

UNIVERSITY OF NAIROBI

INSTITUTE OF DIPLOMACY AND INTERNATIONAL STUDIES

**THE SUSTAINABLE MANAGEMENT OF RESOURCE BASED CONFLICTS
IN AFRICA: A CASE OF LAIKIPIA COUNTY IN KENYA**

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DECLARATION

I, Maina Elizabeth Wanjiku, hereby declare that this research project is my original work and has not been presented for a degree in any other University.

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SIGNATURE.....

DATE.....

R52/8034/2019

This research project has been submitted for examination with my approval as a University Supervisor.

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DEDICATION

I dedicate this research project to all the communities in the world who have been affected by natural resources-based conflicts. May they know that peace is in existence through the right means of sharing and understanding and of being a brother's keeper.

I would also like to dedicate this project to governments, institutions and individuals who have made an effort through resource management means to assist in managing natural resource-based conflicts. Their efforts are recognized and I hope that this research helps to inform future endeavours in a dream that aims at seeing conflict by resources end through sustainable management.

ACKNOWLEDGEMENTS

“A person can succeed at almost anything for which they have unlimited enthusiasm.”
— **Charles M. Schwab,**

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ABBREVIATIONS AND ACRONYMS

CBNRM –Community Based Natural Resource Management

CBOs – Community Based Organizations

FAO – Food and Agriculture Organization

FGDs – Focused Group Discussions

GOK – Government of Kenya

HEC – Human-Wildlife Conflict

NGOs – Non Governmental Organizations

NRM – Natural Resource Management

SDGs – Sustainable Development Goals

SLM – Sustainable Land Management

SPSS - Statistical Package for Social Sciences

SWGs – Sector Working Groups

U.N. – United Nations

UN DESA – United Nations Department of Economic and Social Affairs

UNSC – United Nations Security Council

USAID – United States Agency for International Development

ABSTRACT

A journey of 1000 miles begins with one step, so has been the journey towards natural resource conflict management. The conflict has however never ended; it instead keeps recurring. Why despite all efforts to manage it? This research takes us on a journey to the beautiful County of Laikipia where the beauty of natural resources is a bestowment. Forests and wild animals, herders to smallholder farmers, land in volumes, and richness in cultures but blood fills the place when these resources are wanted. The researcher tries to identify why over the years conflicts over and about these resources has been occurring, identifying some of the solutions that have been in place in an effort to try and manage these conflicts, which have worked and which have failed in an effort to try and identify the sustainable means of managing the conflicts. The study looks into the relationship between the existence of natural resources and how this existence results into conflict, further looking at the policy frameworks in place input by the government and other legal frameworks, and also strategies that have been in place and the challenges faced in the efforts to implement these foreseen solutions to practice. The journey into the natural resources based conflicts in Laikipia aims at ensuring that the methods used in managing the conflicts are as up to date to the current and existing problems, focus on the people and aim at achieving the important sustainable development goals which through a focus to the attainment help to manage various keys within countries in an effort to promote social, economic and environmental development. The study hopes to show that the reoccurrence of natural resource-based conflicts is as a result of unsustainable means in the management and hopes to provide sustainable solutions of development that can be applied and adopted where applicable whilst improving already working mechanisms to reduce and slowly end the reoccurrence of resource-based conflicts.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.0 Introduction

In a simple definition, a resource is a source or supply from which benefit is produced. Natural resources play a vital role in the sustenance of everyday life. It is essential for human survival and for the satisfaction of human desire. If in plenty or scarce and not well managed, then there is a risk and this could result in the eruption of violence. The management of natural resources has existed over the years, with various methods being put in place in an effort to mitigate and manage natural resource-based conflicts. Unfortunately, despite these efforts, similar kind of conflicts despite these efforts have reoccurred in the same areas over and over due to environmental factors and despite efforts such as natural resource projects being in place these conflicts have not decreased.

This study, therefore, aims at identifying why these conflicts keep on recurring and identifying a possible way(s) forward in an effort to decrease and sustainably manage these conflicts.

1.1 Background

The term conflict has been variously conceptualized. However, the multiplicity of definitions has always pointed at one fact: that conflict is an enduring aspect of social existence. It is believed that wherever a community of individuals is found, conflict is basically a part of their experiences. Thus, most conflicts are social in character and usually arise as human beings pursue their different survival and security needs.¹ Conflicts arise due to issues about values which are not negotiable. They arise due to the non-fulfilment of needs and values that are shared by the parties and are inherent in all human beings.² Most conflicts arise out of feelings of injustice that have been perpetrated. It has been proposed that the desire for justice has been the reason as to why people tend to be unwilling to compromise with assertions of injustice that often lead to intractable conflicts as well as an individual's sense of justice being connected

¹ R. Stagner (1967) *Psychological Aspects of International Conflicts*. London. Belmont Brooks p.16.

² Mwangiru M. (2006) *Conflict in Africa; Theory Processes and Institutions of Management*. Centre for conflict research Nairobi.

to the norms, rights, and entitlements that are thought to underlie decent human treatment.³

Conflicts over natural resources are conflicts that occur over materials that occur in nature and that are essential to human beings such as water, air, land, forests, fish, wildlife, topsoil, and minerals.⁴ Natural resources form an integral part of society and to the world all over as sources of income, industry, and identity. In developing countries there tends to be a great dependency on these resources as sources of income and livelihoods. According to a research by the Institute of Peace,⁵ half of the world's population remains directly tied to local natural resources with many rural communities depending on agriculture, fisheries, minerals and timber as the main sources of income. This dependency by states, individuals, and even communities has sometimes led to the emergence of disputes and violent conflicts. In definition, natural resource-based conflicts, in this case, refer to the disagreements or disputes that occur or arise with regard to the use, access, and the management of natural resources.⁶ United States Agency for International Development(USAID), also defines natural resource-based conflicts as situations where the allocation, management or use of natural resources result in violence, human rights abuses or even the denial to access of natural resources to an extent that significantly diminishes human welfare.⁷

In Africa, for example, civil wars in the 1990s, in Liberia, Sierra Leone, Guinea, Cote d'Ivoire, intergroup tensions in Nigeria and the Niger Delta, and in Northern Ghana, were deeply rooted in natural resources. East Africa a section made up of the republics of Rwanda, Kenya, Uganda, Burundi and Tanzania, has also had its share of conflicts over natural resources. Kenya and Uganda have had disputes over Migingo Island, a dispute that is overly overlooked but could easily result in a violent conflict between the residents from both countries over space and fish within the two countries.

³ Kariuki Muigua (2014) Natural Resources and Conflict management in East Africa Pp.6 A paper presented at the 1st natural conflict management group East African ADR Summit. Pp. 25

⁴ Bannon, Ian and Paul Collier (2003) Natural Resources and Violent Conflict: Options and Actions. Washington D.C.: World Bank.

⁵ United States Institute of Peace (2007) 'Natural Resources, Conflict, and Conflict Resolution: A Study Guide Series on Peace and Conflict.' Washington D.C. 20036

⁶ Food and Agricultural Organization, Conflict and Natural Resource Management'. PP.1 <http://www.fao.org/forestry/21572-0d9d4b43a56ac49880557f4ebaa3534e3.pdf> Accessed on 29-03-2019

⁷ United States Agency for International Development(USAID), 'Conflict over Natural Resources at the community level in Nepal Including its Relation to Armed Conflict (2006) https://pdf.usaid.gov/pdf_docs/PNADF990.pdf Accessed 29-03-2019

Currently, the structures within are more of non-violent which over time could exacerbate to conflict due to resource scarcity especially with the emerging climatic changes and space due to population pressures.

Laikipia County is one of the 47 counties in the Republic of Kenya in the Central Rift Valley region. It is listed in the first schedule of the Kenya Constitution 2010 as county number 031. The gazetted county headquarters is Rumuruti Town but has been hosted in Nanyuki Town since the inception of devolution in 2013. Laikipia is cosmopolitan with about 23 communities comprising of Maasai, Samburu, Rendile, Somali, Pokots, Kalenjins, Meru, Kikuyu, and Turkana among others. “Laikipia” is a Maasai word equivalent to trees plain reflecting the large highland plateau. The county is largely rural in the settlement with the main economic activities being crop farming, livestock rearing, tourism, retail and wholesale trade. The county is a member of the Mt. Kenya and Aberdares Counties Economic Bloc, Amaya Triangle Initiative and Frontier Counties Development Council. Laikipia borders Samburu County to the North, Isiolo County to the North East, Meru County to the East, Nyeri County to the South East, Nyandarua County to the South, Nakuru County to the South West and Baringo County to the West. It covers an area of 9,462 km² and ranks as the 15th largest county in the country by land size.⁸

In Laikipia County in Kenya, there are a series of conflicts that erupt both violent and non-violent over natural resources. Most of these conflicts are over the resources of land, water, forests and human-wildlife relations.⁹ Natural resource-based conflicts have therefore been in existence for years with the conflicts being of two types; those that encompass situations where armed conflict is financed or sustained through the sale of natural resources like in the 1990s in Africa such as in Angola and Sierra Leone and so is the case in Somalia by the Al-Shabaab terror group through the sale charcoal trade and those that result from competition over resources among various groups.

With a special focus on the latter, natural resource-based conflict management has been happening for years, through various methods with diplomacy; negation and

⁸ Republic of Kenya (2018) Laikipia County Integrated Development Plan 2018-2022. Available at: <https://laikipia.go.ke/assets/file/7518c091-second-county-integrated-development.pdf>
Accessed 23/04/2019

⁹ Waithaka M. Thomas (2010) ‘An Assessment of the Impact of Land Use Changes on Human-Elephant Conflict in Laikipia West District, Kenya.

mediation being on the forefront especially when the relations and borders of states are at stake. Official and non-official diplomacy has been applied in both cases with interest by donors, governments, international and non-governmental organizations that are involved in conflict and conflict management in natural resources emerging with projects that are much focused on areas of international development with an aim to sustainably manage and end natural resources-based conflicts. The areas of focus have been on peacebuilding, poverty reduction and biodiversity conservation.¹⁰ In Laikipia, many projects have been established with an aim to manage natural resource-based conflicts in the area as the County resources plentiful. However, conflicts have over the years over natural resources been recurrent despite these projects having been put in place. With a special focus on the implications these projects have had, this research aims at establishing why despite these many projects whose aim should have been to manage and reduce these conflicts have had on natural resource-based conflicts with a focus on their sustainability and community ownership.

1.2 Statement of the Research Problem

Over the years, the strategies used in resolving conflicts have gradually changed from the use of mediation and negotiation models solely. Gradually, conflict managers have moved into ways that help to promote and achieve, peacebuilding, poverty reduction and biodiversity conservation; areas that have also received large support through the involvement of donors, governments and NGOs. This change has led to the establishment of projects and programs through which when implemented, will help to not just to put to an end existing conflicts, but instead end both violent and non-violent conflicts, by addressing the key root issues that may have resulted or that could lead to the emergence of the conflict.

The sustainability of these projects or programs is, however, a gap as if these projects are impactful in a long term way then natural resource-based conflicts should reduce. When put in place, these initiatives are aimed at addressing or solving the issues within the communities within which they are implemented, however over time, these project dwindle and the end goal and objective is not achieved resulting in re-emergence

¹⁰ Warner Michael, (2000) 'Conflict Management, in community based natural resource projects: Experiences from Fiji and Papua Guinea. 'Overseas development institute Portland House. Stag Place London SW1E5DP UK.

of both violent and non-violent conflicts which end up affecting the communities and in general the state.

It is now that natural resource management strategies that are put in place stop being just reactive like the official ways of diplomacy and instead are planned and implemented in sustainable ways that will lead to community ownership of projects and thus sustainable ways of ending natural resource-based conflicts. This research, therefore, hopes to investigate and identify what have been the implications of resource management on resource-based conflicts inform this problem giving possible solutions with sustainability as an end to a means.

1.3 Research Questions

1. What is the relationship between natural resource management and conflict?
2. What are some of the existing policy frameworks on the management of resource-based conflicts in Laikipia County?
3. What are some of the strategies that have been put in place in Laikipia County, and the challenges being experienced in an effort to mitigate natural resource-based conflicts?

1.4 Objectives

1.4.1 Main objective

1. To examine the nexus between natural resource management and conflict in Kenya: A case of Laikipia county.

1.4.2 Specific Objectives

2. To examine the existing policy frameworks in the management of resource-based conflicts by various stakeholders in Laikipia County.
3. To investigate the strategies being applied and the challenges being faced in Laikipia County in an effort to mitigate resource-based conflicts.

1.5 Literature Review

The Literature review is based on two aspects; Theoretical literature review that links this research to two theories and the empirical literature review.

1.6 Theoretical Literature Review

The theoretical literature review was necessary for this study as it has been used to examine the key debates on resource-based conflicts. This study considers resource scarcity and human needs theories.

1.6.1 Resource Scarcity Theory

This study is founded on the theoretical model of natural resource scarcity. This model is aligned to Thomas Homer-Dixon model of Environmental Scarcities and Violent Conflict.¹¹ In this model, Homer opines that there is a relationship between the scarcity of natural resources and the outbreak of conflict. He further argues that the scarcity of renewable resources will increase sharply in the next few decades due to the rise in world population. Future generations will witness a drop in high-quality agriculturally viable land, forest cover, widespread depletion and degradation of aquifers, rivers, and other water resources; the decline of many fisheries; and perhaps significant climate change.¹²

The term natural resource scarcity encompasses all the three main sources of the scarcity of renewable resources. The three main agents of this scarcity are human-induced environmental change, population growth and structural inequality in resource distribution. Population growth as a causative factor of resource scarcity reduces a person's per-capita availability by dividing it among more and more people.¹³ The structural inequality of resource distribution concentrates a resource in the hands of a few people and subjects the rest to greater scarcity.

