

**EFFECTS OF INSECURITY ON SOCIO-ECONOMIC ACTIVITIES OF  
PASTORALIST COMMUNITIES IN MANDERA  
COUNTY, KENYA**

**ABDI MOHAMED ALI**

**C50/CE/28335/2015**

**A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF HUMANITIES  
AND SOCIAL SCIENCES IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF  
ARTS, GEOGRAPHY OF KENYATTA UNIVERSITY.**

**SEPTEMBER, 2023**

## DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

Signature.....

Date.....

**Abdi Mohamed Ali**

**C50/CE/28335/2015**

This thesis has been submitted for review with our approval as university supervisors:

Signature.....

Date.....

**Dr. Philomena Muiruri**

**Department of Geography Kenyatta University**

Signature.....

Date.....

**Dr. Thomas N. Kibutu**

**Department of Geography Kenyatta University**

## **DEDICATION**

I dedicate this thesis to my wife, Halima Hassan, sons, Abdi Malik Abdi, Mohamed Amin Abdi and Abubakar Abdi, for their continued support during my studies.

## **ACKNOWLEDGMENT**

I would like to express my sincere thankfulness to the All-Powerful God for providing me with good health throughout the study. I want to express my gratitude to Dr. Philomena Muiruri and Dr. Thomas Kibutu, my supervisors from the Department of Geography at Kenyatta University, for their academic and professional guidance. I greatly appreciate their breadth of knowledge and readiness to mentor and inspire me to strive for success in this field. My sincere gratitude to all of the geography department lecturers who helped me with my coursework. I want to express my gratitude to all of the participants in this study for helping me with data collection

## TABLE OF CONTENTS

<b>DECLARATION .....</b>	<b>ii</b>
<b>ACKNOWLEDGMENT .....</b>	<b>iv</b>
<b>TABLE OF CONTENTS .....</b>	<b>v</b>
<b>DEDICATION .....</b>	<b>iii</b>
<b>LIST OF TABLES .....</b>	<b>ix</b>
<b>LIST OF FIGURES .....</b>	<b>x</b>
<b>ABBREVIATIONS AND ACRONYMS.....</b>	<b>xi</b>
<b>OPERATIONAL DEFINITION OF TERMS AND CONCEPTS .....</b>	<b>xii</b>
<b>ABSTRACT.....</b>	<b>xiii</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION .....</b>	<b>1</b>
1.1 Background of the study .....	1
1.2 Statement of the Problem .....	8
1.3 Objectives.....	9
1.3.1 Specific Objectives.....	9
1.4 Research Questions .....	9
1.5 Justification and Significance of the Study .....	10
1.6 Scope of the Study.....	11
1.7 Limitations of the Study.....	11
<b>CHAPTER TWO .....</b>	<b>12</b>
<b>LITERATURE REVIEW.....</b>	<b>12</b>
2.0 Introduction .....	12
2.1 Empirical Literature of Forms of Insecurity.....	12
2.2 Empirical Literature of the Effects of Insecurity on Social Activities Among Pastoralist Communities.....	15
2.3 Empirical Literature of the Effects of Insecurity on Economic Activities Among	

Pastoralist Communities.....	21
2.4 Empirical Literature of the Strategies used to Cope with Insecurity among Pastoralist Communities.....	25
2.5 Theoretical Framework .....	29
2.5.1 Human Security theory.....	29
2.5.2 Risk Theory .....	31
2.6 The Conceptual Framework .....	33
<b>CHAPTER THREE .....</b>	<b>35</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>35</b>
3.0 Introduction .....	35
3.1 Research Design .....	35
3.2 Study Area.....	35
3.3.1 Site Selection and Description. ....	35
3.3.2 Climate and Vegetation .....	36
3.3.3 Population.....	37
3.3.4 Economic Activities .....	37
3.4 Target Population .....	38
3.5 Sampling techniques and sample size .....	39
3.5.1 Sampling Techniques .....	39
3.5.2 Sample Size Determination .....	39
3.6 Research Instruments .....	40
3.7 Data Collection.....	41
3.8 Pilot Study .....	42
3.9 Validity and Reliability .....	42
3.9.1 Validity of the Instruments.....	42
3.9.2 Reliability of the Instruments .....	43
3.10 Data Management and Analysis.....	43
3.11 Ethical Consideration .....	44

<b>CHAPTER FOUR.....</b>	<b>45</b>
<b>DATA ANALYSIS AND PRESENTATION OF THE FINDINGS .....</b>	<b>45</b>
4.1 Introduction .....	45
4.2 Response Rate .....	45
4.3 Social Economic Characteristics of the Respondents .....	46
4.3.1 Distribution of the respondents by gender .....	46
4.3.2 Education Level.....	47
4.3.3 Distribution of the household heads by age .....	48
4.4 Economic activities .....	48
4.5 Forms of Insecurity in Mandera County .....	53
4.6 Effects of Insecurity on Social Activities and Social Services.....	55
4.6.1 Effects of Insecurity on Health Care Services.....	56
4.6.2 Effects of Insecurity on Education .....	57
4.6.3 Effects of Insecurity on Social Functions.....	60
4.7 Economic Effects of Insecurity .....	62
4.8 Coping Strategies .....	69
<b>CHAPTER FIVE .....</b>	<b>74</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>74</b>
5.1 Introduction .....	74
5.2 Summary of Research Findings .....	74
5.2.1 Forms of Insecurity among Pastoralist Communities. ....	74
5.2.2 Effects of Insecurity on Social Activities among Pastoralist Communities....	74
5.2.3 Effects of Insecurity on Economic Activities among Pastoralist Communities .....	76
5.2.4 Coping Strategies in the Face of Insecurity among Pastoralist Communities.	77
5.3 Conclusions .....	78
5.4 Recommendations .....	80
5.5 Suggestions for Further Research.....	81

<b>REFERENCES.....</b>	<b>83</b>
<b>APPENDICES.....</b>	<b>95</b>
A1: Introduction Letter.....	95
A2: Questionnaire for the Household Heads.....	96
A3: Interview Guide for Key Informants.....	102
A4: Research Authorization Letter from the Graduate School of Kenyatta University.....	103
A5: Approval of Research Proposal by Graduate School of Kenyatta University.....	104
A6: Letter of Approval by Ethics Review Committee of Kenya University.....	105
A7: Authorization Letter from National Commission for Science, Technology and Innovation, NACOSTI.....	107
A8: Research Authorization Letter from County Commissioner, Mandera.....	108
A9: Research Authorization Letter from County Director of Education, Mandera.....	109
E10: Study Area.....	110

## LIST OF TABLES

Table 1: Response rate .....	45
Table 4.2: Education aspects affected by insecurity .....	58
Table 4.3: Effects of insecurity on economic activities .....	63

## LIST OF FIGURES

Figure 2.1: Conceptual model of security management .....	34
Figure 4.1: Gender of the respondents .....	46
Figure 4.2: Education level of the respondents Source: Field Data (2020) .....	47
Figure 4.3: Distribution of the respondents by age .....	48
Figure 4.4: Economic activities .....	49
Figure 4.5: Forms of insecurity .....	53
Figure 4.6: Effects of insecurity on social functions .....	61

## **ABBREVIATIONS AND ACRONYMS**

<b>ASAL:</b>	Arid and Semi-Arid Land
<b>CAP:</b>	Common Agricultural Policy
<b>DRC:</b>	Democratic Republic of Congo
<b>GDP:</b>	Gross Domestic Product
<b>HH:</b>	Head of Household
<b>IDPs:</b>	Internally displaced Persons
<b>KNBS:</b>	Kenya National Bureau of Statistics
<b>NACOSTI:</b>	National Commission for Science, Technology and Innovation
<b>NGOs:</b>	Non-Governmental Organizations
<b>PTSD:</b>	Post-traumatic stress disorder
<b>RCS:</b>	Representatives of Civil Societies
<b>RL:</b>	Religious Leaders
<b>SPSS:</b>	Statistical Package for Social Sciences
<b>UNDP:</b>	United Nations Development Programmes
<b>UNESCO:</b>	United Nations Educational, Scientific and Cultural Organizations
<b>UNICEF:</b>	United Nations Children's Fund
<b>USAID:</b>	United States Agency for International Development
<b>WHO:</b>	World Health Organization

## OPERATIONAL DEFINITION OF TERMS AND CONCEPTS

<b>Coping strategies</b>	These are ways in which pastoralist communities use to overcome challenges posed by insecurity. In the context of this study, these are different strategies adopted by pastoralists in Mandera to cope with the effects of insecurity.
<b>Economic activities</b>	These are activities which pastoralist communities in Mandera county get involved as way of sustaining themselves and their families.
<b>Household</b>	Refers to a social unit within the pastoral communities in Mandera county made up of people living under one shelter sharing same meal.
<b>Insecurity</b>	These is the exposure of pastoral households in Mandera county to dangers involving their lives, livestock and property
<b>Migration</b>	These is the movement of pastoralists in Mandera from one place to another in search for pasture, water and safer areas during insecurity
<b>Social activities</b>	These are engagement that promote values and determine how pastoralist communities interrelate with each other,
<b>Pastoralist communities</b>	These are people whose main source of livelihood involves the rearing of livestock in Mandera, they include the gareh, murale degodia and corner tribe

## ABSTRACT

The presence of an imminent threat to people's lives and property is referred to as insecurity. It might represent a threat, posing difficulties, risks, and raising anxieties, which would have an impact on a nation's socioeconomic progress. The study's goal was to assess the impact of security on pastoral households' socioeconomic activities in Mandera County. This study's primary goal was to evaluate how insecurity affected the socioeconomic activities of pastoralist communities in Mandera. The specific objectives of the study were; (i) To examine forms of insecurity among pastoralist communities in Mandera County, (ii) To assess the social effects of insecurity among pastoralist communities in Mandera County, (iii) To evaluate the economic effects of insecurity among pastoralist communities in Mandera County and (iv) To establish strategies for coping with the effects of insecurity on socio-economic activities in Mandera County. Human security theory and risk theory served as the study's guiding principles. The study employed a descriptive survey research design. A total of 399 household heads, 4 chiefs, 6 sub-chiefs, 10 religious leaders, and 6 members of civil society. Stratified method was used to ensure all the sub counties were included in the study. The household heads were sampled using purposive sampling. Chiefs, sub-chiefs, religious figures, and members of civil society were sampled using purposive sampling. Data was collected by use of questionnaires and key informant interview guide to gather primary data. Data analysis was done using the statistical Packages for Social Science (SPSS Version 25) computer software program, descriptive statistics such as frequencies, percentages, means, and standard deviations was used, the finding of the study were presented using tables, figures, pie chart and bar graphs. The data collected from the key informants was analyzed using thematic analysis. This involved categorization of data, identification and interpretation of themes based on the research objectives. The study's findings indicate that Mandera experiences a variety of kinds of insecurity, such as livestock rustling, banditry, border conflicts, terrorism attacks, and inter-clan disputes. These have detrimental consequences on social services like health and education as well as involvement in social activities. Trade, business, agriculture, and pastoralism have all been impacted by the heightened instability. Based on the findings, the national government through the Ministry of Interior and Administration of National Government is advised to strengthen security measures in the country through its pertinent stakeholders, such as security actors, in order to address the root causes of insecurity. In order to guarantee that the pastoral communities have access to social services, the county government of Mandera is advised to provide adequate amenities in the county. The study findings would offer insights that would help reshape policies by the government and the stakeholders in a bid to find long lasting solutions to insecurity and other regions in Kenya with insecurity. The study will also contribute to the body of knowledge on the effects of insecurity on the socio-economic activities of pastoralist's communities. In this regard, the study will be a key reference point for other researchers and academicians with interest in the same area of study and other related areas.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the study

Pastoralism takes place across the world in areas extending from the dry lands of Africa and the Arabian Peninsula to the highlands of Asia and Latin America. Pastoralists occupy the arid and semi-arid areas where the potential for crop cultivation is limited (Nori, 2021). In Latin America, pastoralists are mainly found in Argentina, Bolivia, Chile, and Peru. Pastoralism is a small part of these countries' economies, and it is important because it fills economic gaps.

Most of Asia is made up of arid or semi-arid regions. Because mountainous places receive more rainfall than plains and valleys, pastoralists choose to live there (Motuzaite et al., 2020). In addition to having more precipitation, mountainous areas feature native mountain vegetation that provides different nutritional benefits for animals. In order to irrigate food crops and fodder, pastoralists also use the slopes to construct gravity-fed irrigation channels. Additionally, springs and streams provide water for both humans and their cattle, and the mild climate in hilly locations makes life more comfortable for both people and their livestock.

In Europe, pastoralism is mostly practiced in Bulgaria, Germany, Ireland, Wales, Scotland, and Sweden. Pastoralists depend on transhumance, whereby they seasonally move from one type of pasture to another, and grazing on conservation zones and state-owned land (Liechti & Biber, 2016). In Europe, pastoralists do not face many challenges since they get support from the European Community (EC) in the form of funds distributed to farmers through the Common Agricultural Policy (CAP). Pastoralists who keep traditional livestock breeds on pastures and use low levels of

inputs in places that are hard to use for arable farming are compensated for the income they lose by not switching to more intensive, high-input farming.

Pastoralism is practiced by roughly 268 million people in Africa, accounting for about 40% of the continent (Orton, 2015). Some of these communities include the Fulani in Nigeria, Berber in northern Africa west, Maasai, Somali, and Boran in East Africa. These communities live in arid and semi-arid areas. They can be identified by their heavy reliance on cattle as a means of subsistence and a variety of migratory behaviors in search of water and pastures. In Africa, pastoralists view their way of life as more than just a means of subsistence; it is integral to the culture of the individuals and communities who practice it. Pastoralists mostly raise cattle, sheep, and goats in places that receive higher amounts of precipitation than they do in extremely arid regions where they primarily raise camels and goats. In the majority of Africa, pastoralists have long lived on land that hasn't been used for anything else. However, because of their recent migratory habits, they are now at odds with both the government and other communities.

Pastoralism is a major economic activity and has a significant impact on the national economy of the majority of West African nations. According to Naah (2018), pastoralism provides a living for many people and accounts for close to 60% of the production of meat and milk products consumed. One of the West African nations with a reputation for pastoralism is Nigeria. The importance of keeping numerous animals of different species in such big quantities Over 9 million people in the nation make a living through pastoral work. The Fulani and the Fulbe, who keep more than 80% of the nation's livestock, are the major communities that practice pastoralism.

Pastoralism is a significant economic activity in the majority of the countries in the Horn of Africa. One of the largest pastoralist populations in the world lives in parts of

Kenya, Somalia, Ethiopia, and Uganda where other forms of support are scarce (Catley, Lind, & Scoones, 2016). Because seasonal weather patterns mean that these resources are not always available, pastoralists in this region rely significantly on strategic mobility to ensure access to pasture land and water sites, and as a result, their livelihoods have a regional component. They cross international borders to emigrate, have access to regional and global markets, and are impacted by global phenomena like violence or drought. Pastoralism provides livelihood for an estimated 20 million people in Ethiopia and accounts for around 80% of the country's yearly milk production. It also provides 90% of the meat consumed in East Africa and contributes 19%, 13%, and 8% of the GDP (Nyariki, 2017).

Support to pastoralists in these areas is scarce and the intervention measures fail due to various reasons. One of them is misplaced narratives that pastoralism is outdated and there is a need for alternatives to pastoralism (Wachira et al, 2020). As a result of these narratives, there have been biases against the pastoralists particular in the provision of education, water, investment in diversification programs such as irrigation farming and other projects outside the pastoral economy. Another reason is poor design of the development projects in the areas occupied by pastoralists. As a result, the projects do not fit the local contexts. For instance, the boreholes and water points provided do not function for long and when repairs are needed, the cost involved is very high (Thomas et al, 2019). Additionally, the intervention programs in the areas inhabited by the pastoralists do not incorporate the social aspects, do not involve local networks or mobilize local expertise and experience. These projects fail when the funding cease.

Pastoralism is the primary source of income for those who live in Kenya's arid and semi-arid regions (ASAL), which make up around 80% of the country's total

geographical area (Amwata et al. 2015). Most individuals agree that pastoralism considerably boosts the nation's GDP and that the livestock value chain benefits a lot of people (Karaimu 2013). Pastoralists rule a substantial portion of northern Kenya and its borderlands. The area is often regarded as being underdeveloped and underprivileged, and it is devoid of infrastructure and essential services. It suffers from a lack of governance and the rule of law, as well as from social, political, and economic marginalization. The area is also susceptible to ongoing wars and is severely affected by ongoing droughts (Opiyo et al., 2015). Communities of pastoralists in Kenya are not all the same. They comprise the communities of the Rendille, Turkana, Samburu, Boran, Gabra, Somali, Burji, Pokot, Masai, and Garre.

One of the areas where pastoralism is a dormant economic activity is Mandera County. This is due to the area's extreme aridity, which makes crop production impossible. However, the communities are looking for additional economic diversification strategies as their reliance on pastoralism declines. In this county, residents are specifically expanding their sources of income by engaging in crop cultivation through irrigation, trade, the sale of charcoal and firewood, leasing, and the purchase and sale of land, among other activities (Abdullahi, 2018).

Communities of pastoralists are under a lot of hardship, including drought and other natural disasters like climate change. Additionally, there are more instances of cross-border violence, cattle rustling, cross-border intrusions, and competition for scarce natural resources like pastures and water sources in the areas inhabited by these communities. Additionally, these regions endure increasing instability, which has a detrimental impact on socioeconomic growth and makes people there more vulnerable to poverty (Brzoska & Frohlich, 2016).

Insecurity in the social and economic activities of pastoralists is a multifaceted issue

with far-reaching implications for the livelihoods and well-being of these communities as per Catley, A., Lind, J., & Scoones, I (Eds.) (2013). Insecurity in social and economic activities of pastoralists is a complex and longstanding issue that affects nomadic or semi-nomadic communities around the world. Pastoralists are people who rely primarily on herding livestock such as cattle, sheep, goats, camels, and others for their livelihoods as to Araya Mezgebo. (2016). Their way of life is often characterized by mobility, as they move their herds in search of grazing land and water sources. According to Catley, A., Lind, J., & Scoones, I. (Eds.). (2013), several factors contribute to insecurity in the social and economic activities of pastoralists which include Land Disputes and Encroachment where Pastoralists often face land tenure issues as their traditional grazing lands are increasingly encroached upon by agriculture, infrastructure development, and urban expansion. This competition for land leads to conflicts between pastoralists and other land users, which can disrupt their economic activities. Secondly Resource Scarcity in which Climate change and environmental degradation have led to the depletion of natural resources such as water and grazing land. As a result, pastoralists struggle to find suitable areas for their herds, leading to overgrazing in some areas and desertification in others, affecting their economic well-being.

Insecurity and Conflict to Pastoralist communities are vulnerable., both internal and external according to Laura Lewis & Mahaman Tidjani Alou, (2017). These conflicts can be driven by competition for resources, ethnic tensions, or land disputes. Armed conflicts, raids, and cattle theft are not uncommon and can result in loss of livestock and lives and Limited Access to Services: Pastoralist communities often have limited access to healthcare, education, and other essential services due to their nomadic lifestyle. This lack of access can hinder their overall well-being.

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their nomadic lifestyle. This lack of access can hinder their overall well-being and economic development.

The areas inhabited by pastoralists experience insecurity which is mainly manifested in various forms. One of them is cattle rustling which is mainly caused by weakened traditional governance, culture, political incitements, and the proliferation of small arms, among other causes (Kimokoti, 2022). In effect, the increased cases of cattle rustling leads to deaths, destruction of property, injuries and loss of lives among other effects. Another form of insecurity is border conflicts. This mainly results from scramble for pastures and water, political incitements among other factors (Nori & Scoones, 2019). This has impact on the communities in various ways including community evictions, injuries, deaths, and destruction of property. This has resulted in huge displacement of people, deaths, destruction, loss of property and injuries. The areas occupied are also prone to terrorism. This is mainly due to weak governance structure and poor presence of security officials in these areas. Such attacks polarize economic activities such as tourism, investment among others (Ejiofor, 2022).

