in authority and power of decision making from the central governing structure to devolved units at the local community levels (Pirson & Turnbull, 2018).

Devolved Governance: It entails the delegation of powers from a sovereign state's central government to subnational governments, such as regional or local governments. It is a form of administrative decentralization in action. Devolved territories have the authority to enact legislation that is important to their territory hence giving them more autonomy (Kalekye, 2016).

Institutional Capabilities: The strategies used by local traditional institutions to improve and develop their local institutions (Tan, 2019). The nomadic communities seek knowledge on how to improve the financial skills, systems and institutions as well as social well-being of their people. According to Iyambo (1998) “capacity building is viewed as central to the success of the decentralization implementation process. It is recommended that deliberate and systematic efforts be taken in the area of capacity building using both local and donor funding.

Livelihood Diversification: The process by rural families to broaden their portfolio activities, social amenities and other social support capabilities to survive environmental changes and improve their standards of living (Gautam & Andersen, 2016).

Forms of livelihood: All economic activities conducted by local communities to earn an income, survive and thrive. It covers the pastoralism lifestyle, trading, fishery and crop farming. (It covers the pastoralism lifestyle including trading, fishery and crop farming (Chitonge & Ntsebeza, 2012).

Sustainable Livelihood: For the purpose of this study, it involves development strategies based on realistic expectations to include environmental management and management of livestock according to pastoralists' capability and empowering them to make informed choices about what to adopt and reject. Pastoralist livelihood covers all the socio- economic activities for a people or community that relies on keeping of animals like cattle, sheep, goat, camel and donkeys (Homewood, Trench & Brockington, 2012).

ABBREVIATIONS AND ACRONYMS

ASAL:	Arid and Semi-Arid Lands
CIDP:	County Integrated Development Plan (Marsabit-2018-2022)
FAO:	Food and Agriculture Organization
FGD:	Focus Group Discussion
GOK:	Government of Kenya
IGAD:	Intergovernmental Authority on Development
KNBS:	Kenya National Bureau of Statistics
MCA:	Member of County Assembly
NACOSTI:	National Commission for Science, Technology and Innovation
NGOs:	Non-Governmental Organizations
PENHA:	Pastoral and Environmental Network in the Horn of Africa
RAs:	Research Assistants
SPSS:	Statistical Package for Social Science
UNDP:	United Nations Development Programme

CHAPTER ONE INTRODUCTION

1.1 Introduction

Chapter one start with an introduction and subsequently details the background to the study, and a statement of the problem. It also presents the purpose of the study, objectives of the study, research questions, significance of the study, the scope, delimitations, and limitations of the study. Finally, it outlines the assumptions of the study and discusses theories in theoretical framework on which the study is anchored, the conceptual framework signifying relationship between independent and dependent variables of the study.

1.2 Background to the Study

The transfer of cash and the enactment of several laws have aided the delegated tasks under devolved governance as per the County Government Act (2012) Section 5. As earlier mentioned in the abstract, according to the fourth schedule of the Constitution of Kenya (2010), Kenya has a unique devolved system where both national and county governments appropriate budgets for various projects on livelihoods including for the pastoralist at any given time. Devolved government paves the way for fair, high-quality, and sustainable services for all Kenyans, with monitoring and assessment that aligns county and national goals (Bache, Bartle & Flinders, 2016). The procedures within the Act establish an institutional structure that outlines the new management and institutional structures that will be expected under the devolved system, which will be in line with

Kenya's Vision 2030. The national level is where the devolved system governance takes place (Fre & Tesfageris, 2019). The Devolved governance views pastoral livelihood differently as shared by Bache, et al. (2016) further mention that most of those at the national governing level push for a sedentary lifestyle to enable them to offer social services like people registration, education, healthcare and other social amenities. According to Wangai, et al. (2017) the local communities' greatest desire is to retain their cultural ecosystem and advocates for their pastoralist lifestyle, while the local governance level advocate for a mid-point where the cultural and social practice is not completely changed but also see a need for living quality livelihoods. At the same time, Demissie (2017) shares that is why there is a need for adopting agro-pastoralist livelihood and also to empower pastoralists in policy formulation on pastoral legislation that will be able to protect the pastoral land rights and offer alternatives that can sustain their livelihood.

Pastoralists are among the most researched topics and Pastoral and environmental network in the horn of Africa PEMHA (2019) however states that despite several studies pastoralists is still the least understood groups worldwide. The research points out that relevant policy consistently ignored the scientific evidence for sustainable pastoralism, the strategies and institutions that local people can utilize to turn the diversity and unpredictable weather conditions in the dry land to their advantage. The Northern Kenya communities and local governing structure has had challenges that arise from weak communication system, management and coordination with the national government and to some extent the county government. The local communities are not communicated to on the changing policies and regulations concerning their culture, traditions, belief

system and economic practices. At the same time, they are pushed to change some of the traditional practices without being given alternative forms of livelihood or engaged in the decision making, which has led to conflicts Jampel Dell'Angelo et al. (2016). It then becomes interesting to explore how best-devolved governance aspect can be employed in the diversification of the pastoralist's livelihoods in the Northern part of this country.

There are several case studies where pastoral strategies were integrated into a wider livelihood system: prehistoric South African foragers at times kept some livestock, as did prehistoric hunter-gatherers in East Africa; impoverished herders in north-western Namibia and Kenya in the 19th Century resorted in a great number to non-pastoral risk- buffering strategies which allowed for survival and the protection of emaciated herds. Pastoralism in southern and eastern Africa has been heavily influenced by state-led national conservation policies (Berzborn & Solich, 2017). In general, pastoralism has been regarded as environmentally problematic and state policies have sought to control pastoral land use through restricting mobility and/or fixing carrying capacities. Adams and McShane (1996) considered African pastoralists to be detrimental to wildlife, even if the game had been severely reduced by European hunters. As a consequence, herders were in many instances evicted from nature conservation areas. In other settings, they were intentionally contained together with wildlife in emergent conservation areas, as many romantic conservationists firmly believed that game and traditional herders could exist in harmony. In this way, the Maasai were moved from their aboriginal rangelands into what are today the Amboseli and Maasai Mara parks.

The pastoralist communities account for over 25 million people in Sub-Saharan Africa whose livelihood is based on livestock keeping as they move from one place to another. In the recent past, some of the pastoralists have shifted to doing other agricultural activities in combination with mobile livestock keeping (Asfir, 2016). The choice of livelihood is influenced by the social, cultural, economic, political and psychological components. The pastoralist living in arid and semi-arid regions experience difficulty in making use of their land for an economic purpose like agricultural activities due to unpredictable rainfall patterns and inadequate amount, harsh temperatures, improbable soil texture (Liao & Fei, 2017). Climatic changes make the communities to adopt a nomadic lifestyle of moving from one place to another to find food and water for their animals like cattle, goats, sheep and camels. Some of the reasons for shifts in pastoralist lifestyle include environmental degradation, droughts, flooding, conflicts among the neighboring communities, lack of basic infrastructure and increased insecurity (Githinji, et al., 2019). These reasons push the pastoralist to diversify their livelihoods and stop fully depending on their animals for survival as their practices becomes hard to maintain.

Pastoralists derive their subsistence needs from the consumption of animal products especially milk, meat and blood; in addition to purchased foodstuffs (Salih, 2017). Small stocks are easily sold compared to large stocks, which are sold when there is no other alternative. Both animal products and purchased grains contribute to pastoral household food security. Food security is therefore defined as the availability of adequate food, accessibility and affordability by household members at all times for active and

comfortable life (Nyariki, 2016). Over the years, Sub-Saharan African governments have been addressing national food self-sufficiency, yet it is evident that, from the outset, perennial hunger could coexist with adequate food supply at national, regional and international levels (Islam, 2019). The quantities of food at the national or regional levels do not correspond to the food security status at each household in the society. This is because households cannot produce sufficient food for themselves and do not have the monetary power to bridge the shortfall through purchases. Naturally, pastoral communities are expected to improve their food security status by improving livestock production and marketing strategies, as well as improved income through diversification and intensification of income-generation activities. Improved livestock production requires an understanding of the pastoral environment and production goals. Therefore, most pastoralists adopt livestock mobility in search of scarce water and pasture resources.

In some cases, where mobility if not well managed along specific routes, can cause a definite effect on the natural resources. However, the use of these resources by pastoralists depends on property rights, regime and sustainable management to support their socioeconomic livelihood (McCabe, 2017). To cope with these uncertainties in pastoral livelihoods, diverse and flexible strategies through a number of social, economic, environmental and political mechanisms are necessary. These may include improving market outlets, livestock diversity, and monitoring the impact of mobility on natural resources, key site management and establishing small-scale businesses (Akabwai, 2018). To complement these strategies, appropriate policies related to pastoral development including infrastructure and adequate social amenities are needed (de Bruijin & Van Dijk,

2017). Even though most researchers argue that the adoption of the mobility paradigm provides new insights into the social, political and environmental dynamics of pastoralists, the main concern is how it affects natural resource use and the pastoral livelihood and food security (Niamir-Fuller, 2014). An explicit environmental assessment of livestock movement and other development initiatives and their subsequent effect on natural resource uses has been an effective tool for properly designed and implemented pastoral developments to boost food security and pastoral livelihoods (Pratt & Gwynne, 2017).

In Ethiopia, Dinku (2018) revealed that for pastoralism to thrive there must be a symbiotic relationship between the pastoralist community members, the land and the livestock. Whenever the three aspects experience changes, then one aspect will suffer and it will affect the others, such that when land is unproductive, then the animals lack food and the people also suffer. With the changes in the climatic conditions, prolonged droughts and heavy rainfall causing floods, shifts in socio-economic demands as sustaining livelihoods need more resources, the pastoralist communities are shifting and adopting diversified measures to survive and thrive. According to Addisu (2017), some of the measures included settling down in and around urban centers to conduct training activities and some are seeking employment opportunities. Some studies consider diversification as an intentional strategy aimed at generating revenue benefits by diversifying the economic activity portfolio (Ellis, 1999). Furthermore, livelihood diversification is defined as a process that allows rural families to engage in other economic and social activities to diversify their portfolio activities and social support

capabilities to adapt to changing environmental conditions and improve their living standards (Yu, 2016). The diversification of livelihoods relieves pressure on the natural resources in the environment, reduces livelihood vulnerabilities and risks and improves resilience and sustainability of the communities while alleviating poverty.

A study by Woodhouse and McCabe (2018) on the wellbeing and conservation, diversity and change in visions of a good life among the Maasai in northern Tanzania suggested that the value of taking a disaggregated approach that conceptualizes benefits and burdens through a number of locally relevant well-being elements ensures that the priorities of the most vulnerable communities are reflected. Some changes in policies, laws and regulations like land ownership terms from communal land ownership to individual, push for pastoralist livelihood diversification like non-pastoral option where the animals no longer wander around for grazing but are kept in one place (Achiba, 2018). At the same time, Demissie (2017) mentions that some of the pastoralists are keeping modern animal breeds that can survive better under the changes in the environment, the people also practice modern animal husbandry like zero-grazing and artificial insemination to increase the production, which they use as food and sell to earn an income. The devolved governance structure will consider the means of livelihood for the pastoralists, the challenges they face and what can the devolved governing system do to help in diversification efforts.

Another study by Gebremichael and Asfaw (2019) on the drivers of food choice among Pastoral/Agro-Pastoral Community in Somali Regional State, Eastern Ethiopia revealed that the driving factors of food choice included drought, income, cost,

availability and quality of foods, market access, familiarity with new foods, knowledge of nutritious foods, and health status of individuals. The Vision 2030 developmental strategy report state that large tracts of land under pastoral communities is underutilized and produces little, hence calling for policy changes to plow the land (Frank, et al., 2017). According to Greiner (2017) the changes in land-tenure with a shift from communal land holding to individual poses a big threat to the way of life for the pastoralist communities. It then becomes prudent for the local leaders to hold brief meetings and make locals aware of the changes in land ownership, climatic changes that affect their livelihood.

Many players are executing and coordinating drought management activities in Kenya, according to King-Okumu, Orindi, and Lekalkuli (2019), resulting in redundancy, misunderstanding, lack of synergy, and inadequate accountability. This level of complexity necessitates devolved governance frameworks capable of aligning initiatives to government development plans, such as The National Drought Management Authority, which coordinates and harmonizes approaches and strategies for pastoral livelihood diversification in our case study. The changes in weather patterns, environmental concerns and cost of living pushes for exploration into livelihood diversification; the many actors trying to resolve the problems that pastoralists face, creates room for confusion, duplication of roles and wastage of resources, hence the need for a devolved governance approach to handling the case.

In Kenya, the presence of county government with devolved units has led to the need for coordination and clear communication channels between the national government and the county government in terms of sharing resources, responsibilities and

service delivery. This started with the formation of the Transition Authority which worked to help the counties get a footing on what their role and responsibilities lie regarding legal matters and service to the people (King-Okumu, et al., 2018). The devolved governance in Kenya is based on sharing resources, responsibilities, power and authority between the national government and county government and between the traditional institutions and formal institutions. As shared by Patel, Robinson and Ng'ang'a (2018) the quality and strength of governance at the local scale in the Northern part of Kenya is little with a lot of emphasis on keeping with the traditions as opposed to considering diversification to survive the changing climatic and weather patterns and social structures.

1.3 Statement of the Problem

Decentralization of the Kenyan governing system into the county government has helped in bringing government services closer to its people. The pastoralist communities have been able to slowly adapt and shift to other livelihood and economic activities as they try to survive the climatic changes and conserve the natural resources. The local governance structures have helped the communities to diversify, but challenges still linger due to weak communication systems, decisions made without consultation and participation of the locals and unequal power and authority sharing with biasness against the local communities.

Some studies have looked on devolved governance and pastoralist livelihood diversification for instance; In Kenya, Achiba (2018) looked at measures to manage livelihood risks by adopting diversified income in pastoral settlements in Isiolo County.

The study noted that one way was for the pastoral communities and households to settle down in one specific area. The study creates a conceptual gap as it does not mention governance at any level in livelihood diversification. Another study by Naburi (2020) examined the effectiveness of Watershed Governance for Food Security in the Sio River Basin. At the time of study, water resource management was yet to be implemented under devolved governance hence study presented a governance gap.