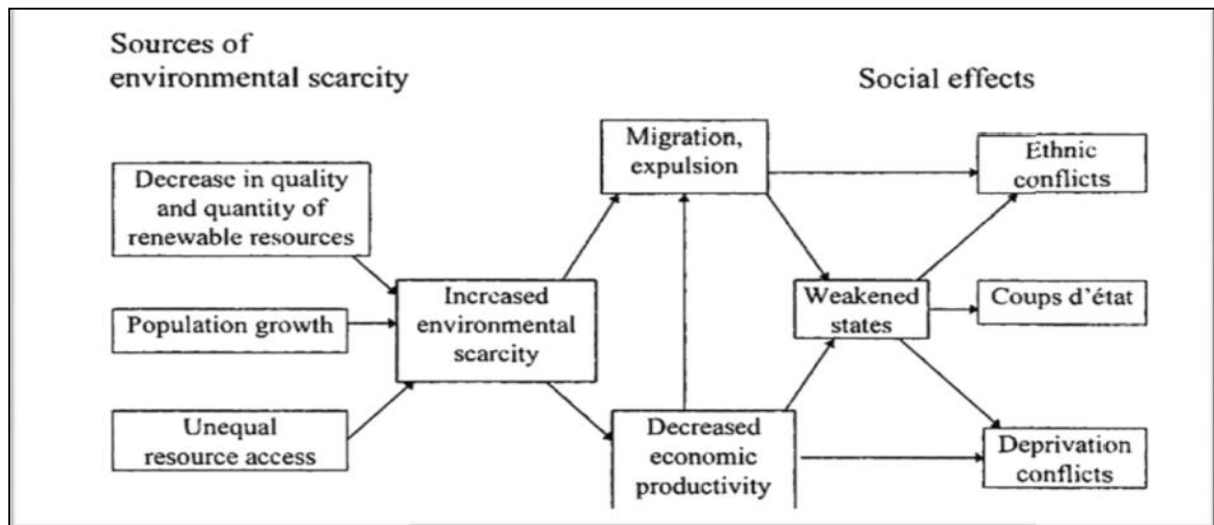
The world is already witnessing violent conflict that is induced by the scarcity of natural resources and it has been predicted that the coming decades will see a surge in this type of violence that is induced by the scarcity of natural resources. The Homer-Dixon theoretical put forward three key hypotheses that predict how the scarcity of natural resources will catalyze violent conflicts. First, he hypothesizes that decreasing supplies of physically controllable environmental resources such as clean water and good agricultural land would provoke inter- or intra-state scarcity conflicts or resource wars. Second, large populations' movements caused by environmental stress would induce group-identity conflicts, especially ethnic clashes. Third, severe environmental scarcity would simultaneously increase economic deprivation and disrupt key social institutions.

¹¹ Thomas Homer-Dixon, *Environmental Scarcities and Violent Conflict: Evidence from Cases*, Journal of International Security Volume 19, No. 1; Page 5-40

¹² Thomas Homer-Dixon, *Environmental Scarcities and Violent Conflict: Evidence from Cases*, Journal of International Security Volume 19, No. 1; Page 5-40

¹³ Peter Gleick, *Effects of Population Growth on Water Scarcity*, Journal of International Security, Volume 18, No.1 1993. PP 101.

Figure 1: Sources of Environmental Scarcity



Source: Homer Dixon (1994)

Resource scarcity theories propose that there are three tenets that govern how scarcity induces violence. First, reduction in the quantity or quality of a resource shrinks the resource pie. Secondly, population growth divides the pie into smaller slices for each individual, and thirdly, unequal resource distribution means that some groups in society will get disproportionately larger pieces of the pie at the expense of another group.¹⁴

In Laikipia County, resource scarcity, especially with the factors of population increase and climate change, has been greatly experienced and thus an increase in conflicts as a result of these. Stakeholders have put in place solutions through the establishment of projects that promote peacebuilding, poverty reduction and biodiversity conservation in aim to end these conflicts. These solutions are meant to increase the renewable resources, ensure equal share of these resources or manage the little that is available through mediation and negotiation agreements. The sources of environmental conflict as described by Homer Dixon¹⁵ are some of the major reasons causing conflicts in Laikipia over natural resources.

1.6.2 Human Needs Theory

Originally by Maslow and later reviewed by John Burton, the Human needs theory is based on the idea that there are certain essentials necessary for survival. They

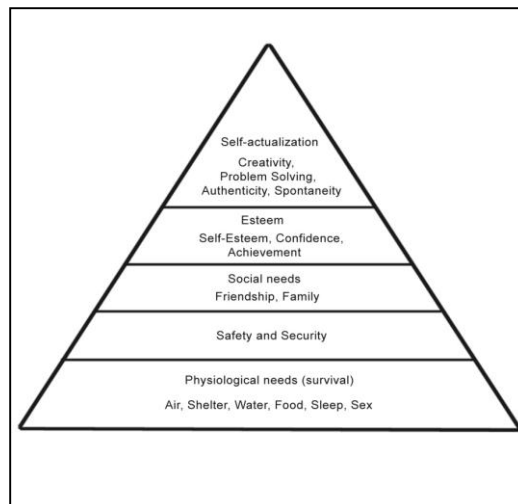
¹⁴ Thomas Homer-Dixon, *Environmental Scarcities and Violent Conflict: Evidence from Cases*, Journal of International Security Volume 19, No. 1; Page 5-40

¹⁵ Ibid''

are not simply food, water, and shelter. These essentials include both physical and non-physical elements, importantly they also include those things humans are instinctively driven to attain. While there is no agreed list of these needs they include: Safety/Security, Belongingness/Love, Self-esteem, Personal fulfilment, Identity, Cultural security, Freedom, Distributive justice, and Participation.¹⁶

Different scholars have focused on different elements of this list, and some such as Maslow have argued that they can be organized into a hierarchy,¹⁷ while others, such as Burton, who was at the forefront on applying this theory to social and political conflicts, have argued that human needs cannot be ordered in such a way. The interconnected needs for identity recognition and security, in particular, have been the focus of many examinations.

Figure 2: The Hierarchy of Needs by Abraham Maslow



Source: Maslow's Hierarchy of Needs (2003)

According to the Maslow's hierarchy, bottom-most needs; lack of these key needs can lead to the emergence of conflicts. In Laikipia, most of these basic needs are derived from natural resources and thus the need for this theory to explain natural resource-based conflicts. Any inherent threat to the basic needs leads to fear of the second class of needs that are fear of lack of safety and security and thus structures emerge that result in conflict.

¹⁶ Marker, S. (2003) 'Unmet Human Needs', Beyond Intractability. (Eds.) Guy Burgess and Heidi Burgess. Boulder: Conflict Information Consortium, University of Colorado.

¹⁷ Rothman, J. (1997) Resolving Identity-Based Conflict in Nations, Organizations, and Communities (San Francisco: Jossey-Bass Publishers).

Laikipia County is resource-rich, however over the years, with population increase, environmental changes and climate change, resources have become depleted and others minimal. Challenge is that most of the renewable resources are not being replenished as much as they are being put to use. These, therefore, leads to competition for the scarce resources that are available and thus violence, as all parties try to access the resources. The basic needs of food, shelter, water and food from which most of the communities within Laikipia communities depend on have become scarce and thus competitive items. As Homer Dixon argues, lack of access to these needs can lead to the emergence of conflict¹⁸ which is the case, for Laikipia. This lack of access to and also the lack of provision of these needs which have become scarce in the end results in violent conflict.

1.7 Empirical Literature Review

This section reviews literature around the three objectives:

1.7.1 The Relationship between Natural Resource Management and Conflict

The link between natural resources and conflict is probably as old as human settlement. Empires and kingdoms throughout history are known to have risen or fallen because of their victories or defeats in wars that were heavily laden with natural resource considerations.¹⁹ History is also replete with examples of friendships and alliances forged by empires and kingdoms to defend access to, and control of, essential natural resources while efforts have also been made to appease those who might block access to sources of vital natural resources.

This portrays the importance of natural resources to politics, diplomacy, and intergroup relations. The formation of modern nation-states, however, introduced more complex dimensions into the nature of resource politics, with issues such as disagreements over newly drawn geographical boundaries, protests over the forceful incorporation of hitherto autonomous units into new nation-state structures, creation of new national identities, and a number of other considerations, all becoming crucial factors that consequently changed the nature of the conflicts surrounding natural resources.

¹⁸ Ibid''

¹⁹ Abiodun Alao (2007) *Natural Resources and Conflict in Africa: The Tragedy of Endowment*. University of Rochester Press 668 Mt. Hope Avenue, Rochester, NY 14620, USA pp.1

These complications are more profound in the states formed during the second half of the twentieth century. The efforts to build internal cohesion among the disparate groups brought together to form nation-states, the consolidation of the fragile social structures inherited at independence, the greed of the elites i.e. those who took over the political leadership of these countries at independence, and the desire to ensure the state's survival in a world that had become dangerously competitive, were among the factors that combined to heighten the propensity for conflicts over natural resources in developing societies. The problems in this respect were hardly alleviated, as the majority of these new states took off during a century coloured by two global wars and an intense ideological rivalry that polarized the world. Thus, the ultimate outcome has been the catalogue of resource-related conflicts that greeted the birth and early development of many of these states.

The manifestations of resource conflicts in the last quarter of the twentieth century were particularly devastating. From oil in the Middle East and solid minerals in Africa to land in Asia and agricultural products in Latin America, conflicts over natural resources shattered hopes and tore societies apart. For Africa, the implications of some of these conflicts have been profound, sometimes underlining fundamental issues such as the collapse of state structures, massive human rights abuses, the weakening of civil society, the further depression of the economy, and the disintegration of traditional institutions. On another level, however, the conflicts reinforced the need for a deeper understanding of the dynamics of conflict, social configuration, and political processes in Africa, especially as all these are crucial to the efforts to find lasting solutions to the conflicts that have bedevilled the continent. Indeed, as of the dawn of the twentieth century, forty per cent²⁰ of the twenty-seven violent conflicts in the world were taking place on the African continent.

In Africa, natural resources can be linked to conflicts in three ways. One is where cases in natural resources constitute a direct or remote cause of conflict, secondly, there are situations in which natural resources fuel and/or sustain conflicts and finally there are instances in which resources have come into consideration in efforts to resolve conflicts.²¹ As a cause of conflict, natural resource considerations have become easily identifiable in many communal conflicts, especially over the ownership and control of

²⁰ Ibid'' pp. 2

²¹ Kariuki Muigua (2014) Natural Resources and Conflict management in East Africa Pp.6 A paper presented at the 1st natural conflict management group East African ADR Summit. Pp. 10

the land. On a wider national level, however, it is ironic that rarely have natural resources been blatantly evident as the sole cause of conflict, in spite of recent econometric and quantitative analysis suggesting the contrary. More often than not, natural resource issues form core considerations in conflicts that are attributable to other causes. Issues such as ethnicity and religion (in cases of internal conflicts) or boundary and ideological disagreements (in cases of external conflicts) are some of the subterfuges often exploited to conceal the crucial aspects of natural resource considerations. Once open conflicts commence, however, the importance of natural resource considerations becomes so obvious that even warring factions no longer make pretence about them.²²

As a factor for fueling conflicts, the role of natural resources has become one of the most controversial issues in post-Cold War Africa, especially through the increase in the number of armed groups exploiting natural resources to advance their desire for self-determination or pursue other centrifugal tendencies. While this practice is not altogether new, the increase in the number of recent cases is remarkable. From Angola and Liberia to DRC and Sierra Leone, armed groups have exploited the natural resources inside their territories to prosecute wars against their respective governments. Additionally, central governments in some countries have used natural resources to consolidate their authorities against challenges from rebel forces. Furthermore, the development of this process has also benefited from some post-Cold War security complications particularly with the proliferation of, and easy accessibility to, light weapons²³

It is the role of natural resources in prolonging conflicts that have attracted recent concerns from the international community, evidenced by the activities of the United Nations and many international nongovernmental organizations (NGOs) on the role of diamonds in Angola's and Sierra Leone's civil wars. Multinational corporations involved in the exploitation of these resources have also had to be increasingly conscious of the consequences of their involvement in those natural resources engulfed in controversies.²⁴

²² Kariuki Muigua (2016) 'Managing Natural Resource Conflicts in Kenya through Negotiation and Mediation.' Pp. 5

²³ Ibid' pp. 25

²⁴ Ibid'.

As a consideration in resolving conflicts, natural resources have come into play in two ways. First is through the inclusion of natural resource considerations in peace agreements, especially for those conflicts in which root causes are linked to the ownership and management of natural resources. The underlying rationale is the belief that inclusion of such clauses in peace agreements serves either to pacify belligerent groups or to end willful mismanagement of these resources. An example was the July 1999 Lomé Peace Agreement on Sierra Leone civil war, where the management of the country's diamond resources was put under the control of the leader of the rebel Revolutionary United Front (RUF), the late Foday Sankoh. Although this did not achieve the desired result, as was evident from the January 2000 re-eruption of violence in the country, it informs on the extent to which the importance of natural resources is appreciated in recent efforts at resolving conflicts.²⁵

The second way is through current efforts being made to frustrate rebel groups, warlords, and others from exploiting the resources under their control to prosecute wars. The hope in this exercise is that such frustration would assist in resolving conflicts. Perhaps Africa's most notable examples of this are the United Nations' embargo on diamonds in the rebel-held territories of Angola and the embargo imposed on Liberia's former President Charles Taylor for his alleged involvement in Sierra Leone's civil conflict and diamond trade. Other examples include the Kimberley Process, which aimed at halting the flow of "conflict diamonds" and had the desired result of enhancing the chances of peaceful resolution of conflicts. While these efforts are not always successful, their incorporation into the wider efforts at resolving these conflicts marks another initiative in conflict resolution.²⁶

1.7.2 The Effectiveness of existing policies on natural resource conflict management

Most of the laws governing environmental matters in Kenya mainly provide for conflict management through the national court system based on legislation and policy statements that are administered through regulatory and judicial institutions. Litigation, which is a state-sponsored approach to conflict management, does not afford the affected parties a reasonable and fair opportunity to participate in finding a lasting

²⁵ Ibid. Pp.5 -6

²⁶ William Wallis, (2003) "Kimberley Process: Africa's Conflict Diamonds: Is the UN backed Certification Scheme Failing to Bring Transparency to the Trade," *Financial Times* (London),

solution. This is because, apart from the coercive nature of the process, litigation is also subject to other procedural technicalities which may affect its effectiveness.²⁷

The Constitution also provides for the active involvement of communities in sustainable environmental and natural resources matters through seeking court's intervention. Citizens have a role of ensuring that their rights in relation to the environment are not violated, by way of litigation.²⁸ This is also captured in various statutes such as the Forest Conservation and Management Act, 2016, which provides that persons can sue for enforcement of environmental rights²⁹ and the Environmental Management and Coordination Act (EMCA), 1999,³⁰ the framework law on environmental management and conservation which provides that a court of competent jurisdiction may, in proceedings brought by any person, issue an environmental restoration order against a person who has harmed, is harming or is reasonably likely to harm the environment, amongst others.