The increased insecurity in areas inhabited by pastoralists had caused increased poverty levels. This is because, insecurity disrupt both the socio economic activities (Ng'asike, 2022). For instance, during times of insecurity, people cannot attend religious activities, weddings, markets and children not able to go to school. Also, increased insecurity leads to the collapse of the traditional livelihoods. For instance, attacks are associated with large scale out-migration and displacement of communities, which leads to destitution.

Increased insecurity also hinders the provision of social services such as education and health services (Mutu, 2017). Heightened insecurity leads to closure of schools as the affected communities are forced to flee to safer places thus hindering education

attainment. The raids also scare away teachers and other individuals involved in the provision of education who are not willing to work in such volatile areas. Healthcare workers are scared from working in areas with insecurity and provision of healthcare supplies becomes a challenge.

## **1.2 Statement of the Problem**

The Kenyan government recognizes the need to address vulnerabilities and inequalities in the areas inhabited by pastoralists (Hassan et al, 2022). In a move towards the realization of this, the government has put focus on the promotion of security in the areas. This is because, security is fundamental to the people's livelihoods, poverty reduction and the achievement of development goals. However, in spite of the efforts, the regions inhabited by pastoralists have been affected by insecurity and have the development indicators in the country and the pastoralists have suffered from prolonged chronic marginalization (Barako, 2021).

Mandera is one of the areas in the country where the communities are predominately pastoralists. According to the Mandera County integrated development plan (2022), 72% of the people there are pastoralists and depends predominantly on their animal as a source of livelihoods. The county has a poverty index of 77.6% and the majority of the population live below the poverty index (Kaduka et al, 2023). Similar to other regions inhabited by pastoralists in the country, the government has continued to provide security in order to promote development in the area. However, despite this, development in the county continues being marred by heightened insecurity and underdevelopment. This study therefore endeavored to determine how the social economic development of pastoralist is affected by insecurity.

The study was also inspired by a dearth of literature as previous studies have not exhaustively focused on how the insecurity in the county has impacted on socio

economic development with particular focus on the pastoralists. Among the studies done, Hussein (2016) focused on the effects of the pastoralist community on quality education in Mandera County, and Aburo (2016) focused on the effect of underdevelopment in Mandera County. These studies did not focus on insecurity and the associated socio economic effects. This study will therefore bridge the research gaps.

### **1.3 Objectives**

The general objective of the study was to analyze the effects of insecurity on socio-economic activities of pastoralist communities in Mandera County in Kenya

#### **1.3.1 Specific Objectives**

The specific objectives of the study are;

- i. To examine the forms of insecurity among pastoralist communities in Mandera County.
- ii. To assess the social effects of insecurity among pastoralist communities in Mandera County.
- iii. To evaluate the economic effects of insecurity among pastoralist communities in Mandera County.
- iv. To establish strategies for coping with the effects of insecurity on socio-economic activities in Mandera County.

### **1.4 Research Questions**

The research questions of the study were:

- i. What are the forms of insecurity among pastoralist communities in Mandera County?

- ii. What are the social effects of insecurity among pastoralist communities in Mandera County?
- iii. What are the economic effects of insecurity among pastoralist communities in Mandera County?
- iv. How are the pastoral households coping up with insecurity situation in Mandera County?

### **1.5 Justification and Significance of the Study**

In spite of the government's efforts to curb) insecurity and the issues it brings with it have persisted in Mandera County. Mandera county was specifically chosen in this study as it had numerous conflicts) (insecurity) and cases of terrorist attacks. The county has experienced heightened insecurity in the past than other areas in the country inhabited by pastoralists. This means that the existing policy frameworks to address the problem are not effective. In addition, to this, there is less research that has been conducted in the context of Kenya to assess insecurity in areas inhabited by pastoralists and the associated socio economic effects. The study is therefore necessary in order to explore new policy options for the relevant government agencies in the struggle to find lasting solutions to insecurity in Mandera County and other areas inhabited by pastoralists.

Apart from informing policy-making, the study will contribute to the body of knowledge on the effects of insecurity on socio-economic activities of pastoralist communities. In this regard, the study will be a reference point for other researchers and academicians advancing research on the same area of study and other related studies. Since there are still numerous questions regarding the causal association between insecurity and the development in the areas occupied by pastoralists and the

coping mechanisms used by the communities which remain unanswered. As a result, the study advances our understanding of the subject and provides a solid framework for further investigation.

### **1.6 Scope of the Study**

The study was conducted in Mandera County and other counties were not included. Mandera county borders Somalia and the inhabitants have homogeneous characteristics. The homogeneity of the pastoral communities is exhibited in their reliance on herding as a key source of livelihood, their nomadic and semi nomadic lifestyles, and little reliance on other sources of livelihood such as agriculture. The area has been an epicenter of insecurity. The study's focus was solely on the socioeconomic effects of insecurity on pastoral households and the different strategies the communities use to cope with the effects of insecurity.

### **1.7 Limitations of the Study**

The limitations experienced in this study was the inaccessibility of some areas in the study location due to its vastness. Accessing some sections was not easy since the general status of various roads in the county is very poor and not usable during the rainy season. In such scenarios, motor cycles were used to gain access to the interior areas that were inaccessible using vehicles. Unwillingness by some respondents to answer research questions was a challenge as they considered the issue of insecurity sensitive. This was mitigated by assuring the respondents that high confidentiality would be upheld. The study also used the local chiefs and local people as research assistants to avoid suspicion. Language barrier was also a challenge since the majority of the respondents could not understand English. This was addressed by using two inducted research assistants who have a good grasp of English, Swahili, and the local dialects, and the researcher could also speak several dialects and was able to communicate with them.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter presents a review of the literature on the effects of insecurity on socio-economic development. The first section covers the empirical literature review in line with the research objectives. This covered the different forms of insecurity, the effects of insecurity on social activities, the effect of insecurity on economic activities, and the strategies used by pastoralists to cope with insecurity. The chapter also presents a theoretical, the conceptual framework for the study and a summary of literature review and research gaps.

#### **2.1 Empirical Literature of Forms of Insecurity**

Threats, obstacles, weaknesses, hazards, and anxieties are all examples of objective dangers to people's lives and property (Akbulut-Yuksel, 2015). Okedion (2021) asserts that the social contract between the people and the state, in which people freely gave up their rights to an entity known as the government that is in charge of insuring everyone's survival, was established out of necessity. Although gaining security is a highly desired goal, it can be difficult owing to different hazards and threats in daily life as well as in local and global environments. Okedion (2021) defined security in this manner as taking steps to avert violent disputes.

There are different forms of insecurity in areas occupied by pastoralists. These include cattle rustling, border conflicts, clan conflicts, and terrorist attacks. There are numerous instances of cattle raiding activities in which property is destroyed, animals are stolen, and lives are lost. According to a study conducted by Kimani, Okemwa and Masiga (2021), cattle rustling is recognized and acknowledged as a cultural

activity, and this has made the practice dominant among the pastoralists. Raiding activities that cause high insecurity were a traditional cultural practice of testing a person's bravery and prowess in bloody warfare between various groups, which makes the practice dominant. Also, the cattle raiding activities are facilitated by the high proliferation of weapons.

Similar findings by Mkutu (2020) indicated that the high proliferation of arms is a major cause of insecurity, which makes the attacks more devastating. Cattle raiding is also promoted by commercialization, where businesspeople offer ready markets for the confiscated animals. All these cause insecurities in the areas, which, in most cases, lead to migration to safer camps.

In pastoralist-populated areas, terrorist attacks are one type of insecurity. Terror attacks by Al-Shabab terrorist fighters have occurred repeatedly in various places, especially those near to the Kenya-Sudan border. Most of these attacks have targeted important social facilities, infrastructure, security organizations, and government figures (Ajah, Dinne & Salami, 2020). There is tension in these communities as a result of these frequent attacks. For instance, pastoral poverty, inequality, and high unemployment in northern Kenya contribute to social-economic issues that make it easier for young men to join Al-Shabaab and other violent organizations. It has been simple for the group to establish itself and gather members because of the weak and unstable infrastructure. As a result, the organization now finds it simple to organize and carry out attacks.

Clan wars are another sort of insecurity that might exist in the locations where pastoral populations live. Conflicts in these regions typically occur more frequently and last longer when there are heterogeneous clans than they do in places with homogeneous clans. Contrary to contiguous zones, where two or more clans border

one another, resource conflicts are reduced where one dominating clan predominates. Chelang'a and Chesire (2020) say that it is possible for both different and similar groups to fight over who gets to use and control water and pasture.

Insecurity can also occur in the form of border conflicts. This mostly occurs in northern Kenya. In most cases, the communities engage in conflict when one crosses into the other community's territory. This has been mostly the case among the Turkana and the Pokot. Also, in some cases, the movement for water and pastures is not confined to the country but transcends international boundaries into Ethiopia, Sudan, Somalia, and Uganda. These interregional and cross-border movements frequently result in conflicts, which in most cases result in property destruction and loss of life (Houessou et al., 2020).

Security-related topics have dominated the conversation about development for many years. Krahman (2017), for instance, noted in a study conducted in Haiti that numerous attempts have been made since the end of the cold war to redefine the concept of security from a state-centric perspective to a broader view that prioritizes individuals. In this new definition, human security—which incorporates elements of national security, human rights, and national development—remains a key barometer for explaining the concept. Krahman (2017) says that people have tried to expand the idea of security from the level of the state to the level of society and the individual, as well as from military concerns to non-military ones.

According to Chamarbagwala and Morán (2015), one is a neo-realist theoretical strand that conceptualizes security as the state's fundamental duty. The second school of thought, known as the postmodernist or plural perspective, conceptualizes non-state actors as being in charge of security and displaces the state as the main supplier of security. Every government should give the economic security of its population a

higher priority than state security because economic problems are frequently the cause of security problems.

When considering security in many Sub-Saharan African countries, Nwanegbo and Odigbo (2013) draw attention to the absence of threats to peace, stability, national cohesion, and political and economic goals of a country. However, there is widespread agreement that maintaining peace, sustaining national unity, and fostering long-term socioeconomic prosperity all depend on security. According to Oladeji and Folorunso (2015), the presence of a strong system that can quickly, expertly, and in real time solve the challenges that these threats offer defines security in Nigeria rather than the absence of threats or security issues.

In Kenya, specifically in Mandera County, the concept of insecurity connotes different meanings, such as the absence of safety; danger; hazard; uncertainty; lack of protection and lack of safety. In Mandera County, for example, UNDP (2015) asserts that the concept of insecurity emphasizes a key point: those affected by insecurity are not only uncertain or unaware of what will happen, but they are also vulnerable to danger when it occurs. This shows up as fights between clans, fights between different ethnic groups, theft of livestock, fights over boundaries, terrorism, and fights between clans.

## **2.2 Empirical Literature of the Effects of Insecurity on Social Activities Among Pastoralist Communities**

Insecurity in the pastoral regions has various social effects and is inextricably associated with poverty. This has been identified in numerous studies that have been conducted. A study conducted by Justino (2016) identified that increased instability affects education. Armed conflicts, which are frequent in pastoral areas, worsen insecurity, which makes it difficult to provide high-quality education. According to

the findings, both the supply and demand sides of education are significantly impacted by insecurity. On the supply side, the research showed that schools are typically targeted and destroyed during conflicts, leaving the populace without educational resources. Teachers fear working in unstable areas because of the harassment and murder of teachers. This results in a teacher shortage, which has an impact on education.

On the demand side, the study found that rising insecurity leads to a shift to camps, which results in children dropping out of school. Additionally, despite possible efforts to provide education in these camps, the standard is typically quite low due to a lack of facilities and teachers. On the demand side, many individuals believe that education is not necessary and that schools are hazardous when there are disputes. As a result, many parents do not believe that their children need to receive an education.

Increased insecurity among the pastoralist communities also hinders the provision of social services.

Dunn (2018) conducted a study to determine the impact of the Boko Haram insurgency in Northeast Nigeria and found that rising conflict levels and greater insecurity are linked to children's ill health. According to the report, the Boko Haram insurgency had impacted the majority of the nation's regions, creating fear and insecurity that led people to congregate in camps. Children living in camps had inadequate nutrition, which was one effect that was visible. Children in camps had poor nutrition and bad health compared to kids in cities and other safe places. Since it was difficult to obtain sufficient food and healthcare services in the camps, this was brought on by a bad diet and a lack of medical attention. The study also found that the camps were overcrowded, with little access to clean, potable water, and poor sanitation, which further jeopardized the health of the camp's inhabitants.

In another study conducted in Nigeria, Agheyisi (2019) identified that increased insecurity impacts on inter-communal relations. Heightened animosity between communities leads to strong negative feelings and distrust towards each other. This decrease in trust reduced the capability and the motivation of the communities to coexist and cooperate. Intercommunal relations deteriorate, particularly when crimes like rape or the kidnapping of women occur. This approach may make parents more likely to arrange an early marriage for their daughters with someone they deem to be "safe hands" in an effort to foster relationships. This is however no common in the current era.

While this study offered key insights on the effects of insecurity on social activities, the study was done in the context of Nigeria and therefore, the findings are not applicable in Kenya and more specifically Mandera country. This limits the applicability of the findings and creates the need for this study

Oladayo (2019) conducted a study to determine the impact of conflict on health outcomes in the sub-Saharan region and established that insecurity is a major challenge that affects the provision of healthcare services. Evidence from Sudan showed that insecurity hurts healthcare in a big way, especially because it caused a lack of health workers. The findings indicated that during conflicts, health workers get killed while a number of them fear working in areas with conflicts. This leads to a shortage of healthcare workers.

In Bentiu, Bor, Akobo, Jonglei State, and Juba, health workers were killed and harassed by combatants, which increased fear for other health workers working in these places. The provision of healthcare services by non-governmental organizations is also affected as most of these organizations fear working in the insecure areas, particularly in Juba. As a result, the people in these areas are deprived off these

services. While this study offered key insights on the effects of insecurity on social activities, the focus was not on Kenya and more specifically Mandera country. This limits the applicability of the findings and creates the need for this study.

In a study to assess the effects of insecurity in Somalia, Kinyoki et al. (2017) found that significant levels of undernutrition among children existed in the impacted areas as a result of ongoing wars and rising undernutrition. The lack of food and inadequate kid medication were blamed for this issue. Children found it difficult to acquire healthy foods during wars, and medical care was inadequate in the impacted areas because it was difficult to provide it and because healthcare staff were feared there. Based on the findings, malnutrition among children, especially those under the age of 5, was shown to be the main issue, which exposed the kids to illnesses. A lack of nourishment was said to be the issue.

While this study offered key insights on the effects of insecurity on social activities, the study was done in the context of Somalia and therefore, the findings are not applicable in Kenya and more specifically Mandera country. This limits the applicability of the findings and creates the need for this study

Namasivayam et al. (2017) conducted a study to determine the consequences of insecurity in Uganda and found that insecurity had a detrimental impact on the maternal health of women in the affected area. Conflict-related increases in insecurity had a detrimental impact on women's utilization of maternal healthcare in Northern Uganda since institutional deliveries and the use of contraception were less common among women in the main conflict zones. While this study offered key insights on the social effects of insecurity, the study was not conducted in Kenya and more specifically in Mandera county. This created the rationale of this study.

Another negative health consequence of elevated insecurity is poor mental health. According to a study Amnesty International (2016), many refugees from Juba, Malakal, and Bentiu who were residing in Uganda had PTSD as a result of the civil violence they had undergone at home. The battle caused a great deal of sorrow, especially in Juba, where many of the refugees wished they had never existed.

While this study offered key insights on the effects of insecurity on social activities, the study was done in the context of Uganda and therefore, the findings are not applicable in Kenya and more specifically Mandera country. This limits the applicability of the findings and creates the need for this study

Locally, Balfour et al (2020) conducted a study to determine the dimensions of water insecurity in pastoralist households in Kenya and concluded that insecurity affects the social welfare of the affected communities, particularly the women and children, and completely disrupts their social lives. In times of war, violations of the fundamental rights of women and girls are pervasive, including brutal crimes such as rape, torture, murder, maltreatment, and neglect. The study further noted that increased insecurity and crimes against women often leave them in situations where they can hardly make ends meet. While this study offered key insights on the effects of insecurity on social activities, the study was not done specifically in Mandera county and therefore created the need for this study

Mbugua (2016) conducted a study on the effects of insecurity in West Pokot and found that it reduces educational possibilities in areas affected by armed conflicts by prompting children and their families to leave their homes and seek refuge in safer locations. Children avoid going to school out of fear and instability, especially those with impairments who need regular parental care and attention. The majority of the time, groups that are fleeing settle in underdeveloped areas devoid of educational

institutions, educators, and other educational stakeholders. As a result, their schooling is impacted. While this study offered key insights on the effects of insecurity, it was not done in Mandera County and therefore, the findings are not applicable in the county. This created the need for this study

In another study conducted in Mandera county, Aburo (2017) identified that violence makes teachers scarce in the afflicted areas. Because they are seen as elites and leaders in their communities as well as opponents of child tyranny and recruitment to war, teachers are typically the target of assailants during war and conflict terror acts. Most instructors avoid working in conflict-prone areas because of their susceptibility to attacks, which causes a scarcity of educators in the affected areas. As a result, education in the afflicted areas is of lesser quality. Schools and other educational institutions are destroyed as a result of armed warfare. Conflict hinders access to schools, delays their opening, threatens the safety of children within and outside of them, and raises teacher and student absenteeism rates. While this study was conducted in Mandera county, it did not analyze the forms of insecurity and the socio-economic effects of insecurity and therefore, the findings are not applicable in the county. This created the need for this study.

Ibrahim (2015) did a study on the effects of insecurity in Mandera county and found that many people's social activities, including as education, healthcare, religious events, and social gatherings, have been disrupted as a result of insecurity. According to Ibrahim (2015), insecurity in many areas of Mandera County has caused a breakdown in the delivery of public services, the destruction of sanitary and medical facilities, and the loss of workers due to deaths or emigration. The study was necessary since Ibrahim (2015) could not show how each type of insecurity affected communal activities in pastoralist groups. The study did not also examine the coping

strategies used by the pastoralists communities to cope with insecurity, hence the need for this study.

### **2.3 Empirical Literature of the Effects of Insecurity on Economic Activities Among Pastoralist Communities**

Insecurity and poor economic development are clearly related. Studies have demonstrated that violent conflicts result in insecurity, which is marked by a breakdown of law and order, an increase in crime rates, and impunity which in turn impact on economic development (Riedel & Welsh, 2015). Riedel and Welsh (2015) conducted a study to examine the patterns, explanations, and interventions of conflicts. The study identified that, in the afflicted areas, insecurity hinders investment and trade. It's crucial to keep in mind that two of the most crucial methods for pastoral communities to flourish are through commerce and investment. Investments are discouraged by the heightened volatility in the pastoral districts, though, as no investor, local or foreign, would be inclined to engage in a risky and uncertain environment.

Samim and Zhiquan (2020) conducted a study in Afghanistan's eastern regions and identified the prolonged war and conflicts in the region led to increasing insecurity and, in turn, a great deal of community relocation. The people's economic activities were highly disrupted as a result, especially in the production of agricultural goods, which is the main economic activity in these regions. In a similar study by Bapolisi (2021) the findings indicated that conflicts and rising insecurity in Afghanistan were to blame for sharp fall in agricultural production. This resulted from farmers' ongoing movement in search of safer communities to establish themselves. People migrated as a result of rising insecurity out of fear of being persecuted, kidnapped, enlisted in the military forces, or having their homes and possessions destroyed. The people suffered

from food insecurity as well as other issues like infections as a result. While these studies contributed to the understanding of the effects of insecurity, it was not done in Kenya and hence not applicable.

In another study conducted by Eklund, Persson, and Pilesjö (2016) in Iraq, the findings indicated that agricultural production is one of the key areas that have been hit hard by constant conflicts and insecurity in the country. A large number of people live in rural areas and rely on agricultural production as their source of livelihood. However, during conflicts, many farmers flee and abandon their farms, which impacts on agricultural production. Also, agricultural infrastructure, machinery, and livestock get destroyed, which further threatens agricultural livelihoods in the affected areas. While these studies contributed to the understanding of the effects of insecurity, it was not done in Kenya and hence not applicable.