The greatest challenge of devolved governance in Northern Counties including the County of Marsabit is placing more emphasis on traditions as opposed to empowering pastoralists to diversify their livelihoods. This has increased the vulnerability of the pastoral local communities of Marsabit County to shocks occasioned by drought and other unforeseen calamities. Lack of diversification has contributed to overreliance on livestock as a source of livelihoods among pastoral communities in Marsabit County. The ultimate effect of this is the manifestation of a vicious cycle of poverty as a negligible proportion of livestock products is available for commercial purposes. It is against this background that the present study investigated on how best the devolved governance can be practiced to improve on diversification efforts by the pastoralist communities. In addition, it will guide policy makers to consult the local communities more, educators will get information on the link and increase the depth of literature on handling devolved governance and the local communities will gain insight on the personal value they gain on diversifying their economic activities.

1.4 Purpose of the Study

To assess the living standards of the people of Moyale sub-county in Marsabit County through the diversification of pastoralists' livelihoods and application of devolved governance principles.

1.5 Objectives of the Study

The study specifically was directed by the following objectives:

- (i) To determine the forms of livelihoods on pastoralist livelihood diversification in Moyale Sub-County.
- (ii) To assess the effectiveness of devolved governance system on pastoralist livelihood diversification in Moyale Sub- County.
- (iii) To examine the challenges that hinder devolution from ensuring sustainable pastoralist livelihood in Moyale Sub-County.

1.6 Research Questions

The study sought to answer the following research questions:

- (i) Which forms of diversification have pastoralists adopted in their livelihood in Moyale, Marsabit County?
- (ii) To what extent does the effectiveness of the devolved governance system affect livelihood diversification in Moyale, Marsabit County?
- (iii) What is hindering devolution from ensuring sustainable pastoralist livelihoods in Moyale Sub-County?

1.7 Significance of the Study

The study signifies the need for carrying out the research. It justifies the work's relevance and effect on the research fraternity, as well as its contribution to new insights and how others will benefit from it. The study intends to influence the growth of literature in the areas affected by devolved governance and pastoralist livelihood diversification in the marginalized areas in Northern Kenya that are famous for being pastoralists, by extending the existing literature and suggesting areas requiring further research. Future scholars are likely to find this study relevant in guiding their future studies which will help come up with better strategies for improved governance.

This study may also be helpful to both national and county level, community/local level in the formulation of policies, structures and guidelines for the diversification of pastoralist livelihoods. The findings in the study to assist the Government to understand areas of strength and weaknesses in existing policies to come up with ways in which they can be enhance awareness on the diversified options for the pastoralist communities.

The study is of great significance to the community of case study since the locals have remained marginalized for centuries despite devolution. The strategies to enhance development in the community on how to apply relevant/adequate practices to eliminate backward livelihood practices and shift to diversified available options for sustainable livelihood and future prosperity for the pastoral communities.

The study to benefit the academic fraternity, the researchers, authors and scholars to gain from it, as part of the literature review on devolved governance and pastoralist livelihood diversification. The study can also be used as a reference material, besides

suggesting areas that future researchers should focus their studies on. This would boost growth of existing literature review within East Africa and Sub-Sahara region.

1.8 Scope of the Study

The scope of study concentrated on the mentioned variables for devolved governance and pastoralist livelihood diversification in Moyale Sub-County in Marsabit County. The study placed emphasis on means of livelihoods, institutional capacities and decentralized governance structures in impacting pastoralist livelihood diversification. The study targeted leaders ranging from religious leaders, community leaders, the pastoral households and county and national government leadership members. This study was done in the month of June, 2021.

1.9 Delimitations of the Study

They refer to the considerations and variables that are not included in the research. In other words, they are the limits that the researcher sets for the duration of the study, the size of the population, and the types of participants. The study was restricted at assessing the devolved governance and pastoralist livelihood diversification in Moyale, Marsabit County Kenya. The study specifically looked at the means of livelihoods among the pastoral communities, challenges pastoralist communities to experience in livelihood diversification and the effectiveness of devolved governance system on pastoralist livelihood diversification. The study targeted 1771 respondents including the elected

leaders from national and county government, religious and community leaders and the community members from Moyale Sub-County.

1.10 Limitations of the Study

They refer to those characteristics of design or methodology that somehow restrict the study information hence impacting or influencing the interpretation of the study findings. Most of the target respondents feared availing requested information due to the implication that the study may paint a negative image about their communities. They feared that the information requested may not certainty or whole used for other purposes than academic purposes. To overcome issues relating to uncertainty, fears and others, the researcher assured the respondents that the study is voluntary, and the information asked was to be used for entirely academic purposes by showing the official introduction letter from Africa Nazarene University. One more limitation included the busy schedule run by the target respondents which left them with limited time to participate in the study.

To overcome this challenge, the researcher with her research assistants moderated on methods to conduct the questioners and interviews as well improvised a convenient way to collect data later by adopting a drop and pick method to limit the level of interruptions in their daily schedules. There were several challenges faced including insecurity resulting from hostility and suspicion between different communities; inaccessibility due to poor infrastructure. To overcome this, the researcher selected Research Assistants from different communities who could easily access the villages

using motorcycle and were able to convince the respondents/elders of the purpose of the research. Interviews with the elected leaders took days because of their nature of work

1.11 Assumptions of the Study

The study was carried out on assumptions that respondents would be willing to participate in the study in their free will. The study also assumed that the target respondents would provide accurate and timely information to enable the researcher draw inferences and conclusions. The study presumed that devolved governance can support pastoralist livelihood diversification.

1.12 Theoretical Framework

The theoretical framework includes theories which are formulated to explain, predict, helps readers in understanding a phenomenon that assists a researcher to gain a full understanding about the main points concerning specific events of the research and, in many cases, to challenge and extend existing knowledge, within the limits of the critical bounding assumptions Zach Claybaugh (2013). This study was anchored on three theories; the agency theory, citizen participation theory and institutional theory as discussed below.

1.12.1 Agency Theory

Understanding the context by which history shaped agency theory is critical as they enable researchers to gain a better understanding of the theory and its limitations, as

well as to inform future research Muldoon et al., (2013). As a result, theories are the creations of the theorists, and the theorist's life experiences always influence the development of the theory. Various scholars from a variety of fields contributed to the theory, including organizational behavior (Eisenhardt, 1985), law studies (Lan & Heracleous, 2010), marketing (Bergen, Dutta, & Walker, 1992), healthcare (Jiang, Lockee, & Fraiser, 2012), accounting (Reichelstein, 1992), and family business (Jiang, Lockee, & Fraiser, 2012). (Tsai, Hung, Kuo, & Kuo, 2006). In essence, agency theory is based on an economic concept of risk-sharing (Eisenhardt, 1989), which happens between two parties, principals and agents, who may have various methods to solve the issue (Jensen & Meckling, 1976).

The interaction between two or more parties is described by agency theory, also known as principal-agent or principal agency theory/model, in which one party, denoted as the principal, employs another party, designated as the agent, to execute some work on behalf of the principal (Jensen & Meckling, 1976; Moe, 1984; Ross, 1973). The idea claims that once leaders transfer power to agents, they typically have difficulty managing them since agents' objectives are often at odds with their own, and agents often have greater knowledge about their capacity and actions than principals.

The theory emphasizes the existing link between organizational principles and actors. The agent's job is to make sure that the targeted tactics are executed across the business to obtain better results (Kivistö, 2008). If the agent, on the other hand, fails to perform as promised, the agency's loss will escalate. Agents are responsible for assisting

workers in improving their performance and assisting the firm in achieving its competitive advantage.

The theory is practical in exposing how different institutions and its leadership can change the course of the action plan as they act as the mouthpiece of the entire community. The leaders and elders are tasked with representing the needs of the pastoralist communities in the wake of changing lifestyles, economic activities, and diversifying their livelihoods in response to the changes in the environment and social aspects. The effectiveness of the diversification is based on institutional capabilities as communicated by the elders and leaders, who act as agents of the pastoralist communities. The theory has however been criticized in the behavioral assumptions it makes about human motivation and behavior. Critics of agency theory claim that it provides a too limited model of human motivation and allows unnecessarily pessimistic and cynical moral assessments of individuals.

The theory is relevant to the study as it helps in exposing how different institutions and their leadership can change the course of the action plan as they act as the mouthpiece of the entire community.

1.12.2 Citizen Participation Theory

Citizen participation involves a process that offers an opportunity for private citizens to influence public decision-making, and has long been a component of the process of democratic decision making (Fung, 2015). Devolution is described in the Fourth Schedule of the Kenyan Constitution of 2010 as two tiers of government, namely, the National and County Governments, which are different and interdependent with

legally allocated and protected roles and powers. The National Executive, Parliament, and the Judiciary make up the National Government, while the County Executive and County Assembly make up the County Government. Both levels must handle their reciprocal contacts with one other in a consultative and cooperative manner. Citizens engage in their governance under the decentralized form of government by exercising their sovereignty directly or indirectly via elected and appointed representatives. This is a significant shift from the past when power and resources were concentrated and individuals had little say in how their government was run. Nonetheless, the degree of citizen engagement at both levels has not been maximized, despite the fact that the legislation mandates public participation. There is still a gap between the law's requirements and actual practice. This is primarily due to a lack of awareness of public involvement concepts. There is currently no policy or legal framework in place to govern public engagement. Public participation law has been proven to be weak and ineffectual in fostering excellent public engagement in counties where it exists. The Namibian government's perspective on citizen engagement is expressed in policy statements derived principally from Article 95(k) of the constitution.

Well-planned public participation projects reflect both residents' and planner standards. Arnstein's "ladder of citizen participation" can help the planner assess his or her expectations of the intent of a program and compare that with the anticipated expectations of citizen participants. The particular importance of Arnstein's research comes from the clear awareness that there are various rates of participation, from citizens' therapy or manipulation through consultation, and to what we might now

recognize as legitimate participation that is partnership rates and citizens' power (Davis, Kliewer & Nicolaides, 2017).

There are clear drawbacks to Arnstein's structure. Through phase represents a specific category, within which a wide range of interactions is likely to occur. For example, there may be major variations in the nature and quality of the information being communicated at the level of informing. Realistically, therefore, levels of participation are likely to reflex a more complex continuum than a simple series of steps. The use of a ladder often implies emphasizing the value of local communities' cultural identity and democratization and engagement at all regional, global, local and individual levels (Kotus & Sowada, 2017). It points to a policy, not merely inclusive of the conventional receivers, but primarily emanating from them.

Nevertheless, increased control may not always be desired by the community, and it may fail to increase control without the required help. Participatory communication is a concept that describes the philosophy and communication methods used to include people in the process of decision-making (Musakophas & Polnigongit, 2017). It intends to return to the origins of its sense which, like the term community, is similar to that. Communication should therefore be aimed at making something familiar or exchanging definitions, beliefs, perceptions, or information.

A shift in the livelihood and means of survival will push the pastoralist communities to adopt a more participatory approach in looking at solutions that ensure they survive and thrive in the wake of the changing environmental conditions, cultural changes and economic demands approach (Tombleson & Wolf, 2017). The adoption of

the decentralized governing structures either through devolved units and county governments allows for local community's participation in the decision-making process on issues that affect their lives. Since most of the pastoralist community members are illiterate and uninformed, for any policy changes that affect their lifestyle, it becomes paramount to include the local community leaders who will pass on the information to the last member and diversify their sources of livelihood (Krawczyk & Sweet-Cushman, 2017). The shift from pure pastoralist activities can only be attained through a participatory approach and information sharing.

The theory is relevant to the study as it helps in exploring how best to shift the means of livelihood of the pastoral communities with the help of a decentralized governing structure to communicate the same and involve the local community elders, leaders and members.

1.12.3 Institutional Theory

The institutional theory is an approach to have a deeper understanding of the organization, working procedures and management practices adopted in handling its products and services that comply with the economic and social pressures. It looks at the deeper and resilient aspects of the social structure of an organization as exposed by its internal organizational structure which includes, the rules, norms, routines and schemes. Zsidisin, Melnyk and Ragatz (2005) shared that the theory explores the guidelines for social behavior within organizations that defy economic rationality.

According to Hillebrand, et al. (2011) institutions are the foundation of social life for all communities. This is due to the fact that the social environment is likely to influence the institutional actors that work hand-in-hand with organizational leaders during the formulation and regulation of laws, rules and norms. As such, the leadership within Moyale Sub-County will consider the environmental changes and guide and advice its people on the policy changes and how they can shift their lifestyle to survive the changing times. The institutions within the area also need to be empowered, consulted and strengthened to make better decisions that will ensure the people diversify and adapt to new methods of earning an income and a livelihood. Therefore, the theory is relevant in exposing the capacities of the local institutions in planning and implementing diversified livelihood opportunities aside from the pastoralism activities, in such a manner as to ensure the local community members can survive and thrive in the changing times. The institutional theory can look at the present systems and cultural activities and enhance the capacity of the local institutions to adapt new mechanism that will improve the chances of survival of the local communities.

However, the theory has been criticized for failing to integrate interest-driven actions (and thus power and conflict problems) with normatively guided behavior, for failing to place organizational institutionalism in larger historical and social contexts in order to gain knowledge of more fundamental social change procedures, and for failing to take an interpretive approach seriously. The theory is adopted in the current study in seeking to expose the impact of institutional capabilities and pastoralist livelihood diversification.

1.13 Conceptual Framework

According to Young (2009), a conceptual framework is a diagrammatical representation that displays the link between dependent and independent variables that are considered to be fundamental parts of the dynamics of the situation under study. Emily, Odhion's states that Omolo (2015) shows how independent and dependent variables relate to each other. The independent variables in this study include; Forms of Livelihood of Pastoral Communities (Market-based livelihood, On-farming activities, Keeping animals for trading, Human Capital and Natural Capital), Effectiveness of Devolved Governance System (Educating the locals, Budget and resource allocation, Political will and legitimacy, Community Consultation and Collective Decision Making) and Challenges Pastoralist Communities Experience (Lack of credit/capital, No training on other agricultural activities production, Changing land policies, Climatic variability and Loss of Fertile Grazing Land). The dependent variables include; Pastoral Livelihood Diversification (Agro-pastoralist, Trading, Seeking employment, Livestock Production and Fishery). Figure 1.1 creates a linkage between the study variables as shown below.