1.7.3 Public Participation and Community Empowerment

The Constitution of Kenya places a duty on every person to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources. *The Agenda 21*³¹ under chapter 23 calls for full public participation by all social groups, including women, youth, indigenous people and local communities in policy-making and decision-making. Meaningful public participation can act to preempt conflicts in environmental matters since all the important stakeholders get to own up the decisions made. Various laws and policies should be designed in ways that protect the environment from degradation, and also ensures meaningful participation of communities in such measures, first through decision-making, and then encouraging active participation, whether through incentives or otherwise. A bottom-top approach to natural resource management, including conflict management, creates an opportunity to involve the local people who may have insiders' grasp of the issues at hand and thus positively contribute to addressing them satisfactorily. There is a need for empowerment of communities which helps people gain control over their own lives, through fostering power (that is, the capacity to implement) in people, for use in their

²⁷ Ojwang, J.B., (2007) "The Role of the Judiciary in Promoting Environmental Compliance and Sustainable Development," 1 Kenya Law Review Journal pp. 19-29,

²⁸ The Constitution of Kenya, (2010) Government Printer, Nairobi.

²⁹ The Laws of Kenya (2006) 'The Forest Conservation and Management' Act No.34.

³⁰ Environmental Management and Coordination Act (1999) See Sec. 111(1).

³¹ United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992.

own lives, their communities, and in their society, by acting on issues that they define as important.³²

Empowerment promotes participation of people, organizations, and communities towards the goals of increased individual and community control, political efficacy, improved quality of community life, and social justice³³ Thus, through empowerment, poor people get the assets and capabilities to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives.³⁴ The basic aspects of empowerment that are considered important especially in the context of this discussion include participation, control and critical awareness, where participation is the individual's actions that contribute to community contexts and processes.³⁵

Kenyan local communities and in this case Laikipia citizenry should, therefore, be empowered to participate more productively in social, political and economic decision-making processes, especially in the areas of natural resources and environmental management, conflicts management and participation in general governance matters. These have a direct impact on the quality of the social, economic and cultural life of the local people and it is, therefore, important to involve them.

1.7.4 Concerted Peacebuilding Efforts

Promotion and implementation of peacebuilding efforts in environmental governance matters as an element of sustainable development cannot meaningfully be achieved without the concerted efforts from all stakeholders. The Sustainable Development Goals (SDGs) recognize this connection and provide that sustainable development cannot be realized without peace and security, and peace and security will be at risk without sustainable development.³⁶ The non-Governmental organizations, academia, government institutions and community leaders directly concerned in peacebuilding efforts can collaborate in creating awareness and coming up with creative ways to manage environmental conflicts for peace and sustainable development. Religious organizations

³² Page, N. and Czuba, C.E.,(1990) "Empowerment: What Is It?" *Journal of Extension*, Volume 37, Number 5, Commentary, 5COM1.

³³ Wallerstein, N., "Powerlessness, empowerment and health: Implications for health promotion programs." *American Journal of Health Promotion*, 6(3), 197-205

³⁴ World Bank, *Chapter 2. What Is Empowerment?* p.11. Available at <http://siteresources.worldbank.org/INTEMPowerment/Resources/486312-1095094954594/draft2.pdf> [Accessed on 19/04/2019].

³⁵ Zimmerman, M.A., (2000) "Empowerment Theory: Psychological, Organizational and Community Levels of Analysis," *Handbook on Community Psychology*, New York: Plenum Press, 2000. p.52.

³⁶ United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, A/RES/70/1, para.35.

can also come in to facilitate the actual processes of conflict management and also foster awareness creation efforts. In Kenya, where these conflicts are clan-based or community-based, courts offer little help in terms of achieving lasting peace due to the settlement nature of the outcome.³⁷

The need to involve everyone is affirmed in the Constitution which provides that every person has a duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.³⁸

1.7.5 The Sustainable Development Goals (SDGs) and Conflict Management

The Sustainable Development Goals (SDGs), also known as the global goals are the blueprint to achieving a better and more sustainable future for all. They address the global challenges the world faces, including those related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice.³⁹ Development cannot be achieved without peace. Globally, between one and a half and two billion people live in countries that are affected by conflict, violence and fragility. These countries face the greatest share of the global development deficit. Conflicts, in fact, reduce a country's gross domestic product (GDP) growth by two percentage points per year, on average.⁴⁰

The United Nations therefore through the United Nations Security Council emphasizes on the concept of “sustaining peace” as a goal and a process to building a common vision of and for society, ensuring that the needs of all segments of the population are considered. Any conflict management strategy that today does not focus on, and emphasize on the SDGs, in efforts to try and attain peace or manage conflicts is due to fail or as is the case in Laikipia keep having the reoccurrence of conflicts.

Sustaining peace is more difficult than attaining peace, and therefore scholars and researchers stress that the most successful prevention strategies are endogenous and local undertaken by local and national actors through internal political processes. To promote conflict prevention, it is especially critical to foster collective approaches to risk assessment and management and build local capacities and commitment to collectively understand and

³⁷ Mwangiri M. (2006) Conflict in Africa; Theory Processes and Institutions of Management. Centre for conflict research Nairobi.

³⁸ Constitution of Kenya 2010, Art. 69(2).

³⁹ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

⁴⁰ World Bank <https://www.worldbank.org/en/topic/fragilityconflictviolence/overview>

closely monitor the conditions that could contribute to fragility. It is also important to clarify responsibilities for managing risks amongst stakeholders. This prevention-based approach includes assessing how risks could affect the implementation of sustainable development programs, the protection of sustainable development gains and the promotion of resilience.⁴¹

Conflicts are transformational, and in conflict management, its sustenance is important and thus use of strategies that help to achieve continuity and end reoccurrence would be very important. Interconnecting SDGs as a focus area in an objective to manage natural resource-based conflicts would be a successful journey in the road towards sustainable natural resource-based conflict management.

1.8 Summary of the gaps in the Literature

A lot of research and study has been looked into with regard to natural resources and conflict, and these studies have clearly brought out the linkage between the two. Policies and frameworks have also been put in place to try and address this issue, policies that have been improved over the years with changing times. Different strategies of conflict management have been applied; official and non-official diplomacy, projects by CBOs, on ways to promote peace, environmental conservation effort projects and many more. Unfortunately, these conflicts have been recurrent over the years despite these efforts. Sometimes the issues are politicized and thus the reemergence, however with sustainable and proper ownership of the projects and strategies that are being put in place then the natural resource-based conflicts should decrease and become a bit easier to mitigate when they emerge helping to reduce conflicts promoting negative peace and reduce reoccurrence. this study, therefore, aims at addressing this gap in the sustainability on the management of resource-based conflicts by adding on to the little available literature that is there on the relation of attaining the SDGs in an effort to promote sustainable conflict management in Laikipia County.

1.9 Justification of the Study

This study can be justified on three major levels; academic, public and policy justifications

⁴¹ UN DESA (2018) World Public Sector Report: Integrated approaches for migration, health, and in post conflict contexts. <https://www.un.org/development/desa/publications/world-public-sector-report-2018.html> accessed on 17th August,2019

1.9.1 Academic Justification

Change is good, and over the years, there have been changes in the way conflict management happens. Natural resources as discussed can be a blessing and also a curse and it therefore important that resource management is well implemented, followed up and even measured to ensure success and continuity. As the world looks into sustainable goals and achieving them how can this apply to conflict management and specifically natural resource-based conflicts.

This study is therefore justifiable as it aims at looking at what has and is existing, look into the gaps and academically provides input on ways to improve and better natural resource conflict management through sustainable means. It hopes to inform both the academic and policy aspects of Natural resource-based conflicts and their management and steer them towards sustainable peace.

1.9.2 Policy Justification

This research hopes to inform existing policies to improve existing policies that focus on the management of natural resources and also conflict related to natural resources and other related factors. It hopes to inform policy by looking at existing policies and the gaps that may be existing within them resulting in the reoccurrence of resource conflicts.

1.9.3 Public Justification

The public is important in any policy, or decision that is made as eventually, the implementation tends to affect them. This research aims to inform and also educate the public on natural resource management, and how to reduce reoccurrence through their right to participation.

1.10 Theoretical Framework

“Within the next fifty years, the planet’s human population will probably pass nine billion, and global economic output may quintuple. Largely, as a result, scarcities of renewable resources will increase sharply. The total area of high-quality agricultural land will drop, as will the extent of forests and the number of species they sustain. Comin generations will also see the widespread depletion and degradation of aquifers, rivers and other water resources; the decline of many fisheries, and other perhaps significant climate

change. If such scarcities become severe they could precipitate violent, civil, or even international conflicts.’’⁴²

The resource scarcity theory is founded on the theoretical model of natural resource scarcity. This model is aligned with Thomas Homer Dixon’s model of environmental scarcities and violent conflict. In this model, Homer opines that there is a relationship between the scarcity of natural resources and the outbreak of conflict.⁴³

The term natural resource scarcity encompasses all the three main sources of the scarcity of renewable resources. The three main agents of this scarcity are human-induced environmental change, population growth and structural inequality in resource distribution. Population growth as a causative factor of resource scarcity reduces a person’s per-capita availability by dividing it among more and more people.⁴⁴ The structural inequality of resource distribution concentrates a resource in the hands of a few people and subjects the rest to greater scarcity. The world is already witnessing violent conflict that is induced by the scarcity of natural resources and it has been predicted that the coming decades will see a surge in this type of violence that is induced by the scarcity of natural resources.

The Homer-Dixon theoretical put forward three key hypotheses that predict how the scarcity of natural resources will catalyze violent conflicts. First, he hypothesizes that decreasing supplies of physically controllable environmental resources such as clean water and good agricultural land would provoke inter- or intra-state scarcity conflicts or resource wars. Second, large populations’ movements caused by environmental stress would induce group-identity conflicts, especially ethnic clashes. Third, severe environmental scarcity would simultaneously increase economic deprivation and disrupt key social institutions.

Resource scarcity theories propose that there are three tenets that govern how scarcity induces violence. First, reduction in the quantity or quality of a resource shrinks the resource pie. Secondly, population growth divides the pie into smaller slices for each

⁴² Thomas F. Homer Dixon (1991) “On the Threshold: Environmental Changes As Causes of Acute Conflict.” *International Security*, Vol. 16, No. 2 pp. 76 - 116

⁴³ Thomas Homer Dixon (1999) *Environmental Scarcities and Violent Conflict: Evidence from Cases*, *Journal of International Security*. Volume 19, No. 1 pp. 5 – 40

⁴⁴ Peter Gleick, (1993) *Effects of Population Growth on Water Scarcity*, *Journal of International Security*, Volume 18, No.1 Page 101

individual, and thirdly, unequal resource distribution means that some groups in society will get disproportionately larger pieces of the pie at the expense of another group.⁴⁵

In Laikipia County, resource scarcity due to factors such as increased populations, environmental changes such as climate change which have resulted to decreased water levels, depletion of forests for farming areas and search for wood for charcoal, and poor climatic conditions for farming and pastoralism have resulted to all depending on the little that is available. This has therefore led to the invasion of Cattle ranches, fight for available water resources, and other basic resources. These conflicts have transformed into violent conflicts that have led to deaths, resulted in IDPs and political, social and economic imbalances within the region. The resource scarcity theory by Homer Dixon Clearly brings out and explains the situation in Laikipia County giving a way forward on the need to protect these resources as argued by Dixon on the need to protect the non-renewable and replenish the renewable resources, in his prediction on the emergence of violent conflicts over resources in the world bringing out the clear need for sustainable and not reactive solutions.

1.11 Hypothesis

This study shall test the following hypothesis:

H₁: The existence, scarcity, and mismanagement of natural resources within a people results in the occurrence and reoccurrence of resource-based conflicts.

H₋: The strategies that have been currently adopted within Laikipia County in an effort to manage natural resource-based conflict do not promote sustainable resource-based conflict management.

H₀: There are existing policy frameworks in the management of resource-based conflicts in Laikipia County.

1.12 Scope and Limitation of the Study

This research focused on the Laikipia region solely and the target group was those who have engaged or been part of conflict due to the scarcity of natural resources. The findings of this research may not fully bring out the full picture because of dishonesty may have existed because all measures are self-report and pressure may have existed

⁴⁵ Ibid'pp. 5-40

for the people to respond in a certain way; the sample may not be a representative of the whole population. The outcome of this research may, however, be replicated in other areas where natural resource conflicts have been experienced. Time limitation may also be a challenge in an effort to carry out the data collection as the area of coverage is quite large with limitations on financing.

1.13 Research Design and Methodology

This section contains the research design, the study area, the study population, the sampling techniques, the data collection tools, the data sources, the data analysis methods and the ethical considerations.

1.13.1 Research Design

A research design is a systematic plan to study a scientific problem. It is the framework that is created to seek answers to research questions.⁴⁶ The study adopted both descriptive and explanatory research design on a mixed methodology approach employing both qualitative and quantitative methods of data collection and analysis. The descriptive design aimed at provoking the ‘why’ question for the explanatory research⁴⁷ by bringing out the facts on the increasing phenomenon through descriptive research. This method allowed the researcher to separately analyze both the qualitative and quantitative data and later combine the data for interpretation in finding conclusions and identifying a way forward.

1.13.2 Study Area

The study was conducted in Laikipia County, Kenya. This is because, the County, is one of the resource-rich areas that have over the years had consistent conflicts over natural resources. Over the years, various conflict management strategies have been applied to end the conflicts however they are recurrent and the study will aim at identifying why and identify possible solutions.