Ujunwa, Okoyeuzu, and Kalu (2019) conducted a study in West Africa found that armed conflicts have increased insecurity, which has had a major impact on food security in the impacted areas. The study demonstrated that when there are wars, there is greater danger and the agricultural sector loses greatly as a result of forced migration, destroyed fields, and a lack of available farming materials. In a similar study carried out in Nigeria by Igwe (2015), the findings established that instances of conflict have led to the destruction of roads, farming equipment, telecommunications, bridges, water and sanitation structures, schools and hospitals, thus disrupting education and health acquisition. The findings further found that insecurity has decelerated all forms of trade and economic growth, which in turn lags the development of the affected areas. These studies contributed to the understanding of the effects of insecurity on economic activities. However, there were contextual gaps as the study was not conducted in Kenya and more specifically Mandera County.

Adelaja and George (2019) analyzed the impact of conflicts and insecurity in the Nigerian regions targeted by Boko Haram and identified that rising insecurity has had a major impact on agricultural production. As a result of the militants' ongoing attacks, production of many crops, including sorghum, cassava, soy, and yam, has been drastically decreased. People were constantly moving about and migrating in search of safe havens, which prevented them from concentrating on agricultural output. While this study contributed to the understanding of the effects of insecurity, it was not done in Kenya and hence not applicable.

Locally, Muturi and Oguya (2016) conducted a study to determine the factors affecting performance of construction projects in arid and semi-arid areas in Kenya. The study identified that one consequence of insecurity is the postponement of construction initiatives. It has become challenging to carry out any development projects due to lawlessness and elevated insecurity. The government employees and non-governmental organizations (NGOs) stationed in these regions constantly worry about being attacked by bandits. These places are consequently characterized by bad roads, a lack of basic services like schools and hospitals, food instability, and a lack of access to safe and clean water. While this study focused on the effects of conflicts on the pastoralists, it was not done in Mandera County. Also, the study did not focus on the effects of insecurity on the socio economic development and hence the need for this study.

In another study conducted in Laikipia County, Gicheru (2019) identified that poor resource allocation for development projects by the county government and national government is a result of insecurity. For example, when a significant amount of the available resources is diverted from other development projects and is used to provide security in the impacted areas, it constitutes a drain on local and national resources.

The communities are denied the chance to benefit from high-quality education, healthcare, clean water, roads, and other facilities as a result of this theft of resources from other sectors. For example, the government employees and non-governmental organizations (NGOs) stationed in these areas constantly risk being attacked by bandits. These places are consequently characterized by bad roads, a lack of basic services like schools and hospitals, food instability, and a lack of access to safe and clean water. Poor resource allocation is a result of insecurity. While this study focused on the effects of conflicts on the pastoralists, it was not done in Mandera county. Also, the study did not focus on the effects of insecurity on the socio economic development and hence the need for this study.

Mbugua (2016) conducted a study on the causes and effects of insecurities on the economies of pastoralist communities in Kacheliba in the Pokot North Sub County, Chepareria in the Pokot South Sub County, and Sigor in the Pokot Central Sub County. The findings indicated that the rising tension among communities in these areas resulted in the closure of commercial establishments such as shops, markets, and financial institutions. High levels of insecurity also prevented the opening of banks and microfinance institutions, as well as market places and retail stores. While the study offered insights on the effects of insecurity on economic activities, the focus was not in Mandera country and therefore, the findings were not generalizable.

Ahmed (2015) did a study in Mandera county and found that local workers employed by export-oriented businesses as well as foreign tourists and investors were afraid to make investments or engage in productive economic activities. Also, the study discovered that lack of utilities and infrastructure, such as power, piped water, and telephones, has hampered growth in many impacted communities. The study found that Mandera town is the only place where the amenities are available. In another

study with comparable findings, Aburo (2017) came to the conclusion that the majority of people live in poverty in the Mandera county areas afflicted by insecurity because there aren't any significant economic activities there. While these studies were conducted in Mandera county, they did not focus on the effects of insecurity on socioeconomic effects and hence the need for this study.

Mbugua (2016) conducted a study on the causes and impacts of insecurity on pastoralist economies in West Pokot County in Kenya and identified that increased insecurity has led to high levels of unemployment. This was due to the low number of businesses in the area. The situation has also been aided by the closure of schools, which has affected literacy levels and, as a result, employment levels, because young people cannot easily access formal employment opportunities without education. The study also established that most NGOs which would provide employment opportunities to the people had either moved to safer grounds or closed down due to insecurity. Insecurity has a significant impact on the labor force, as large displacement and migration deprive companies and business workers. While the study offered insights on the effects of insecurity on economic activities, the focus was not in Mandera country. Also, the study did not focus on the socio economic effects of insecurity and therefore, the findings were not generalizable.

#### **2.4 Empirical Literature of the Strategies used to Cope with Insecurity among Pastoralist Communities.**

There are various mechanisms that are used to cope with insecurity in areas inhabited by pastoralists. This is illustrated by numerous studies that have been conducted globally. A study conducted by Justino (2016) on the supply and demand restrictions to education in conflict-affected countries, the study identified that communities in volatile areas can benefit from economic management strategies. There are five basic

forms of economic coping mechanisms that people and households in violent and contentious contexts adopt. Subsistence farming and other low-risk activities, involvement in underground markets, division of labor among households, (non-forced) relocation, utilization of savings and asset sales (including land), subsistence farming and other low-risk activities. This study contributed to the understanding of various strategies used by pastoralists to cope with insecurity. However, the findings are not applicable in Kenya and more specifically in Mandera country.

In a study conducted by Krause (2017) on the role of the non-violence and civilian agency in communal war in Jos, Nigeria, the findings indicated that the community elders were instrumental in peace building. The community elders play a key role in restoring peace by prioritizing forgiveness and reconciliation of those affected by the perpetrators of conflicts and the communities in general. While this study offers key insights that contribute to the understanding of the coping mechanisms used by pastoralists, the context in which it was done limits the application of the findings in Kenya and more specifically in Mandera county. Also, the focus of the study was not on the socio economic effects of insecurity. There was therefore a need for a study to bridge the research gap

A study conducted in Lake Chad, Congo Basin among the Mbororo pastoralist, Nagabhatla et al (2021) identified that the community elders promoted security by fostering peace and coexistence among the pastoral communities. The study indicated that the majority of the groups have experienced a decrease in tension as a result of resource management agreements made by the elders on behalf of the communities. This was done particularly where resource scarcity was the main cause of conflicts. While this study offers key insights that contribute to the understanding of the coping mechanisms used by pastoralists, the context in which it was done limits the

application of the findings in Kenya and more specifically in Mandera County. Also, the focus of the study was not on the socio economic effects of insecurity. There was therefore a need for a study to bridge the research gap

Ptacek and Connaughton (2023) conducted a study in Liberia and identified that the civil society and faith based organizations play a key role in addressing conflicts and restoring peace. By encouraging peacemaking and communication between opposing populations, civil society organizations play a crucial role in settling disputes and lowering levels of insecurity. Additionally, it gives the appropriate authorities advance notice of potential issues so that they can take preventative action. On the other hand, faith-based groups are vital to restoring peace, especially when there are disputes amongst communities. They accomplish this by offering individuals impacted counseling and spiritual assistance, as well as by encouraging atonement and reintegration.

Mekuyie and Mulu (2021) conducted a study to determine the perception of impacts of climate variability on pastoralists and their adaptation/coping strategies in Fentale district of Oromia region in Ethiopia. The findings indicated that pastoralists rely on small scale crop growing to cope with insecurity. Small plots and crops are less likely to attract the attention of warring factions and may keep families fed, at least temporarily. The households that choose to remain in rural areas frequently choose to cultivate low-risk, low-return crops rather than keeping livestock to feed their families.

While this study offers key insights that contribute to the understanding of the coping mechanisms used by pastoralists, the context in which it was done limits the application of the findings in Kenya and more specifically in Mandera County. Whereas the focus of the study was not on the socio economic effects of insecurity.

There was therefore a need for a study to bridge the research gap.

Adan (2020) conducted a study to evaluate the contribution of informal peace agreement to community conflict management among Borana and Gabra Communities in Marsabit County and identified the pastoralist communities increasingly rely on the informal mechanisms of conflict management mechanisms, partly due to a lack of faith in the prevailing legal mechanisms. This is a good instance whereby the councils of elders are utilized to resolve conflicts and restore order through mediation and reconciliation. The main conflicts in the pastoral communities are driven by grazing land issues and water resources. In areas where pastoralists live, there are often conflicts within and between communities. This puts the role of informal structures for dealing with conflicts in the spotlight. Communities also come to agreements on how to make use of the natural resources that are available.

In a study conducted in Marsabit County by Adan (2015) identified that Borana and Gabra communities rely on exodus and community movement as coping strategies for insecurity. The study identified that emigration and fleeing have historically been among the most important household coping mechanisms during times of crisis. This shows that migration is a practical means of coping with the effects of instability and violence. And so, leaving insecure zone can be a long-term or permanent decision if the entire family relocates, or it can be a more transient choice if people frequently travel back and forth between their homes and cities, leaving at night and returning during the day, or if only a portion of the family relocates. While this study offered key insights on the various strategies pastoralists use to cope with insecurity, the focus was not on the effects of insecurity on socio economic development and hence the need for this study. Also, the study was not conducted in Mandera, hence the

geographical gaps that were addressed in this study.

Muraguri (2020) conducted a study to determine the role of sports in promoting peaceful interactions and co-existence in Kenya for the period between 2001-2019.

The study identified that sporting events are used to prevent conflicts and other problems that could prevent pastoralists from living in peace with one another. For instance, the USAID Pro Mara created the sports initiative and the forest conservation program in Trans Mara in an effort to encourage peaceful inter-community coexistence and environmental protection. Youths were given peace messages during the festivities as a way to encourage peaceful coexistence. However, this was ineffective because it did not stop the ongoing interethnic tensions in the regions where pro-Mara activities have been strong, especially those between the Maasai and the Kipsigis.

## **2.5 Theoretical Framework**

### **2.5.1 Human Security theory**

This theory has been around since the 1990s, when it was employed to create global inventions for fostering peace. The paradigm was connected to the Brandt Commission-related narratives of human-centered development that were emerging (Christie & Acharya 2008). The rejection of state-centric security techniques and the increased focus on development led to the establishment of the human security concept. The theory states that issues like hunger, crime, environmental change, and sustainable development are all part of human security. The concept contends that any factor that lowers the quality of these factors, such as population pressures, restricted access to stock or resources poses a security risk. On the other side, improving human security involves doing anything that can improve their quality of life, including economic growth, better resource access, social and political empowerment.

According to the United Nations Development Programme, many risks to human security, such as those to food security, environmental health, economic security, personal security, community security, and political security are listed in the Human Development Report (1994). According to Alkire (2003), the UNDP definition has eliminated the distinction between being free from desire and being free from fear. That is a life free from violence and squalor. This method gets to the heart of the security issues affecting the pastoralist communities in Mandera County in the context of this study. This is due to the basic tenets of the theory, which address protection from unexpected and harmful changes in routines of daily living as well as persistent attacks like hunger and repression.

The concept was designed to clarify the differences between national security, which includes defending the nation against external invasion as well as defending national interests, and personal and societal security. Focusing on the county of Mandera's security from a human security viewpoint rather than a governmental perspective was deemed essential. This is so because national security is concerned with the institutions, people, borders, and national interests. Human security, on the other hand, is person-centered and emphasizes the defense of persons. The most important factor in this situation is to consider each person's wellbeing and to address common people's needs in addressing sources of risks.

However, despite the fact that this theory can be used to investigate insecurity and its numerous ramifications, scholars in a variety of fields, including global governance and peacekeeping, have voiced significant criticism of it (Paris-2001, 2004; Duffield and Waddle 2004, 2006; Krause 2004; Chandler 2008). The main criticisms are that it is difficult to understand and lacks a definition.

Human security, according to Paris (2001;88), is comparable to other equally

nebulous terms like "sustainable development," which everyone supports but few people understand fully. It is described as normatively appealing but analytical by Newman (2010;82).

Others claim that the idea of human security is both too broad and dispersed. Some contend that its lack of precision prevents it from being used as a tool for academic analysis, and that its wide topical scope makes it unsuitable as a guideline for formulating policies. They also contend that by failing to establish a hierarchy of goals, it lessens its usefulness for setting priorities.

According to Krause (2004;364), human security can be thought of as a "loose shorthand for unpleasant things happening" when seen in its most general sense. Despite the claims made by Buzan (2004), Martin and Owen (2010) that defining human security broadly under seven component aspects means little to nothing distinguishing it from human rights, this poses a political quandary for decision-makers entrusted with allocating finite resources.

### **2.5.2 Risk Theory**

The proponents of the risk theory are Tversky, Kahneman, and Slovic (1970). The theory was developed to provide an explanation for how humans actually make decisions when presented with uncertainty. According to the risk theory, changes in how a society perceives and handles risk can have a significant impact on that society. The theory holds that dangers inherently prompt diverse forces to react to their existence. The idea contends that risk is actively evaluated in respect to potential outcomes in this regard. The theory contends that risk is how individuals anticipate threats and make an effort to control them, and that risk is how cultures now interpret risk through a futuristic lens.

The term "risk" is used by proponents of the risk theory to denote a danger, threat, or injury that has the potential to affect someone's stability, socioeconomic development, or health (Bialostok, 2015). Risk, according to Lukas (2016), is an incident that is likely to have unfavorable effects on a person or a group of people. Uncertainty is considered to exist when it comes to the probability associated with a danger. According to Lukas (2016), the threat's actual existence determines what a risk truly is. Chaos, uncontrolled, or controlled actions by any individual within a group pose risks. According to Lukas (2016), incidents that result in direct confrontations or collisions can happen during interpersonal interactions, either accidentally or on purpose.

Around the world, several linkages between behavioral components have detrimental effects on economic development, peace, and regional stability. "Security incidents" are unfavorable results that result from face-to-face conflicts between people (Lukas, 2016). Almer (1967) claimed that a number of risks in modern life put people's lives in peril or result in the destruction of property and necessary infrastructure. Risks associated with insecurity are unpredictable, occur abruptly and without warning, and result in monetary losses, property damage, fatalities, and injuries (Almer, 1967; Lukas, 2016). Risks like insecurity could affect a community as a whole or just the targeted people.

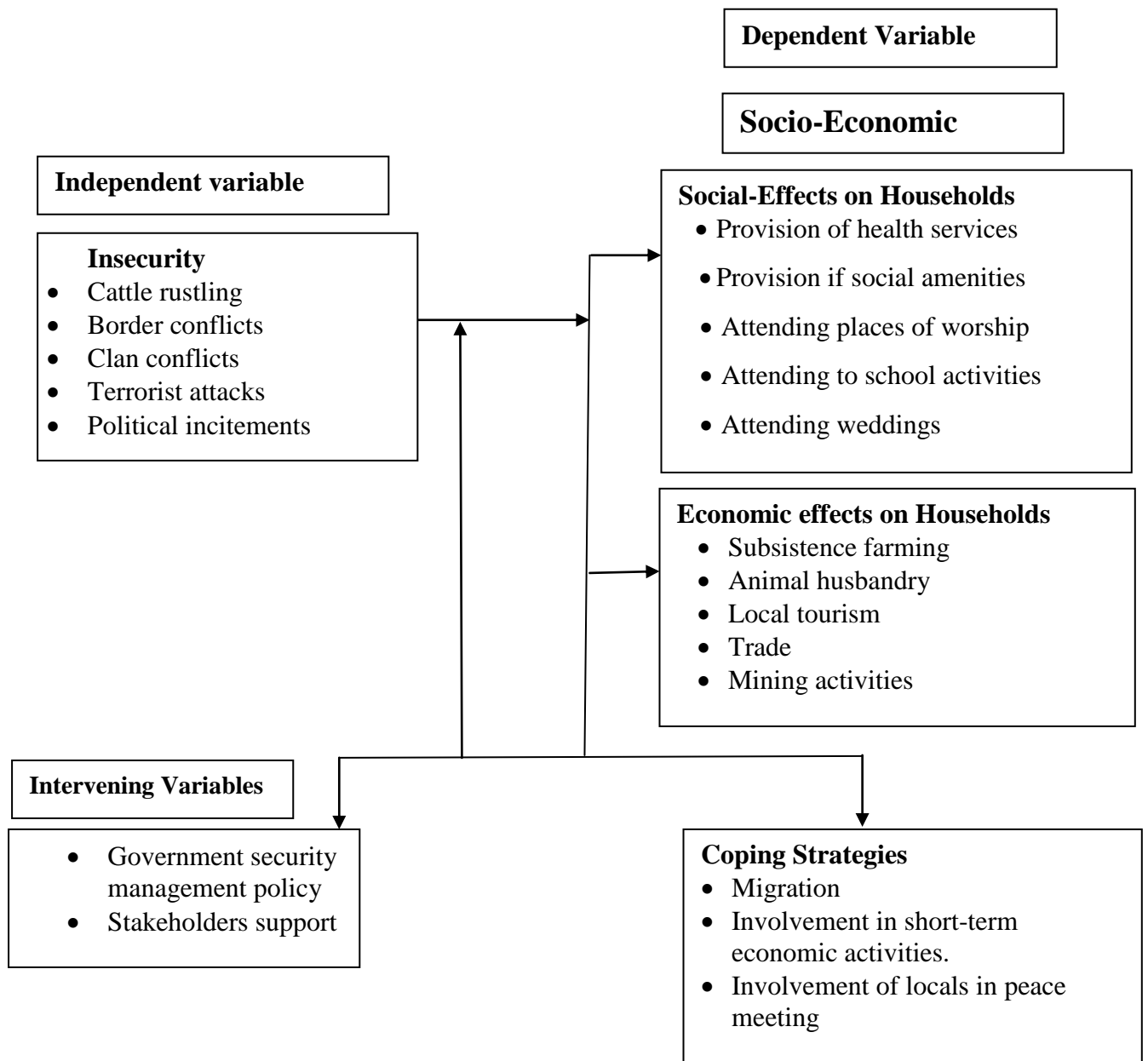
The risk theory is mostly used in scientific fields of study to pinpoint hazards, define them, assess them, and develop defenses against them (Lukas, 2016). The hypothesis is relevant to the investigation of insecurity in Mandera since it has posed a serious threat to both individuals and communities there. The communities in Mandera County confront insecurity threats, and this study hypothesizes that the low socioeconomic position of the populace is due to insecurity, which has hampered the

social and socioeconomic development of the region and affected various areas of the county. Therefore, the risk theory was employed in this study to identify the various types of insecurity, or risk in this situation, as well as the various methods by which people respond.

## **2.6 The Conceptual Framework**

The conceptual framework is presented on Figure 1.1 showing the relationship between the independent variable and the dependent variable. The independent variable is insecurity and the dependent variables are the socio economic effects. The relationship between the variables is moderated by the intervening variables and the coping mechanisms used by the pastoral communities.

The conceptual framework indicates that insecurity hinders the provision of health services by scaring health workers from working in the areas with insecurity and the provision of healthcare supplies. It also leads to the destruction of healthcare centers. Insecurity also limits the provision social amenities, the ability of the pastoralists to attend social functions such as places of worship, attendance to schools and other functions such as weddings. Insecurity also impacts on various economic activities such as a subsistence farming, animal husbandry, local tourism in the areas, trade, and mining activities. To cope with the effects of insecurity, the pastoralists engage in migration, short term economic activities and involvement in peace meetings. The effects of insecurity are moderated by the intervention of the government through security management policies and support from different stakeholders.



**Figure 2.1: Conceptual model of security management**

**Source: Synthesized from literature review (2020)**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

In this chapter, the study's methodology is presented. The target population, study location, sample size, sampling procedures, and research strategy are all covered. Additionally, it discusses the data gathering tools utilized, strategies for assessing the validity and reliability of the tools, data collection techniques, approaches for organizing and interpreting the data, and ethical considerations for the study's conduct.