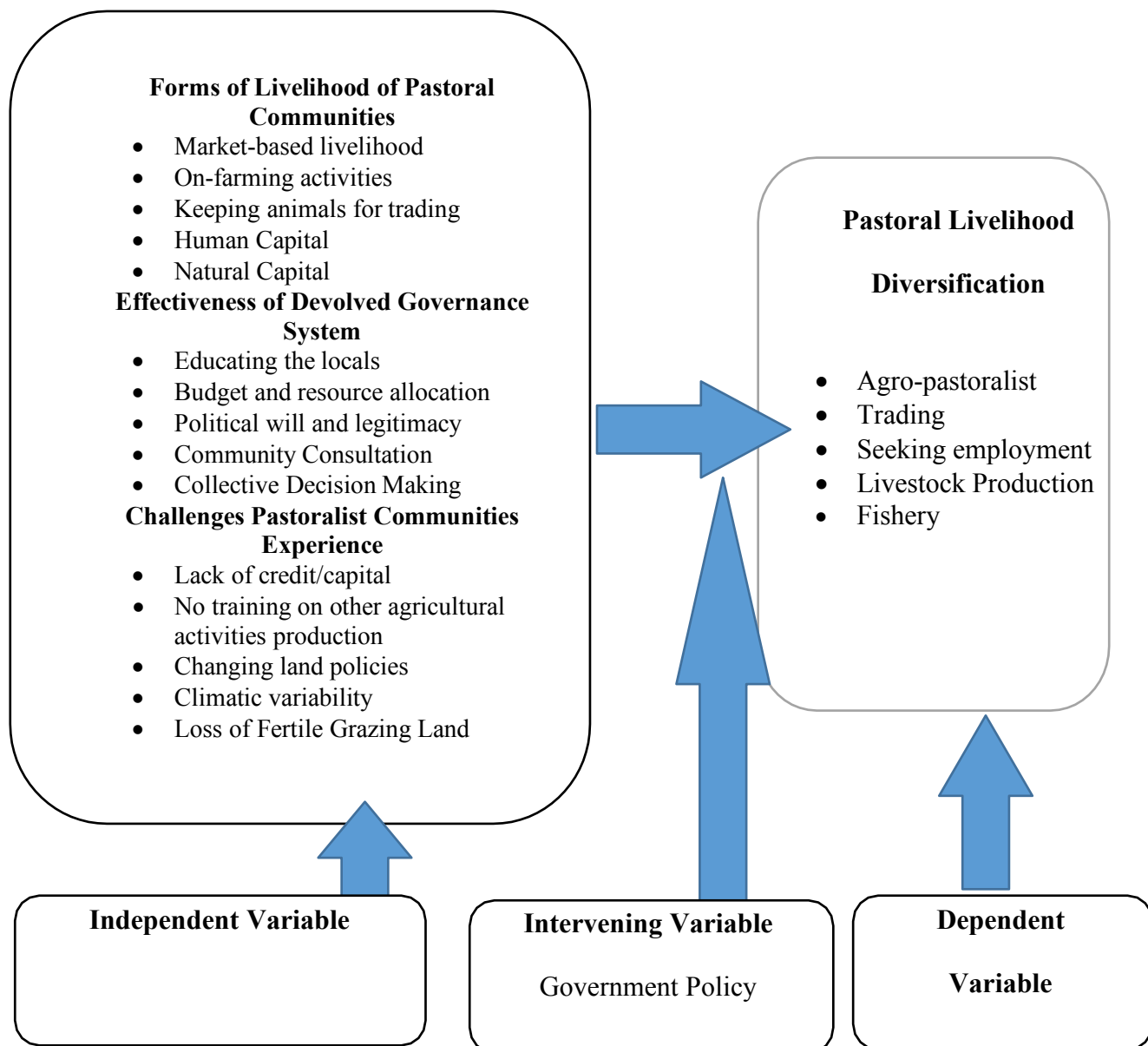


Figure 1.1: Conceptual Model demonstrating the relationship between independent, dependent variables

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This literature review aims to assess previous related studies, theoretical framework and experience of other countries with regard to evaluate the effect of devolved governance on pastoralist livelihood diversification in Moyale Sub-County in Marsabit County Kenya. The components in this section include review of literature, summary and research gap.

2.2 Review of Literature

2.2.1 Forms of Livelihoods among the Pastoral Communities

Pastoralism and agro-pastoralism are limited in arid and semi-arid environments due to natural restrictions. The fundamentally irregular nature of rainfall, a high rate of evapotranspiration, and low organic levels are all important restrictions, according to Swift (2018). Droughts are becoming more common, putting pastoral systems at risk of collapse. The inhabitants are penniless and forced to scrape out a life on dwindling resources, and they are on the verge of being evicted from their homes (Mkutu, 2018). The pastoral system is being challenged by a lack of rural income and competition from major commercial producers such as commercial ranchers, which is exacerbating the miseries of African herders. Arable agriculture is largely restricted in arid and semi-arid terrain, with a few exceptions. Pastoralist groups make up more than 70% of Kenya's total land area. These settlements, however, account for fewer than 3% of the entire

population of roughly 40 million people. Livestock movement over a large territorial territory to use scattered pasture and water supplies in response to seasonal and temporal variations and distribution of rainfall is one defining aspect of a pastoral way of life. They do this by using communally shared range land resources (Mkutu, 2018).

Morton and Kerven (2013) researched on a specific objective: What basic service support is needed for livestock-based livelihoods in the drylands of the Horn of Africa? According to their study, pastoralists have often supplemented livestock production with a variety of non-pastoral subsistence activities (for example an investment strategy for the proceeds of good livestock production) so as to survive whenever their herds are lost. Non-livestock operations now account for a large portion of household income in many Horn of Africa regions. Crop agriculture is particularly important as a source of income for pastoralists. Investment is achieved through link to capital and labour opportunity where individuals, households, and communities can have some income. In addition, they can diversify through social and economic activity by doing livestock production and non-livestock activities that may complement each other. Livestock plays a critical role in the livelihoods of pastoral and agro-pastoral societies in the IGAD region where grazing of the animals leads to exploitation of drylands with the result of low and unreliable rainfall patterns and amount eventually influencing those societies toward various types of mobility. Livestock and their products are consumed directly by households as well as sold to raise money for staple foods and other necessities. This study creates a contextual gap as it was done in the Horn of Africa and not specifically Marsabit County in Kenya.

Mwanyumba (2014) researched on the effect of pastoralist livelihoods, livestock herd dynamics on trade in Garissa County, Kenya. The study suggested that for 93 % of households' primary source of income was livestock, while 35 % of households had planned for diversified livelihood income. The majority of households (68.5 %) were a sedentary lifestyle of moving their livestock during droughts. Similarly, the majority of the members of the households were uneducated hence supporting the grazing labor. During the interview, it was noted that the sale of livestock could take a long like 72 days making it difficult to survive. Droughts, movement, livestock diseases, and marketing were all listed as constraints. To deal with these limitations, most households merged conventional tactics with relief aid. Females of reproductive age made up more than half of all animals in livestock herds. This study creates a conceptual framework as it covered trade as the dependent variable and not livelihood diversification.

Achiba (2018) did a study on livelihood risks and how to manage it by income diversification and strategies adopted by the households of pastoralists in Isiolo County, Kenya. The finding of the study showed/indicated livestock herding is one of the main income-generating activities for the pastoral settlements in Isiolo, but in the recent past, the local communities have adopted other non-stock income-generating activities. The study shared that the traditional pastoralism system is changing and many of the older generations are adapting to new customs and other means of livelihood. One of the approaches is the market-based livelihood as pastoral communities are shifting from subsistence production to trading and market-driven goods and services. The study concludes that more pastoral settlements and households are shifting to sedentary

pastoralism and have reduced their mobility for food security. While others have adopted petty trading schemes, wages and getting an education to get employment as alternative income-generating activities. This study creates methodological as it entirely relied on quantitative methods, unlike the present study that used both qualitative and quantitative methods.

A study by Naburi (2020) examined the effectiveness of watershed governance for food security in the Sio River Basin. Water resources management as an institution mandated to manage all water resources in the country and at the time of study did not have a decentralized and operational office at the county level therefore river basin not fully implemented under devolved governance hence this study presented governance gap. Liao, Barrett and Kassam (2015) on diversification and if it improves the pastoral household livelihoods in China and advocates for the pastoralists to adapt to changes in the environment and socio-political systems through measures including agro- pastoralism, crop farming, household members become wage laborers and seeking other employment opportunities. Other diversification strategies cover engaging in trading activities and hiring skilled herders who will look after the animals and conducting mixed smallholding that will limit movement. This study was however conducted in China and not in Kenya thus a contextual gap. In Tanzania, Smith (2015) revealed that the Maasai women have adopted market activities as a means of diversifying their sources of income and livelihood. While the men keep to pastoralism activities, the women contribute to the household economies by venturing into new market activities and other income-earning activities at the local markets for example some women have joined gemstone mining.

In Kenya, Setey, et al. (2019) revealed that change in land tenure has pushed pastoralist communities in Baringo County to seek diversified methods of livelihood. One of the common methods is an on-farming approach which is dictated changes in land tenure, increase in the size of households, low income earning, food shortage, extreme weather patterns and little or no education achieved by household members. The study noted that effective on-farm activities will rely on availability and access of land inputs and resources like fertilizer, educating the local communities on modern farming methods and improving capacity building through training where they gain skills that can help them become gainfully employed. This study was done in Baringo and not Marsabit County thus creating a contextual gap. Bedelian and Ogutu (2017) mentioned that some Maasai women have taken to making bead items like headgears, necklaces and selling them to earn an income and sustain their lives. While the men have taken to seeking employment opportunities in neighboring towns and cities as casual laborers, the children are getting formal education that will enable them to become professionals.

2.2.2 Effectiveness of Devolved Governance System on Pastoralist Livelihood Diversification

Martin, et al. (2018) did a study on climate change adaptation through decentralized governance and how the locals address community resilience programs. The study done in Mali share that climate change adaptation has become a top priority to many governments in developing nations to ensure the survival of the local communities. Both national and international organizations and governing institutions seek for policies, measures and mechanisms to advance the lives of the communities. Devolution of

authority is taunted to ensure effective adaptation of livelihood mechanisms at the local levels as it allows participation of the locals and sharing of their views. The planning process at the local level is based on community consultation and decisions are made collectively in response to efforts of identifying and implementing climate change adaptations. The study findings show that local communities can take part in climate adaptation interventions through local planning which is enabled through access to adequate resources, technical expertise and a commitment to engage the local citizenry from the initial planning phase to the execution of the interventions. The interventions are more likely to be implemented when the local community members are engaged hence advocating for a decentralized system of governance in handling climate change adaptations. The study created methodological gaps, as it used quantitative methods entirely while the present study used both qualitative and quantitative methods.

To understand the challenge for conservation and the management of many ecosystems, as shared by Selgrath, et al. (2018) stating that there is a need for transition and diversification of socio-economic activities to protect the ecosystem. The study on shifting gears looks at diversification and the transition needed to protect the marine system from challenges like over-exploitation, over-fishing in some waters which will eventually negatively affect the biodiversity and lower catches. The study revealed that as the human population increased in the last 60 years from 1950 to 2010 by as much as 240%, who need food for survival and have had a negative impact on the marine system and its biodiversity along the coral reef in the Philippines. Through the use of a local governance system where information on best fishing methods, equipment and gears is

communicated to the fishermen, the results are a better marine system. There has also been a change of fishing regulations such as the use of nets and diving to protect the ecosystem. As noted, adopting localized governing structures can improve the ecosystem and enable the locals to diversify their livelihood means. The methodological gap created by this study is that it was cross-sectional covering the period of 1950 -2010 while the present study covered only the year 2021.

In central China, Kasymov and Hamidov (2017) noted that these countries have transitioned from the centralized state-managed economy and shifted to the decentralized and market-driven one with the institutional structure of common-pool resource management. When looking at pasture use and irrigation water use, policy interventions that are from the top and central governing system are rarely relevant and applicable in the socio-economic space of the local communities. The study advocates for a bottom-up transformation process with the help of informal practices by the local communities in coordinating and cooperating in the use of locally available resources. As such, success in managing pasture and water use is based on the new emerging governing institutionalized structure that works for the development of the local institutions, financial and human resources through sharing of knowledge and skills. The study shows that using the decentralized governing structure has become more effective in managing pasture and water usage since there are efforts to ensure a strong partnership by the locals and the national administrators. Strengthening the local institutions is through partnership and building support for the local initiatives. The conceptual gap created by this study is that it was done in China and not in Kenya. In addition, the study fell short of revealing the

challenges that hinder devolution from ensuring sustainable pastoralist livelihood, a gap that needed to be filled.

In Colombia, Franco and Ali (2017) share that for effective community development, there is a need to adopt a change in governance approach from the hierarchical management at the central governing system to devolved units that incorporate co-management. Using the devolved system of governance is more effective as it reflects the societal values and priorities since all the locals are engaged and participate in all decision-making processes. Furthermore, when the locals participate in decision-making and are consulted in matters to do with resource usage and livelihood activities, they take responsibility for the actions leading to better-diversified livelihood programs and interventions. The gap created by this study is that it was conducted in Colombia and not in Kenya. The study advocates for the need for devolved governance for community development however, the forms of livelihoods on pastoralist livelihood diversification and the challenges that hinder the said devolution from ensuring sustainable pastoralist livelihood is not established in the study hence the need for the current study.

Liu, Tang, Zhou and Liang (2018) researched on the effect of governance quality on economic growth in China. The study findings revealed that the quality of governance has a positive effect on the growth of the economy. High governance quality contributes positively to the growth of high-quality developments that are geared towards the sustenance of different communities and the whole country in general. Some of the approaches used in incorporating quality governance include; a stable bureaucratic

system that helps in the provision of long-term investment in the private sector, reduction of corruption and encouraging productive investment, bureaucratic professionalization which encourages investment in public facilities, good economic power structure which promotes optimization of resource allocation, supporting governments' positive effect by providing tax, products, services among others. The conceptual gap created by this study is that it focused on economic growth and not livelihood diversification as the dependent variable.