The study localities identified were on a basis of previous natural resource conflicts that prevailed and that have been recurrent in a period of at least five years despite numerous conflict management strategies being applied within these regions. The select

⁴⁶ <https://www.nyu.edu/pages/classes/bkg/methods/005847ch1.pdf> Accessed 22/05/2019

⁴⁷ Ibid’ pp.2

sample focused on the major actors in natural resource conflict management in the County with consideration of the indicated data collection limitations.

1.13.3 Study Population

The study population for this study consisted of communities within Laikipia County; pastoralists and smallholder farmers, conservatism, government representatives, CBOs, and academicians.

1.13.4 Sampling

The sampling was done through representative sampling to be set of a population that seeks to accurately reflect the characteristics of the larger group. The study focused on populations of interest for this study where those selected were stakeholders who are and were involved in conflicts and also conflict management in the reoccurring natural resource and environmental based conflicts within the County.

1.13.5 Data Collection

Data collection was done through a mixed approach where data derived from both primary and secondary sources. This was through the study of literature, data from semi-structured questionnaires, focused groups discussions and interviews. Through Purposive and random sampling, the study covered a total of 70 respondents to the questionnaires which were distributed to communities; pastoralists, farmers, and ranch owners within the selected areas of the County especially the most affected in the conflicts reoccurrence. Also, the questionnaires were issued to elders within the communities and persons involved in conflict resolution severally through committees or arbitration and negotiation means and community barazas. Though hard to reach, due to the challenge of access to ranches questionnaires were also issued to two ranch managers, and also to police stations and hospitals to as to establish the mode of reports that are made and the extent of violence that exists when the conflicts occur.

Two focused group discussions were also held with communities involved in several conflicts in order to understand the reasons for reoccurrence and on possible ways to reduce or avoid this in the future. Interviews were also held with two NGOs engaged in peacebuilding in the County and also County representatives.

1.13.6 Data Sources

Secondary Data

Secondary data was obtained from the internet (websites), academic journals and publications (from Government ministries, international and regional natural resources management bodies) and from libraries of institutions dealing with natural resource management and conflict.

Primary Data

Primary data was obtained by using a survey research methodology where structured questionnaires will be administered to respondents within the study area. There will be five categories of respondents interviewed within the study area; pastoralists, county administrative officials, farmers, ranch owners, peacebuilding and environmental focused CBOs, and academicians in the field of conflict management.

Surveys for each of the areas were conducted with the assistance of five research assistants with the questionnaire having a mix of one and multiple part responses.

1.13.7 Data Analysis

Data gathered was subjected to analysis. Primary data collected through the use of questionnaires will be entered into a Statistical Package for Social Sciences (SPSS) spreadsheet for analysis. The spreadsheet findings will be presented using frequency distribution tables, bar graphs, and pie charts.

Qualitative data was analyzed by coding common themes and presenting the findings in the form of generalized statements in narration form whereby those responses that carry the greatest weight regarding the issues under study will be reflected. The systematic analysis of the information will be used to enable the conclusion and the recommendations.

1.13.8 Ethical Considerations

Whilst conducting this research, the researcher on their part respected the ethical considerations. The researcher was open-minded and shared information and ideas freely without fear or intimidation yet observing the need to protect intellectual property, avoid

any form of fabrication, and avoid plagiarized work and recognize borrowed work by acknowledging the source of data.⁴⁸

While conducting her data collection, the researcher respected the research ethics by ensuring that the research did not infringe on the rights and safety of the interviewees and respondents,⁴⁹ ensuring anonymity, confidentiality and privacy of the respondents, ensure beneficence through explaining the purpose of the study and the possible benefits that could accrue from it⁵⁰ without exaggerating or understating and not force persons to participate but to instead voluntarily be a part of the research.

1.14 Chapter Outline

This research represents a study of Natural resource management as a source of conflict.

Chapter one introduces the study by giving a brief background and the statement of the problem. This is followed by a comprehensive literature review that is founded on the research objectives.

Chapter two examines the nexus between natural resources and conflict in Africa focusing on Laikipia as a case study.

Chapter three looks at the existing policy frameworks in the management of Resource-Based conflicts in Laikipia County.

Chapter four looks into the challenges faced in the implementation of conflict management projects in Laikipia

Chapter five will give a summary, recommendation and conclusion of the research.

⁴⁸ Mugenda A. G. (2011) *Social Science Research Methods: Theory and Practice*. ARTS Press; Nairobi

⁴⁹ Blumberg B., Cooper D.R., & Schindler P.S. (2005). *Business Research Methods*, Mc Graw Hill: Berkshire.

⁵⁰ Churchill, L.R (1995) "Beneficence". *Encyclopedia of Bio-ethics*. Simon & Shuster, Macmillan: New York.

CHAPTER TWO

THE NEXUS BETWEEN NATURAL RESOURCES AND CONFLICTS IN LAIKIPIA COUNTY IN KENYA

2.0 Introduction

This chapter analyses the relationship between conflict and natural resources in Laikipia County. The analysis is anchored on Homer Dixon's prediction on the hierarchy of needs and also focuses on the environmental changes and how they affect natural resources resulting in conflict. The Chapter will also look at a few conflicts that have occurred within Laikipia County as a result of the existence of plenty of natural resources in the county.

2.1 Human-Elephant Conflict

In many parts of Africa, large herbivores find their way into private lands, competing for forage with livestock and destroying crops. In Kenya, elephants specifically *Loxodonta Africana* pose a real threat to subsistence farmers at the interface between the elephants' range and agricultural land. Conservation and land-use strategies and policies in Kenya do not take into account the needs of the rural poor and tend to prioritize wildlife protection at the expense of the people. At the same time, however, rapid population growth has put protected areas under intense pressure through encroachment.⁵¹ HEC is a significant problem in Africa and Asia, particularly where land managed for conservation adjoins land under cultivation.

Despite declines in populations of African elephants in the twentieth century,⁵² the human-elephant conflict remains a significant problem, especially where land managed for conservation adjoins farmland.⁵³ Despite various efforts by conservancies where the elephants' habitats are based in Laikipia County to try and counter the elephant escapes to where the people, live, attacks by elephants on human farmlands still happens, where the elephants damage crops.

Human-elephant conflicts include loss of crops, damage of property and risk to life. In Laikipia, people are also killed by elephants, and crop-raiding elephants are

⁵¹ Ochieng Tobias (2008) Coping with Human Elephant conflict in Laikipia District, Kenya pp. 1
<https://www.researchgate.net/publication/259853146> Accessed 30th August 2019

⁵² Douglas-Hamilton I. (1987) 'African elephants: Population trends and their causes.' Oryx . pp. 11-24

⁵³ Thouless, C. (1994) ' Conflict between humans and elephants on private land in Northern Kenya.' Oryx 28(2) pp. 119-127

killed legally and even illegally, every year.⁵⁴ These problems are exacerbated by the expansion of settled agriculture onto rangeland and the fragmentation of areas of open savanna.

Despite efforts by conservancies, and farmland owners, such electrical fences which are quite expensive to input and maintain, traditional farm-based deterrents such as the use of watchtowers, fires, and ditches, Novel based deterrents such as chilli greased fences, fireworks, and powerful electric lights.⁵⁵ These methods have been recognized as potential means of reducing conflict by preventing access to vulnerable land or by separating people and elephants at a landscape scale.⁵⁶

In a research conducted by the University of Cambridge within Laikipia region in one of the elephant conservancies, Olpejeta Conservancy, a conservancy is located in Laikipia County, and irrigated small farming occurs on densely settled smallholder land to its east and south-west where crop-raiding by elephants on cultivated land around the conservancy occurs and is reported.⁵⁷ The conservancy has approximately 300-400 elephants and in an effort to reduce breakage into the farmlands. The method helped to reduce breakages, as illustrated in the table below, however, despite the electrical fence, the breakages kept on ongoing and thus an ongoing human-wildlife conflict.

Table 2.1: Monitoring elephant breakages into cultivated farmlands at Olpejeta conservancy in Laikipia County

Fence-station	Length (km)	Breakages Before	Breakages after
A	23	0	2
B	8	14	0
C	8	31	1
D	18	14	0
E	20	43	16
F	11	3	4
G	41	2	0
Total	129	107	23

(Source: Field Data 2019)

⁵⁴ Omondi, P., Bitok E., and Kagiri J. (2004) Managing human-elephant conflicts: The Kenya experience. *Pachyderm* pp. 39-48

⁵⁵ Sitati N. W. and Walpole M. (2006) 'Assessing farm based measure for mitigating human elephant conflict in Transmara District, Kenya.' *Oryx* 40 pp. 279-286

⁵⁶ Jenkins P.R., and P.H. Hamilton (1982) *The Laikipia elephant problem wildlife conservation and management of tourism and wildlife*, Nairobi

⁵⁷ Mulama M.S. (1990) Assessment of the crop raiding by elephant in Laikipia East Sirima location. Unpublished report. Nairobi: Laikipia Elephant project; Kenya wildlife service.

The research indicated that human-wildlife conflict exists within Laikipia County. Before the electric fences were put up, in a conservancy area of 129 kilometres, there were breakages of elephants out of the conservancy into human land. 107 breakages were recorded. After the electric fence was set up, and effort put in place to try and reduce the human-wildlife conflict, the breakages within the same kilometre area, reduced by 65% to only 23 breakages recorded within the research period. A natural resource conflict management strategy that helped to reduce conflict, which was great but despite this, the breakages by elephants past the electric fence were still recorded.

“We have had a reduction in breakages since the electric fence was put up, however with the increased changes in climate and limitations in natural phenomenon, there is a limit in water and food availability for the animals and thus they break out to try and find food and water.” Ranger Olpejeta conservancy

Emerging issues such as climate change where there are increased temperatures and long extended drought periods have affected the human-wildlife conflicts within the County. In an interview with one of the farmers who farm near the conservancy, the farmer indicated that sometimes they too move close to the conservancy area where water is available, and this competition for the limited resources is what results to the increased and repetitive human-wildlife conflicts.

“When the animals, move to our farms we fight them and they fight back. Sometimes this results in the death of either people or the animals themselves. The elephants are especially the main culprits and we fight to protect our crop. It is a sad competition. ”
Farmer Laikipia County

2.2 Scarcity of Natural Resources resulting in Conflicts in Laikipia County

There are many factors that determine the emergence, persistence and even management of conflicts; ranging from internal to relational and even contextual factors.⁵⁸ It has rightly been observed that in the majority of cases of resource conflicts, one or more of the following drivers are usually at play either, conflict over resource ownership; conflict over resource access; conflict over decision making associated with

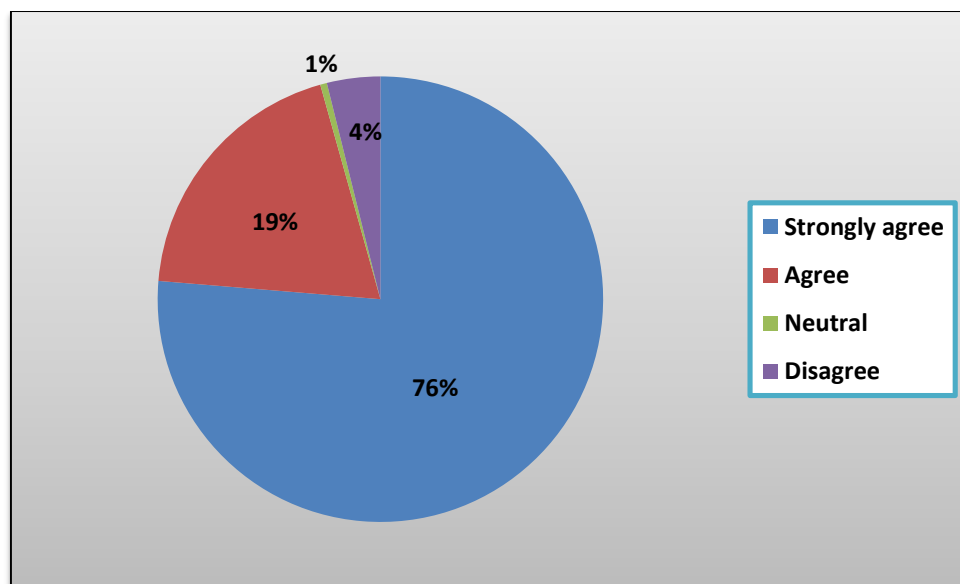
⁵⁸ Louis K. (2003) “Factors Shaping the course of intractable Conflict.” Eds. Beyond Intractability. Eds. Guy Burgess and Heidi Burgess. Conflict Research Consortium, University of Colorado, Boulder

resource management; or, and conflict over distribution of resource revenues as well as other benefits and burdens.⁵⁹

These conflict drivers have contributed to most of the natural resource conflicts in Kenya. There is, therefore, a need to sustainably identify a way(s) to address these drivers. In the Horn of Africa, environmental-related conflicts have existed for quite a while with inter-clan conflicts in Somalia since 1991 and despite the use of resources to try and resolve the conflict competition over resources and clan interests have always derailed the process.

The researcher wanted to find out how rain patterns have changed within Laikipia as water is a major scarcity resource resulting to conflicts within the County and if the inhabitants of the county agreed that these changes had had an implication in the increased reoccurrence of conflicts.

Figure 3: Impact of changing weather trends to resources in Laikipia County



Source: Field Data, 2019

Responses from the interviews conducted on indicated that 95% of the respondents agreed that changes in weather rain trends had resulted in decreased water availability thus increased water access conflicts both violent and non-violent. 5% of the respondents disagreed that changes in weather rainfall patterns had been the reason for

⁵⁹ The United Nations Department of Political Affairs and United Nations Environment Program (2005) "Natural Resources and Conflict: A Guide for Mediation Practitioners." UN DPA and UNEP p. 11.

increased water conflict reoccurrence while 1% of the respondents were unsure and neutral on the relation between the two.

2.3 Impetus factors for resource-based conflicts in Laikipia County

Today, the management of natural resources in developing countries is uncertain and a huge challenge due to the increased competition for the diminishing renewable resources which continues to increase with environmental degradation, growing populations and also climate change.⁶⁰ In 2018, over 2000 people died as a result of conflict between smallholder farmers and pastoralists in various Kenya counties; Laikipia inclusive.