#### **3.1 Research Design**

This study employed a descriptive research design. This design helps to systematically and accurately describe a study phenomenon and the study population. This design is used to gather topical and accurate information that reflects current events and, whenever possible, to draw meaningful inferences from the data by asking people about their opinions, deeds, attitudes, or values. In this study, a descriptive design was suitable as the aim was get an understanding of the effects of insecurity. Specifically, the design helped to describe the respondents, the different forms of insecurity, the effects of insecurity on the socio economic activities and the different mechanisms used by the pastoralists to cope with the effects of insecurity in Mandera county.

#### **3.2 Study Area**

##### **3.3.1 Site Selection and Description.**

The study was conducted in Mandera County. The county is located at about 3° 55' N 41° 50' E in Northern Kenya, near the borders with Somalia and Ethiopia. The county

borders Ethiopia to the North, Somalia to the East and Wajir County to the South-West. It covers an area of approximately 25,797.7 km<sup>2</sup>. The county is composed of six sub-counties, namely: Lafey, Mandera North, Banissa, Mandera South, Mandera West, and Mandera East (Mandera County Integrated Development Plan 2018-2022).

### **3.3.2 Climate and Vegetation**

Mandera County is typically dry. On average, there is never a shortage of heat, and December is the month with the least amount of rain. With a minimum temperature of 24°C in July and a maximum of 42°C in February, the county experiences high temperatures. January, February, March, June, July, August, and November are the dry months. Rainfall in Mandera County is infrequent and unreliable, averaging 191.7mm yearly. The short rains, which average 122mm, occur in October and November whereas the long rains, which average 69.1mm, occur in April and May. Permanent sources of water are uncommon in this county; boreholes and springs provide the majority of the water that is accessible. The population is additionally supplied with water during the rainy seasons by the cyclical River Daua. Additionally, there are few pastures in the area, which presents a significant problem for the pastoralists that live here (Mandera County Integrated Development Plan 2018-2022).

From 400 meters above sea level in Elwak in the south to 970 meters above sea level, low-lying rocky hills in Mandera County's plains progressively rise. The remaining topography is low-lying and characterized by thick flora and thorny plants resembling those found in the savannah. This is especially true in isolated hills' foothills, which are covered in invasive plants, stones, and shrubs. The county floods during periods of heavy rain because to its low plains and poor drainage (Mandera County Integrated Development Plan 2018-2022).

### **3.3.3 Population**

Mandera County has a population of 1,025,756 (KNBS, 2019). This comprises 559,943 males (54,6/0) and 465,813 females (45.4). According to Kenya National Bureau of Statistics Statistical Abstract (2019), there are 10,458 households in Mandera County, with an average of 6 people living there. The population statistics show the county's population has increased greatly over recent years. There are four dominant tribes in Mandera, namely the Garre, Murulle, Degodia, and corner tribes. There is a sedentary agrarian population along the Daua River and scores of agro-pastoralists who have inhabited better-watered areas (Mandera County Integrated Development Plan 2018-2022).

### **3.3.4 Economic Activities**

Pastoralism is the primary economic activity in Mandera County. It includes caring for livestock like camels, goats, donkeys, sheep, and cattle as well as frequently interacting with other animals like buffalo and antelopes. Despite being dry, the area has a favorable environment for raising animals. Despite the fact that rearing cattle is the pastoralist communities' primary source of income, many of them are diversifying their businesses. As an example, irrigation farming is practiced in some of the areas. For instance, this is done in Bella, Gadudiye and Danka villages in Mandera East sub county under the food voucher project funded by German Foreign Federal Office. In the county, there are around 285 small-scale irrigation programs covering 4,014.5ha. The projects are located in Mandera East, Mandera North, Lafey, and Banisa. The primary crops grown, mostly in the irrigation belts of Mandera East, Lafey, and Banisa, are maize and cowpeas. The same crops are also farmed in the hinterlands of Lafey, Mandera North, and Mandera South, as well as the agro-pastoral zone of Mandera West. The irrigated livelihood zone includes fields of livestock feed.

Horticulture is performed in the irrigated livelihood zones of Mandera East, North, Lafey, and Banisa, and there is a lot of potential for fruit and vegetable production there (Mandera County Integrated Development Plan 2018-2022).

Another important industry in the county is mining. Coal, precious stones, oil, and gold are just a few of the many minerals that are abundant in Mandera County. Additionally, the villages of Elwak and Rhamu contain sizable limestone resources that can be mined and utilized to make cement. All of these resources are still unexplored, though, and the main extraction activities taking place in the county are sand collection and stone quarrying. However, there is ongoing oil prospecting in the Mandera North Constituency near As-habito and Kutulo. Multinational firms do this in order to assess their viability (Mandera County Integrated Development Plan 2018-2022).

In Mandera county, fish farming has also become a viable source of income for some residents. A portion of the population of Mandera County works as a fisherman. Mandera's county administration has built a number of fish ponds, some for use by farmers and others by institutions. More than 300 farmers from all throughout the county received fish farming instruction on fisheries development from the county administration. Additionally, there is a GOK farm located near Bulla Hajji that was created to assist farmers in growing fingerlings. The county administration has also supported the cultivation of a variety of fish species in the Daua River (Mandera County Integrated Development Plan 2018-2022).

### **3.4 Target Population**

The target population in this study were pastoralists communities in Mandera county. The respondents were the heads of households. There are 125,763 households in Mandera County, with an average of 6 people living there (Kenya National Bureau of

Statistics Statistical Abstract 2019). The respondents were therefore sampled from 125,763 household heads. Data was also gathered from key informants which included Chiefs, religious figures, and members of civil society.

### **3.5 Sampling techniques and sample size**

#### **3.5.1 Sampling Techniques**

In choosing different types of respondents for the study, multiple sampling techniques were used. Stratified sampling was used to ensure that all the sub counties in Mandera county are included in the study. The respondents were therefore sampled from Mandera North, Mandera East, Mandera South, Mandera West, Laffey, and Banisa. This ensured that the respondents in Mandera County had an equal chance of being selected for the sample. The household heads were selected using purposive sampling. This is because, being the heads of households, they were well informed on the effects of insecurity and the associated effects and therefore well placed to give reliable data. Purposive sampling was also used to sample administrative leader-chief, assistant chiefs, religious leaders, and civil society representatives. The choice of this method was premised on the assumption that these respondents are well conversant with the area of the study and the occurrences due to the leadership positions they hold. This method was used together with the snowball sampling technique. The snowball method was used to locate the key respondents through referrals.

#### **3.5.2 Sample Size Determination**

To obtain a sample size that has an adequate representation, Yamane's Formula (1973) was used. This formula is applied when the size of the entire target population is known. Using this formula, the sample size of the household heads who participated in the study was calculated as follows

$$n = \frac{N}{1 + N(e)^2}$$

Where, n = desired sample size at 95% confidence interval

N= Target Population

e = Margin of error corresponding to 95% confidence level.

Thus, the sample was:

$$n = \frac{125,763}{1 + 125,763(0.05)^2}$$

n = 399 respondents

### **3.6 Research Instruments**

Data was acquired via questionnaires and interview schedules. A questionnaire was handed to the household heads to collect quantitative data from them. The questionnaire was deemed appropriate and economical because data was obtained from a substantial number of household heads. It was quite easy to code and quantitatively evaluate the data collected through the questionnaires. The questionnaire was divided into a number of sections in accordance with the objectives of the study. In the first section, the respondents' demographic data is covered. The other sections of the study cover its objectives. The open-ended questions and Likert Scale in the questionnaire are based on the Appendix II research objectives. Closed-end and Likert questions were used to collect data based on options. Open-ended questions helped collect qualitative data that needed further justifications and explanations.

Data collection commenced after the researcher obtained an introduction letter and the necessary permits. The questionnaires were administered by the researcher with the

help of research assistants. This was preferred as a large number of the respondents could not read and write. This method enabled the researcher to guide the respondents on how to answer the research questions.

To collect qualitative information, interviews were conducted with the chiefs, sub chiefs, religious figures, and members of civil society. It was determined that the interview guide was suitable for getting information from significant sources. This was because the method allowed for in-depth analysis of the issue under study and clarification from the respondents. For this study, a set of interview questions was designed based on the objectives of the investigation. Interviews were important for this study because they let the researchers dig deeper, ask follow-up questions, and build a strong relationship with the respondents (Appendix 3).

### **3.7 Data Collection**

The data collection exercise began in September after receiving a research permit and letters of authorization from the required authorities (2019). The questionnaires were given to the household heads by two recently engaged study assistants, who subsequently collected them once they had been finished. The assumption that most respondents would be able to understand the questions provided the reason for distributing the surveys.

This strategy was favored as well since it made it simple, rapid, and economical to gather a large amount of data from a sizable population. It also gave the reply time to think about their answer and seek clarification. These helped to boost the response rate. After the data was gathered, the completed questionnaires were gathered and safely stored for data analysis. Two recently engaged research assistants helped the researcher conduct the interviews. In the event that a respondent wanted to explain some material in their native tongue, the research assistant assisted with note-taking

and translation. To gather qualitative data at a time that was convenient for the respondents, a conversation about significant topics was launched using an interview guide. This made sure the interviews were organized and enabled useful comparison. This strategy was chosen because it allows the interviewer to collect more information based on the study topic by paying attention to verbal and nonverbal signs. Although they were planned at varied times, interviews were conducted with every responder

### **3.8 Pilot Study**

Pilot research was conducted in the Khutulo sub county in Wajir County in September 2019 after acquiring the appropriate approvals. Ten family heads were randomly selected. Because it was close by and one of the areas with the worst security, this place was picked. The piloting's objectives included evaluating the appropriateness and clarity of the research questions on the developed instruments, the application of the information sought and the language used, as well as the validity and reliability of the instruments. The queries that the respondents had regarding the items on the study instruments could be asked. The results from the pilot study were used to improve the research questions and remove ambiguity.

### **3.9 Validity and Reliability**

#### **3.9.1 Validity of the Instruments**

The triangulation of data gathered through several techniques allowed for the validation of the study tools. This method was employed to increase the instruments' internal validity. To determine whether the instrument's items had produced pertinent information from which reliable generalizations about the population could be made from the sample under study, the responses from the pilot test were compared with the instrument's items. A panel of experts was consulted for an evaluation of the content

validity in order to determine the reliability of an instrument's questions. To determine whether the items were in line with the study's aims and likely to produce the needed data, consultations with the supervisors were held. Items that were deemed insufficient for producing the necessary information were eliminated, and those that were recommended as suitable for producing the information were included.

### **3.9.2 Reliability of the Instruments**

Reliability analysis was carried out to ascertain the consistency of the research tool. The reliability of the closed-ended test items in the surveys was evaluated using the test retest technique. A Cronbach Alpha Statistic for all the items was calculated. A Cronbach Alpha Coefficient of  $r= 0.7$  was obtained for all four objectives, suggesting strong internal reliability and being regarded as satisfactory.

### **3.10 Data Management and Analysis**

In order to analyze the data, both quantitative and qualitative methods were employed. The quantitative information that was received from the household heads was evaluated using the Statistical Packages for Social Science (SPSS Version 25). This was accomplished through the use of descriptive analysis, namely the use of frequencies, percentages, means, and standard deviations. This method was used to look at the respondents' demographic data and pinpoint the many kinds of insecurity that exist in Mandera county. The method was also used to determine the different coping strategies used by the pastoralist communities in the county to deal with the different kinds of insecurity. The social and economic effects of insecurity were examined using the Likert means and standard deviations. The results were presented using tables and figures.

Data from the key informants, which had been acquired through interview guides,

was analyzed using thematic analysis. This involved recognizing, classifying, and categorizing the common themes from the respondents' responses. The topics were then looked at and assessed in light of the objectives of the study.

### **3.11 Ethical Consideration**

Before starting data collection, an introduction letter from Kenyatta University Graduate School was obtained. These documents were then submitted to the National Commission for Science, Technology, and Innovation to get a license (NACOSTI). The county education director's office and the office of the Mandera County Commissioners were then presented with the permit to request approval for the study. The respondents were inducted before being included in the study to ensure they have thorough knowledge. Additionally, confidentiality was upheld and all the sources used were acknowledged.

## CHAPTER FOUR

### DATA ANALYSIS AND PRESENTATION OF THE FINDINGS

#### 4.1 Introduction

The presentations of the results and data analysis are covered in chapter four. The first section presents the response rate in order to determine whether the questionnaire return rate was sufficient enough to give reliable findings. The section covers the demographic information about the respondents. This was considered vital as it offered a profound understanding of the respondents. In the other sections, the analysis was carried out in line with the research objectives.

#### 4.2 Response Rate

An analysis of the questionnaire return rate was conducted to ascertain whether the response rate was sufficient for the study to produce trustworthy results. Only 216 of the study's 399 target household heads provided data, however. A response rate of 54.1 percent was the outcome. The poor response rate was attributed to the research area's dispersed structure, which made it difficult to contact a significant number of respondents. According to Mugenda & Mugenda (2003), the response rate of 50% and above is sufficient to give reliable data. In this study therefore, the response rate was sufficient to conduct a data analysis and produce trustworthy results.

**Table 1: Response rate**

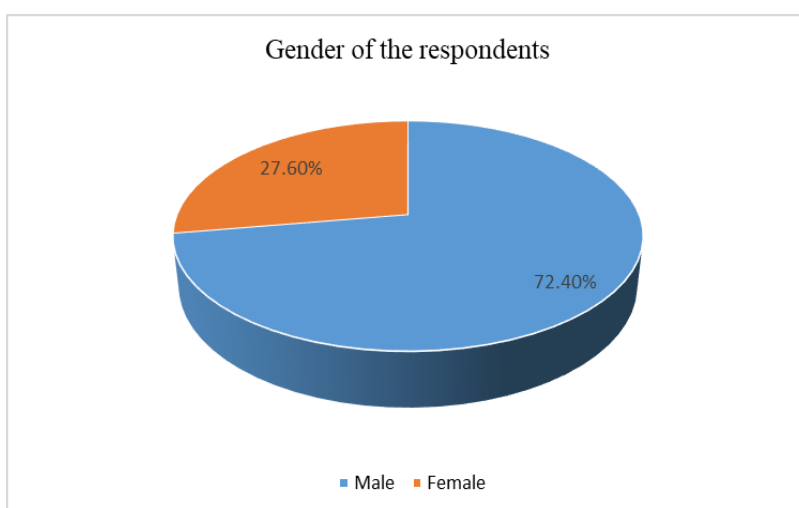
<b>Response and Non-response</b>	<b>Frequency</b>	<b>Percent</b>
Response	216	54.1
Nonresponse	183	45.9
<b>Total</b>	<b>399</b>	<b>100.0</b>

### 4.3 Social Economic Characteristics of the Respondents

The analysis of the respondents' demographic data is presented in this section. Here, the goal was to comprehend the respondents in great detail. The investigation included information on the respondents' gender, age distribution, education level, and main source of support. The analysis of gender helped to determine whether the respondents were well represented based on gender. The analysis of age was crucial as the level of education can shape the coping mechanisms chosen. Also, the analysis of the main source of support was crucial as it helped to understand the coping mechanisms of the pastoralists.

#### 4.3.1 Distribution of the respondents by gender

The study aimed to identify the respondents' gender distribution. The results showed that male respondents made up 72.40 percent of the sample, while female household heads made up 27.60 percent. Due to the fact that men predominately run households in Mandera county, they made up the majority of the population. The majority of domestic duties are performed by women. Figure 4.1 presents the findings.

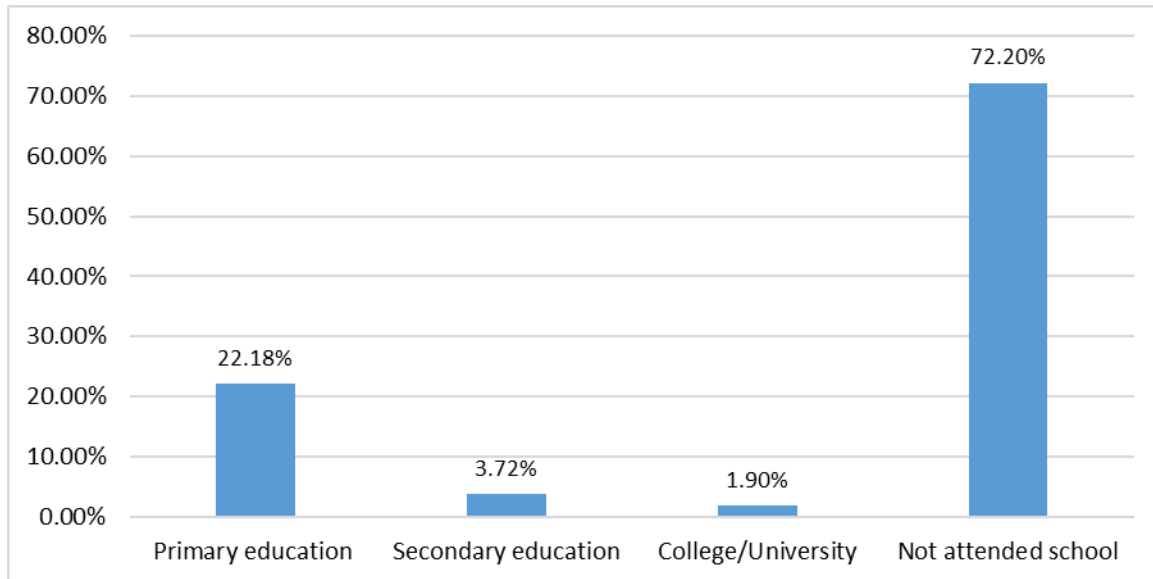


**Figure 4.1: Gender of the respondents**

**Source: Field Data (2020)**

### 4.3.2 Education Level

The study sought to determine the educational level of the respondents. The findings are presented on the figure below;

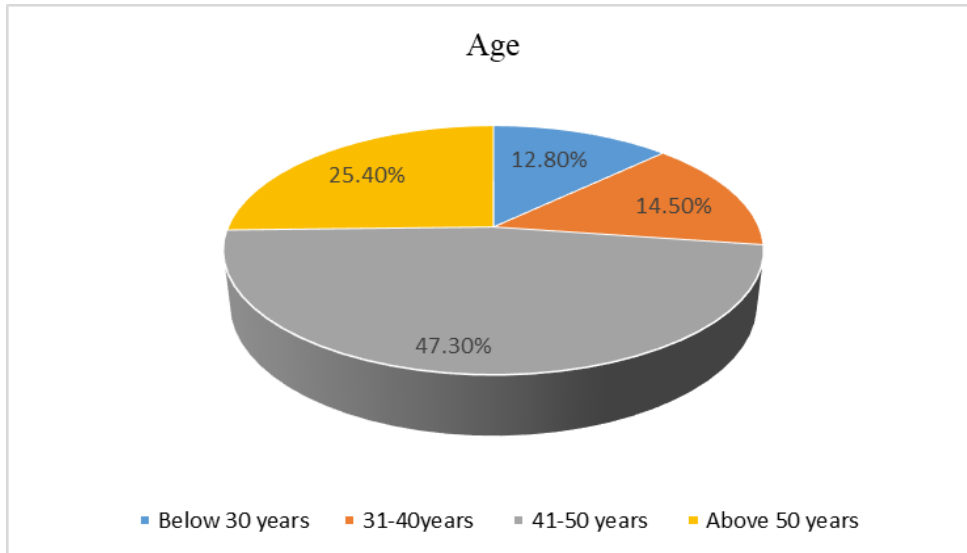


**Figure 4.2: Education level of the respondents Source: Field Data (2020)**

The findings revealed that 72.20% of the respondents had not attended school; 22.18% had primary education; 3.72% had secondary education; and 1.90% had college/university education. The findings reveal very low education attainment among the respondents. The respondents' nomadic pastoral lifestyle, which forces them to travel about in search of pasture and water, can be attributed to their poor level of education. They have less access to traditional and formal education as a result. The results match those of Abdullahi (2018), who found that the people's lack of education was due to the fact that they were nomads, which made it hard for them to go to school. Similarly, Adan (2020) conducted a study in Mandera East sub county and identified low educational attainment which was attributable to the nomadic pastoralism, which involves relocation from place to place in search of pastures and water.