Chandradasa (2014) investigated on effectiveness and impact of a community governance approach to alleviating poverty using a case study of Care International Hambantota Sri Lanka. Governance entails the act of governing. It constitutes either a separate process or part of management or the process of leadership. Better governance plays a critical role in fostering community development projects that are associated with the improvement of the well-being of the community members and raising their standards of living. Quality governance encourages collaboration between the public, private and non-profit sectors to achieve mutual goals. Poor governance is believed to cause a lot of chaos and lack of development in the community. The methodological gap created by this inquiry is that it was a case study, while the present study covered different pastoralists in Marsabit County in Kenya.

Employee trust mediates the impact of e-government and good governance in the public sector of developing nations, according to Alaaraj and Ibrahim (2014). According to the conclusions of the research, empowering public sector personnel via e-government fosters trustworthy behaviors that are important for good governance to increase

effectiveness, efficiency, transparency, and innovation. Governance entails the process of making decisions and the procedure followed in implementing the decisions. It helps in generating valuable outcomes that match the community's needs through efficient utilization of resources. The methodological gap created by this study is that it had three variables, independent, mediating and dependent. The present study had to intervene instead of mediating variables thus creating the gap.

In Ethiopia, Gufu (2017) considers the sustainability of the pastoral livelihood of the Borana pastoralists who dwell in the lowland; the community is vulnerable to factors that concern the resilience of their pastoral system. The study noted that the lifestyle of the Borana community is under threat by the recurrent environmental shocks, marginalization by economic and social systems and push for change from the pastoral practices of mobility. Gufu (2017) further shares that the community is stressed by ecological factors like prolonged seasons of drought and sociopolitical systems and animal diseases. To survive, the elders have invested in learning about the weather pattern, the new diseases and how to treat and manage and they are adopting alternative means of earning an income. The community elders have looked into informal/customary institutions and local initiatives to protect and preserve the lifestyle of the Borana pastoralists. The study findings reveal that the elders are involving all people in the decision-making and ensuring they invest in the human capital of the younger generations in the hope that they will help them to diversify their asset base and cushion them against the vulnerabilities they face. At the same time, the Ethiopian government is adopting the decentralized approach to support, equip and encourage the development of alternative

forms of livelihood for the Borana pastoralists. This is despite the pastoralists' weak capacity and unwillingness to respond to the ecological and sociopolitical vulnerabilities, while the formal governing structure fails to acknowledge issues the communities face.

According to Omolo, et al. (2017) the recurrent droughts and other climate changes like flooding make the pastoralist communities in Kenya lose their assets (animals) and hence face food insecurity and the chance of their survival is reduced. It then becomes prudent to build resilience at the individual, household and community level and its success is fully dependent on the type of intervention. The pastoral communities that will survive and thrive are those that can form resilience measures, are adaptable and transform their sources of income from one line to several variables. These variables include crop farming such that they become agro-pastoralists, gain skills and knowledge and gain employment and keep animal breeds that are more resilient to the climatic changes. Applying good governance principles such as transparency and accountability will enhance societal development, progress and sustainable growth (Keping, 2018). Indeed, one of the ways to determine the success or failure of any government worldwide is biased on the efforts the government has put in developing the conditions for satisfying the basic needs of the people they govern (Basil, 2009).

2.2.3 Challenges Pastoralist Communities Experience in Livelihood Diversification

Pastoralism is becoming riskier as a result of a variety of variables such as population and land constraints, animal illnesses, regulatory challenges, and climatic variability (Bailey, 2019). Changes in production systems, mechanization, loss of

rangeland grazing resources, natural calamities, disease outbreaks, inappropriate breeding policies and practices, the inappropriate introduction of exotic breeds, loss of animal keepers' security on land tenure, and inadequate access to other natural resources are all identified as threats by FAO (2017). Changes in cultural practices, the eroding of traditional institutions and social interactions, the impact of population increase and urbanization, and governments' failure to analyze the sustainability of interventions/practices and adopt appropriate policies and economic measures are among the others.

Pastoralist groups have a variety of traditional behaviors to deal with some of these problems and safeguard their livestock production system and livelihoods (Pavanello, 2017). Livestock mobility, species diversity, maximizing stock densities, redistributing assets among relatives and friends, livelihood diversification, herd splitting, use of wild foods to supplement reduced yields during droughts, and opportunistic rain-fed or flood recession cultivation were all discussed by the World Initiative for Sustainable Pastoralism (WISP) (2017). Pastoralists, according to Rota and Sperandini (2019), retain animals that are suited to the current climatic circumstances and set aside regions with abundant flora for use during dry seasons or droughts.

Kaye-Zwiebel and King (2014) did an investigation on transition for the Kenyan pastoralist societies and the perceptions they held on the ecosystem. The study revealed that many dry land areas of Northern Kenya and other dry areas in Africa had seen the traditional pastoralist transform their economic activities. The main reasons behind the transformations included challenges like diminishing resource availability, changing

social values and governance systems, and new resource management institutions challenging the capacity of communities for effective common pool resource management. The other challenges include changing weather patterns like prolonged drought and heavy rains leading to flooding that leads to death of the animals. The study noted that local perceived transformation and diversification efforts based on the social capital of reciprocity, sanctioning and norms of equity and fairness in participation in conservation efforts through partnerships with external actors. At the same time, communities and individuals who benefited from the conservation efforts are likely to support diversification efforts that conserve natural resources. The study creates a conceptual gap by focusing on perceptions they held on the ecosystem as the dependent variable, unlike the present study that focused on livelihood diversification.

In Ethiopia and among the Omo pastoralists, Mengistu (2015) investigated on the challenges that livelihood diversification faced when seeking food security. The study collected data from pastoralist households through using questionnaires, observation, interviews and focus group discussions. The findings showed that the pastoralist households could not ensure food security for their family members; the wealthier households had more opportunities to diversify their sources of income than poor and average families. The households also found challenges in livelihood diversification with aspects like resources that were communally administered, lack of access to markets, financial resources and no training and agricultural extension services. The study concludes by noting that access to funds, markets, agricultural training and extension services and capital administration of communal resources would encourage livelihood

diversification. The methodological gap presented by this study is that it sampled pastoralist households as the respondents while the present study sampled respondents from diverse groups including religious leaders.

Nyangena (2018) revealed that the increased droughts and changes in land usage among pastoral communities, led to an adjustment in sources of livelihood by the communities looking into diversification. The local communities must work together with public and private institutions both in formal or informal capacity to respond to the changes through implementing livelihood strategies including on-farming, off-farming and non-farming activities to sustain their lives. It is also evident that policies and regulations made at the national level may be insensitive to the local needs, thus there is a need for locals to form institutions and structures such that their perspective and knowledge can be included in the planning system and strategies developed.

Rugadya (2017) on land tenure and food security for the pastoralist communities, shared that pastoralism is one of the oldest mechanisms adopted by the communities to adjust to the changes in the environment. Their mobility was an adaptive strategy to ensure they survive and thrive and to date, they contribute a big percentage to the GDP, dairy and meat production and supply, trade where countries earn foreign exchange from export and support market chains for animal products like shoe making companies. Sustainability of pastoralist activities in the current land tenure which has shifted from communal to individual ownership means the traditional institutions must be involved in developing bilateral agreements with neighboring clans to allow cross-border mobility and sharing of pastoral areas. The local communities must also look at avenues to protect

and develop the land as an asset and diversify their sources of livelihood. The methodological gap created by this study is that it adopted a desk review approach while the present study was empirical.

In Ethiopia, a study by Teka, Woldu and Fre (2019) on the status and determinants of poverty and income inequality in pastoral and agro-pastoral communities revealed that to counter the high poverty, it is proposed that poverty reduction programs be strengthened and diversified income schemes are introduced; local institutions be modernized, microfinance services be increased, and women and youth-specific packages be introduced. To enhance the pastoralists' livelihoods, the government should closely work with National government ministries and departments, County government departments, NGOs and Community based initiatives to come up with various policy and legislative frameworks which should govern their operations and minimize the challenges they encounter. Some of the challenges encountered by these institutions include; Lack of resources and ineffective capacity to provide essential services making it difficult for the institutions to generate enough revenue for growth, limited skilled personnel in some departments have impeded service provision, corruption, and misuse in devolved funding have slowed development activities in the counties. Delays in the National Government's remittance of funds to the counties hamper the smooth operation of the institutions; Duplication of positions in the institutions causes conflict between staffs working at different levels of the government; structural overlaps where the management of towns and urban areas varies from that of rural areas, with more services directed to cities and urban centers; Poor transportation or communication network which hinders the

movement of commodities and high population in some counties making it difficult in the provision of quality services. This study creates a conceptual gap as it focused on poverty and income inequality as the dependent variable while the present study focused on livelihood diversification.

Another study by Yona and Mathewos (2017) on livelihood diversification in Sidama, Ethiopia zone revealed that most of the rural households engage in farming activity, trade and other off-farm activities. But their ability to shift to other diversified livelihoods is hampered by lack of skills, attitudinal issues, cultural aspects, lack of credit or capital, low awareness on modern technological applications and low household average income. To address these challenges and help the local communities to diversify their livelihoods so as to improve their chances of survival is through strengthening access to capital funding, provision of vocational training to improve their skills and improving rural infrastructures like electricity and internet connectivity. There is also a need for a shift in thinking by the local institutional leaders on some of their cultural practices which will change the trend and enable the young generation to diversify their income-earning ventures. This study creates a contextual gap having been conducted in Ethiopia and not in Kenya.

Fabusoro (2019) studied forms and determinants of rural livelihoods diversification in Ogun State, Nigeria. There are 320 farmers in the state's four agricultural zones of Abeokuta, Ilene, Ilaro, and Ijebu-Ode, with the bulk of them engaged in various livelihood activities. Seven kinds of livelihood activities were identified using the modified livelihood diversification typology. The majority of the

families (99.1%, n = 320) were active in arable farming, while 18% were involved in cattle, and roughly 7% were involved in fish farming, according to the research. Off-farm/processing activities employed 28 percent of the sample, with 21 percent working a full year. Over half of the sample (50.9%) worked in non-farm local services. About 22% of the sample worked in local commerce, with 14% working full-time. Local formal employment accounted for 11 percent of the sample's income. Ten percent worked all year, 18 on a permanent basis, and the rest (0.62 percent) worked during the offseason. The methodological gap created by this study is that it was supported by a quantitative approach entirely.

Melketo (2016) sought to identify the livelihood patterns of the pastoral households who were under pressure. In the project region in Afar Ethiopia, the research looked at the factors that influence household livelihood diversification. According to the report, 24-28 percent of the population continues to engage in conventional activities and/or diversifies less. Livestock-based revenue continued to be the single and most significant source of income, accounting for 89 percent of total income. The area's main sources of revenue were livestock, crops, minor commerce, wages, and natural resource sales. The discrepancy is because this research was done in Ethiopia rather than Kenya,

Iiyama (2018) in their study on livelihood diversification strategies, incomes and soil management strategies in Kerio Valley, Kenya, identified the primary livelihood diversification options being pursued based on the proportional contributions to total income from farming, livestock, and off-farm activities. With a broad range of income levels, the research discovered five key livelihood diversification options. Households

with a person receiving a consistent income (72 percent) through a regular off-farm job or a formal business had the highest gross earnings (about \$190/month). Households with a greater return on agricultural operations, such as fruits and dairy animals, came in second, earning an average of \$114 per month. Following them were families heavily reliant on staple crops, earning \$97 per month, pastoral households with traditional animal breeds (\$57 per month), and households reliant on less stable, sporadic off-farm sources (\$43 per month) (78 percent). More than half of the 19 studied homes (57%) belonged to one of two groups that were strongly reliant on non-farm sources of income. This study was largely quantitative while the current study had both qualitative and quantitative approaches thus a methodological gap.

Recent studies have shown that pastoralists' wealth within the ASAL counties have declined by more than 60 percent over the last ten years (GoK, 2017). This is attributed to stresses experienced by the communities which are related mostly to climate change, droughts, water shortage, increasing human and livestock population and general mobility of both human beings and livestock (Nyariki, 2018). Their mobility is often seen to be in conflict with official plans to modernize the nation. In all the communities, the traditional system of leadership and governance has also come under increasing pressure as new systems of national and county government become more powerful, usually at the expense of the traditional system (Elhadi, 2018).

2.3 Summary and Research Gap

The chapter has looked at the literature review; it has specifically discussed the empirical part which presents previous studies done by other scholars on the topic under study and finally the summary of research gaps which highlights the gaps that the current study sought to fill. The above studies Liao, Barrett and Kassam (2015); Kasymov and Hamidov (2017), Yona and Mathewos (2017) and Martin, Perine, Lee and Ratcliffe (2018) in Mali, created a contextual gap as they were done in other countries and cities, and hence the findings might not apply in the Kenyan context. Other studies created a conceptual gap by looking at other aspects of livelihood diversification like Martin, *et al.* (2018) looked at community resilience programs. Naburi (2020) study examined the effectiveness of watershed governance for sustainable food security in the Lower Sio River Basin of Busia County in Kenya. Rugadya (2017) studied on land tenure and food security for the pastoralist communities and Smith (2015) on the Maasai women in Tanzania adopting market activities for survival. The contextual, conceptual and differences in demographic backgrounds create a knowledge gap, which the study sought to fill. This study sought to fill the research gaps by investigating devolved governance and pastoralist livelihood diversification.

CHAPTER THREE RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is a theoretical system on how to analyze and apply research methods to the different fields of study. For example, Obwatho (2014) describes research methodology as a presentation of various methodical steps that are followed by a researcher in carrying out studies concerning the research problem along with the sense or the underlying logic. This is a preview section detailing methodology that was used in the study entailing research design, research site and rationale, target population and sample study specifying sample size and procedures. It also aims to point out data collection procedures highlighting methods, approaches and instruments used. Further, it presents reliability tests as a component of data analysis and tools and presentation. Lastly, legal and ethical considerations to be applied during the entire course of data collection are also detailed.