2.3.1 Cattle Rustling and Banditry

Cattle rustling and Banditry is also very common amongst pastoral communities and so is the case for Laikipia County. The practice is viewed as a means to restock herd due to effects of harsh drought, expanded grazing pastures and the conventional means by men who have come of age to acquire cattle that they use to pay for bride price. The Maasai who are majorly pastoralists also believe that cattle originated from them and thus the need to raid all those in possession of livestock.⁶¹ This has resulted to attack by pastoralists on agro-pastoral communities living in areas such as Rumuruti within Laikipia County as stated by interviewees; where the attacks mainly happen at the wee hours of the night. Cattle rustling within Laikipia County is very widespread, and the acts of commercialization make it even more complicated,⁶² cattle that are rustled is then sold to other areas such as Nairobi and other major cities within Kenya.

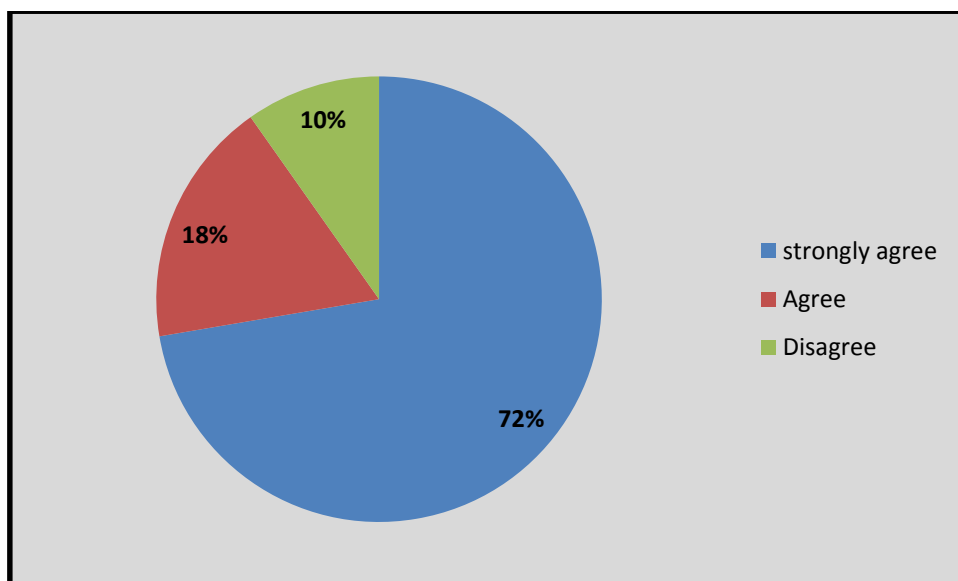
Figure 4: Cattle rustling and banditry is a crime

The researcher aimed at identifying the views of the locals with regard to cattle rustling as one of the major conflicts within the County and if they considered it a crime.

⁶⁰ Ibid. Pp. 25

⁶¹ Okapu Etyang N. (2013) The factors influencing sustainability of peace in resource-based tribal conflicts in Laikipia north district. Pp. 22

⁶² Ibid. Pp.25



Source: Field Data, 2019

Statistical data from the data collected indicated that most of the interviewees; accounting for 90% agreed to cattle rustling being a criminal activity.

Table 2.2: Cattle rustling is fueled by politics and it increases a lot during the campaign period

		Frequency	Percentage
Valid	Strongly agree	18	47%
	Agree	10	26%
	Neutral	7	18%
	Disagree	3	8%
	Total	38	100%

Source (Field Data, 2019)

Most of the respondents representing 73% of the sample reported that during political events especially campaigns, conflicts in regard to cattle increased greatly due to political events. The respondents tended to feel that politicians were the cause of the cattle increased cattle conflicts in the region. Pastoral conflicts are always an opportunity for the politicians to try and show their support for various teams in an effort to gunner their votes by controlling the wealth in the pastoral communities. And also through providing small arms to the conflicting communities through illegal unofficial means.⁶³ Interviewees also indicated that the members of the County and local leaders were the main sponsors of the resource-related conflicts especially cattle, where some even made promises of awards of items such as land and cattle to those

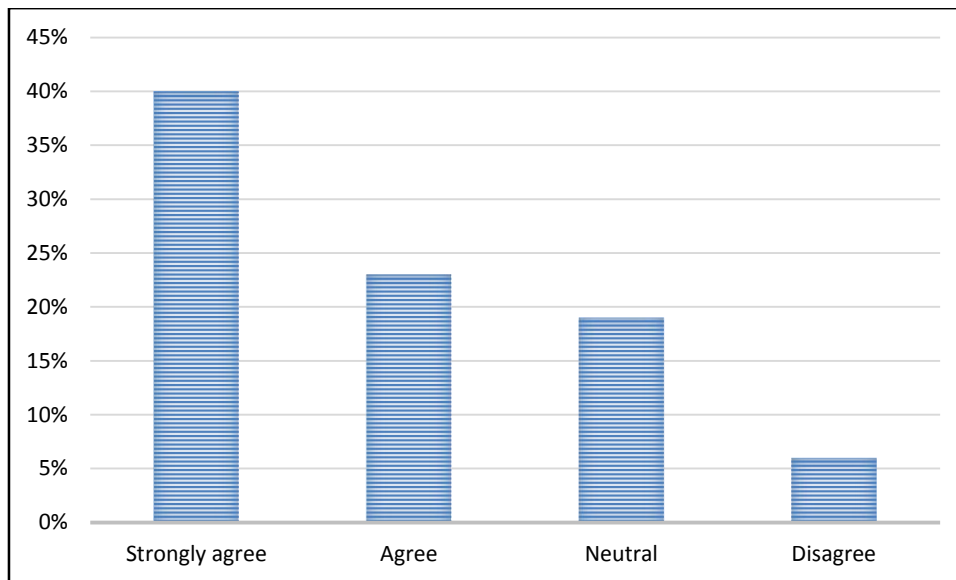
⁶³ Ibid, pp. 32

who raided neighbouring communities. As a way of raising funds for campaigns, or even to maintain political leverage over their opponents, in an effort to acquire power easily, politicians can sometimes sponsor raids.⁶⁴ Politicians can also promote conflict directly by certain propaganda⁶⁵ as a way to maintain or gain power against competitors.

2.3.2 Commercialization of Cattle rustling by wealthy cartels in Laikipia County

The researcher was interested in finding out whether the act of cattle rustling a common conflict aspect in Laikipia County, is of any economic value to the rustlers and if not who exactly the act benefitted. This was advised by the fact that respondents indicated that sometimes rustling is done as a result of a business need. The researcher, therefore, wanted to find out who exactly are the beneficiaries.

Figure 5: Cattle rustling as a business activity



Source: Field Data, 2019

From the responses, 63% of the respondents indicated that yes cattle rustling was a business-oriented venture where both pastoralists and non-pastoralists engaged in as an economic venture to provide to their families.

“Stolen cattle can be easily tracked and identified by the owners and therefore to avoid this, rustlers who engage in the activity in a non-traditional way, where the cattle are not a symbol of wealth, then sell the cattle to businessmen who then sell to

⁶⁴ Ibrahim and Jenner (1997) Wajir community based conflict management seminar paper for USAID conference on conflict resolution in the greater Horn of Africa

⁶⁵ Amisi B.K. (1997) Conflict in Rift valley and Western Kenya. *USAID conference paper on conflict in the area. Horn of Africa, June.*

slaughterhouses and either business in the big cities such as Nairobi.” Pastoralist,
Laikipia County

From the responses, it was indicative that there are individuals and groups who engage in cattle rustling as a traditional way of gathering wealth whilst others do it for business, this was mainly represented by the 19% representative of respondents who were neutral with regard to cattle rustling being a business adventure solely. The clear outcome here is that, in recent times, pastoral conflicts are more influenced by commercial rather than cultural reasons unlike it was the case before, a clear transition in the conflicts.

2.3.3 Land, a natural resource that results in the conflict in Laikipia County

Land, ownership and distribution in Laikipia County have been the cause of conflict between the pastoral communities, ranchers and smallholder farmers for many years. In 1904, the Anglo- Maasai treaty that was signed was designed to merely steal and take away the Maasai, inheritance; land through manipulation.⁶⁶ The signing of this agreement resulted in the ultimate displacement of the initial inhabitants and their needs and all their demands and request thereafter were never met. Every effort to reclaim and regain their land has always fallen onto deaf government ears, where instead the government comes in not to protect its citizens but white settlers owning large ranches in the County.⁶⁷

Land ownership and distribution in Laikipia County, has therefore been a constant cause of conflict especially between the Pastoralists and the ranchers and also the smallholder farmers. Pastoralist, want and need land to graze their cattle, on. Traditionally cattle to the pastoralists are a sign of wealth and thus a great value is indeed given to cattle thus great care and protection are given to the animals. Smallholder farmers who want to farm and produce food and white settlers owning large chunks of land where their ranches are based who want to protect their property. In Laikipia, ranchers own over 50% of the land despite their population being less than that of the local population.

⁶⁶ Kinnarf, M. F. and O'Brien, T.G. (2012) Effects of private land use, livestock and management, and human tolerance on diversity, distribution and abundance of large African mammals. *Conservation Biology*, 26(6) pp. 1026-1039

⁶⁷ Fox, G.R. (2018) Maasai Group ranches, minority land owners and the political landscape of Laikipia County Kenya. *Journal of Eastern African Studies*. 12(3) pp. 473-493

Pastoral communities in Laikipia believe that their land was taken away deceitfully; during the 1904 agreement.⁶⁸ As the major and prior inhabitants of Land in Laikipia the pastoralists need the land for their cattle. Pastoral communities believe that land is communal, and therefore, should be utilized communally. This has resulted in violent clashes between the ranch owners and pastoralists who when in search of grazing land have forced their way into ranches indicating that idle ranches should be made accessible for herding.⁶⁹

The conflict on land has not only occurred due to the need to share resources that are available especially that on grazing and farming, but the escalation of conflicts has also been attributed to underlying and continually unresolved issues on marginalization, and discrimination of exclusion of various groups politically. Communities in Africa, as so is the case in Laikipia, view land as a source of their livelihood, pride and as an asset, that is greatly attributed to their identity as a people and thus the result of these challenges on Land being faced within the County resulting to conflict and violence.

2.4 Examples of Natural Resource-Based conflicts in Laikipia County

This section will analyze some of the examples of resource conflicts that occur and that are recurrent within Laikipia County

2.4.1 Land distribution conflicts

Land-based grievances are what have triggered invasions within Laikipia County and these keep reoccurring. In 2017, which was an election year in Kenya land issues were often used in political campaigns resulting in the spillover of conflicts to neighbouring counties such as Isiolo where, conservancies were also being invaded by pastoralists, spurred on by local politicians. This is the political dynamic that was and still being seen in Laikipia resulting in conflict over the resource.⁷⁰

⁶⁸ Mutunga Vannesa (2018) Natural Resource Management Framework as a conflict management strategy in Kenya; Case of Laikipia County pp. 28

⁶⁹ Kratli S, Swift (2001)" Understanding and managing pastoral conflict in Kenya: How contemporary understandings and knowledge of pastoral conflict can guide practical work." Environment Team, IDS Sussex, UK

⁷⁰ Muriithi Mutiga (2017) Violence, Land, and the Upcoming Vote in Kenya's Laikipia Region; from early warning to early action. @Crisis Group pp. 1

<https://www.crisisgroup.org/africa/horn-africa/kenya/violence-land-and-upcoming-vote-kenyas-laikipia-region> Accessed 20th August 2019

These grievances are an easy rallying cry as many pastoralists in the area lost access to their ancestral pasture lands in the early 20th century when British imperialists forcibly removed the Maasai pastoralist community from the Rift Valley and Laikipia. What ensued created a mosaic of land tenure arrangements. The Maasai's relocation enabled European settlement and agricultural production in the favourable ecological conditions of the Rift Valley – an area which came to be known as part of the “White Highlands”. Africans were restricted to certain areas, largely based on ethnicity. When independence came, it signalled the move towards individual land rights and redistribution schemes. But these schemes were criticized for putting land into the hands of a few political elites. In Laikipia, the majority of Kenyans were settled on smallholdings in the west or remained landless. Group ranches, where a group of people collectively own freehold title to land, were set up predominantly in the north while some private ranches from the colonial period kept their land.

Conflicts over land amongst pastoralists and ranchers have also been very recurrent within Laikipia County. Ranchers want to protect their property whilst pastoralists who as stated earlier, believe in communal and sharing of land for grazing. In recent years' attacks by pastoralists into ranches has resulted in deaths of ranch owners and even pastoralists through engagement in violent conflicts and shootings. Kuki Gallman⁷¹ states that Laikipia represents a lost Eden in European settler thinking which are infused with an imagined sense of entitlement to and identification with her adopted land.

During the discussion in focused groups, respondents indicated that unfortunately the government was never supportive of the residents and was biased towards supporting the ranch owners whenever crisis arose. They felt marginalized and undervalued by their own government that they brought to power by exercising their rights to vote, and with these emotions all up and rising, then the probability of a reoccurrence of the land conflicts is due to happen which they did not deny.

⁷¹ Gitau Mbarai(2017) “ The Laikipia Crisis and the Disenfranchisement of Kenyans in the North” Elephant publishers pp. 2-3
<https://www.theelephant.info/features/2017/05/18/the-laikipia-crisis-and-the-disenfranchisement-of-kenyans-in-the-north/>

2.4.2 Displacement of pastoralists by immigrants

Economic endowment and increased empowerment are some of the significant reasons why resident communities in Laikipia County migrated from their initial places. Land buying organizations emerged with their motive being, to legitimize agriculture as the backbone of Kenya's economy.⁷² Pressure for land was already rife at the turn of the century in Central Kenya but it was not until the 1950s that huge numbers of immigrants settled in Laikipia areas of Rumuruti and Laikipia West Sub-county.⁷³ Like many other parts of Kenya, where communities acquired land and settled through land buying companies, such communities adopted ethnic names to identify emerging administrative areas corresponding to where the majority of them may have come from. Kiamariga, a sub-location in Rumuruti division of Laikipia county, originally is a name for a sub-location in Karatina, Nyeri County. Maundu ni meri, also in Sosian sub-location of Laikipia County, is a replica name originally from Nyandarua County.⁷⁴

These immigrants occupied land though through legal commercial ways that were previously community-owned and shared, introducing fences and agricultural zones that previously were non-existent. This has resulted in major tribal clashes amongst the various communities within Laikipia County, which as reported by the media are tribal but the root causes are major of land resources.