### 4.3.3 Distribution of the household heads by age

The study sought to determine the distribution of the respondents by age. The findings are presented on the figure below;



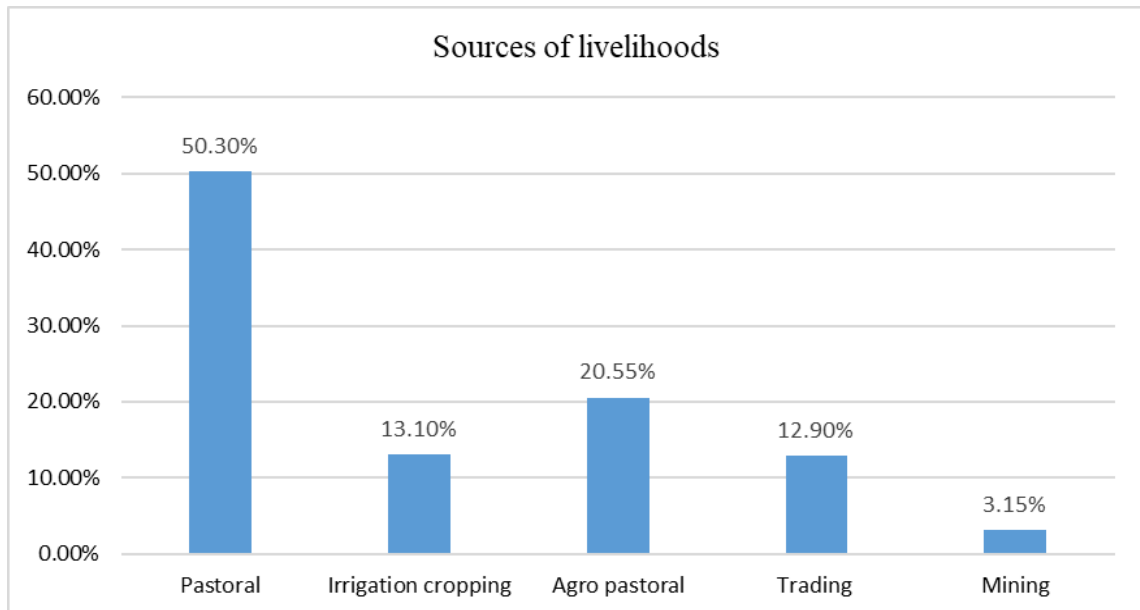
**Figure 4.3: Distribution of the respondents by age**

**Source: Field Data (2020)**

The findings revealed that 47.30% were aged 41–50 years, 25.40% were aged above 50 years, 14.50% were aged 31–40 years, and 12.80% were aged below 30 years. The findings imply that the majority of the respondents were old. This is because most of the household heads are elderly. As an alternative source of income, many of the capable youths have gone to look for white-collar jobs in towns.

### 4.4 Economic activities

The findings indicate that the people of Mandera county engage in various economic activities. These include subsistence farming, livestock rearing, trading activities, and mining activities. Generally, the findings indicate that pastoralism is the predominant economic activity in Mandera County and that other activities are not common.



**Figure 4.4: Economic activities**

**Source: Field Data (2020)**

The results revealed that 50.30% of the respondents used pastoralism as their primary source of income. Since farming provides a living for about 60% of the county's people, it is the main economic activity. Animals raised for domestication are released onto vast fields of open pasture under the practice of pastoralism. As a source of income, camels, goats, cattle, sheep, and donkeys are the animals that are kept most frequently.

Irrigation farmers made up 13.10% of the total and were mostly concentrated in the county's northern regions. Irrigation is the supply of water to land to assist in crop production. Some parts of the drought-threatened areas are slowly being transformed into green farms through irrigation along rivers and dams. This is mainly done for food production. Besides food crop farming, the households also grow fodder for livestock in the irrigated zones in Mandera East, North, Lafey, and Banisa. Also, many households practice horticulture, and various parts of the county have a huge

potential for fruit and vegetable production. This is steadily becoming a popular choice for pastoralists to minimize their reliance on raising animals.

Agro pastoralism is the growing of crops and keeping of livestock as a source of economic activity. This has emerged as another economic activity in Mandera county. The study revealed that this economic activity is practiced by 20.55% of the households. This economic activity was common in the western parts of the county. The growing of crops supplements livestock keeping. The common crops grown are maize, millet, sorghum, and vegetables and fruits along the river Daua.

Some communities in Mandera county practice trading. The study revealed that this practice is done by 12.90% of the households. This has been promoted greatly by the county government through increasing the number of markets; modernizing the old markets; and the building of stalls and bale shades. The main products traded in the markets are fresh farm produce, livestock and livestock products, dry food stuffs, clothes, electronics, and other commodities.

The study revealed that a section of the communities in Mandera county practice mining as their main economic activity. This is done by a small proportion of 3.15%, especially in the Mandera East, specifically in Hareri, Sala, and some parts of Kutulo. The major mining activities are quarrying and sand harvesting. The country is also rich in natural resources, such as precious stones, gold, and oil. There are also huge deposits of limestone in Rhamu and Elwak towns. These minerals are yet to be exploited.

The findings implied that most of the inhabitants in Mandera County are pastorals. However, it is evident from the findings that the people in Mandera County are diversifying into other economic activities such as irrigation cropping and trade.

During the interviews, the key informants also said that pastoralism is the main way of life in pastoralist communities.

Voice of respondent

*“I mostly engage in livestock keeping and rarely engage in farming as an economic activity due to dry weather patterns in my locality. I only practice minimal farming, just a kitchen garden to help my family pull through a season after which I resort to other economic activities as a source of livelihood” (Chief, ADL 5)*

These views were also supported by the religious leaders and representatives of civil society who stated that farming is not a preferred economic undertaking in many arid and semi-arid regions such as Mandera County.

Voice of respondent

*“It is not easy to convince any pastoralist household to adopt farming as an alternative source of livelihood. Sometimes, the weather is not favorable for arable activities and crops rarely do well” (Religious leader, RL4)*

A representative of civil societies also indicated that farming activities are not usually practiced in ASAL regions.

Voice of respondent

*“I have occasionally witnessed pastoralist communities practice farming. On one occasion, we gathered people to take free fertilizers and seeds and start planting food crops to supplement their economic activities. I was shocked to see that only a handful of people came for the farm inputs” (Representative of civil society, RCS3)*

These results support Ahmed's (2015) claims that pastoralist communities in Mandera

County mainly rely on commerce and livestock as their main sources of income and practice very little subsistence crop production. This implies that subsistence farming, as an alternative source of economic livelihood, is yet to be fully embraced by pastoralist communities. The key informants also agreed that people in Mandera county engage in trading activities. According to the interviewees, both wholesale and retail are the most common economic activities that pastoralist communities engage in.

Voice of respondent

*'Trade is part of our culture and constitutes a larger segment of our economic undertakings. I have often engaged in trade and sale of livestock as a source of livelihood for myfamily'* (sub chief, AL 2)

Similar views were expressed by the religious leaders and representatives of civil society, who also noted that the trade and sale of livestock is part of the culture among the pastoralist communities.

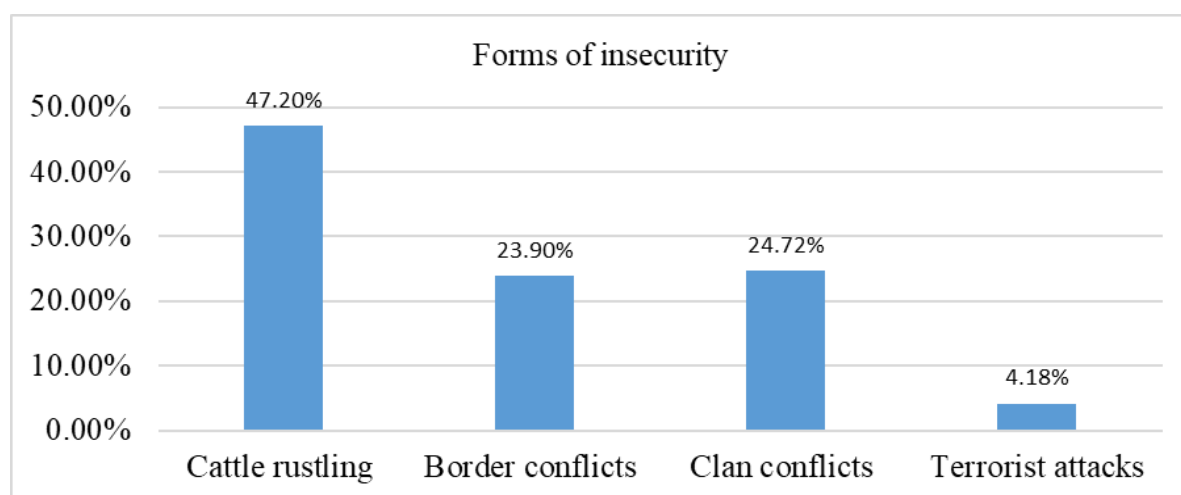
Voice of respondent

*'Trade and sale of livestock to earn a living are part of the culture and traditions of pastoralist communities. Whether or not a household is engaged in other economic activities such as subsistence crop farming and tourism, trading activities are never forgotten'* (Religious leader, RL5)

This is consistent with the assertions of Aburo (2017) that pastoralist communities in Mandera County depend heavily on trade and cattle as their sources of livelihoods. This shows that pastoralism and trade are the most important ways for pastoralist communities to make money.

#### 4.5 Forms of Insecurity in Mandera County

Analysis here sought to address the first objective, that is to identify the forms of insecurity in Mandera county. Based on the analysis, Mandera County experience insecurity. These were reported as follows;



**Figure 4.5: Forms of insecurity**

**Source: Field Data (2020)**

Findings revealed that cattle rustling was the most prevalent form of conflict in Mandera county, as represented by 47.20%. Cattle rustling is common in Mandera East. This is mainly caused by weakened traditional governance, culture, political incitements, and the proliferation of small arms, among other causes. This practice has caused an increased loss of lives, injuries, destruction, and loss of property.

Another type of insecurity mentioned by households is border conflicts. A total of 23.90% of the respondents mentioned it. Conflicts between the Degodia and Garre populations have recently broken out in the county's border regions with Mandera and Wajir. This has caused widespread community evictions, injuries, fatalities, and property damage. The study revealed that inter-clan conflicts are a form of insecurity in Mandera county. This was reported by 24.72%. This was common between the

Garre and Degodia clans. The conflicts have been mainly caused and fueled by battles over scarce resources, land ownership, and political incitements. This has resulted in huge displacement of people, deaths, destruction, loss of property and injuries.

Terrorism has emerged as another form of insecurity in Mandera County. This was reported by a small percentage of the house heads. Terrorist attacks on buses on transit, quarries, and households have resulted in massive loss of life and injury. The attacks have also polarized economic activities such as tourism and have discouraged external investors from investing in the country.

The key informants' conclusions concurred with those of the household heads that a major issue facing the pastoralist communities in Mandera County is insecurity. All of the chiefs, religious leaders, and people from civil society who took part in the study agreed that cattle rustling, clan and border wars, and terrorist attacks have become common in pastoralist communities.

Voice of respondent

*'Incidences of insecurity have been on the rise with cases of livestock theft, fight over scarce resources, sporadic terrorist attacks and political incitements have become a menace among pastoralist communities'* (Religious leader, RL1)

On their part, representatives of civil society also narrated that insecurity has been a major problem in Mandera. They too noted that there have been numerous cases of insecurity among pastoralist communities.

Voice of respondent

*'In many occasions, we spend most of our time in creating awareness among members of communities on how to reduce high number of cases of insecurity. One time, there are conflicts related to livestock theft, fight over borders or boundaries, clan rivalries*

*and another time, it is a case of terrorist attacks or political incitements. In fact, cases of insecurity have become rampant'* (Representative of civil society, RCS1)

This suggests that instances of insecurity among pastoralist groups have turned into a serious issue that calls for considerable attention from interested parties. The findings concur with those of a study carried out in Mandera County, where Ibrahim (2015) and UNDP (2015) determined that there are many instances of insecurity among members of pastoralist groups. These forms of instability, according to UNDP (2015), vary from clan disputes to interethnic wars, livestock theft, border disputes, and terrorism.

Generally, these findings point to the fact that pastoralist communities have borne the brunt of instances of insecurity caused by constant border contestations, scarcity of water points, cattle rustling, and inter-clan rivalries, which occasion net negative effects on their daily socio-economic activities. In other words, this situation has become rampant and could be the cause of increased poverty levels and the constant displacement of pastoralist households in search of safe places.

#### **4.6 Effects of Insecurity on Social Activities and Social Services**

The purpose of the analysis was to address the second objective, that is to examine the social effects of insecurity among pastoralist communities in Mandera County. Social activities are activities that involve interaction and communication with others. These are built into social systems such as schools, work, and culture. Social services include facilities and benefits such as healthcare, education, job training, among others. The study found that increased insecurity in the county has affected social activities and social services.

#### **4.6.1 Effects of Insecurity on Health Care Services**

Insecurity in Mandera County has greatly impacted health services. Generally, the study found that access to health services in the county is a great challenge among the residents, and this is mostly attributed to the high level of insecurity. There is a shortage of medical facilities; a lack of enough healthcare providers; and a shortage of medical supplies for the healthcare centers. Healthcare workers are afraid to work in insecure areas, so many of them have fled to safer areas, particularly on the outskirts of Mandera, such as Arabia, Fino, and Umar Jilaow, where hospitals and healthcare centers have been destroyed.

The findings from the key respondents were in agreement with the views of the household heads as they also noted that the provision of healthcare to the pastoralist communities is a key problem as a result of heightened insecurity in most parts of the county.

Voice of respondent

*'Most of the residents in this area lack quality healthcare. Also, the ones available are either destroyed or lack doctors as many fears working here. It is really a big challenge to the people here'* (Religious leader, RL2)

Voice of respondent

*'In my locality, many people have been killed as a result of conflicts involving livestock theft, inter-clan rivalry and terrorist insurgency. Due to insecurity, pastoralist communities havenot been able to live in peace and continue with the uninterrupted'* (Sub chief, AL1)

Voice of respondent

*'We have a challenge accessing quality healthcare nor social amenity services. In my*

*locality, there is only one dispensary which very often lacks medicine nor adequate qualified staff to attend to critical ailments or emergencies. We rarely congregate in social halls or have entertainment joint'* (Sub chief, AL1).

Voice of respondent

*'Most of the residents in this area lack quality healthcare or other social amenity services. This is because very few health workers are willing to work here. Also there has been a problem of inadequate medicines'* (Religious leader, RL2)

These results support Mutu's (2017) claims that growing insecurity among pastoralist communities also makes it more difficult to deliver social services. According to Mutu (2017), increased instability limits access to medical care, which increases the likelihood that people would become malnourished and susceptible to infectious diseases. There is a lack of health professionals as a result of the fear that health workers have about living and working in unstable areas. Furthermore, there aren't adequate and poor-quality medical facilities. Because to inaccessible roads, providing health services in some areas is difficult due to inadequate infrastructure. These results support the claims made by Schilling et al. (2012) that there is also limited access to clean water and inadequate food and housing, which exacerbates health issues. These results demonstrate that the provision of and access to quality healthcare services, clean drinking water, and other social amenities is severely hampered by insecurity, regardless of its form.

#### **4.6.2 Effects of Insecurity on Education**

Insecurity in Mandera county greatly affected the education sector. Insecurity caused shortages of teachers, displacement of students, shortage of resources, and destruction of schools, as shown in the table below;

**Table 4.2: Education aspects affected by insecurity**

<b>Factor</b>	<b>Frequency</b>	<b>Percentage</b>
Displacement of teachers	34	15.90%
Displacement of students	57	26.40%
Insufficient supply of educational resources	32	14.60%
Perception that the schools are not safe for the learners	63	29.40%
Destruction of schools.	30	13.70%
<b>Total</b>	<b>216</b>	<b>100%</b>

**Source: Field Data (2020)**

Findings revealed that 29.40% of the respondents felt that education in Mandera County has been affected by the perception that the schools are not safe for learners. Another 26.4% reported that education in Mandera County has been affected by the displacement of students as a result of insecurity. Learners fled to safer places with their parents. 14% of the household heads reported that education has been affected by the displacement of teachers due to insecurity. There was an exodus of teachers from the affected areas, especially in the outskirts of Mandera town. Arabia, Fino, Umar Jilaow, Hareri hosle, and parts of Lafey were mostly affected. 14.60% cited that education in Mandera County has been affected by insufficient supply of educational resources. This was as a result of diverting the resources to other safer places. A further 13.7% of the household heads who participated in the study reported that education in Mandera County has been affected by the destruction of schools by the armed bandits. Schools such as Alhidaya primary school and Hareri Hosle were affected.

The results concur with those of Adam and Pkalya (2015), who came to the conclusion that heightened security causes high school dropout rates and low student retention. During conflicts also, education is affected when teachers are displaced and others fear working in the affected areas; when there is an insufficient supply of educational resources; and the perception that the schools are not safe for the learners; destruction of schools. This affects the level of education.

The findings from the key respondents were in agreement with the views of the household heads as they also noted that the provision of education services to the pastoralist communities is a key problem as a result of heightened insecurity in most parts of the county.

Voice of respondent

*'Education in the county has greatly worsened. This has been a problem over a long time as a result of a series of conflict and terror activities in the county which increase insecurity. This has cause displacement as people look for safer places. A large number of them do not get back to school (Administrative Leader, AL2).'*

Voice of respondent

*'Taking our children to schools sometimes become a big problem. Personally, my children too do not attend school and even shy away from participating in wedding ceremonies especially after a series of attacks in our community (Administrative Leader, AL1).'*

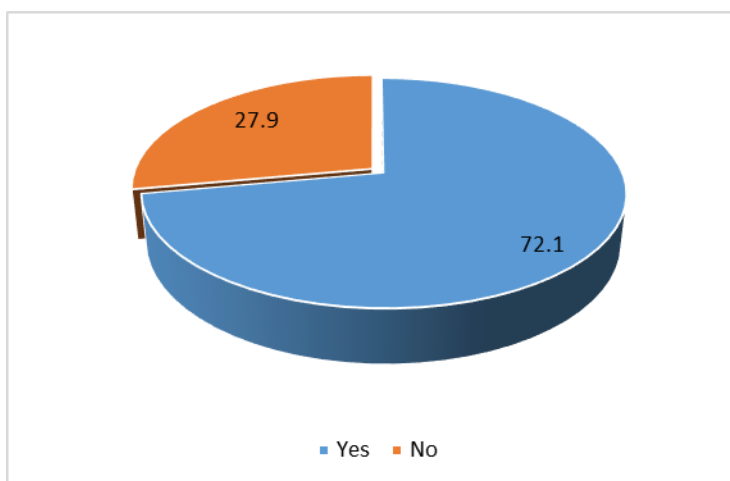
These results support those of a study done in Uganda by Kakande and Nalwadda (2013), who found that the high rates of poverty and insecurity, particularly in Northern Uganda, contributed to the poor quality of education by making it difficult for parents to provide their children with scholastic materials. These results support

research by Adan and Pkalya from 2005, which found that wars and armed violence enhanced insecurity, which in turn caused high school dropout rates and low school retention. These results are in line with Mbugua's (2016) claims that insecurity reduces educational possibilities in conflict-affected areas by prompting children and their families to leave their homes and seek refuge in safer locations. Fear and insecurity are associated with conflicts keep children out of school especially those with disabilities who require constant attention and care from the parents. According to Mbugua (2016), in most cases, the fleeing communities settle in marginalized areas where there are no educational facilities, teachers and other educational stakeholders.