3.2 Research Design

This study employed a concurrent mixed methods approach. The organization of current data, collecting, and analytic circumstances in a way intended to provide relevance to the study goals is the research design (Tobi & Kampen, 2018). This section guides the researcher on how to plan the study coherently and logically through various research methods and techniques to integrate the two basic approaches applied to research, which are quantitative and qualitative methods Kothari (2004). The design

applied both approaches to assess the effect of devolved governance on pastoralist livelihood diversification in Moyale Sub-County, Marsabit County Kenya. The design enabled to make efficient and effective ways to review and make inferences on the whole population.

3.3 Research Site and Rationale

The study site in areas included administrative and political units for the wards within Moyale Sub-County, Marsabit County Kenya as per Marsabit CIDP (2018-2020) namely: Butiye, Sololo, Manyatta/Heillu, Moyale Township, Uran, Golbo and Obbu. The majority of the local community members are pastoralists and this lifestyle is facing challenges like an increase in the human population that depends on the meagre earnings from animals, change in land ownership, community fights with neighbours and hence the need to explore livelihood diversification. The culture is also foreboding with practices like early marriages, nomadic lifestyle and warring communities. The area has experienced prolonged droughts and heavy rainfall seasons that cause havoc to the pastoral lifestyle as many animals die, making the people seek other means of survival. The structure of governance is also weak with no distinct structures, thus the area with these conditions makes the best case for the study to explore devolved governance and livelihood diversification.

The site is ideal due to the challenges that are faced by these communities in the different wards and how diversification has been embraced and incorporated as part of their lifestyle and the efforts of the national, county and traditional governing system.

3.4 Target Population

The target population is the members of an actual or imaginary group of people, events, or things having comparable qualities from which the researcher intends to draw conclusions to generalize the study's findings, according to Mugenda & Mugenda (2003). The study appropriately applied stratified sampling techniques to simplify the assessment strategy which further facilitated the comparison strategy. Thereafter, sampling was carried out using simple random and purposive to select the respondents.

The target population was represented propositionally in the 7 wards thus it contains various desirable traits that are under scrutiny as shown in Table 3.1 below.

Table 3.1: Target Population

Moyale sub-County Wards	Target population
Butiye	179
Sololo	266
Manyatta/Heillu	148
Moyale Township	362
Uran	223
Golbo	387
Obbu	206
Total	1771

Source: KNBS 2019

3.5 Study Sample

A study sample is formulated by designing a definitive plan to gain a sample size from a given target population. In order to acquire appropriate rating or finding the researcher adopted a step-by-step procedure in selecting items from the target population that made the sample for the study (Larson & Csikszentmihalyi, 2014).

3.5.1 Sample Size

A sample is the smaller group of people selected from the target population who will take part in the investigation. The people who take part may as well be referred to either respondents or participants. The amount to which we can adapt the results of our study to the target group we are interested in is referred to as generalizability. Using Kothari's (2004) formula the study calculated the target population of 1771 with 95% confidence level and an error of 0.05 to arrive at a sample size of 315. The study used the 10% of the 17706 households to target 1771 male Pastoral Households including the elected leaders from national and county governments, religious and community leaders, the public and the head of sedentary pastoralists in the respective wards within the Sub-County.

Sample size Kothari (2004) formula equation as:

$$n = \frac{Z^2 \cdot N \cdot \sigma_p^2}{(N-1)e^2 + Z^2 \cdot \sigma_p^2}$$

Where; n = Size of the sample,

N = Size of the population and given as 1771,

e = Acceptable error and given as 0.05,

σ_p = Standard deviation of the population and given as 0.5 where not known,

Z = Standard deviation at a confidence level given as 1.96 at 95% confidence level

$$n = \frac{1.96^2 \cdot 1771 \cdot 0.5^2}{(1771-1)0.05^2 + 1.96^2 \cdot 0.5^2}$$

$$\frac{1700.8684}{4.425 + 0.9604}$$

$$\frac{1700.8684}{5.384}$$

$$315.93$$

$$n = 315$$

n= 315 respondents

The study conducted interviews on elected leaders, focus group discussion with the community elders and religious leaders applying stratified sampling while survey questionnaires used random sampling for the heads of households practicing pastoral sedentary livelihood. The elected leaders were 8 (1 Member of Parliament and 7 MCAs from each ward), the religious leaders were 14 two per ward, community elders were 21, three from each of the seven wards.

Table 3.2: Sample Size

Moyale sub-County Wards	Target Population	Sample Size
Butiye	179	32
Sololo	266	47
Manyatta/Heillu	148	26
Moyale Township	362	64
Uran	223	40
Golbo	387	69
Obbu	206	37
Total	1771	315

Source: Researcher (2021)

3.5.2 Sampling Procedure

A sample is a subset of a population chosen to reflect or represent the population's characteristics. The term "sampling" refers to the purposeful selection of a few things from a population of interest to get the information needed to generalize results to the full population (Etikan & Bala, 2017). Sampling is the approach, process, or technique for selecting a sub-group from a population to participate in research, Gula (2005). It is the process of choosing a group of people for research in such a manner that the people chosen are representative of the larger group from which they were chosen. The respondents were chosen using simple random sampling and selective sampling.

Simple random sampling was used to sample the community members while purposive sampling was used to select the key study informants. The primary source of data collection was the KNBS 2019 Kenya Population and Housing Census since The

Kenya National Bureau of Statistics is the principal agency of the Government of Kenya for collecting statistical data then analyzing, disseminating and custodian of official statistical information. The study used 10% of the 17706 households to target 1771 Pastoral Households. Thereafter, a sample group of people was selected from the target population who took part in the investigation. This was done by using Kothari's (2004) formula the study calculated the target population of 1771 with a 95% confidence level and an error of 0.05 to arrive at a sample size of 315 people.

3.6 Data Collection

3.6.1 Data Collection Instruments

Primary data was collected using a questionnaire that was administered to the respondents. The questionnaires were both closed and open-ended questionnaires that captured all the variables. Open-ended permitted the free response from the respondents without any suggestion of answers. A questionnaire is used because it allows the researcher to collect a larger amount of data within a limited area. These questionnaires were self-administered, dropped and picked later. The questionnaire used the five-point Likert scale where; 1=strongly disagree, 2=disagree, 3=neutral, 4 agree and 5 strongly agree.

3.6.2 Pilot Testing of Research Instruments

A pilot study was conducted to detect weakness in design and instrumentation and to provide proxy data for the selection of a sample. Etikan and Bala (2017) noted that a pilot study can be conducted using 1-10% of the respondents from the sample size. Therefore, the researcher selected a pilot group of 3 individuals (being 1% of the sample size) for pilot testing that was done in Moyale Township. Respondents who participated in the pilot study were not included in the actual study. The clarity of the research instruments to the respondents was established so as to enhance the instrument's validity and reliability.

The results helped the researcher to correct inconsistencies that were seen to arise from the instruments, which ensured they measure what they were intended to.

3.6.3 Instrument Reliability

Reliability is when the instrument used in the research gives constant results all the time (Creswell & Creswell, 2017). This research instrument is tested such that its findings are constant even after several tests. Cronbach's Alpha was applied to measure the reliability of the instrument. The questionnaire was considered reliable since all the variables had coefficient value of 0.7 and above.

3.6.4 Instrument Validity

Validity involves the appropriateness, meaningfulness, and usefulness of inferences made by the researcher on the basis of the data collected (Creswell & Creswell, 2017). The pilot test was done so as to check the questionnaire's structure and the sequence, meaning and ambiguity of questions. This ensured the validity of the research instrument before was applied in the actual and final research. The research instrument was pilot tested using a sample of 7% making 22 participants which is ideal if it ranges from 1% to 10% according to Sullivan (2011). Those who took part in the pilot test were not included in the main study. After testing the instrument, the questionnaire was corrected and the final document was used in the final study.

3.6.5 Data Collection Procedure

The researcher collected primary data from its sources using structured questionnaires. Before the actual data collection took place, the researcher applied for an introductory letter from the university and then applied for a research permit to NACOSTI. Further, permission was sought from county officials and community leaders to carry out the study. The study also conducted a pilot study to ensure that the research instrument was valid and reliable to collect data for the study which was used to draw conclusions and make recommendations.

During the actual data collection process, the researcher employed seven research assistants (RA) to help in data collection. The RAs were drawn from the local community members so as to be able to translate the research questions to them. The data collected was done in a span of two weeks before analysis and reporting are done.

Table 3.3: Data collection procedure

Description	Number of Ras
Pilot test	All Ras
Telephone interviews	1 RA
Face-to-face interviews	1RA
Focus Group Discussions	1 RA
Survey questionnaires	4 Ras
Total	7 Ras

Source: Researcher (2021).

The purpose of using telephone interviews was to conduct interview with a self-selected respondent who had previous interaction with the RA currently based in Moyale Township Ward. It was also used to follow up the questionnaire's completion and delivery of the data.

3.7 Data Analysis and Presentation

Data analysis and presentation as explained by Kohlmann and Gatermann (2016), is the method that entails the cleaning up of data, grouping of the data, coding and rationalizing it. It also includes editing, tabulation, or structuring among others. The process was done in order to make certain that the researcher interprets in an understandable and efficient manner for further analysis. The data was entered into statistical package for social sciences version 25.0 through coding of the questionnaires, numbering and coding their indices; later further analysis was conducted. Descriptive analysis was conducted where means, frequencies and standard deviation measures were obtained for the study. The qualitative data collected in the interviews and focus group discussions were analyzed using content analysis and arranged in themes.

Findings were presented in graphs, charts and tables which are easy reading, as compared to reading data in full content and presentations of data. For example, the study targeted a sample size of 315 respondents in collecting data out of which 201 filled in and returned the questionnaires making a response rate of 63.8 % as shown in Table 4.1. This has enabled the analysis and reporting of response rate easy to analysis. Similarly, the study accurately illustrates the distribution of respondents by gender using tabulation. Findings for the distribution of target age groups were presented in Bar-graph which confirmed that, the majority (56.0%) of the participants were aged between 41-50 years and implied that the respondents were fairly sought across different targeted age groups. The chart was applied to presented education level and the study revealed majority (54.0%) of the respondents had no formal education, 25.0% of the respondents had primary education, 14.0% had secondary education while only 7% had a college education.

3.8 Legal and Ethical Considerations

The researcher conducted her study in accordance with the highest ethical standards. The researcher first requested authorization from the county administration office by drafting a formal letter outlining the study's aim and goals. The African Nazarene University administration provided an introduction letter, which was subsequently sent to the National Commission of Science, Technology, and Innovations (NACOSTI) for the award of a research permit. Prior to the commencement of the study, the respondents' agreement was obtained while collecting the research permit, indicating that the information would only be used for academic purposes. The researcher informed respondents that the information they submitted would be kept private. Participants were also told that they might leave the research at any moment if they so desired. The respondents' involvement was completely voluntary and uncompensated; no incentives were promised in exchange for their participation. This was achieved by asking respondents not to include their names or any other mark that may be used to identify them. These ethical considerations raised by Njenga and Osieno (2013) enabled this study to present research findings in an honest and unbiased manner.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter discusses the interpretation and presentation of the findings obtained from the field. The chapter presents the background information of the respondents and the findings of the analysis based on the objectives of the study. Descriptive statistics were used to discuss the findings of the study.

4.1.1 Response Rate

In order to gather data, the research sought a sample size of 315 respondents, of whom 201 completed and returned the questionnaires, resulting in a response rate of 63.8 percent, as shown in Table 4.1. According to Mugenda & Mugenda (2003), a response rate of 50% is appropriate for analysis and reporting; a rate of 60% is good, and a rate of 70% or more is exceptional. The response rate was thus held to be good. The researcher failed to achieve an excellent level based on the security challenges in the area of the study. At the moment, the area is experiencing inter-clan conflict and therefore security has been heightened which limited data collection in terms of accessing some areas in the sub-county. Further low education levels, poor infrastructures, some areas inaccessible based on geographical locations and costs of carrying the data collection have contributed to lower response rate. This will affect the effectiveness of devolved governance in implementing the needed sustainable livelihood diversification.

Table 4.1: Response rate

Response	Frequency	Percentage
Responded	201	63.8
Not responded	114	36.2
Total	315	100

Source: Research data, (2021)

4.2 Background Information

This section presents, statistical findings related to the respondent's background information. Specifically, the areas investigated include age, gender and the highest level of education,

4.2.1 Distribution of Respondents by Gender

Respondents were asked to indicate their gender category. This was sought in view of ensuring fair involvement of male and female respondents. Results are presented in Table 4.3. Results show that the majority (61.0%) of the respondents were females whereas 39.0% were male. This implies that both male and female participants were fairly involved in this study. However, the results also reveal low participation male gender. The high number of female participation can be attributed to the gender roles in the area of the study. Women spend much of their time carrying out household duties while men are in the fields herding. It was easier to deal with the female more than the male because of the researcher's gender whereby both male and female participants commented that:

‘This work (research) is normally performed by educated men’

Participants were asked to clarify the ward in which they resided in. Various areas were indicated, among them included Butiye, Sololo, Manyatta/Heillu, Moyale Township. Uran, Golbo and Obbu were less accessible for data collection due to security concerns, drought, distance and time limit.

Table 4.2.1: Distribution of respondents by Gender

Gender	Frequency	Percentage
Male	78	39
Female	123	61
Total	201	100

Source: Research data, (2021)

4.2.2 Distribution of Respondents by Age

Respondents were asked to indicate their age group. This was sought in view of confirming whether the respondents were fairly distributed across target age groups. Results presented in Figure 4.1 confirms that, the majority (56.0%) of the participants were aged between 41-50 years. Further 32.0% were aged between 31-40 years, whereas only 12% were aged above 51 years. The age between 30-50 years contributes to 86% of the respondents from the pastoralists' households. This implies that the respondents were fairly sought across different targeted age groups.