2.4.3 Human-Wildlife conflicts

Over time conservation areas or conservancies have been set up within Laikipia County. These were either former ranches that moved into wildlife management or were set up by a community. Laikipia has an abundance of wildlife and these areas act as a form of a public-private partnership with the Kenya Wildlife Service.⁷⁵ They are mandated to manage Kenya's wildlife and offer tourism opportunities which can attract premium prices. But the conservancies have created conflict with some surrounding communities. There is deep inequality within Laikipia between those who reap the benefits of wildlife and those who bear the costs.

Due to the land arrangements, many smallholders in Laikipia are situated outside the conservancies or within wildlife migratory corridors. As a result, they suffer both livestock and crop destruction. For privately-run conservancies, there are concerns that this

⁷² Ibid, pp.29

⁷³ Akiwumi, (1999)

⁷⁴ Ibid' PP.29

⁷⁵ ibid' pp 6-7

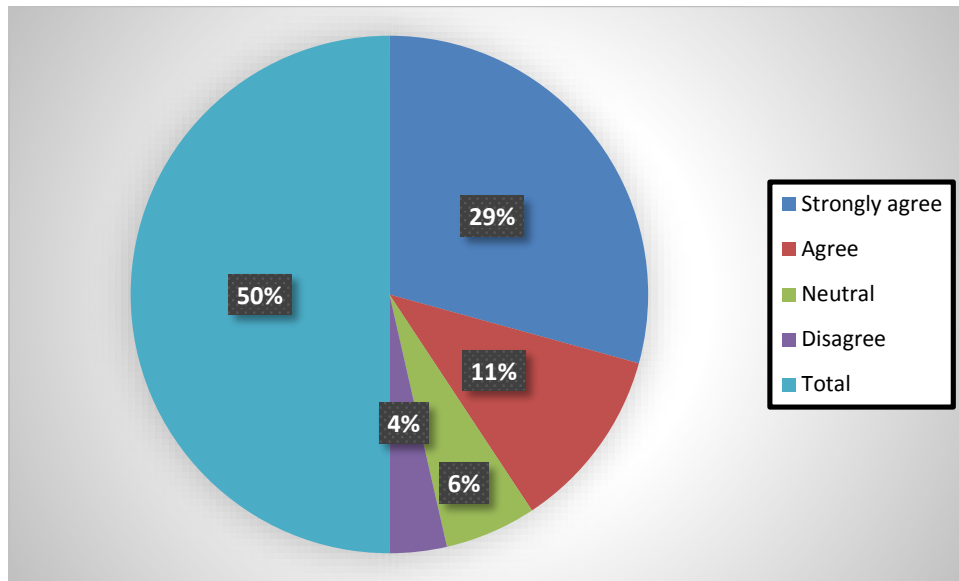
is a legitimate way to concentrate large tracts of land and valuable wildlife-related economic activities in the hands of a few individuals. Also troubling is the use of National Police Reservists by private conservancies. These scouts are private employees. But they are armed by the government through the national police reservists' initiative for the purpose of maintaining "wildlife security". The scouts are empowered to use violence to stop poaching, but also act in security matters beyond the conservancy of their employment, such as tracking raided cattle. This has the potential to escalate the conflict between private and public interests.

2.4.4 Political Dimensions that Result in Resource Conflicts

Resource-based conflicts are also overlaid with corruption particularly the misappropriation of funds that could have been used for development. Instead, they serve political interests with some benefiting financially from the raids. The raids have become a political tool for those looking for votes in exchange for water and pasture resources that one, are limited and are of great need to the communities within the County. Therefore, fueled by the proliferation of arms within pastoral communities, some politicians use their positions to incite their constituents to take up arms and lay blame for the lack of resources elsewhere. Cattle raids are therefore often perpetrated by criminal gangs with links to corrupt government or political actors, thus the continued reoccurrence of resource-based conflicts in the County.

Previous disarmament programs have sought to address the arms problem but have been criticized for the excessive use of force by police or military. They have also been criticized for leaving disarmed communities vulnerable to attack by those communities that haven't been disarmed. When politicians politicize issues on resources that affect the people then conflict is due to reoccurring which has been the case. Political influences have an impact on the way conflict occurs as indicated in the responses in figure 6 below

Figure 6: Political influences as a contributing factor to conflict reoccurrence



Source: Field Data, 2019

61% of the respondents, confirmed to political factors as great influencers of the occurrence and reemergence of resource conflicts in Laikipia County. As in the discussions above, political leaders have been known to even provide small arms to the aggressors and sometimes be part of the parties engaging in business for rustled cattle. This was reported to especially the case during campaigns, where political leaders will fund aggressors in a bid to look as the negotiator or solution ‘finder’ of the emerged resource conflicts.

2.5 Water Resource Conflicts

Water is a finite resource which is fundamental to life. It has no viable substitute. However, the latest trends show that water resources management throughout the country reflects the uncertain future of natural water supplies. Longer drought spells should mean that communities make a concerted effort in managing available water resources and, use reserves harvested during rainy seasons when rivers run low; this, unfortunately, is not the case. Laikipia County suffers from water shortages for domestic use, farming and livestock rearing due to the high incidences of droughts. The arid and semi-arid areas Laikipia County included have unpredictable climate patterns and this disrupts agricultural planning leading to reduced yields in farming and loss of livestock. The situation is further

intensified by the lack of access to credit financial services, increased the demand for food supply and low profits from farming activities.⁷⁶

In the last years since 2015-2019, reports have indicated that a majority of perennial rivers flowing in and out of Laikipia County. Ontulili, Nanyuki, Naromoru, Upper Ewaso Nyiro, Mutara, Suguroi, and Pesi rivers, were identified as some of the rivers that are drying up exceptionally fast, irrespective of whether it is a dry season or not. The river sources from Mount Kenya and Aberdares Ranges experienced reduced flow due to over-abstraction by residents in order to meet the extremely high demand for water for domestic and irrigation use.⁷⁷

A great majority of the inhabitants of the Ewaso Ng'iro Basin face severe difficulties earning a livelihood, i.e., the agro-pastoralist smallholders on the Laikipia Plateau because of their limited land resources and the difficulties of coping with the highly variable semiarid conditions and the pastoralists because of the historical loss of complementary pastures in the upper catchment. These difficulties are now severely aggravated by the heavy decrease in the low flows in the Ewaso Ng'iro Basin, and current trends indicate that problems will continue to increase in the future. Against this background, one would expect major conflicts over water resources among the different categories of water users within the highland-lowland system.

In an interview to one of the pastoralists within Laikipia, by Langat⁷⁸ in research on the increased conflicts between pastoralist and herders in Kiboya Laikipia County, he stated that one the pastoralists indicated that:

“We do not let our animals die yet there is plenty of pasture and water in ranches and people farms. Therefore, when hungry we let our cattle out of their manyattas out into the fields where pasture and water are available.” This, in turn, results in conflict with the farm and ranch owners.

Interestingly, some of the respondents seemed to be quite aware on climate change and the impact It is having on the increased water conflicts, 75% of the respondents

⁷⁶ Bahta S. (2009) Equitable Resource Management and Regional Security in the Horn of Africa: Human Security setting agenda for the Horn of Africa. Published by Africa Peace Forums Nairobi Kenya p. 160

⁷⁷ Mwangi James (2017) Cause for Concern: Laikipia's Drying Rivers. Laikipia Wildlife Forum; conservation in action. <https://laikipia.org/cause-for-concern/> Accessed 18th August 2019

⁷⁸ Langat Wesley; “ As water Falls Short, Conflict between herders and farmers sharpens.” Reuters Afritech 2015 <https://af.reuters.com/article/topNews/idAFKBNOTCOMZ20151123>

indicating that there is a dire need for climate change to be declared as a national emergency and very key actions taken in a bid to address this.

“We can already see the effects. We cannot pump water from the rivers during the day to irrigate our crops, the temperatures are unbearably high and the crop is infested by pests that previously never existed before. Water is limited and conflicts are on the rise as all these resources are limited. We are scared and do not know what to do. Unfortunately for us farmers, extension officers no longer exist to guide us. Conflicts will soon not just be about water but also food and other needs”

2.5.1 Water influences conflicts

The researcher was interested in finding out whether water influences conflict. Results are indicated in the table below

Table: 2.3: Water resource and water conflicts

	Strongly agree		Agree		Neutral		Disagree	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Volume of rainfall and the accessibility of water has caused frequent conflicts	30	50 %	15	25%	8	13.33 %	7	11.67%
Water as a scarce resource has attracted conflict from various communities	25	41.6%	28	46.6%	0	0.00 %	7	11.8%
Extraction of water upstream is detrimental to water users downstream	27	45 %	16	26.7%	10	16.7 %	7	11.6%
Rainfall patterns within Laikipia County have changed in last 5-10 years	18	30%	14	23.3%	18	30%	10	16.7%
Disturbance and crop destruction is encountered more during the dry seasons	25	41.7 %	11	18.3%	12	20.0 %	12	20.0%
Trespassing into ranches by pastoralists is mainly experienced during the dry season	16	26.7%	11	18.3%	8	13.3 %	25	41.7%

Source (Field Data 2019)

Varying rainfall patterns and thus limited access to water as indicated by 65% of the respondents has been a contributing factor to the reemergence of water-related conflicts within Laikipia County. Water scarcity has increased and weather statics have predicted that this expected to increase in the future due to other contributing factors⁷⁹ such as climate change, increased populations etc. The respondents also indicated that due to a decrease in

⁷⁹ Ibid pp. 28

water availability there has been a rise in the reemergence of water-related conflicts as they all scramble for the scarce available resource.

Laikipia county has a lot of smallholder farmers who engage in agricultural activities. 71.7% responses indicated that irrigation activities upstream usually have an effect on other farmers downstream due to limited water or no water access at all, as farmers upstream block the waters in order to carry out their activities affecting those downstream. Conflicts over land in Kenya originate in competing demands for water by individuals with the same purpose or by different users with different interests.⁸⁰ This study has collaborated that water issues are a causal effect as to why there are recurring resource conflicts within Laikipia County.

When asked if disturbances within the ranches and conservancies by human beings into and by animals out of the areas mainly occur during the dry season, 70% indicated that yes this is when disturbances occur in an effort and search for water resource to quench thirst, for food and also other activities such as framing. Elephants, therefore, break out of the conservancies despite the pout up of strong electric fences and humans move closer to the conservatives to farm if the water is available there. Pastoralists also trespass into ranches as indicated by 45% of the respondents, in a bid to search for water and grazing land. 41.7% of the respondents, however, indicated that trespasses into ranches are majorly not during the dry season but as a pass-through in their normal nomadic lifestyle.

“Land is communal, as nomads, we move about and if the ranches are along the way, we get in. Our animals must have access to water and grazing land and these lands are available and have plenty of these.”

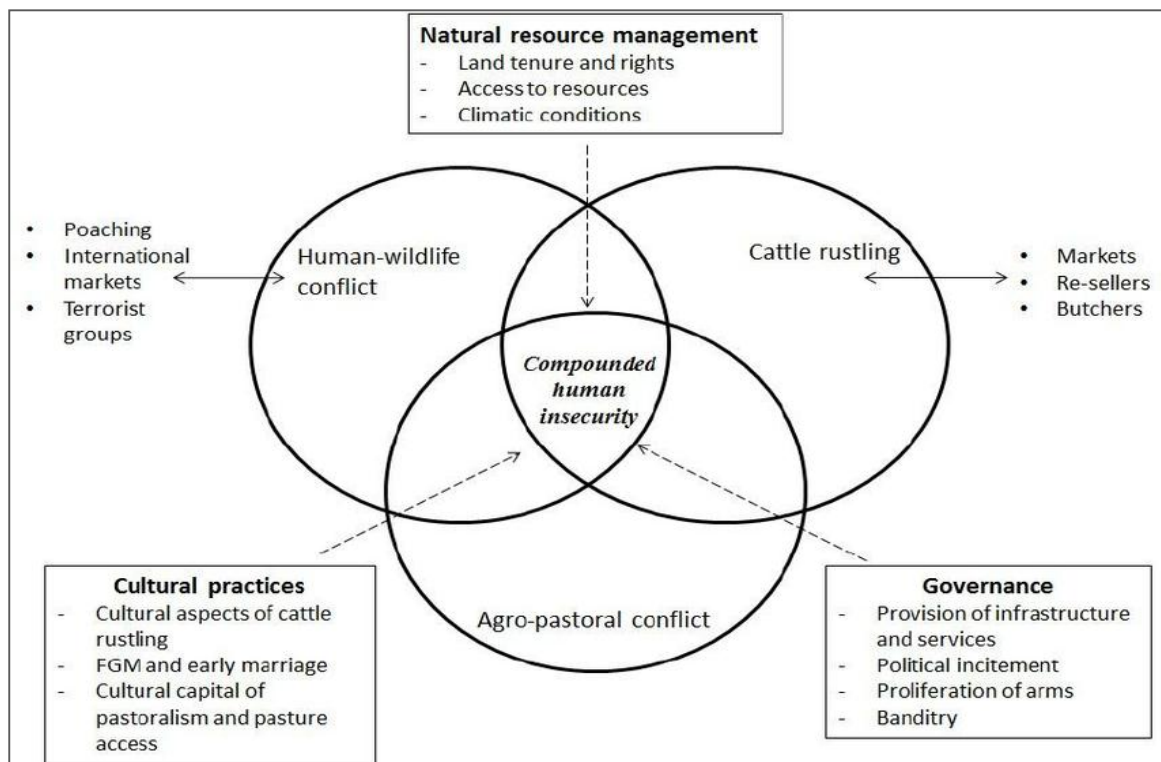
2.6 Summary of the chapter findings

The reoccurrence of resource-based conflicts within Laikipia County are clearly interlinked and nexus between natural resources and conflict is converged and interlinked. Other factors are also of influence such as climate change, which is currently key in the reoccurrence of conflicts in the world and Laikipia County too, as most of the resources are affected by changes in climate resulting to increased and reoccurring conflicts. The need for connection to development through the SDGs in an effort to promote sustaining peace will be a key solution an effort to reduce and prevent this reoccurrence.