The education of such people is thus affected. Intensified insecurity also leads to the permanent or temporary closure of schools, which in turn impacts on the provision of education. Therefore, these findings imply that the inability of pastoralist communities to actively participate in social activities and events such as worshipping, schools, and wedding ceremonies is largely attributed to constant incidences of insecurity.

#### **4.6.3 Effects of Insecurity on Social Functions**

Social interactions have been severely disturbed by insecurity in Mandera County. The majority of respondents (72.1 percent) concurred that social events like weddings and worship services had been significantly impacted and are no longer held in some locations because of assaults. This is a result of individuals being hesitant to host and attend activities out of concern for an attack.



**Figure 4.6: Effects of insecurity on social functions**

The findings from the key informant interviews supported what the heads of families reported about how insecurity has grown to be a major issue in Mandera County.

Voice of respondent

*'Due to the constant manifestation of insecurity in my locality, religious activities have been highly affected as it has been very difficult to go to places of worship. Besides it has been equally difficult to attend social gatherings such as wedding and burial functions for fear of being attacked'* (Religious leader, RL4)

Voice of respondent

*'In my place of worship, membership has gone down due to insecurity as most people stay away from such gatherings for fear of being attacked during prayer sessions. Sometimes, I find it very hard to assemble people to attend prayers. In some instances, many places of worship have been attacked and thus, the rest have been shut down'* (Religious leader, RL3).

Voice of respondent

*'In my locality, there are no quality social amenity services. People rarely frequent entertainment joints, rarely go for worship and interact with colleagues. This is*

*attributed to increasing instances of terrorist sporadic attacks, border and clan conflicts' (CivilSociety Representative, CSR 1)*

Voice of respondent

*'Increased cases of insecurity have had a net effect on people's social lives. Such insecurity incidences have disrupted the provision of quality social services to the people. During times of insecurity and conflicts, people rarely access social amenities within their localities. In some cases, such social amenity facilities such as social halls get destroyed by the assailants. This always leave our community poorer and worse' (Civil Society Representative, CSR 2)*

These results run counter to Ibrahim's (2015) claims that, in Mandera County, pastoralist groups' social activities are tied to cattle as a source of cultural status. Ibrahim (2015) claims that people engage in social activities including going to weddings, marketplaces, and religious events while also sending their kids to school. These results indicate that social activities are uncommon in pastoralist communities despite these contradictions. In other words, they avoid going to places of worship, letting their kids participate in school activities, and attending social gatherings like weddings. This raises the question of how much social interaction in pastoralist societies is influenced by safety.

#### **4.7 Economic Effects of Insecurity**

The purpose of the analysis was to address the third objective, that is to examine the economic effects of insecurity among pastoralist communities in Mandera County. Increased insecurity in Mandera has impacted greatly on the economic activities in the county. Repeated attacks and increased insecurity have limited the extent to which people in Mandera engage in livestock keeping, irrigation farming, trading activities,

and farming. In the analysis, the means obtained indicated that generally, the respondents agreed with all the statements they rated regarding the economic effects of insecurity. The findings are presented in the table below.

**Table 4.3: Effects of insecurity on economic activities**

<b>Summary of Test Items</b>	<b>Mean</b>	<b>STD</b>
Among pastoralist communities, insecurity has made it difficult to adopt farming as an alternative economic activity due to the frequent displacement of people	4.0286	.67964
Insecurity has led to the theft of people's livestock making them fear engaging in such economic activities in future	4.6238	.81358
Cases of insecurity have scared away potential investors who visit different parts of Mandera County as local tourists	4.9330	.71056
Despite the frequent sporadic attacks among pastoralist communities, trade and pastoralism have remained the most viable economic activity	4.7941	.6113
Increased deaths of people due to insecurity have reduced the number of pastoralist communities who take part in mining activities or quarry business	4.2517	.6293
Increased insecurity in Mandera county has greatly affected tourism activities and the number of tourists has greatly reduced.	4.3416	.6074

The findings revealed that among the household heads who participated in the study agreed that insecurity has made it difficult to adopt farming as an alternative economic activity due to the frequent displacement of people. The mean further proves this as stated above (Mean = 4.0286). Insecurity has led to the theft of people's livestock, making them fear engaging in such economic activities in the future (Mean = 4.6238). Rampant insecurity has scared away potential investors who visit different parts of Mandera County as local tourists at a mean of 4.9330. Despite the frequent sporadic attacks among pastoralist communities, trade and pastoralism have remained the most viable economic activity among the residents of Mandera County (Mean=4.7941) and that increased deaths of people due to insecurity has reduced the number of pastoralist communities who take part in mining activities or quarry

business (Mean = 4.2517). Respondents agreed that insecurity in Mandera county has greatly affected tourism activities and the number of tourists has greatly reduced (Mean = 4.3416).

During the interviews, the key informants reported that insecurity in Mandera County has greatly affected economic activity in the county. With regard to farming, for instance, the key informants reported that with an increase in incidences of sporadic attacks and other forms of insecurity, it is difficult to undertake viable farming activities.

Voice of respondent

*'The residents here rarely engage in farming since in various cases, they are forced to escape in search of safe places. Our crops get destroyed by grazing animals or by burning them Although we practice minimum farming to sustain our families and reduce overdependence on livestock, the activity has not been viable because the weather here is harsh'* (Sub Chief 4 leader, AL 4)

Religious leaders and representatives of civil society also expressed similar views. They stated that pastoralist communities rarely engage in farming activities due to their history of having had their crops destroyed and livestock stolen during conflicts.

Voice of respondent

*'In many cases, people from pastoralists have stopped undertaking activities since, during the violence, they have had their farmlands destroyed and their livestock stolen leaving them with a lot of losses. To them, they would rather engage in economic activities that provide for their families for shorter periods'* (A representative of civil society, RCS4)

The results unmistakably demonstrate how negatively crop growing has been

impacted by insecurity in Mandera County. These results support the findings of a study conducted in Tajikistan in 2015 by Justino and Shemyakina, which showed that during violent conflicts, resources like homes, land, labor, utensils, cattle, and animals are destroyed through intense fighting and looting. Farmers frequently sustain the worst losses during conflicts, according to Justino and Shemyakina (2015). The substantial population displacements that come along with most violent conflicts exacerbate these effects and are frequently to blame.

The results concur with those of a study by Matthew, Brown, and Jensen (2014), which found that farmers frequently sustain the greatest losses during conflicts, and that these impacts are exacerbated and frequently brought on by the significant population displacements that come along with the majority of violent conflicts. The results show that farming is a huge challenge in places with high levels of insecurity because farmers frequently lose their acreage or have their livestock stolen, which results in significant unanticipated losses.

The results concur with those of Adelaja and George (2019), who came to the conclusion that agricultural production is hampered by security in pastoralist-inhabited areas. The government, working with humanitarian organizations, executes agricultural initiatives, mainly irrigation farming in pastoral areas, in an effort to reduce overdependence on cattle for a living. But as a result of the projects' shutdown due to increased insecurity, the areas' food insecurity rises. People were constantly moving about and migrating in search of safe havens, which prevented them from concentrating on agricultural output. The results concur with those of a study by Ujunwa, Okoyeuzu, and Kalu (2019), which found that violent conflicts and rising insecurity in West Africa have considerably impacted agricultural production, which has led to increased food insecurity.

The primary informants stated that growing insecurity caused the traditional pastoralist livelihoods to fail in terms of rearing animals.

Voice of respondent

*'We always experience cattle rustling here. Our animals are stolen which leaves us poorer. This is a major challenge considering other sources of livelihood such as agriculture are not viable here'* (Religious leader 3, RL 3)

Regarding investment, the key respondents agreed that increased cases of insecurity have scared away potential investors who would visit different parts of Mandera County as local tourists.

Voice of respondent

*'There have been countless cases of conflicts what have increased insecurity in the county. This has scared away potential investors. Our county therefore lags behind in terms of development'* (Civil society representative, CSR 2)

Religious leaders and representatives of civil society also noted that insecurity has been the cause of a lack of potential investors.

Voice of respondent

*'This area, many investors who had economic projects fled due to unending cases of insecurity'* (Religious leader, RL6)

These findings support the assertions of Le Billon (2012) that insecurity also discourages investment and trade in the affected areas. According to Le Billon (2012), increased volatility in the pastoral regions discourages investment as no investor, whether local or foreign, would be motivated to invest in an unsafe and insecure environment. It also leads to the closure of market centers, shops, and also

discourages the establishment of banks and microfinance institutions. This indicates that for local investment and tourism activities to thrive, security dynamics play a key role since potential investors and tourists get assurance of relative safety and that of their investments.

Regarding trade, the key informants had similar sentiments to the household heads that increased cases of insecurity have affected trade activities. This view was shared by the religious leaders and representatives of civil society, who noted that trade is part of the culture and traditions among pastoralist communities.

Voice of respondent

*'In this community, everyone desires to own livestock and engage in trading activities, without which one is considered inadequate'* (Religious leader, RL7)

These findings support the viewpoints held by Le Billon (2012) that, despite the fact that insecurity discourages investment and trade in the affected areas, many pastoralist communities still regard trading activities and investments as central to their ability to attain higher levels of development. These results show that trade and livestock are the two main drivers of economic growth in pastoralist communities. Despite security challenges that occasion huge economic losses, people consider and undertake trading activities and keep livestock for prestige and sale.

During the interviews, the key informants reported that insecurity in Mandera County has greatly affected mining activities. The religious leaders and representatives also reported that quite a number of quarry workers have been killed during times of insecurity. This has made many job-seekers shy away from the mining and quarrying business.

Voice of respondent

*'Many job-seekers focus elsewhere for economic activities and not in the mining and quarry sector due to increased cases of sporadic attacks and deaths of quarry workers and miners'* (Representative of civil society, RCS5)

These results support the claims made by Abass (2013) that Al-Shabab attacks in Mandera County have resulted in the deaths of numerous quarry employees, which has caused the remaining workers to abandon the quarry and mining sites in search of alternative sources of income. In conclusion, these findings demonstrate that workplace insecurity has grown to be a significant factor in fatal accidents among employees, particularly those who work in the mining and quarrying industries.

The key respondents agreed with the household heads that the tourism industry had suffered as a result of heightened insecurity in Mandera. Despite possessing a variety of beautiful features and tourism attractions, Mandera county only receives a relatively limited number of visitors from outside the country, according to the key informants. Additionally, there is very little local tourism because of attacks.

Voice of respondent

*'We rarely receive a large number of visitors here due to fear of being attacked by the bandits. Visitors also fear attacks by the al-Shabaab militias. Visitors from outside the county and from the county are very less despite our county having game reserves and other places to visit'* (Sub chief, AI, 4)

Voice of respondent

*'Here in Mandera county, we have game reserves that hardly get a large number of visitors. This is due to fear of bandit's attacks and attack by al-Shabaab. The problem is even worsened as there are not enough security officers in these areas (civil security representative,' CSR, 5)*

The findings revealed that insecurity in Mandera County is a huge challenge to tourism. It is worth noting that Mandera county has a number of tourist attractions, including Malka Mari National Park, Elwak ancient wells, Marehan sandstone, Dandu hills, and River Dua, among others. However, only a few people visit these places due to increased insecurity and fear of attacks. Tourism has not managed to generate much revenue for the country.

The results are consistent with a study by Andrés-Rosales, Sánchez-Mitre, and Marcelo (2018) that looked at how insecurity affected tourism in Guerrero and found that it deterred travel. The study came to the conclusion that the lack of protection has caused local and foreign visitors to the cities of Cancun and Acapulco, which are among the most violent and hazardous in the world, to decrease. Similar conclusions were reached by Ibrahim, Ahmad, and Shehu (2021), who determined that insecurity has grown to be a major concern for travel, hospitality, and the tourism industry in their study on the impact of ongoing kidnappings on foreign relations in Nigeria. The findings show that visiting certain tourist destinations in certain regions of the country constantly raises the possibility of being assaulted by militants.

#### **4.8 Coping Strategies**

The purpose of the analysis here was to analyze the fourth objective, that is to examine the various strategies adopted by pastoralist communities in Mandera County

to cope with insecurity. Based on the data obtained from the household heads, people in Mandera County use different strategies to cope with insecurity. The findings are presented in the table below.

**Table 4: Different strategies to cope with insecurity**

<b>Statement</b>	<b>M</b>	<b>STD</b>
The community elders aid in curbing insecurity in Mandera County.	4.2680	0.6831
The religious leaders aid in curbing insecurity in Mandera County.	4.0720	0.6072
The civil societies aid in curbing insecurity in Mandera County.	3.1139	0.2965
The security officers deployed in the area play a key role in curbing insecurity in Mandera County.	3.0596	0.6131
Self-defense is the best coping mechanism in Mandera County	3.2607	0.8162
Relocating to safer camps is the best coping mechanism in Mandera County.	4.7902	0.5902

The results showed that the respondents agreed that community elders play a key role in reducing insecurity in Mandera County (Mean=4.2680, STD=0.6831). Religious leaders play a key role (Mean=4.0720, STD=0.6072), security officers stationed nearby play a key role (Mean=4.0596, STD=0.6131), and moving to safer camps is the best coping mechanism in Mandera. The means obtained in these statements indicated that generally the respondents agreed that they cope with insecurity by using

elders, religious leaders to broker peace among the communities. They all agreed that the security officers in the areas also play a crucial role in quelling conflicts and curbing insecurity.

The respondents neither agreed nor disagreed that self-defense is the best coping method in Mandera County (Mean = 3.2607, STD = 0.8162) and neither agreed nor disagreed that civil society has a significant role in reducing insecurity in the county (Mean = 3.1139, STD = 0.965). The means obtained here indicate that the self-defense and the role of civil society are yet to be effective for the pastoral communities to cope with effects of insecurity in Mandera County.

The findings from the key informants were in line with the responses given by the heads of households. The religious leaders and representatives of civil societies reported that people often migrate in droves from areas with conflicts and insecurity to safer grounds.

Voice of respondent

*'We always advise people to seek refuge in safe places to avoid the socio-economic effects of insecurity in their localities. This has ensured that lives are saved as well as salvage little resources which they can use to start their lives afresh (Religious leader, RL8)*

Representatives of civil societies also noted that people take refuge in safe places to avoid the scourge of violence.

Voice of respondent

*'To cope with the ravages of insecurity, pastoralist communities usually migrate, with their entire households, to refugee or IDP camps which they consider as safe havens against insecurity' (Representative of civil society, RCS6)*

These results support a study conducted in Colombia by Ibáez and Moya (2016), who discovered that households living in risky economic environments—even the very poor—develop a variety of complicated risk management and risk-coping mechanisms. According to Ibáez and Moya (2016), many households relocate to refugee and displacement camps, move to safer urban areas, or flee conflict-ridden regions altogether. These results also corroborate a study conducted in Burundi by Brzoska and Fröhlich (2016), which found that most households experiencing violence or anticipating experiencing violence during armed conflict try to minimize risk by relocating to a safer location.

McKay and Loveridge (2014) also note that internally displaced people and refugees move from rural to urban areas. This indicates that migration or fleeing from violence-prone areas is an important strategy that pastoralist communities opt for to cope with the harmful socio-economic effects of insecurity. This affirms the fact that migration plays an important role as a strategy for coping with the effects of insecurity and conflicts. In other words, migration from conflict areas may be long-term or permanent when household members settle in another location or can take on a more temporary nature, with individuals moving frequently between their home and urban environments, fleeing at night and returning during the day or moving only part of the family. These more fluid migration strategies may help households avoid asset and property thefts, and enable households to derive returns from land or access food and labor markets.

From the key informants' interviews, it also emerged that the communities in Mandera County have opted for low-risk but viable economic activities due to the losses they have incurred previously during times of conflict as a means of coping with insecurity. These findings are consistent with the findings of Raeymaekers

(2011) that there are five broad types of economic coping strategies adopted by individuals and households in contexts of violence and conflict. These include the use of savings and asset sales (including land), resort to subsistence agriculture and other low-risk activities, engagement in informal markets, intra household allocation of labor, and (non-forced) migration. Also, the key informants reported that during times of violence, people usually have very little left to depend on as most of their resources are destroyed. Many often resort to selling their livestock to cushion them against economic hardships post-conflict. These findings support the postulations of Shemyakina (2011) who noted that, in Tajikistan, the pastoralist communities in rural areas sell livestock as a form of coping strategy in times of crisis. These findings affirm the fact that, despite their use as an attribute of cultural prestige, livestock plays a key economic role in times of difficulty. They can be sold off to generate income for family upkeep and sustenance post-conflict. The findings revealed that due to the challenges posed by violence, pastoralist communities still adopt a multiplicity of strategies to cope with the economic ravages of insecurity. These include undertaking low-cost but viable economic activities to sustain their livelihood even in times of sporadic attacks. In other words, people in pastoralist communities are adopting new economic strategies in order to earn a living and acquire productive skills that may be useful in the post-conflict period.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents a summary of the main research findings, conclusions, recommendations, and suggestions for further research as discussed under the research objectives. Specifically, the study sought to identify forms of insecurity, the social effects of insecurity, the economic effects of insecurity and the strategies the pastoralists in Mandera county use to cope with the effects of insecurity

#### **5.2 Summary of Research Findings**

This section provides a summary of the findings of the research objectives, which included assessing the levels of insecurity among pastoralist communities, the effects of insecurity on social and economic activities, and coping strategies in the face of insecurity among pastoralist communities.

##### **5.2.1 Forms of Insecurity among Pastoralist Communities.**

The study established that pastoralist communities have borne the brunt of different forms of insecurity. These include cattle rustling, border conflicts, clan conflicts, terrorist attacks, and political incitements by local leaders. In other words, cases of insecurity have become a common phenomenon among pastoralist communities. This means that insecurity in pastoralist communities has become a big problem that needs a lot of attention from everyone involved.

##### **5.2.2 Effects of Insecurity on Social Activities among Pastoralist Communities**

The purpose of the study here was to determine the social effects of insecurity in Mandera county. The study sought to establish the extent to which different forms of

insecurity have affected social activities among pastoralist communities in the county. From the analysis, the study established that insecurity in Mandera County has affected the social lives of the pastoralists in various ways. One of the areas that the study identified as highly affected by insecurity is the provision of healthcare services. The study established that people rarely get health services, while others reported that people in some areas do not get health services at all. Based on the information from the key informants, in some areas there is only one dispensary, which in most cases lacks medicine. The study also found out that insecurity has scared health workers from working in the areas affected by conflicts. Also, various non-governmental organizations that offer healthcare services are scared of working in areas with heightened insecurity.

Education is the other sector that has been adversely affected by insecurity. The study found out that the majority of the children in areas with repeated conflicts do not attend school due to fear of attacks. The enrollment and completion rates are low. Also, the areas with heightened insecurity have a shortage of teachers. The study found out that teachers are scared of working in areas with conflicts, which in turn leads to a shortage of teachers in the country. Besides, classrooms are destroyed during attacks, which hampers the quality of education in various parts of the country. Besides healthcare and education, the study found that insecurity has limited the ability of people to attend social functions such as weddings and religious functions. The study found out that generally, incidences such as cattle rustling, border and clan conflicts, as well as terrorist attacks and political incitements, have hampered the provision of healthcare and other social services in the affected areas in the sub-county. The poor provision of services has also been facilitated by poor infrastructure in most parts of the country.

### **5.2.3 Effects of Insecurity on Economic Activities among Pastoralist Communities**

The study sought to determine the economic effects of insecurity in Mandera County. Based on what the study found, it was clear that people in Mandera County do different things to make money. The study identified that the main economic activity of the people is pastoralism.

However, the study established that the people also engaged in other economic activities such as subsistence farming, animal husbandry, and trading activities. However, the study established that heightened insecurity in most parts of the country has affected the ability of the pastoralists to engage in various economic activities.

The study found insecurity has made it difficult to adopt farming as an alternative economic activity due to frequent displacement of people. Based on the findings, people are, in most cases, constantly moving in search of safe places, which makes it hard for them to practice crop farming as an alternative source of livelihood. The study found that heightened insecurity in Mandera County has led to a dramatic decline in crop farming. This is because, during conflicts, heightened insecurity causes community members to migrate to safer areas, which in turn reduces their engagement in crop farming.