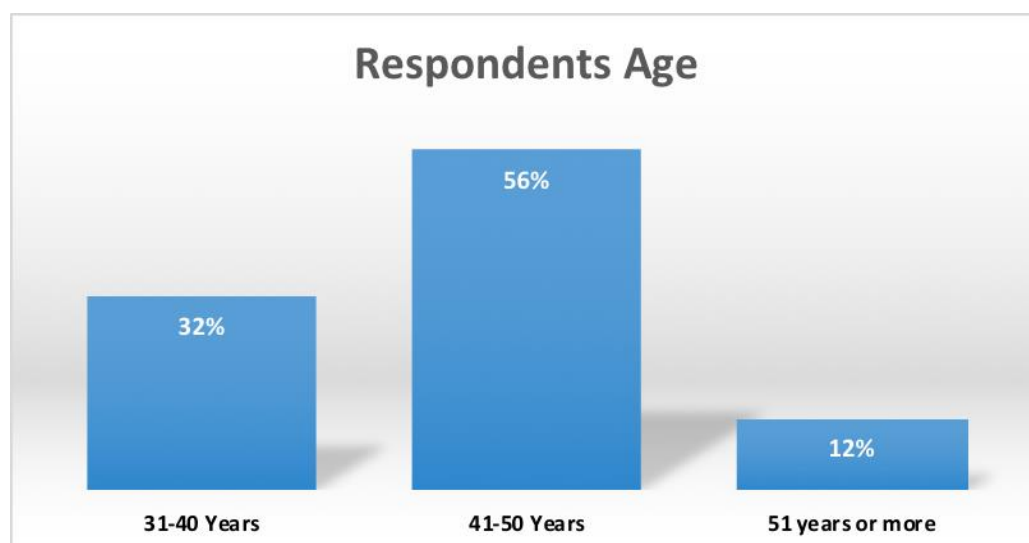


Figure 4.1: Respondents Age

Source: Research data, (2021)

4.2.3 Highest Education Level

Participants were required to indicate their highest level of education. As revealed in Figure 4.2 majority (54.0%) of the respondents had no formal education, 25.0% primary education, 14.0% secondary education and only 7% with a college education.

The study draws literacy levels among pastoralist was below average thus the need to investigate reasons contributing to low literacy levels. The data had more female respondents with no formal education and a female participant explained this verbatim: “Women have for long been perceived to stay at home and take care of family. Therefore, household keepers have no basic education nor awareness on diversification methods and devolved governance plan to support the pastoralists.” (Community Elder 31/08/2021).

Additionally, in another verbatim;

“Low literacy level has contributed to our county lagging behind in every aspect of development despite devolution. For example, there is largely lack of understanding or awareness on public participation. Currently, there is no forum to educate on policy and legal framework to guide Wananchi on how to conduct public participation. The few public gatherings have been less effective in promoting quality public participation.”

(Butiye Teacher.27/08/2021)

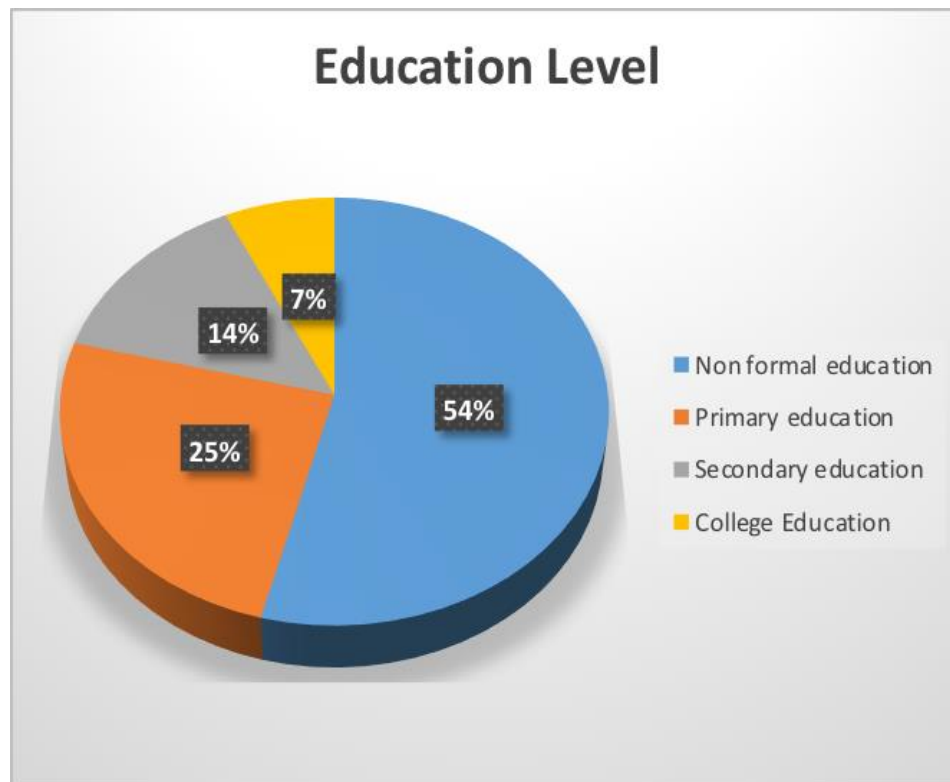


Figure 4.2: Education Level

Source: Research data, (2021)

4.3 Forms of Livelihood

The study respondents were asked to indicate the main sources of livelihood for the people within this sub-county. Subsistence livestock keeping as the main source of income more indicating approximately 47% livestock and peasant farmers, 21% salaried and the rest in some kind of business, small scale farming and charcoal burning. Almost 80% of interviewees reported, rearing of livestock remains the backbone of their livelihood. However, the residents are looking for diverse opportunities to increase and stabilize their means of living.

In a verbatim one Community leader state;

We have realized that we no longer need to remain confining to livestock-rearing. We can combine a range of occupations to construct diverse portfolio of activities which are pertinent for our survival. (Community Leader A. 4/09/2021).

From the qualitative data, it was established that pastoral communities in the dry lands are increasingly vulnerable to food and livelihood crises. In a verbatim, one respondent stated the following.

Alternative food sources should be promoted and supported as a complement to animal production. Furthermore, social welfare assistance in the form of cash transfers rather than food aid should be expanded to allow pastoralist communities to satisfy their fundamental requirements in terms of food, health care, and education. (Member of County Assembly A. 11/09/2021)

The above findings support those of Pottier (2018) who observed that food stress, whether it is short-term or long-term, does not impact all members of a population in the same way. Although dryland locations may have comparable features and occupied inhabitants may face similar issues, livelihood sustainability levels may vary substantially

depending on socioeconomic resources available. The findings are also in line with those of Achiba (2018) who found out that pastoral communities are now adopting other non-stock income-generating activities. Pastoral communities are shifting from subsistence production to trading and market-driven goods and services. The findings are also in line with those of Smith (2015) revealed that the Maasai women have adopted market activities as a means of diversifying their sources of income and livelihood. While the men keep to pastoralism activities, the women contribute to the household economies by venturing into new and other income activities at the local markets.

Participants were then asked to indicate their level of agreement on statement's relating on means of livelihood. Results in Table 4.5 show that majority of the respondents strongly disagreed that the County Marsabit ensures that there is the availability of natural capital to support their farming activities (mean=1.28 SD=0.45) and that the County supports the pastoralists in keeping animals for trading (mean =1.52 SD=0.50).

Results also show that the County government has not been able to maintain a market-based livelihood for the pastoralists (mean =1.68 SD=0.79). Further, the study established that the Marsabit County has been unable to guarantee regular on-farming activities among the pastoralists (mean =1.80 SD=0.75) and that Marsabit County never ensured that pastoralists have access to human capital (mean =1.96 SD=1.00). The findings are in line with those of Karuga (2019) who revealed that there are a number of reasons why pastoralists are politically marginalized: pastoralists live far away from the national capitals where economic activities are concentrated; pastoralists have ignored national borders and have engaged in activities such as transhumance, which is

characterized by high levels of cross-border movement; pastoralists have also been misinterpreted by governments, who see them as an out-of-date and unsustainable way of life. These findings also concur with those of Robinson and Ng'ang'a (2018) who found out that the quality and strength of governance at the local scale in the Northern part of Kenya is little with a lot of emphasis on keeping with the traditions as opposed to considering diversification in order to survive the changing climatic and weather patterns and social structures.

The findings are also in line with those of Yona and Mathewos (2017) who found out that a major problem in pastoral areas is that governments, the international community and the private sector have not done enough to promote development through adequate investment. Approaching development or investment from a humanitarian standpoint needs to change. Pastoralists have a right to development, both as individuals and as communities, and this must be recognized and appreciated. Pastoralists' experience and enthusiasm for providing humanitarian aid must be combined with infrastructure investment to create opportunities for them to achieve, secure, and enjoy their economic, social, cultural, and political rights. The right to development is a universal and inalienable human right, according to this argument. All states, the international community, the media, and agencies must respect, protect, and promote it.

Table 4.3: Statement on forms livelihood

Statement	N	Mean	Std. Dev
The County has maintained a market based livelihood for the pastoralists	201	1.68	0.79
The County ensures regular on-farming activities among the pastoralists	201	1.80	0.75
The County supports the pastoralists in keeping animals for trading	201	1.52	0.50
The County ensures that pastoralists have access to human capital	201	1.96	1.00
The County ensures that there is availability of Natural capital to support their farming activities	201	1.28	0.45
Valid N (list wise)	201		

Source: Research data, (2021)

From the key informants, it was established that in the last 10 years' little progress has been achieved diversifying to alternative income sources. One of the key informants stated the following;

Opportunities for diverse activities, within or around this sub-county are low. The pastoral and agro-pastoral areas are not endowed with natural resources as other high land parts of rural areas. Our County is characterized by scarcity of rain fall, high temperature, recurrent drought, fragile soil and inaccessibility of infrastructures. Therefore, the households and individuals do not have much opportunity to diversify their livelihood portfolio. (Member of County Assembly B. 5/09/2021).

On the Community empowerment initiatives, one member of the County Assembly stated the following in verbatim,

Due to low literacy levels, Pastoral and agro-pastoral households and individuals in this area are not aware of the strategies provided by the government for the development of the rural sector. Lack of awareness and training is also another major factor to engage in better income- generating activities in the study area. They have few opportunities to improve their knowledge, skill, and attitude on how to improve their means of living. Knowledge, skill and attitudinal change through training

and education enable households to pursue diverse activities and can sustain their means of living. (Member of County Assembly B. 5/09/2021).

Further, it was reported by RA's that during the group discussions it emerged that local community leadership structure can play an instrumental role in fostering diversification efforts in the area. For instance, through stakeholder engagements, community leadership can provide proposals on projects which could bear the most transformation impact on third sustainable livelihoods. Following cultural role stratification, various groups can be linked with the best projects that work out for them, for instance, the woman may be equipped with basket-making skills while men may be trained on bee-keeping techniques.

4.4 Effectiveness of Devolved Governance System Structures

The study sought to determine the extent to which participants agreed with the following statements relating on the effectiveness of the devolved governance system on pastoralist livelihood diversification. Results as shown in Table 4.7 that majority of the respondents agreed that the devolved governance system budgets for livelihood diversification among the pastoralist communities (mean =4.16 SD=0.68) and that The CIPD has set aside resources for livelihood diversification activities (mean =3.88 SD=0.99).

Results also established that local initiatives like the training have not helped youth to shift to other sources of livelihood and that the elected leaders (national and county level) have no initiatives that support livelihood diversification efforts (mean = 1.64 SD=0.63). According to Nyangena (2018), education is essential for livelihood

diversification because it provides pastoralists with the necessary skills and knowledge to engage in alternative livelihoods. Mobile schools should be encouraged to provide primary education, particularly to pastoral communities, in order to achieve this. Pastoralists have also attempted to get access to educational programs that would help them learn the specific skills required to engage in political processes. The above findings concur with the study conclusion by The GOK (2019) report that diversification opportunities, such as value addition to livestock products through rural-based processing industries, irrigated crop farming, fishing, and more, must be encouraged.

Descriptive results also show that the national government has inadequately established conservancy in regard to climate change, run in collaboration with the pastoral community, further, the area Member of Parliament (MP) do not use Constituency Development Fund (CDF) for the development of livelihood diversification activities (mean =1.68 SD=0.68). Failure to initiate such measures escalates livelihood risk. According to empirical evidence by Kaye-Zwiebel and King (2014), climate change could have serious consequences, including the loss of livestock due to heat stress.

Results also show that community members are not consulted in developing livelihood diversification policies (mean = 1.72, SD=0.60), and that the communities are engaged in the decision-making on climate change adaptation mechanisms (mean =1.72 SD=0.72). The above findings concur with the study conclusion by Nyangena (2018) that for decades, pastoralists have been side-lined in decision making. Further, the study established that local leaders are reluctant in advocating for resilience measures to

survive the changing tide (mean =1.76 SD=0.82) and that the government have no measures in place that seek to conserve the natural resources by training locals on diversification activities they can engage in (mean =1.76 SD=0.71). Reluctance by the government in the implementation of environmental conservation measures dispels the study results and recommendation by Mengistu (2015) that Education is essential for livelihood diversification because it provides pastoralists with the skills and knowledge they need to pursue alternative sources of income. The findings by Little (2018) found out that most African governments' policies and practices have failed to provide alternative livelihoods for pastoralists. This legitimizes the practice of stocking large herds in order to ensure that at least some animals survive drought deaths while also protecting people from starvation. Nature and government neglect fuel the pastoralists' tragedy of the commons.

Table 4.4: Effectiveness of the devolved governance system on pastoralist livelihood diversification

Statements	N	Mean	Std. Dev
The County ensures that the locals are educated on how they can maintain their livelihoods	201	2.16	0.93
The devolved governance system budgets for livelihood diversification among the pastoralist communities	201	4.16	0.68
The CIPD has set aside resources for livelihood diversification activities	201	3.88	0.99
Community members are consulted in developing livelihood diversification policies	201	1.72	0.60
The elected leaders (national and county level) support livelihood diversification efforts	201	1.64	0.63
The area Member of Parliament (MP) uses Constituency Development Fund (CDF) for development of livelihood diversification activities	201	1.68	0.68
The government works to conserve the natural resources by training locals on diversification activities they can engage in	201	1.76	0.71
The national government has established conservancy in regard to climate change, run in collaboration with pastoral community	201	1.68	0.68
The communities are engaged in the decision making on climate change adaptation mechanisms	201	1.72	0.72
Local initiatives like training helps youth to shift to other sources of livelihood	201	1.64	0.63
Local leaders advocate for resilience measures to survive the changing tide	201	1.76	0.82
Valid N (listwise)			

Source: Research data, (2021)

Devolved governance has failed to enhance local government livestock institutions such as Pastoral Associations and facilitate decentralized planning and accountability procedures, according to focus groups. Furthermore, the Marsabit county administration failed to put in place sufficient systems to manage conflict between pastoral groups and others (allowing effective early warning and fast reaction methods) by allocating necessary budget and resources.