⁸⁰ Nyaoro (1999)

The figure below indicates the connections between conflict and development at the agriculture pastoralism wildlife interface from the perspective of human security. Drawn from empirical data; qualitative and quantitative generated in Laikipia County, Kenya, and literature the figure illustrates that; the major issues which cut across each of these conflicts are related to natural resource management, cultural practices and governance, and these cross-cutting issues impinge on people’s freedoms, extending these conflicts into cases of human insecurity. Specifically, each conflict type compounds the impacts of the others on the farmer and pastoral economic, food, environmental, personal, community, health and political security.⁸¹ The Chapter highlights the interlinkage and connection between resources and conflicts including other factors that contribute to the conflicts further illustrated in figure 4 below showing the closed interlink-age between natural resources and conflict as is the case in Laikipia County

Figure 7: The connections between resource-based conflict and development



(Source: Field Data 2019)

⁸¹ Bond Jennifer (2014) Conflict, Development and Security at the Agro–Pastoral–Wildlife Nexus: A Case of Laikipia County, Kenya. Journal of development studies 50 (7)

CHAPTER THREE EXISTING POLICIES AND STRATEGIES IN THE MANAGEMENT OF RESOURCE-BASED CONFLICTS IN LAIKIPIA COUNTY

3.1 Introduction

This chapter looks into some of the already existing policies in place within Kenya and Laikipia County with regard to Natural resource conflicts management. The study will analyze existing policies, and the impacts they have had on the management of resource-based conflicts. Policy frameworks are a set of procedures or goals which might be used in negotiation, decision making to guide a more detailed set of policies or an ongoing activity.

3.2 Existing policies and strategies in the management of natural resource conflicts

Natural resource management in Kenya has over the years been influenced by a colonial legacy which mainly stressed on command and control policies; policies that have alienated local people from access to resources.⁸² The Constitution of Kenya requires the States to ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; encourage public participation in the management, protection and conservation of the environment; and utilize the environment and natural resources for the benefit of the people of Kenya⁸³ and more to this is every persons' constitutional duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.⁸⁴ The existing resources that resulted in the reoccurrence of conflicts were majorly wildlife, land, water and environmental changes.

3.2.1 Effectiveness of existing policies and strategies in addressing resource conflicts

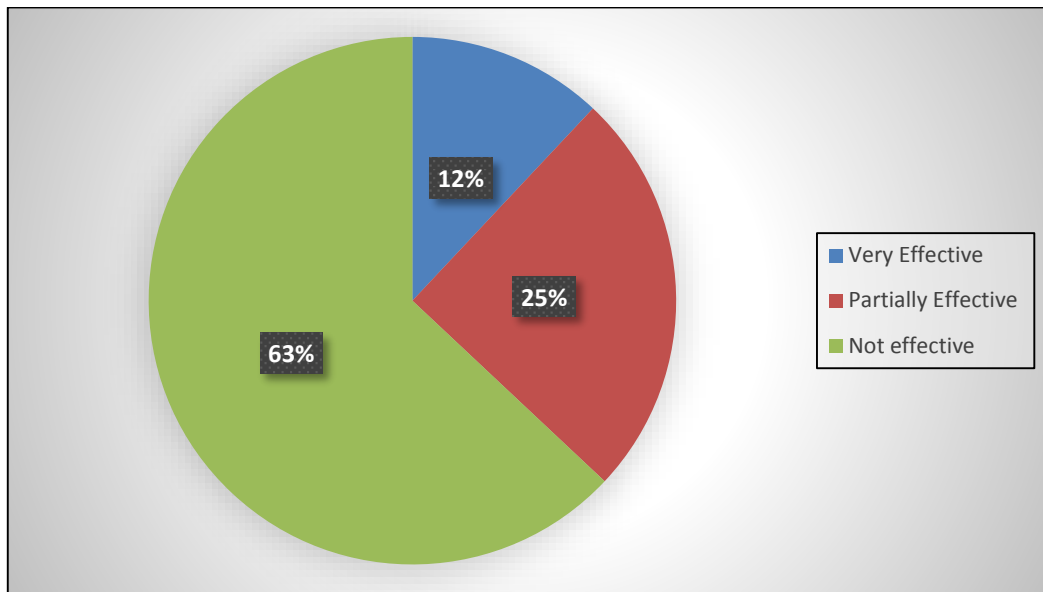
The researcher was interested in finding out some of the effectiveness of strategies used in Laikipia County to address resource-based conflicts.

⁸² Lemarkoko Alexander (2011) The management of natural resource based conflicts in Africa: A case study of the Mau forest complex, (Kenya) 1963-2010 p.22 <https://erepository.uonbi.ac.ke/handle/11295/96292> Accessed 10-10-2019

⁸³ Ibid, Art 69(1)

⁸⁴ Ibid Art 69 (2)

Figure 8: Effectiveness of existing policies and strategies



Source: Field Data, 2019

When asked about their thoughts on the effectiveness of existing policies with regard to natural resources and resource conflict management, 63% of the respondents indicated that the policies were not effective at all as they could not see what impact or changes these policies had made. Most indicated that they were not even aware of such policies. 25% of the respondents indicated that yes the policies were effective but just partially and that more needed to be done to implement and ensure the effectiveness of these policies.

The enactment of the new constitution in 2010, and the subsequent adoption and implementation of specific national environmental policies on natural resources and environmental conservation at the County level has been slow as part of the implementation process with only a handful of district councils passing laws on resource management in the last eight years since the decentralization of the environmental administration.⁸⁵ An interview with an informant working closely with the County government brought to light the slow adoption and implementation of natural resource and environmental-related policies.

⁸⁵ Njenga Kahiro, (2018) CECM water, environment and natural resources county Government of Laikipia County

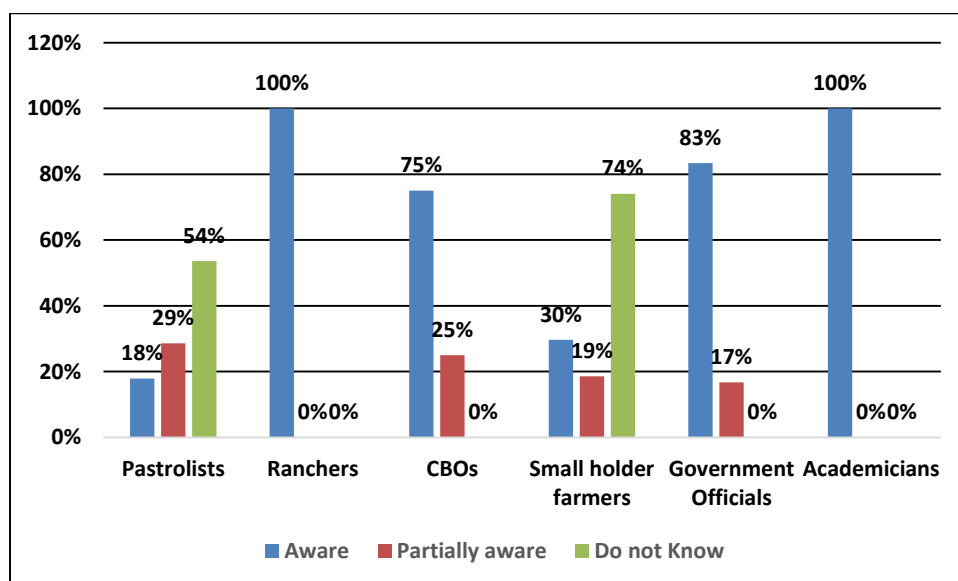
3.2.2 Awareness and knowledge of the existing policies on the management of resource-based conflicts

The study aimed at identifying what policies existed and how aware the stakeholders involved were aware of the existing policies in the management of resources that result in the reoccurrence of conflict.

Some of the existing policies that help in managing conflicts on resources are the land policy, wildlife mitigation policy, water management policy. These policies by themselves have not been a strong method through which resource-based conflicts can be solved by referencing them. In 2010 after the promulgation of the Kenyan constitution, in an effort to try and reduce court cases and also address conflicts at the grassroots, Alternative dispute resolution (ADR) and Traditional dispute resolution (TDR) mechanisms were formalized as mechanisms through which natural resource conflicts can be addressed.

To identify how aware, the community within Laikipia are aware. The data was analyzed for various actors within Laikipia who are affected by the policies in relation to natural resources and environmental management. The same actors are those who are part and parcel of the resource conflicts as causal effects, a part of or in the management of the resource conflicts. Thus the need to know how aware they are on the relevant policies.

Figure 9: Awareness of the existing policies in the management of resource-based conflicts



Source: Field Data, 2019

A total of 56 respondents were interviewed on their awareness of the existing natural resource and environmental related policies within Laikipia County and their participation in the making of these policies. This need was motivated by the response by residents in Laikipia County indicating that they were not aware of the policies in one of the focused group discussions. From the analysis, it was a clear indication that the major elite; academicians, CBO representatives and government officials were aware of the existing policies with just one to two per cent of this group being partially aware, but at least have an idea. Unfortunately, the largest per cent of persons to whom these policies are supposed to assist and guide are not knowledgeable of the existing policies.

An indication that despite formalization of resource policies most people are not fully aware with one of the challenges being illiteracy where majorly the elite was fully aware while most pastoralists and farmers interviewed were partially or fully unaware of what policies require of them with regard to resources.

3.2.3 Preferred strategies in the management of natural resource-based conflicts

In addressing resource conflicts, various strategies can be applied; both traditional and modern strategies. The researcher aimed at identifying which strategies were the most applied in resolving conflicts in the County.

Table 3.1: Preferred traditional and modern strategies in managing conflicts

Strategy	Frequency	%
Traditional strategies		
Peace meetings	12	20.0 %
Government Orders	4	6.7%
Disarmament	8	13.3%
Mediation	18	30.0 %
Negotiation	18	30.0%
Modern strategies		
Environmental governance	8	13.3 %
Collaborative approach	14	23.3 %
Environmental and Natural resource valuation	16	26.7 %
Restoration and rehabilitation of environmentally degraded areas	22	36.7 %

Source (Field Data 2019)

The study established that the most preferred method for conflict resolution by communities in Laikipia County with regard to the traditional strategies of conflict resolution was mediation and negotiation, which are mainly done through the involvement of a third party to assist in the conflict resolution with each having different terms as established by 60% of the respondents; each having 30% equal response. Peace meetings were the third most preferred method, where this mainly involves the coming together of the affected communities guided by a local leader to discuss and find a way forward on the violent occurrences. This was established by 20% of the respondents whilst government orders and disarmament was the least preferred with each establishing response from 6.75 and 13.3%. Disarmament was an un-preferred method as the residents stated that the disarmament process wasn't peaceful but very forceful opposed to how it should be and instead of bringing peace it ends up escalating issues and thus their lack of preference.

As for modern strategies despite not being very clear to some of the respondents, 63.4% established that they would prefer strategies that focus on environmental and natural resource valuation and the restoration and rehabilitation of environmentally degraded areas with each strategy establishing a response of 26.7% and 36.2% respectively. It was clear that most respondents would like to see strategies that focus on valuing and prioritizing strategies that would focus on maintaining and replenishing the available natural resources through environmental activities such as reforestation. 23.3% of the respondents also indicated that a collaborative approach would be good in the management of natural resources where various affected stakeholders come together towards attainment of the same goal.

3.2.4 Effectiveness of existing policies and strategies in resource conflict management

The researcher was interested in finding out how effective the currently existing policies on Natural resource management are.

Table 3.2 Effectiveness of existing policies and strategies in resource conflict management

The Policies	Very effective		Partially effective		Not effective		Do not know	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The Constitution	12	20%	10	16.7%	35	58.3%	3	5%
Land Policies	5	8.3%	28	46.7%	20	33.3%	7	11.7%
Water policies	11	18.3%	20	33.3%	27	45%	2	3.4%
Wildlife utilization policy	10	16.7%	22	36.7%	8	13.3%	20	33.3%
Drought and Disaster management policy	18	30%	25	41.7%	15	25%	2	3.3%

Source (Field Data 2019)

3.3 Devolution as a strategy in Natural resource conflict management

Devolution in Kenya was informed by a need to decentralize national governance and its institutions to the grass root levels, and to also enhance public participation amongst developmental aspects.⁸⁶ Through decentralization power functions resource management are devolved down to the local level.⁸⁷ Decentralization contributes to good governance because it increases opportunities for public participation in economic, social, and political decisions, developing peoples' capacities and also enhancing government responsiveness, transparency and accountability.

Over the years, natural resource management in Kenya has mainly been a state affair, with little or no involvement of the local communities and the public in general. Efforts towards promoting community participation and inclusion had always been exterior. The public was expected to receive only accruing benefits without participation in crucial decision making while the state was the sole custodian. The natural resource management system was characterized by inequitable benefit-sharing, exclusion of the poor and marginalized and indiscriminate environmental degradation.⁸⁸ This approach; the state-centric, was a colonial adopted legacy where the colonialists grabbed native lands and

⁸⁶ Kariuki Muigai (2018) Devolution and Natural Resource Management in Kenya. Pp. 1

⁸⁷ Constitution of Kenya 2010 Art. 174

⁸⁸ Yatich T. et al (2007) Policy and Institutional Context for NRM in Kenya: Challenges and opportunities for land care. ICRAF working paper – no. 43 Available at <https://www.worldagroforestry.org/downloads/publications/PDFs/wp15330.pdf>

appropriated all land-related resources for their own benefit⁸⁹; such as water, forests, minerals and wildlife.