The study also revealed that a fair majority of the respondents agreed with the view that insecurity has led to the theft of people's livestock, making them fear engaging in such economic activities in the future. The study also found out that insecurity in Mandera county has also discouraged investment as investors, both local and international, are scared of carrying out investments in the county. This has, as a result, made the county lag behind in development. Heightened insecurity has also

affected trading activities and has led to the closure of markets and trading centers. Local traders, in most cases, fear carrying out business activities as a result of attacks on their homes. Similarly, traders from other regions of the country are scared of conducting trade in the country for fear of attacks.

#### **5.2.4 Coping Strategies in the Face of Insecurity among Pastoralist Communities**

The study found that people in Mandera county have devised various strategies to cope with insecurity and the associated socio-economic effects. These strategies include migration or fleeing from volatile areas to refugee, IDP camps, or other towns; practicing short-term economic activities to sustain their livelihood; selling livestock; and above all, involving locals in peace initiatives. The study notes that migration strategies help households avoid asset and property thefts and enable households to derive returns from land or access food and labor markets. On short-term alternative economic activities, the study established that many households have resorted to undertaking economic activities whose lifespan is short. The study identified that as the majority of the people resort to crop cultivation as an alternative source of livelihood, they have resolved to cultivate crops that mature faster within a shorter time frame with limited costs. These findings assert that, despite the challenges posed by violence, pastoralist communities still adopt a multiplicity of strategies to cope with the economic ravages of insecurity. Some of these things are doing low-cost but still useful jobs so they can make a living even when there are attacks every now and then.

The coping strategies the respondents reported suggest that pastoralist communities in Mandera County have taken to adopting new economic ways to earn a living and acquire productive skills that may be relevant for economic recovery in the post-conflict period. Besides, the sale of livestock has also been adopted as a way of

cushioning households against economic hardships posed by security challenges. On peace initiatives, it is evident that efforts have been made to involve locals and NGOs in creating awareness of the need to have peaceful co-existence among pastoralist communities.

### **5.3 Conclusions**

Drawing from the above findings, it is evident that people from pastoralist communities in Mandera have borne the brunt of different forms of insecurity. These include cattle rustling, border conflicts, clan conflicts, terrorist attacks, and political incitements by local leaders. In other words, cases of insecurity have become a common phenomenon among pastoralist communities. From the study findings, it is evident that pastoralist communities engage in myriads of social activities. These include the provision of healthcare services, social amenity services, attending places of worship, schools, and wedding ceremonies, among others. However, with increased cases of insecurity, pastoralist communities rarely undertake such social activities.

From the study's findings, due to insecurity, people from pastoralist communities have a great challenge accessing quality healthcare or social amenity services. The study has revealed that insecurity has made it difficult for pastoralist communities to attend a place of worship or meetings in social halls. Their children rarely attend school, nor do they take part in wedding ceremonies or other social events. These indicate that increased cases of insecurity have had a net effect on people's social lives. It implies that, during times of insecurity and conflict, pastoralist communities have no or limited access to social amenities within their localities.

The study has also revealed that intensified insecurity reduces access to health care, which leads to widespread susceptibility to infectious diseases and malnutrition. Due

to insecurity, teachers and health workers are scared of living and working in volatile areas, which creates a shortage of health workers and teachers. In a nutshell, any kind of insecurity makes it hard for pastoralist communities to take part in social activities and events.

It is also evident that people from pastoralist communities undertake numerous economic activities which range from farming, animal husbandry, local tourism, trade and mining activities. However, due to constant sporadic attacks, many people from pastoralist communities have abandoned the sources of livelihood due to frequent displacement of people. The study established that pastoralist communities undertake numerous economic activities that range from farming, animal husbandry, local tourism, trade and mining activities. However, due to constant sporadic attacks, many people from pastoralist communities have abandoned the sources of livelihood due to frequent displacement of people.

Economic activities such as crop farming have taken a back seat among pastoralist communities since, on many occasions, they are forced to leave their farmlands and move to a safer environment, their food crops get destroyed or burnt, and their livestock is stolen. This affirms the fact that, during violent conflicts, assets like houses, land, labor, utensils, cattle, and livestock get destroyed through heavy fighting and looting. Potential investors also get scared about undertaking viable economic activities in such areas. In other words, increased volatility in the pastoral regions discourages investment as no investor, whether local or foreign, would be motivated to undertake meaningful economic activities in an unsafe and insecure environment. However, the study also established that, despite the fact that insecurity discourages investment and trade in the affected areas, many pastoralist communities still regard trading activities and investments as central to their ability to attain higher levels of

development. The study revealed that insecurity has occasioned the loss of lives for many people in the mining sector, especially those working in quarries. From the study findings, mining activities and quarry businesses have become non-viable economic undertakings as an alternative source of livelihood.

From the study findings, people from pastoralist communities have devised numerous strategies on how to cope with the socio-economic effects of insecurity. These strategies include migration or fleeing from volatile areas to refugee, IDP, or other towns. practicing short-term economic activities to sustain their livelihood, sale of livestock and, above all, involving locals in peace initiatives. However, the effectiveness of such coping strategies in mitigating the effects of insecurity on socio-economic activities has yet to be fully explored.

#### **5.4 Recommendations**

The study makes the following recommendations based on the research findings.;

- i. Based on the findings, the study concluded that there is heightened insecurity in Mandera County, which is caused by cattle rustling, banditry, inter-clan conflicts, border conflicts, and instances of terrorist attacks. The national government, through the Ministry of Interior and Administration of National Government is recommended to increase security measures in the county in order to quell the causes of conflicts and insecurity.
- ii. The study established that there is limited access to social services in Mandera, such as health services, education, and other social amenities, which is partly attributed to insecurity. The study also established that the participation of people in various social activities, such as religious activities, is curtailed by increased insecurity. The county government of Mandera is

recommended to provide adequate amenities and intensify security in the county in order to ensure the pastoral communities have access to social services.

iii. The study established that insecurity in Mandera County has affected various economic activities such as pastoralism, crop production, trade, investment, tourism, mining, among other activities. The national government through the Ministry of Interior and Administration of National Government is thus recommended to beef up security in the county in order to attract potential investors, promote trade, and attract tourists. The government and other bodies such as NGOs are recommended to sensitize pastoralist communities on the need to diversify their economic activities in order to reduce their overreliance on pastoralism.

iv. On coping strategies, the government, through the Ministry of Coordination and Interior is recommended to strengthen joint peace initiatives and livelihood activities between the local communities to increase interaction and coexistence among the members, as this would help to foster peaceful coexistence among the communities. Some of these activities could include joint adult literacy programs, income-generation activities, and community sensitization through peace campaigns, sports activities, and community dialogues.

### **5.5 Suggestions for Further Research**

A study should be carried out to analyze the effectiveness of existing conflict resolution strategies to mitigate the negative socio-economic effects of insecurity among pastoralist communities in Mandera North Sub-County, which has been the epicenter for clan clashes.

A study should be done to find out how much the way pastoralist communities in Mander County feel about security management strategies affects their social and economic activities.

## REFERENCES

- A. (2015). Understanding the roles of faith-based health-care providers in Africa: a review of the evidence with a focus on the magnitude, reach, cost, and satisfaction. *The Lancet*, 386(10005): 1765-1775.
- Abass, A. F. (2013). *Effects of Clan Clashes on Provision of Quality Education in Public Primary Schools in Mandera North District, Kenya*. Unpublished Masters Project, University of Nairobi.
- Abdullahi, M. O. M. (2018). Role of Socio-Demographic and Livelihood Strategy Diversification on Pastoralists' household Stability In Mandera County, Kenya. *International Journal of Poverty, Investment and Development*, 3(1), 1-19.
- Aburo, V. Y. (2017). *Effects of Under Development in Mandera County Kenya* (Doctoral dissertation, United States International University-Africa).
- Acharya, M. M., Martirosian, V., Chmielewski, N. N., Hanna, N., Tran, K. K., Liao, A. C., ... & Limoli, C. L. (2015). Stem cell transplantation reverses chemotherapy-induced cognitive dysfunction. *Cancer research*, 75(4), 676-686.
- Adan, H. M. (2020). *Evaluating contribution of informal peace agreement to community conflict management among Borana and Gabra communities in Marsabit* (Doctoral dissertation, Africa Nazarene University).
- Adan, M. & Pkalya, R. (2015). *Closed to Progress: An Assessment of the Socio-Economic Impacts of Conflict on Pastoral and Semi Pastoral Economies in Kenya and Uganda*. Rugby: Practical Action.

- Adan, M. A., & Orodho, J. A. (2016). Effects of inter-clan conflicts on quality school outcomes in secondary schools among the nomadic community in Mandera County, Kenya. *Journal of Research and Methods in Education*, 6 (3); 22-29.
- Adelaja, A., & George, J. (2019). Effects of conflict on agriculture: Evidence from the Boko Haram insurgency. *World Development*, 117(1), 184-195.
- Agheyisi, J. E. (2019). Inter-communal land conflicts in Benin City, Nigeria: Exploring the root causes in the context of customary land supply. *Land Use Policy*, 83(1), 532-542.
- Ahmed, A. A. (2015). *Influence of armed conflict on pupils' performance in Kenya Certificate of Primary Education in Mandera North Sub County, Kenya*. Unpublished Master's Thesis, University of Nairobi.
- Ajah, B. O., Dinne, C. E., & Salami, K. K. (2020). Terrorism in contemporary Nigerian society: Conquest of Boko-Haram, myth or reality. *International Journal of Criminal Justice Sciences*, 15(2), 312-324.
- Alabaichi, A., & Salih, A. I. (2015, October). Enhance security of advance encryption standard algorithm based on key-dependent S-box. In *2015 Fifth International Conference on Digital Information Processing and Communications (ICDIPC)* (pp. 44-53). IEEE.
- Alio, H. M. (2012). *Inter-clan conflict in Mandera District: a case of the Garre and Murulle, 2004-2009* (Doctoral dissertation, University of Nairobi, Kenya).
- Almer, B. (1967). Modern General Risk Theory. *ASTIN Bulletin: The Journal of the IAA*, 4(2),136-169. Retrieved 10 July 2021, from [https://www.casact.org/sites/default/files/database/astin\\_vol4no2\\_136.pdf](https://www.casact.org/sites/default/files/database/astin_vol4no2_136.pdf)

- Amnesty International (2016). The Mental Health Impact of South Sudan's Conflict. Amnesty International, South Sudan.
- Amwata, D. A., Nyariki, D. M., & Musimba, N. R. (2016). Factors influencing pastoral and agropastoral household vulnerability to food insecurity in the drylands of Kenya: a case study of Kajiado and Makueni Counties. *Journal of International Development*, 28 (5), 771-787
- Anderson, D. M., & McKnight, J. (2015). Kenya at war: Al-Shabaab and its enemies in Eastern Africa. *African Affairs*, 114 (454), 1-27.
- Andrés-Rosales, R., Sánchez-Mitre, L. A., & Cruz Marcelo, J. N. (2018). Insecurity and its impact on tourism in Guerrero: a spatial approach, 1999-2014. *Revista de Relaciones Internacionales, Estrategia y Seguridad*, 13(1), 147-162.
- Araya Mezgebo, (2016) Customary Conflict Resolution Mechanisms in Pastoral Communities of Ethiopia: The Case of the Borana and Guji Communities in Borana Zone" by in the International Journal of Humanities and Social Science.
- Baker S. J. (2015). The Australian language and cattle raiders: Sydney: Angus and Robertson Ltd) Krahman, E. (2014). Conceptualizing Security and Governance. *Journal of the Nordic International Studies Association*, 38(1), 5-26.
- Balfour, N., Obando, J., & Gohil, D. (2020). Dimensions of water insecurity in pastoralist households in Kenya. *Waterlines*, 39(1), 24-43.
- Bapolisi, W. A., Ferrari, G., Bisimwa, G., & Merten, S. (2021). Gendered determinants of food insecurity in ongoing regional conflicts, North and South Kivu, the Democratic Republic of Congo. *Agriculture & Food Security*, 10 (1), 1-9.

- Barako, T. D. (2021). *Exploring antenatal care experiences amongst pastoralist communities in Kenya: a focused ethnographic study* (Doctoral dissertation, University of Nottingham).
- Bialostok, S. (2015). Risk theory and education: Policy and practice. *Policy Futures in Education, 13*(5), 561-576.
- Brzoska, M. & Fröhlich, C. (2016). Climate change, migration and violent conflict: vulnerabilities, pathways and adaptation strategies. *Migration and Development, 5*(2), 190-210.
- Catley, A., Lind, J., & Scoones, I. (2016). The futures of pastoralism in the Horn of Africa: pathways of growth and change. *Office international des epizooties revue scientifique et technique, 35*(2), 389-403.
- Catley, A., Lind, J., & Scoones, I. (Eds.). (2013). *Pastoralism and Development in Africa: Dynamic Change at the Margins*. Routledge
- Chamarbagwala, R. & Morán, H. E. (2015). *The Human Capital Consequences of Civil War: Evidence from Guatemala*”, HiCN Working Paper no. 59, Households in Conflict Network.
- Chandler, D. (2008). Review Essay: Human Security: The Dog That Didn't Bark. *Security Dialogue, 39*(4), 427-438.  
<https://doi.org/10.1177/0967010608094037>
- Chelang'a, J. K., & Chesire, M. (2020). Analysis of conflict resolution strategies among Pastoralist Communities of Kenya. *Journal of African Interdisciplinary Studies, 4*(4), 4-21.

- Dunn, G., (2018). The impact of the Boko Haram insurgency in Northeast Nigeria on childhood wasting: a double-difference study. *Confl. Health* 12. <https://doi.org/10.1186/s13031-018-0136-2>
- Eklund, L., Persson, A., & Pilesjö, P. (2016). Cropland changes in times of conflict, reconstruction, and economic development in Iraqi Kurdistan. *Ambio*, 45(1), 78-88.
- Fratkin, E., & Roth, E. A. (2005). *As Pastoralists Settle: Social, Health, and Economic Consequences of the Pastoral Sedentarization in Marsabit District, Kenya*. New York: Springer.
- Hassan, R., Nathan, I., & Kanyinga, K. (2022). Will community rights secure pastoralists' access to land? The Community Land Act in Kenya and its implications for Samburu pastoralists. *The Journal of Peasant Studies*, 1(1), 1-22.
- Houessou, S. O., Dossa, L. H., Assogba, C. A., Diogo, R. V. C., Vanvanhossou, S. F. U., & Schlecht, E. (2020). The role of cross-border transhumance in influencing resident herders' cattle husbandry practices and use of genetic resources. *animal*, 14(11), 2378-2386.
- Hussein, A. (2016). Effects of Pastoralists Community on Quality Education In Mandera County-Kenya. *IOSR Journal Of Humanities And Social Science*, 21(09), 01-09. <https://doi.org/10.9790/0837-2109100109>
- Ibrahim, A. H., & Orodho, J. A. Management Constraints Facing Board of Management in the Implementation of Educational Policies in Public Secondary Schools in Mandera County, Kenya.
- Ibrahim, B. A. (2015). *Effects of insecurity among learners in Mandera East Sub- County*. Unpublished Thesis, Mount Kenya University, Kenya.

- Igwe, D. (2015). Violent Crime as an Impediment to the Achievement of Millennium Development Goals in Africa. *Journal of Military Strategic Studies*, 13(2):4.
- Justino, P. & Shemyakina, O. (2015). *Migrant remittances and household labour supply in the post-conflict Tajikistan*. Post- Unpublished manuscript, Harvard University.
- Justino, P. (2016). Supply and demand restrictions to education in conflict-affected countries: new research and future agendas. *International Journal of Educational Development*, 47, 76-85.
- Justino, P. (2016). Supply and demand restrictions to education in conflict-affected countries: new research and future agendas. *International Journal of Educational Development*, 47(1), 76-85.
- Kaduka, L., Olale, J., Karamanos, A., Mutai, J., Coultas, C., Ahmed, I., ... & Harding, S. (2023). Contextually appropriate communication strategies for COVID-19 prevention in Kenya border regions: evidence from a mixed methods observational study in Busia and Mandera counties. *BMJ open*, 13(5),1-11.
- Kakande. M. & Nalwadda, R. (2013). *A Report on a Study of factors Influencing Access to and Attendance of Primary Education in Uganda*. Kampala
- Kenya National Bureau of Statistics (2019). *Census-2019*. Nairobi: Government Printer
- Kinyoki, D.K., Moloney, G.M., Uthman, O.A., Kandala, N.-B., Odundo, E.O., Noor, A.M., Berkley, J.A., (2017). Conflict in Somalia: impact on child undernutrition. *BMJ Glob. Health* 2, e000262. <https://doi.org/10.1136/bmjgh-2016-000262>

- Krahmann, E. (2017). From performance to performativity: The legitimization of US security contracting and its consequences. *Security dialogue*, 48(6), 541-559.
- Krause, K. (2004). Human Security: An Idea Whose Time Has Come? *Sicherheit & Frieden*, 23(1), 1-6. <https://doi.org/10.5771/0175-274x-2005-1-1>
- Laura Lewis & Mahaman Tidjani Alou, (2017) "Pastoralists under Pressure: Double Exposure to Economic and Environmental Change in Niger" by in *Human Ecology*.
- Le Billon, P. (2012). *Wars of Plunder: Conflicts, Profits and the Politics of Resources*, London:C. Hurst & Co.
- Lee, C. (1970). Generating classification rules from databases. *WIT Transactions on Information and Communication Technologies*, 6.
- Liechti, K., & Biber, J. P. (2016) Pastoralism in Europe: characteristics and challenges of highland-lowland transhumance. *Revue scientifique et technique (International office of Epizootics)*, 35(2), 561-575.
- Little, M. A. (2015). Pastoralism. In *Basics in Human Evolution* (pp. 337-347). Cambridge, Academic Press.
- Lukas, L. (2016). Theoretical sources for a theory of safety and security. *Tenth International Conference on Emerging Security Information, Systems and Technologies*. Retrieved 10 July 2021, from [https:// www. thinkmind. Org /articles/securware\\_2016\\_8\\_20\\_30071.pdf](https://www.thinkmind.org/articles/securware_2016_8_20_30071.pdf)
- Maara, N. W. (2020). *The Spillover Effect of Somalia's Internal Conflict on Kenya's Socio-Economic Development: Case Study of Mandera County* (Doctoral dissertation, United States International University-Africa).

- Matthew, R., Brown, O. & Jensen, D. (2014). *From conflict to peacebuilding: The role of natural resources and the environment*. UNEP. Available at: <http://www.iisd.org/publications/pub.aspx?pno=1062>.
- Mbugua, R. N. (2016). *The Causes and Impact of Insecurity on Pastoralists Economies: The Case of West Pokot County, Kenya (1990-2015)* (Unpublished Doctoral dissertation, Department of Political Science and Public Administration, University of Nairobi).
- McKay, A. & Loveridge, S. (2014). *Exploring the paradox of Rwandan agricultural household income and nutritional outcomes*. Staff paper. Department of Agricultural Economics, Michigan State University, Michigan.
- Motuzaitė Matuzevičiūtė, G., Tabaldiev, K., Hermes, T., Ananyevskaya, E., Grikpedis, M., Luneau, E., ... & Rouse, L. M. (2020). High-altitude agropastoralism in the Kyrgyz Tien Shan: New excavations of the chap farmstead (1065–825 cal bc). *Journal of Field Archaeology*, 45(1), 29-45.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative & qualitative approaches*. Nairobi: Acts press.
- Mugenda, O. M., & Mugenda, A. G. (2005). *Qualitative and quantitative approaches. Research Methods Africa Center for Technology Studies*. Nairobi: Acts Press.
- Muraguri, S. M. (2020). *The Role of Sports in Promoting Peaceful Interactions and Co- Existence in Kenya (2001-2019)* (Doctoral dissertation, United States International University-Africa).
- Mutia, D., Carpenter, S., Jacobs, Z., Jebri, F., Kamau, J., Kelly, S. J., ... & Roberts, M. (2021). Productivity driven by Tana River discharge is spatially limited in Kenyan coastal waters. *Ocean & Coastal Management*, 211, 105713.