In a verbatim one respondent stated following;

The County Government should be committed to developing of response policies and livelihoods framework that emphasizes the overall livelihood of pastoral people depending on both access to assets, such as pasture, water, animal health services, markets, credit and education, and the environment (Community Member A. 1/09/2021).

From the key informants, it was suggested that the government should enhance the development and growth of infrastructures such as electricity, roads, business expansion like providing low-cost tractors to plow and funds for women. A verbatim:

Rural employment through Kazi Mtaani can source the creation of youths and self-employment in our region. Further, the community members have been empowered through awarding contracts and drilling of boreholes both by the county and the national government. The county government should also improve health facilities, provide water tanks and tractors during rainy season, train and supply seedling to farmers. (Member of County Assembly B. 5/09/2021)

In enhancing diversification by the county government, respondents suggested the following: support and motivation by elected leaders MCAs and Elders of the community in order to encourage investment, conduct seminars /workshops, create positions of village administration, sensitization through community Baraza's and handling conflicts in the community by coping with stressful situations and pressure tactics.

The following is verbatim from a 56years old man from Uran Ward:

Marsabit County has started addressing the issue of livelihood diversification little by encouraging men and women to do agriculture farming, initiating programmes to educate citizens on changes in livelihood. (Elder, A. 1/09/2021)

On how to handle challenges of climatic change such as flooding and droughts, respondents suggested the following: building gabions, planting trees and drought-

resistant crops, crop rotation, Adaptation to the life in changing climate, creating a dam for collection of water to be used during drought period and controlling overflow of rainwater to ease flooding hazards.

Interviewees reported that customary institutions and local initiatives plays a significant role on pastoralist livelihood diversification efforts. Governments need to give the institutions freedom in their decision making and they should attempt to rely on both customary and formal laws to prevent conflict between the state and pastoral populations. The study also established that policies and regulations like land owners affected the pastoralist lifestyle of the community since they increased cattle rustling, limited space for grazing areas, conflict in land ownership and expansion tendencies by some communities due to lack of clear boundaries. The findings are in line with those of Rugadya (2017) who found out that pastoralism requires access to and security of land tenure to be productive and sustainable, yet land laws and policies have hampered its growth. Governmental abuse of pastoralists' land rights through the appropriation of their lands for other uses has resulted from a failure to recognize communal and pastoral land tenure in laws and policies, as well as a lack of respect for customary land laws in both land administration and management and within the judicial system.

4.5 Challenges Pastoralist Communities Experience

From the focused group discussions, the major challenge affecting pastoralist communities is drought and insecurity. Drought affected the area vegetation leading to livestock loss. Areas cited with insecurity challenges included Uran, Obbu and Golbo area. The study sought to determine the extent to which respondents agreed with the

following statements assessing on challenges pastoralist communities experience and the impact on pastoralist livelihood. Results in Table 4.6 show that majority of the respondents strongly agreed that pastoralists communities encounter changing land policies (mean=4.56 SD=0.50), other agreed that livelihood diversification efforts is slowed by the pastoralists' lack of awareness of modern technologies (mean =4.40 SD=0.57) and that poor attitudes by pastoralists has hindered livelihood diversification efforts (mean =4.36 SD=0.56).

These results support the findings of Yona and Mathewos (2017), who found that strengthening policies aimed at pastoralists provides them more life options by improving access to education and training, as well as encouraging the establishment of jobs for ASAL residents. The study established that changes in land tenure hinder the diversification efforts of the pastoralist communities. Further, high poverty levels hinder the adoption of livelihood diversification among the pastoralist communities (mean = 4.32SD=0.68). The results of the research by Teka, et al. (2019) support the conclusion that pastoralists must be empowered to influence policy and execution at the national level, and that the government should actively incorporate them in development programs, such as livelihood diversification.

The results are also in accord with those of Gufu (2017), who discovered that pastoralists must begin to think about transformation themselves. The fact is that nomadic existence is becoming more difficult as land fragmentation and private land ownership gain traction. Only a tiny number of animals may be maintained, barely enough to meet

daily demands. Pastoralists can plan to diversify their livelihoods rather than waiting for circumstances to force change on them. The first step is to concentrate on education, which will provide new opportunities for the younger generation. Pastoralists' decades-long "we" vs "them" mentality, which has alienated them from other groups, must shift if they are to get the support they need from other communities.

The study also established that pastoral communities lack funds for capital to diversify into other economic activities (mean =4.28 SD=0.72), pastoral communities suffer from climatic variability even during livelihood diversification efforts (mean =4.24 SD=0.59) and that pastoralists communities face regular loss of fertile grazing land (mean =4.20 SD=0.49). The data above support Little et al. (2001) conclusions that many livelihood diversification alternatives in town, such as lodging, retail, and processing enterprises, need considerable sums of capital for start-up.

Table 4.5: Challenges pastoralist experience and the impact on pastoralist livelihood diversification

Statements	N	Mean	Std. Dev
Pastoral communities lack funds for capital to diversify into other economic activities	201	4.28	0.72
Pastoralists communities encounter changing land policies	201	4.56	0.50
Changes in land tenure hinders the diversification efforts of the pastoralist communities	201	4.32	0.68
Pastoral communities suffer from climatic variability even during livelihood diversification efforts	201	4.24	0.59
Pastoralists communities face regular loss of fertile grazing land	201	4.20	0.49
Poor attitudes by pastoralists has hindered livelihood diversification efforts	201	4.36	0.56
Livelihood diversification efforts is slowed by the pastoralists lack of awareness of modern technologies	201	4.40	0.57
High poverty levels hinder adoption of livelihood diversification among the pastoralist communities	201	4.32	0.68

Source: Research data, (2021)

From the focus group discussions, it was reported that pastoral areas are prone to climate change challenges and insecurity due to inter-tribal conflicts resulting from cattle raids and theft. On how to solve such challenges, one respondent stated the following;

Pastoral communities should be given chances and business skills to help them become more self-sufficient and participate in entrepreneurial enterprises. Dairy cooperatives, tanneries, and leather-working businesses are examples of such skills and opportunities. Pastoralists should also be given information on animal pricing, as well as assistance in stabilizing grain costs via increased local storage. (Religious leaders A. 2/09/2021).

On environmental challenges, the respondents stated that community members should be encouraged to implement various strategies that seek to help in environmental management. Any adaptation methods, according to Gufu (2017), should aim to

strengthen rather than harm pastoralism. Climate change would need intentionally planned measures to provide the required investments for suitable and sustainable growth, enabling pastoralists to either adapt to their changing environment or move out of pastoralism into alternate livelihoods. In a verbatim a member of County Assembly stated the following;

Governments will have to invest in pastoral production systems to realize the economic potential of pastoralism and accomplish expected development in livestock industries. Adapting livestock and disease management strategies to enhance the commercialization of pastoralism will be the first and crucial step in this process. Pastoralism will need different sorts of social support for both those who continue to practice it and those who have abandoned it. Shifting to crop cultivation is vital in enhancing family food resilience, but it should only be used as a temporary solution to allow pastoralists to recover from drought and replace their herds. (Member of County Assembly B. 5/09/2021).

Interviewees also reported that Pastoralism in Kenya has undergone a policy framework change, which is an initiative aimed at securing, protecting, and improving pastoralists' lives, livelihoods, and rights. The policy framework provides a framework for organizing and coordinating Kenyan political commitment to pastoral development. It also stresses the need to properly include pastoralist women and men in the national and regional development processes that they are expected to benefit from. Despite all of the effort put into developing this policy, only a small amount of positive change has occurred because most pastoralists are unaware of it. Water and pasture supply, livestock marketing, animal health workers, and loaning programs are only a few of the measures. In pastoral regions, there is a need to stimulate enterprise and entrepreneurship. Credit and savings facilities should be made available to those who are not part of the pastoral

system so that they can be encouraged to start their businesses and avoid becoming reliant on aid. To increase market access to and for pastoral goods, and therefore to assist open up and diversifying the pastoral economy, it is necessary to build, invest in, and promote communications and transportation facilities in pastoral regions.

The above findings go in line with those of Karuga (2018) who found out that reduced vulnerability among pastoralists necessitates a multidimensional strategy that targets core causes, shifts attitudes, and perceptions, and strengthens and reinforces pastoralists' voices in policy and development processes. Because the causes that generate vulnerability are cyclical, efforts should be taken to disrupt the cycle at various levels via immediate, medium, and long-term interventions. These treatments should target the variables that expose pastoralists to heightened risks and impair their capacity to deal with and manage risks, such as instability, unpredictability, and variability.

4.6 Pastoralist Livelihood Diversification

The study sought to determine the extent to which participants agreed with the following statements relating to pastoralist livelihood diversification. Results show that majority of the respondents agreed that they conducted trade with their neighbors in the local markets (mean =3.64 SD=0.63). The findings agree with the evidence provided by Martin, *et al.* (2018) that due to their livestock-dominated livelihood, pastoralists depend on cross-border trade as a source of wealth. Descriptive results also show that only a few of the Marsabit residents had opted to crop farming (mean =1.68 SD=0.73). Marsabit

residents were also not keeping high breeds of animals (mean =1.76 SD=0.76) and community members were not shifting to fishery activities (mean =1.84 SD=0.79).

The findings fail to concur with those of Morton & Meadows (2018) who observed that various pastoral communities have been exploring a broad variety of income-earning alternatives for decades, and they are being pursued more aggressively in response to drought impacts. Additional sources of revenue such as fishing, fuel wood, and charcoal sales are highly encouraged. This also contradicts the results by Barton (2018), who found that, despite limited options, some pastoralists in Kenya's northwestern region diversify their income-generating activities by collecting firewood and burning charcoal. The findings support Rass (2016), who stated that pastoralists have been diversifying their livestock species in their herd for decades, taking into account that some species are better suited to arid environments and are more drought-resistant. Pastoralists investigated prefer goats, donkeys, and camels over cattle because these animal kinds adapt well to hard desert conditions and can resist drought events, according to their experience.

Table 4.6: Pastoralist Livelihood Diversification

Statement	N	Mean	Std. Dev
Community members are seeking employment opportunities	201	1.84	0.79
We have taken to crop farming	201	1.68	0.73
We conducting trade with our neighbors in the local markets	201	3.64	0.63
We are keeping high breeds of animals	201	1.76	0.76
Community members are shifting to fishery activities	201	1.84	0.73
Valid N (listwise)	201		

Source: Research data, (2021)

From the key informants and focus group discussion, some of the most significant limitations to pastoral diversification in the County were recognized as a lack of investment capital, availability of credit to acquire sales stock, and transportation. A lack of business and entrepreneurial abilities was also cited as a major impediment to effective retail operations. Surprisingly, a lack of understanding of where and how to contribute value was also cited as a barrier. The adolescents, for example, were keen to learn about methods to add value to skins, and they emphasized the need for better quality control when pastoralists take skins from animals.

CHAPTER FIVE

SUMMARY, DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary, discussions, conclusion and recommendations. The study specific questions that this study sought to answer were to determine the forms of livelihoods among the pastoral communities in Moyale, Marsabit County, to assess the effectiveness of devolved governance system on pastoralist livelihood diversification in Moyale, Marsabit County and to examine the challenges pastoralist communities experience in livelihood diversification in Moyale, Marsabit County. The chapter presents the discussions drawn from the data findings analyzed and presented in chapter four.

5.2 Summary of the Findings

The section provides a summary of the analyzed findings guided by the specific objectives:

5.2.1 Forms of Livelihood

From the study findings, nearly 80% of the respondents revealed that rearing of livestock remains the backbone of the livelihood which is similar to Melketo (2020) 89% of livestock as main source of income in the neighbouring country Ethiopia. However, the residents are looking for diverse opportunities to increase and stabilize their means of living. It was established that pastoral communities in the dry lands are increasingly

vulnerable to food and livelihood crises. Descriptive results also established that the County Government have not been successful in maintaining market-based livelihood for the pastoralists. The above findings concur with the study conclusion by Rugadya (2017) that there is a need to encourage alternative economic activities, that use appropriate livestock products (such as dairy products, processing milk, hides and skins, fat processing, bones, blood processing, manure, horns).

Results show that Marsabit County did little effort in ensuring the availability of natural capital to support farming activities and to a larger extent unable to support the pastoralists in keeping animals for trading as represented by a mean of 1.28. The study also revealed greater interest by the respondents to diversify in other activities which would supplement their usual herding activities. The findings are in line with those of Achiba (2018) who found out that pastoral communities are now adopting other non- stock income-generating activities. Pastoral communities are shifting from subsistence production to trading and market-driven goods and services.

5.2.2 Effectiveness of Devolved Governance System Structures

The study revealed that devolved governance system budgets for livelihood diversification among the pastoralist communities and that the CIPD has set aside resources for livelihood diversification activities as shown by a mean of 4.16. However local initiatives like training have not helped youth to shift to other sources of livelihood, and the elected leaders have no initiatives that support livelihood diversification efforts as shown by a mean of 1.64. The devolved governance has not been realized due to frequent

clashes between the different ethnic classes in the County. Peace and Security are vital for devolved governance to take effect and sadly this has been the main challenge historically in Northern Kenya. This contributes to why several development initiatives and supports have failed to result to a lack of effectiveness of devolved governance system structure in Moyale Sub County.

According to empirical evidence by Kaye-Zwiebel and King (2014) that climate change may result in significant negative consequences including loss of livestock through heat stress. Community members are adequately consulted in developing livelihood diversification policies and local leaders are reluctant in advocating for resilience measures to survive the changing tide. There is a need for the government to put measures in place that seek to conserve the natural resources by training locals on diversification activities they can engage in.