- Mutu, P. L. (2017). Causes of Drought Vulnerability and Indigenous Drought Early Warning Methods among the Turkana Nomadic Pastoralists of Ilemi Triangle Region of Northern Kenya. *Research in Health Science*, 2(2), 209-232.
- Muturi, W., & Oguya, S. A. (2016).
- Naah, J. B. S. (2018). Investigating criteria for valuation of forage resources by local agro- pastoralists in West Africa: using quantitative ethnoecological approach. *Journal of ethnobiology and ethnomedicine*, 14 (1), 1-16.
- Nagabhatla, N., Cassidy-Neumiller, M., Francine, N. N., & Maatta, N. (2021). Water, conflicts and migration and the role of regional diplomacy: Lake Chad, Congo Basin, and the Mbororo pastoralist. *Environmental Science & Policy*, 122 (1), 35-48.
- Nagabhatla, N., Cassidy-Neumiller, M., Francine, N. N., & Maatta, N. (2021). Water, conflicts and migration and the role of regional diplomacy: Lake Chad, Congo Basin, and the Mbororo pastoralist. *Environmental Science & Policy*, 122 (1), 35-48.
- Namasivayam, A., González, P.A., Delgado, R.C., Chi, P.C., 2017. The Effect of Armed Conflict on the Utilization of Maternal Health Services in Uganda: A Population based Study. *PLOS Curr. Disasters* 1–12. <https://doi.org/10.1371/currents.dis.557b987d6519d8c7c96f2006ed3c271a>
- Newman, E. (2010). Critical human security studies. *Review Of International Studies*, 36(1), 77-94. <https://doi.org/10.1017/s0260210509990519>
- Nori, M. (2021). Integrating immigrant workforce in european pastoralism: reality, policy and practices. *Italian Review of Agricultural Economics*, 76(1), 49-58.

- Nwanegbo, C. J., & Odigbo, J. (2013). National Development and Insecurity in Nigeria's Fourth Republic: Regretting the Pains and Relishing the Gains. *International Journal of Humanities and Social Science*, 3(4), 285-291.
- Nyariki, D. M., & Amwata, D. A. (2019). The value of pastoralism in Kenya: Application of total economic value approach. *Pastoralism*, 9(1), 9.
- Okedion, M. A. (2021). Restructuring and Automation of Security Model for Sustainable Development in Nigeria. *UJAH: Unizik Journal of Arts and Humanities*, 21(3), 225-241.
- Oladayo, N. A. (2019). The impact of conflict on health outcomes: systematic evidence from sub-saharan Africa. *Mgbakoigba: Journal of African Studies*, 8(1), 88-100.
- Oladeji, S. I. & Folorunso, B. A. (2015). The Imperative of National Security and Stability for Development Process in Contemporary Nigeria. *European Journal of Social Sciences*, 3(2), 66-79
- Olivier, J., Tsimpo, C., Gemignani, R., Shojo, M., Coulombe, H., Dimmock, F. & Haakenstad,
- Opiyo, F., Wasonga, O., Nyangito, M., Schilling, J., & Munang, R. (2015). Drought adaptation and coping strategies among the Turkana pastoralists of northern Kenya. *International Journal of Disaster Risk Science*, 6(3), 295-309.
- Orton, J. (2015). The introduction of pastoralism to southernmost Africa: Thoughts on new contributions to an ongoing debate. *Azania: Archaeological Research in Africa*, 50(2), 250-258.

- Palladino, P. (2018). Transhumance revisited: On mobility and process between ethnography and history. *Journal of Historical Sociology*, 31(2), 119-133.
- Paris, R. (2001). Human Security: Paradigm Shift or Hot Air? *International Security*, 26(2), 87-102. <https://doi.org/10.1162/016228801753191141>
- Ptacek, J. K., & Connaughton, S. L. (2023). Addressing the intersections of health, organizing, and peacebuilding: a case study of peacebuilding in Liberia. *Health communication*, 38(9), 1896-1903.
- Raeymaekers, T. (2011). *Forced Displacement and Youth Employment in the Aftermath of the Congo War: From making a living to making a life*. MICROCON Research Working Paper 38, Brighton: MICROCON.
- Riedel, M. & Welsh, W. N. (2015). *Criminal violence: Patterns, causes, and prevention*. Oxford: Oxford University Press.
- Riedel, M., & Welsh, W. N. (2015). *Criminal violence: Patterns, explanations, and interventions*. Oxford University Press, USA. Factors affecting performance of road construction projects in arid and semi-arid areas in Kenya. *International journal of social science and information technology*, 3(8), 908-929.
- Sadr, K. (2017). *The development of nomadism in ancient northeast Africa*. Philadelphia, University of Pennsylvania Press.
- Salih, M. A. (2015). Agro-Pastoralism: An Underestimated Regional Food Production System. *Eastern Africa Social Science Review (EASSR)*, 9(1): 23-37.

- Samim, S. A., & Zhiquan, H. (2020). Assessment of Food security situation in Afghanistan. *SVU-International Journal of Agricultural Sciences*, 2(2), 356-377.
- Ujunwa, A., Okoyeuzu, C., & Kalu, E. U. (2019). Armed conflict and food security in West Africa: socioeconomic perspective. *International Journal of Social Economics*.
- UNDP (2015). Dynamics and Trends of Conflict in Greater Mandera. *Amani papers*, 1(2): 1-48
- UNESCO (2011). *The hidden crisis: Armed Conflict the biggest barrier to education*. Retrieved from Harvard: <https://news.harvard.edu/wp-content/uploads/2016/02/190743e.pdf>
- UNICEF/ Government of Uganda (2014). UNICEF Country Programme 2005 - 2014: Masterplan of Operation. Kampala
- Wellensteen, P. (2015). *Understanding conflict resolution*. California: Sage Publications.
- WHO, (2016): Cholera and conflict in South Sudan [WWW Document]. URL [https://reliefweb.int/sites/reliefweb.int/files/resources/south\\_sudan\\_donoralert\\_july2016.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/south_sudan_donoralert_july2016.pdf) (accessed 1.2.19).

## APPENDICES

### **A1: Introduction Letter**

#### **Letter of Introduction**

**Dear Sir/Madam,**

#### **RE: PERMISSION TO CONDUCT RESEARCH**

I am Masters of Arts Student at Kenyatta University undertaking research entitled, **“Effects of Insecurity on Socio-economic Activities among Pastoralist Communities in Mandera County, Kenya”**. You've been chosen to take part in the study. Your identity won't be included in the report, and the information you supply will be handled privately.

We sincerely appreciate your cooperation and assistance. I would like to say thank you.

Yours faithfully, Abdi Mohamed Ali

## **A2: Questionnaire for the Household Heads**

Dear respondent,

I am Master of Arts Student at Kenyatta University undertaking research entitled, **“Effects of Insecurity on Socio-economic Activities among Pastoralist Communities in Mandera County, Kenya”**. You have been selected to participate in the study.

### **SECTION A: GENERAL INFORMATION**

***Instruction:*** Please tick against your most appropriate answer and fill the spaces provided.

1. Gender:

Male  Female

2. What is your main source of livelihood?

Pastoralism

Irrigation Farming  Agro pastoralism  Trade

Mining

3. To what extent do you benefit from your livelihood activities Very Low extent

Low Extent

Moderate Extent  Large Extent  Very Large Extent

4. Academic level of the household heads Primary education

Secondary  College/University  No Education

5. Distribution of the respondents by age Below 30 years

31-40 years  41-50 years

Above 50 years [  ]

**SECTION B: FORMS OF INSECURITY IN MANDERA COUNTY**

6. Do you experience any forms of insecurity?

Yes [  ]

No [  ]

b) If Yes, which is the most prevalent form of insecurity in Mandera County?

Cattle rustling [  ]

Border conflicts [  ]

Clan conflicts [  ]

Terrorist attacks [  ]

**SECTION C: EFFECTS OF INSECURITY ON SOCIAL SERVICES IN  
MANDERACOUNTY**

7. To what extent do you access health services in your county?

Very Low extent [  ] Low Extent [  ] Moderate Extent [  ]

Large Extent [  ] Very Large Extent [  ]

8. To what extent has insecurity affected provision of health services in Mandera County?

No extent at all [  ] Small Extent [  ] Moderate extent [  ]

Large extent [  ] Very large extent [  ]

9. To what extent has insecurity affected provision of social amenities in Mandera County?

No extent at all [ ] Small Extent [ ]

Moderate extent [ ] Large extent [ ] Very large extent [ ]

10. To what extent has insecurity affected education in Mandera County?

No extent at all [ ] Small Extent [ ] Moderate extent [ ] Large extent [ ] Very large extent [ ]

11. Which is the major effect of insecurity on education in Mandera County

Displacement of teachers [ ]

Displacement of students [ ] Insufficient supply of educational resources [ ]

Perception that the schools are not safe for the learners [ ] Destruction of schools [ ]

12. To what extent has insecurity affected social functions such as weddings and worship activities?

No extent at all [ ] Small Extent [ ] Moderate extent [ ]

Large extent [ ] Very large extent [ ]

#### **SECTION D: INSECURITY AND ECONOMIC ACTIVITIES AMONG PASTORALIST COMMUNITIES**

13. How often do you engage in the following economic activities?

<b>Economic activity</b>	<b>Very often</b>	<b>Rarely</b>	<b>Never at all</b>
Undertaking subsistence farming			
Engaging in livestock rearing			
Undertaking local tourism			
Engaging in trading activities			

Getting involved in mining activities			
---------------------------------------	--	--	--

14. To what extent does insecurity affect economic activities in your county?

No extent at all [ ] Small Extent [ ] Moderate extent [ ] Large extent [ ] Very large extent [ ]

15. Rate the extent to which you agree with the following statements on the effects of insecurity on economic activities among pastoralist communities in Mandera County

**Key 1-Strongly Disagree, 2-Disagree, 3-Undecided 4-Agree 5-Strongly Agree**

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Among pastoralist communities, insecurity has made it difficult to adopt farming as an alternative economic activity due to the frequent displacement of people					
Insecurity has led to the theft of people's livestock making them fear engaging in such economic activities in future					
Cases of insecurity have scared away potential investors who visit different parts of Mandera County as local tourists					
Despite the frequent sporadic attacks among pastoralist communities, trade has remained the most viable economic activity					

Increased deaths of people due to insecurity have reduced the number of pastoralist communities who take part in mining activities or quarry business					
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16. To what extent does insecurity affect tourism in Mandera country?

No extent at all [ ] Small Extent [ ]

Moderate extent [ ] Large extent [ ] Very large extent [ ]

**SECTION E: COPING STRATEGIES IN THE FACE OF INSECURITY AMONG PASTORALIST COMMUNITIES**

17. Please give the rate to which you agree or disagree with the following statements on the strategies used by pastoralists to cope with insecurity in Mandera County. Use the rating criteria where **5-Strongly Agree, 4-Agree, 3-Neutral, 4-Disagree, 5-Strongly Disagree**, with the following statement on coping mechanisms used by pastoralists in Mandera County.

Statement	1	2	3	4	5
The community elders play a key role in curbing insecurity in Mandera County.					
The religious leaders play a key role in curbing insecurity in Mandera County.					
The civil societies play a key role in curbing insecurity in Mandera County.					

The security officers deployed in the area play a key role in curbing insecurity in Mander County					
Self-defense is the best coping mechanism in Mander County					
Relocating to safer camps is the best coping mechanism in Mander County.					

**THANK YOU FOR PARTICIPATING,ABDI MOHAMED ALI**

### **A3: Interview Guide for Key Informants**

Dear respondent,

I am a Master of Arts Student at Kenyatta University undertaking research entitled, **“Effects of Insecurity on Socio-economic Activities among Pastoralist Communities in Mandera County, Kenya”**. You have been selected to participate in the study.

1. What are some of the forms of insecurity in Mandera County?
2. How would you rate the forms of different forms of insecurity in Mandera County?
3. What are some of the social activities’ pastoralist communities undertake in Mandera County?
4. How often do they partake in such social activities?
5. To what extent has insecurity affected the social activities in Mandera county?
6. What are some of the economic activities the pastoral communities undertake in ManderaCounty?
7. How often do they partake in such economic activities as a source of livelihood?
8. What is the effect of insecurity on the economic activities of the pastoral communities?
9. What are some of the strategies which they adopt to cope with the socio-economic effects of insecurity in Mandera County?
10. How have the coping strategies mitigated against the socio-economic effects of insecurity inMandera County?

**THANK YOU**

**A4: Research Authorization Letter from the Graduate School of Kenyatta University**



**KENYATTA UNIVERSITY  
GRADUATE SCHOOL**

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 020-8704150

Our Ref: C50/CE/28335/2015

DATE: 26<sup>th</sup> April, 2019

Director General,  
National Commission for Science, Technology  
and Innovation  
P.O. Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,


**RE: RESEARCH AUTHORIZATION FOR MR. ABDI MOHAMED ALI – REG.  
NO. C50/CE/28335/15**

I write to introduce Mr. Abdi Mohamed Ali who is a Postgraduate Student of this University. He is registered for M.A. degree programme in the **Department of Geography**.

Mr. Abdi intends to conduct research for a M.A. thesis Proposal entitled, “Effects of Insecurity on the Socio-Economic Development of Pastoral Households in Mandera County, Kenya.”

Any assistance given will be highly appreciated.

Yours faithfully,

  
**PROF. ELISHIBA KIMANI  
DEAN, GRADUATE SCHOOL**

JG/OWN

## A5: Approval of Research Proposal by Graduate School of Kenyatta University



### KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 020-8704150

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

#### Internal Memo

FROM: Dean, Graduate School

DATE: 26<sup>th</sup> April, 2019

TO: Mr. Abdi Mohamed Ali  
C/o Department of Geography

REF: C50/CE/28335/2015

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

=====  
This is to inform you that Graduate School Board, at its meeting on 18<sup>th</sup> April, 2019, approved your Research Proposal for the M.A. Degree entitled, "Effects of Insecurity on the Socio-Economic Development of Pastoral Households in Mandera County, Kenya."

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

JULIA GITU  
FOR: DEAN, GRADUATE SCHOOL

CC. Chairman, Department of Geography

#### Supervisors:

1. Dr. Philomena Muiruri  
C/o Department of Geography  
Kenyatta University
2. Dr. Thomas Kibutu  
C/o Department of Geography  
Kenyatta University

## A6: Letter of Approval by Ethics Review Committee of Kenya University



**KENYATTA UNIVERSITY  
ETHICS REVIEW COMMITTEE**

Fax: 8711242/8711575

Email: [kuerc.chairman@ku.ac.ke](mailto:kuerc.chairman@ku.ac.ke)

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P. O. Box 43844,

Nairobi, 00100

Tel: 8710901/12

Our Ref: **KU/ERC/ APPROVAL /VOL.1/281**

Date: 17<sup>th</sup> June, 2019

Abdi Mohamed Ali  
P.O Box 43844-00100  
NAIROBI

Dear Mr. Ali

**APPLICATION NUMBER: PKU/1025/11075 EFFECTS OF INSECURITY ON-THE SOCIO-ECONOMIC DEVELOPMENT OF PASTORAL HOUSEHOLDS IN, MANDERA, KENYA**

1. **IDENTIFICATION OF PROTOCOL**

The application before the committee is with a research topic "Effects of Insecurity on-The Socio-Economic Development of Pastoral Households In, Mandera, Kenya" received on 3<sup>rd</sup> May, 2019 and discussed on 11<sup>th</sup> June, 2019

2. **APPLICANT**

Abdi Mohamed Ali

3. **SITE**

Mandera, Kenya

4. **DECISION**


The committee has considered the research protocol in accordance with the Kenya University Research Policy (section 7.2.1.3) and the Kenya University Ethics Review Committee Guidelines and **APPROVED that the research may proceed for a period of ONE year from 11<sup>th</sup> June, 2019.**

5. ADVICE/CONDITIONS

- i. Progress reports are submitted to the KU-ERC every six months and a full report is submitted at the end of the study.
- ii. Serious and unexpected adverse events related to the conduct of the study are reported to this committee immediately they occur.
- iii. Notify the Kenyatta University Ethics Committee of any amendments to the protocol.
- iv. Submit an electronic copy of the protocol to KUERC.

When replying, kindly quote the application number above.

If you accept the decision reached and advice and conditions given please sign in the space provided below and return to KU-ERC a copy of the letter.



PROF. JUDITH KIMIYWE  
CHAIRMAN ETHICS REVIEW COMMITTEE








I Abdi Mohamed Ali.....accept the advice given and will fulfill the conditions therein.

Signature.....Abdi Mohamed Ali..... Dated this day of 5<sup>TH</sup> JULY..... 2019.

cc.

DVC-Research Innovation and Outreach

**A7: Authorization Letter from National Commission for Science, Technology and Innovation, NACOSTI**

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 724108	Date of Issue: 14/August/2019
<b>RESEARCH LICENSE</b>	
	
<p>This is to Certify that Mr.. Abdi Ali of Kenyatta University, has been licensed to conduct research in Mandera on the topic: Effects of Insecurity on the Socio-Economic Development of Pastoral Households in Mandera County, Kenya for the period ending : 14/August/2020.</p>	
License No: NACOSTI/P/19/785	
724108 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
<p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	

**A8: Research Authorization Letter from County Commissioner, Mandera**

**THE PRESIDENCY**



**MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT**

Telegraphic Address: "County"  
Email: [ccmandera@hotmail.com](mailto:ccmandera@hotmail.com)  
When replying please quote

The County Commissioner  
P. O. Box 77 - 70300  
**MANDERA**

Ref No: CC/MDR/RM.71/ VOL I (148)

3<sup>rd</sup> September, 2019

All the Deputy County Commissioners  
**MANDERA**

**RE: RESEARCH AUTHORISATION – ABDI ALI – LICENSE NO. NACOSTI/P/19/785**

Reference is made to the CEO National Commission for Science, Technology & Innovation's letter Ref: No. 724108 dated 14<sup>TH</sup> August, 2019 in regard to the above subject matter.

Please note that Mr. Abdi Ali has been granted authority to carry out research on "*Effects of Insecurity on the Socio- Economic Development of pastoral Households in Mandera County*" For the period ending 14<sup>th</sup> August 2020.

Kindly be informed.

A handwritten signature in blue ink, appearing to read 'Onesmus Kyatha', with a horizontal line extending to the right.

ONESMUS KYATHA  
COUNTY COMMISSIONER  
**MANDERA COUNTY**

✓/Cc  
The Director General/CEO  
National Commission for Science, Technology and Innovation  
**NAIROBI**

The County Director of Education.  
**Mandera County**

**A9: Research Authorization Letter from County Director of Education,  
Mandera**

**MINISTRY OF EDUCATION**  
STATE DEPARTMENT OF BASIC EDUCATION

Telephone: Mandera 2018/2239  
When replying please quote

REF: EDM/MCT/2.01/VOL I (123)



COUNTY DIRECTOR OF EDUCATION,  
MANDERA,  
P.O. BOX 30-70300,  
MANDERA.

DATE: 4<sup>th</sup> SEPT, 2019.

*TO WHOM IT MAY CONCERN*

**RE: Abdi Mohamed Ali**  
**NACOSTI/P/19/785.**

This is to introduce to you the above named who hails from Kenyatta University and National Commission for Science, Technology and Innovation (NACOSTI) and intending to carry out research on "**effects of insecurity on the socio-economic development of pastoral households in Mandera County, Kenya**" and have been authorized to undertake the same in Mandera county for a period ending 14<sup>th</sup> August, 2020.

Please accord Mr. Abdi assistance and co-operation to conduct the research accordingly.

Thank you.

A handwritten signature in blue ink, appearing to be 'Adow I. Adan'.

**ADOW I. ADAN**  
**FOR: COUNTY DIRECTOR OF EDUCATION**  
**MANDERA.**

**E10: Study Area**