5.2.3 Challenges Pastoralist Communities Experience

The study established that the major challenge facing pastoralists is the changes in land tenure which hinders the diversification efforts of the pastoralist communities as represented by a mean of 4.56. Another challenge revealed was high poverty levels which hinder the adoption of livelihood diversification among the pastoralist communities. The foregoing results support Teka et al. (2019).s conclusion that pastoralists should be empowered to influence policy and execution at the national level, and that the government should actively incorporate them in development programs, such as livelihood diversification. Pastoral communities lack funds for capital to diversify into

other economic activities. They further suffer from climatic variability even during livelihood diversification efforts. Inter-tribal conflicts stemming from livestock raiding and theft make pastoral regions vulnerable to instability. The foregoing results support Little et al. (2001) conclusions that improving policies aimed at pastoralists provides them with more life options via greater access to education and training and supports the establishment of jobs for ASAL residents.

5.2.4 Pastoralist Livelihood Diversification

Results show that pastoralists in Marsabit County actively conducted trade with their neighbours in the local markets and the findings agree on the evidence provided by Martin, et al. (2018) that Due to their livestock-dominated livelihood; pastoralists depend on cross-border trade as a source of wealth. Descriptive results also show that only a few of the Marsabit residents had opted to crop farming.

5.3 Discussions

This section discusses the findings on forms of livelihoods, Effectiveness of Devolved Governance System Structures and Challenges Pastoralist Communities Experience in relation to literature review.

5.3.1 Forms of Livelihoods

The first objective was determining the means of livelihoods among the pastoral communities in Moyale Sub-County. From the findings, it was established that pastoralism is an ancient form of human activity and present-day pastoral peoples carry forward an array of diverse cultures, ecological adaptations and management systems that

have changed with modernity. However, Moyale Sub-County residents were neither keeping high breeds of animals nor shifting to fishery activities. Failure to adopt alternative measures such as crop farming subdues the recommendation by Morton and Kerven (2013) who indicate that crop agriculture is particularly important as a source of income for pastoralists. This situation concurs with the GOK (2019) report that there is a need to encourage opportunities for diversification, including value addition to livestock products through rural-based processing industries, irrigated crop farming and fishing among others. Lack of analysis to determine opportunities, adaptable policies and objectives which are crucial in enabling pastoralists to articulate their needs, use available resources and existing capabilities.

5.3.2 Effectiveness of Devolved Governance System Structures

The second objective was to assess the effectiveness of the devolved governance system on pastoralist livelihood diversification in Moyale Sub- County. The study established that the devolved governance had performed poorly in strengthening local Government livestock institutions such as Pastoral Associations and facilitating decentralized planning and accountability mechanisms. Further county government of Marsabit had not to put in place appropriate mechanisms to manage conflict between pastoral groups and others by providing adequate funding and resources.

The study also established that policies and regulations like landowners affected the pastoralist lifestyle of the community since they increased cattle rustling, limited space for grazing areas, conflict in land ownership and expansion tendencies by some communities due to lack of clear boundaries. The findings are in line with those of

Rugadya (2017) who observed that access to and security of land tenure are crucial for productive and sustainable pastoralism, but that land laws and policies have hampered pastoralism's progress. Governmental abuse of pastoralists' land rights through the appropriation of their lands for other uses has resulted from a failure to recognize communal and pastoral land tenure in laws and policies, as well as a lack of respect for customary land laws in both land administration and management and within the judicial system.

5.3.3 Challenges Pastoralist Communities Experience

To examine the challenges that hinder devolution from ensuring sustainable pastoralist livelihood in Moyale Sub-County. The challenge is that there are no guarantee sustainable livelihood strategies will be accepted by pastoralists if they have not been empowered to make informed choices about what to adopt and reject. In this respect, pastoralist development must be based on realistic expectations that reflect the historic marginalization. Statistical evidence shows the necessity by both national and county governments to establish conservancy in relation to climate change and use the Constituency Development Fund (CDF) respectively for the development of livelihood diversification activities. However, the findings show the level of pastoralist livelihood diversification and devolved governance is insignificant. Pastoralists' livelihood challenges raise concern to move towards more ambitious development goals to appreciate natural resources and value their protection and sustainable management.

5.4 Conclusions

Based on the study results, pastoral communities in Moyale, Marsabit County mostly relies of livestock keeping with some on small-scale farming and business activities. This long-term reliance on livestock-based livelihoods of pastoral and agro- pastoral communities in Moyale, Marsabit County are increasingly becoming unsustainable and highly vulnerable for natural disasters and thus the need to conserve climate and diversify into alternative sources of livelihood so as to better quality of life.

The study also concludes that the devolved governance had performed poorly in strengthening local Government livestock institutions such as Pastoral Associations and facilitating decentralized planning and accountability mechanisms. Further county government of Marsabit had not put in place appropriate mechanisms are in place to manage conflict between pastoral groups and others by providing adequate funding and resources. To address this frequent natural disaster, both national and county governments have established various mitigation programmes, policies, initiatives which are contained in the fourth schedule of the Constitution of Kenya 2010.

The study concludes that pastoralists in Moyale, Marsabit County experienced considerable challenges in an effort to embrace livelihood diversification. Some of the challenges include livestock diseases, droughts, such as high poverty levels, lack of empowerment, lack of business skill, lack funds for capital to diversify into other economic activities, climatic variability, degradation of land, inter-tribal conflicts

resulting from cattle raids and theft, lack of business skills, lack of markets, price fluctuations and lack of modern storage facilities.

5.5 Recommendation

Given that poor climatic conditions were increasing affecting the over-relied pastoralism activities in Moyale, there is, therefore, the need for the residents in this area to embrace alternative sources of livelihood. Such may include activities like, poultry and bee keeping, trading, basket weaving, fishing, aquaculture, dairy products, processing milk, hides and skins, fat processing, bones and blood processing, manure, horns and modern-day farming technologies. There is an urgent need to address tree planting and water harvesting at the household level. The Elders and the pastoralists have not harnessed the strength of the joining hands to form groups to source capital to start ranches for pasture and agro farming. Therefore, MCAs need to mobilize groups to source seeds, fertilizers, plowing equipment for farming crops like maize, beans, and green grams during the annual rainy season. However, this must be guided by feasibility research.

The County Government of Marsabit must provide the necessary infrastructure and resources and provide capacity development for livelihood diversification change to occur. The list is to educate the people to save and let them understand in-depth the basic diversification approach, for example, to start garden farming, orchards, keeping poultry, also close collaboration is required between the County Government and National

Government addressing some of the challenges like the insecurity policies to promote peace and safety.

In mitigating the challenges, all the stakeholders including the local communities, the County Government, National Government, donors and other interested parties must meet frequently and get thoroughly involved in development initiatives. This partnership will accord each individual an opportunity to be heard especially on how challenges impeding livelihoods changes can be mitigated at an earlier stage before being faced by the mentioned challenges.

5.6 Area for Further Research

This study sought to determine the effect of devolved governance on pastoralist livelihood diversification in Moyale, Marsabit County Kenya, in the future similar studies covering more counties should be conducted for purpose of results comparison. The Pastoralists are not at peace and safe to grasp the opportunities expected from devolved governance on livelihood diversification. The County Government can utilize the data to research further the challenges affecting the pastoralists and come up with sustainable development strategies.

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APPENDICES

Appendix 1: Questionnaire for Head of Pastoral Households

Kindly answer all questions on:

Devolved Governance and Pastoralist Livelihood Diversification in Moyale Sub-County in Marsabit County

All information that you share will be handled in confidentiality and it will be used for academic purposes only.

Part A: Background Information

1. Gender?

Male

Female

2. Which ward do you reside in?

.....

3. How old are you?

31-40 Years

41-50 Years

51 years or more

4. What is your highest education level?

Non formal education

Primary education

Secondary education

College Education

University

others..... specify

Part B: Forms of Livelihood

5. Below are several statements on means of livelihood; Using a Likert scale of 1-5 where; 1=strongly disagree, 2=disagree, 3=neutral, 4 agree and 5 strongly agree; indicate the extent of your agreement with each of these statements.

Statement	1	2	3	4	5
The County has maintained a market based livelihood for the pastoralists					
The County ensures regular on-farming activities among the pastoralists					
The County supports the pastoralists in keeping animals for trading					
The County ensures that pastoralists have access to human capital					
The County ensures that there is availability of Natural capital to support their farming activities					

6. How have the forms of livelihood been improved?

Part C: Challenges Pastoralist Communities Experience

7. These are statements on challenges pastoralist communities experience and the impact on pastoralist livelihood diversification. Using a Likert scale of 1-5 where; 1=strongly disagree, 2=disagree, 3=neutral, 4 agree and 5 strongly agree; indicate the extent of your agreement with each of these statements as applicable.

Statement	1	2	3	4	5
Pastoral communities lack funds for capital to diversify into other economic activities					
Pastoralists communities encounter changing land policies					
Changes in land tenure hinders the diversification efforts of the pastoralist communities					
Pastoral communities suffer from climatic variability even during livelihood diversification efforts					
Pastoralists communities face regular loss of fertile grazing land					
Poor attitudes by pastoralists has hindered livelihood diversification efforts					
Livelihood diversification efforts is slowed by the pastoralists lack of awareness of modern technologies					
High poverty levels hinder adoption of livelihood diversification among the pastoralist communities					

8. What are other challenges experienced by pastoralist communities?

Part D: Effectiveness of Devolved Governance System Structures

9. Below are several statements on effectiveness of the devolved governance system on pastoralist livelihood diversification; Using a Likert scale of 1-5 where; 1=strongly disagree, 2=disagree, 3=neutral, 4 agree and 5 strongly agree; indicate the extent of your agreement with each of these statements.

Statement	1	2	3	4	5
The County ensures that the locals are educated on how they can maintain their livelihoods					
The devolved governance system budgets for livelihood diversification among the pastoralist communities					
The CIPD has set aside resources for livelihood diversification activities					
Community members are consulted in developing livelihood diversification policies					
The elected leaders (national and county level) support livelihood diversification efforts					
The area Member of Parliament(MP)uses Constituency Development Fund (CDF) for development of livelihood diversification activities					
The government works to conserve the natural resources by training locals on diversification activities they can engage in					
The national government has established conservancy in regard to climate change, run in collaboration with pastoral community					

The communities are engaged in the decision making on climate change adaptation mechanisms					
Local initiatives like training helps youth to shift to other sources of livelihood					
Local leaders advocate for resilience measures to survive the changing tide					

10. How effective are the devolved governance system structures?

Part E: Pastoralist Livelihood Diversification

11. Below are several statements pastoralist livelihood diversification. Using a Likert scale of 1-5 where; 1=strongly disagree, 2=disagree, 3=neutral, 4 agree and 5 strongly agree; indicate the extent of your agreement with each of these statements, as they apply in your community.

Statement	1	2	3	4	5
Community members are seeking employment opportunities					
We have taken to crop farming					
We conducting trade with our neighbors in the local markets					
We are keeping high breeds of animals					
Community members are shifting to fishery activities					

12. How has pastoralist livelihood diversification been improved?

Appendix 2: Committal Letter26th May, 2021

Africa Nazarene University

P.O Box 067-00200

Nairobi, Kenya.

Dear Respondent,

Subject: Request to collect Research Data

I, Rahma Aga, a Masters student in Governance, Peace and Security, in the Department of Peace and Conflict Studies of Africa Nazarene University, wish to undertake a study on: **“Devolved Governance and Pastoralist Livelihood Diversification in Moyale, Marsabit County Kenya.** I therefore, sincerely request you to assist in filling this questionnaire. The information collected will be used for academic purpose only and all confidentiality will be kept.

Thanks for your cooperation.

Yours sincerely,

Rahma Aga...

**Dr. Daniel Namanya**

14S03DMGP006

Dr. Wilkins Ndege Muhingi**Supervisors**

Appendix 3: School Recommendation Letter



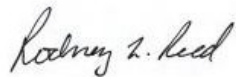
12th August 2021

RE: TO WHOM IT MAY CONCERN

Aga Rahma (14S03DMGP006) is a bonafide student at Africa Nazarene University. She has finished her course work and has defended her thesis proposal entitled: -

“Devolved Governance and Pastoralist Livelihood Diversification in Moyale, Marsabit County Kenya”.

Any assistance accorded to her to facilitate data collection and finish her thesis is highly welcomed.



Prof. Rodney Reed
DVC, Academic & Student Affairs.

Appendix 4: Interview Guide for Key Informants

1. Kindly provide a brief background about yourself in terms of:
 - i. Your position
 - ii. Your age
 - iii. Period you have served in this position
 - iv. Highest level of education attained
2. From your observation what are the main sources of livelihood for the people within this sub-county?
3. What shifts have you seen in the sources of livelihood in this county, say in the last 10 years?
4. How have the community members been empowered and through which institutions?
5. How best can the local community leadership structure be enhanced to lead to diversification efforts of the community?
6. What been the impact of the devolved system of governances to the livelihood diversification efforts?
7. How are the community members addressing the challenges they face with climatic changes like flooding and droughts to survive and thrive?
8. Change in policies and regulations like land owner, how has that affected the pastoralist lifestyle of the community?
9. How has the county government, communicated and addressed the issue of livelihood diversification?
10. Comment on customary institutions and local initiatives on pastoralist livelihood diversification.

Appendix 5: Focus Group Discussion Guide

1. Kindly introduce yourself to the group by sharing:
 - i. Your age
 - ii. Which village you come from
 - iii. Highest level of education attained
 - iv. The number of household members are in your family
 - v. The activities you handle on a daily basis

2. What are the forms of livelihood in your family?

3. What changes have you experienced in sourcing or earning an income, say in the last ten years?

4. What information and initiatives have you benefited from the local institutions?

5. What benefits have you received from the county/sub-county government in terms of sustaining your livelihood?

6. Comment on any changes that you have experienced in your pastoralism activities?

Appendix 6: NACOSTI Research Permit


REPUBLIC OF KENYA


NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 976754 Date of Issue: 23/August/2021

RESEARCH LICENSE



This is to Certify that Ms. RAHMA MOHAMED AGA of Africa Nazarene University, has been licensed to conduct research in Marsabit on the topic: Devolved Governance and Pastoralist Livelihood Diversification in Moyale, Marsabit County Kenya for the period ending : 23/August/2022.

License No: NACOSTI/P/21/12519

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