In the year 1989, former Kenyan president Daniel Arap Moi, announced that Kenya would shift its allocations of resources to ways that were more responsive to the needs of the country's citizens,⁹⁰ which led to the paradigm shift from state-centric natural and environmental resource management to a community based natural resource management (CBRNM). The new model was expected to be more effective and also efficient in attaining sustainable utilization of natural resources and also promoting environmental justice.⁹¹ Unlike devolution, CBRNM entailed the involvement of communities in conservation activities with the advantage of sharing accruing benefits. Whilst devolution entails more than just administrative but also includes political decentralization which is inclusive of power-sharing with the Central government.⁹²

In natural resource management, decentralization enables local people to identify and prioritize their environmental problems accurately; ensure efficient resource allocation, promote greater respect for decisions made with local input such as rules for resource use. This, in turn, allows for easier monitoring of resource use giving marginalized groups a greater influence on local policy.⁹³ This applies well where decentralization adopts democratic forms rather than administrative ones; where there are representatives and downwardly accountable local authorities who hold a secure and autonomous domain of power to make and to also implement meaningful decisions. Devolution aims at improving government performance by making it more accountable and responsive to the needs and aspirations of the people.

Chapter Eleven of the Kenyan constitution provides for devolution with the fourth schedule outlining the obligations of the central and county governments in natural resource management.⁹⁴ The Central government is required to protect the environment and natural

⁸⁹ Ogendo H. (1991) *Tenants of the Crown; Evolution of Agrarian Law and Institutions in Kenya*. ACTS Press, Nairobi Kenya.

⁹⁰ Barkan, J.D. & Chege, M. (1989) 'Decentralising the State: District Focus and the Politics of Reallocation in Kenya.' *The Journal of Modern African Studies*, September, Vol. 27(3), pp. 431-453.

⁹¹ Misati J. (2012) *Towards a Policy Framework for Community Based Natural Resource Management in Fresh Water Eco0-systems: A case study of Lake Naivasha, Kenya* pp. 541-552

⁹² Oloo, O. (2014) *Devolving Corruption? Kenya's Transition to Devolution, Experiences and Lessons from the Decade of Constituency Development Fund in Kenya*.

⁹³ Larson A.M. (2003) *Decentralization and Forest management in Latin America: Towards a working model*. *Public Admin Dev* Vol. 23 pp. 211-212

⁹⁴ *Ibid*.

resources with a view to establishing durable and sustainable development systems in particular to fishing, hunting and gathering, protection of animals and wildlife, water protection securing sufficient residual water, hydraulic engineering and the safety of dams; and energy policy.⁹⁵ The County government, on the other hand, is required to implement specific national government policies on natural resources and environmental conservation including soil and water conservation and also forestry. County governments are supposed to ensure and coordinate the participation of communities and locations in governance at the local level and assist communities and locations to develop the administrative capacity for the effective exercise of the functions and powers and participation in governance at the local level.⁹⁶ The Senate is also expected to play an important role within the devolved system by fostering good governance in the management of the natural resource in Kenya. Both the national and County governments have a responsibility to ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources.⁹⁷

Devolution has an advantage with regard to the management of natural resources. Good, efficient and effective resource management helps to mitigate and also reduce resource-related conflicts. One is because it makes it difficult for individuals and groups of officials and other actors to collude and engage in corrupt practices due to the distributed authority over public goods and revenues. This helps to foster effective cooperation within the devolved units enabling local communities to mobilize social pressure against rent-seeking and also corruption. Devolution also multiplies the opportunities for political participation, promoting a democratic culture where communities are empowered to manage their own resources more effectively and thus productive efficiency in the provision and use of public services and the allocation of resources. Devolution also helps in poverty alienation, one of the major causes of resource conflict, by providing a governance framework for advancing pro-poor policies because sub-national institutions are likely to be more familiar with the local circumstances and cost conditions and so are better equipped to distribute resources more equitably.⁹⁸

⁹⁵ Ibid

⁹⁶ Ibid

⁹⁷ Mutua K. Jackson Vs. Government of Makueni et al (2018) "Environment and Land Case." P. 195 paragraph 24

⁹⁸ Institute of Economic Affairs et al (2011) 'A Guide for Understanding Decentralization in Kenya. Pp. 9 Available at: <https://www.ncck.org/largedocs/Decentralisation%20Manual%20>

One of the objectives of devolution is to promote environmental justice in the exploitation of natural resources, by giving powers of self-governance to the people and enhancing public participation in the exercise of the powers of the state and in making decisions that affect them. The people have the right to manage their own affairs and even further their own development. They can protect and promote the interests and rights of minorities and marginalized communities, promote the social and economic development and also the provision of proximate easily accessible services, ensure equitable sharing of national and local resources and also facilitate the decentralization of state organs, their functions, and services from the capital of Kenya.⁹⁹ Devolution is expected to address one of the major causes of resource conflicts especially in Laikipia on the struggle for environmental justice in Kenya especially in relation to natural resources management, however been debates on the success of devolution in achieving this¹⁰⁰ as it has been a big and huge challenge over the years on addressing the environmental injustices.

Involving the public in local governance enhances their understanding of environmental matters, making them appreciate the necessity of conserving and sustainable use of resources around them.¹⁰¹ When resources are controlled through the state as was the case before in Kenya, then these results to conflicts amongst institutions and overlap in mandates.¹⁰² With devolution, however, the roles, decision making, appropriation, monitoring and enforcement become more clear and precise. It enhances the commitment of local community members in the management of natural resource management.¹⁰³

Devolution's objectives and principles are to ensure the equitable sharing of national and local resources as stipulated in the constitution¹⁰⁴ giving powers of self-governance to the people and also enhancing their participation in the exercise of the powers of the state and in making decisions that affect them. County governments are

⁹⁹ Ibid; Art (74)

¹⁰⁰ Nduta R.W, Shisia A., Kamau G. & Asienga I. (2017) 'Challenges Facing Public Resources Management of Devolved Governments in Kenya: A Case of Machakos County. *International journal of economics, commerce and management*, Vol. V, Issue 9

¹⁰¹ Ibid

¹⁰² Shackleton S., Campbell B., Wollenberg E. and Edmunds D. (2002) Devolution and community based natural resource management: Creating space for local people to participate and benefit. *Natural resource perspectives* 76, No. 1

¹⁰³ Gruber J.S., (2008) Key Principles of community based natural resource management; a synthesis and interpretation of identified effective approaches for managing commons. Available at: https://iasc2008.glos.ac.uk/conference%20papers/papers/G/Gruber_132301.pdf accessed on 30-09-2019

¹⁰⁴ Constitution of Kenya: Art (174)

expected to establish the policy, legal and social framework and conditions needed for local management to succeed, facilitate, and also regulate private activity, helping the local organizations enforce locally designed monitored regulations and sanctions addressing local inequality and also ensuring representation of marginalized groups so that downward accountability of the organization receiving devolved authority is assured and also helping communities defend their rights, including the protection against powerful external groups such as mining and timber companies and other cartels.¹⁰⁵ Natural resource management has become and is a key development strategy in these recent times. Control of resources by the local people and also by communities improve local governance through participation and hence empowers the poor, centralized decision making, control and enforcement of natural resource management through government agencies has often proven ineffective and brought about resource degradation rather than sustainable use.¹⁰⁶

The devolved governments are the primary implementers though they still need the national governments' assistance. Natural resources have been identified as multi-sectoral. This is because they encompass many sectors that include the environment, agriculture, irrigation, forestry, livestock, water supply, and energy, and thus a need for multi-sectoral cooperation particularly at the decentralized district levels, which are the focal points of service delivery and support to sustainable community management of natural resources.¹⁰⁷

According to the transition to devolved government act,¹⁰⁸ the defunct transition authority is expected to assist the County governments to build capacity to effectively undertake the role of natural resource management on behalf of the local people. Under the devolved system, natural resource management seems to have adapted the adaptive governance approach that calls for wide-ranging public involvement in a never-ending process of knowledge generation, decision making and policy implementation processes and access to justice through courts.¹⁰⁹ Provision on public participation, public communication and access to information and civic education, all of which have an

¹⁰⁵ Ibid.

¹⁰⁶ Serageldin M., et al, (2006) "Treating People and Communities as Assets: Local government actions to reduce poverty and achieve the millennium development goals." *Global Urban Development Magazine*, Vol. 2 (1) Available at: <https://www.globalurban.org/GUDMaq06Vol21ss1/Serageldin,%20sollaso,%20&20Valensuela.htm>

¹⁰⁷ DANIDA: Natural Resource Management Available at: https://kenya.um.dk/en/danida_en/nrm accessed 10-9-2019

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

implication on the management of natural resources, at the County level are under the County government's act 2012,¹¹⁰ where the principles upon which citizen participation in counties should be based. This includes timely access to information, data, décor and other information relevant and related to policy formulation and implementation. This is in appreciation of the fact that meaningful public participation of citizens requires access to relevant information that is useful in decision making by the citizenry in relation to the management of natural resource management in the counties.¹¹¹ The act further calls for reasonable access to the process of formulating and implementing policies, laws and regulations, including the approval of development proposals, projects and budgets, the granting of permits and the establishment of specific performance standards. This is an important procedural aspect of the natural resources management that enables the public to appreciate the whole process and be able to voice their concerns and proposals regarding the whole process.

The effect of this in the face of devolution is that policies, laws and regulations that are out in place and any development projects that are undertaken in relation to the exploitation of natural resources are more likely to be responsive to the real needs of the people at the County Level. This then facilitates effective natural resource management for the improvement of peoples' livelihoods. Without the relevant information, it is important to note that then the affected communities could miss out on the actual benefits accruing from localized natural resource management as the whole process could be hijacked by other interested parties defeating the essence of devolution¹¹² and as a result, resulting to the re-emergence of resource conflicts. The act also requires that to enhance the participation of marginalized groups and communities, they should have access to relevant information, actualizing article 56 of the constitution¹¹³ which obligates the state to put affirmation action programs designed to ensure that minorities and marginalized groups participate and are well represented in governance and other spheres of life. This act helps to address the reoccurrence of conflicts that are as a result of the feeling of marginalization and seclusion in the use and access to natural resources in Laikipia.

¹¹⁰ Act No. 17 of 2012

¹¹¹ Ibid, S. 87

¹¹² Oyono, P.R. (2004) "The Social and Organizational roots of ecological uncertainties in Cameroon's forest management decentralization model." *The European Journal of development. Research* Vol. 16, No. 1

¹¹³ Ibid.

3.4 Sustainable Development and Management of Natural Resources

Regional economic development is one of the major goals of devolution. Greater control over one's livelihood is a key factor to development, empowerment and poverty alienation.¹¹⁴ Local democratic control over natural resources can improve local livelihood and have positive ecological impacts as well. With development, come problems of soil degradation and waterways, altered landscapes and destroyed biodiversities and habitats.¹¹⁵ Consequently, environment and development issues should be considered as integral activities. Local people should be empowered in a collaborative manner to enable them to deal with negative environmental effects. The County governments and the Senate, have the powers to create institutions and laws ensuring good practice in natural resource management.¹¹⁶ County executives being the policymakers need to pay attention to political contexts in which stakeholders will vie access and control over natural resources.¹¹⁷

Sustainable development should in the long term ameliorate the negative effects of poverty, provide basic needs, and meet people's aspirations for a better life. This can be achieved satisfactorily through the meaningful involvement of the people in the counties in natural resource exploitation. The devolved system thus holds responsibility as it holds a promise to deal with rampant poverty in the Counties,¹¹⁸ Laikipia County inclusive.

There is bound to be a paradigm shift in the management of natural resources including on the way the government combats such challenges as climate change, deforestation, afforestation, soil and water conservation measures, pollution amongst others. Although the national government has the role in pollution control,¹¹⁹ and implementation of specific national government policies on natural resources and environmental conservation including soil, water and forestry.¹²⁰ In the fourth schedule of the constitution, climate change is not listed as a function of either level of government with an implication that by default, article 186(3) of the constitution applies so that climate

¹¹⁴ Ibid. PP. 212

¹¹⁵ Policy, legal and institutional framework governing environmental management in Kenya. P. 305
Available at:

http://www.tanariverdelta.org/tana/975DSY/version/default/part/AttachmentData/data/MUMIAS_Tana_EIA_part5.pdf Accessed 11-10-2019

¹¹⁶ Constitution of Kenya: Art 174 & 96

¹¹⁷ Ibid, S. 36

¹¹⁸ Ibid

¹¹⁹ S.22, Constitution of Kenya, 2010

¹²⁰ Ibid, S. 10

change can be interpreted as a function of the national government.¹²¹ Cooperation between national government and County governments is in the design and the overall implementation of climate change response strategies is seen as imperative, as counties are the likely implementer. In ensuring sustainable management of natural resources, climate change is especially important as it has a great impact on resources existence, quantities and usage; water, soil, and forest resources amongst others.

The principles of planning and development facilitation in a county should protect and develop natural resources in a manner that aligns national and county government policies.¹²² In line with this, the county government act also provides that one of the objectives of county planning is to work towards the attainment and achievement of a tree cover of at least ten per cent of land area in Kenya.¹²³

It is therefore clear that County governments have an important role in climate mitigation efforts which effectively touches on the way natural resources are used, managed and conserved. To achieve this and ultimately sustainable development, County governments need to cooperate with the national government, and also through working with other institutions such as the United Nations working towards development through targeting to attain the SDGs which could help to manage the reoccurrence Of resource-related conflicts in Laikipia County. The applicable SGDs to the management of conflict can be set as targets in a mission to reduce the reoccurrence and also manage resource conflicts.

¹²¹ International Development Law Organization (2012) "Enabling legislative and institutional framework for climate change response in Kenya. P. 47

¹²² County Governments Act, No. 17 of 2012

¹²³ Ibid, S. 106

Figure 10: The Sustainable Development Goals



Source: United Nations

3.5 Land Resource Management and Devolution

Land, one of the major conflict-causing resource within Laikipia County; from ownership, to access and use. With devolution, policies are in place to ensure the proper and sustainable management of this resource. The *National Land Policy*¹²⁴ in contemplation of devolution provides that the institutional framework on land be reformed to ensure devolution of power and authority, participation and representation, injustice, equity and sustainability. It advocates for three institutions to be set up; The National Land Commission, The District Land Boards, and the Community Land Boards. Some of these are also captured in the Constitution and their resulting sectoral law on land.¹²⁵

The community land policy, 2016 as envisaged under the constitution also seeks to give effect to article 63(5) of the constitution; to provide for the recognition, protection, management and administration of community land to establish and define the functions and powers of community land boards and management committees to provide for the powers of county governments in relation to unregistered community land; and for connected purposes. The act provides for holding of unregistered community land in trust by county governments.¹²⁶

¹²⁴ Sessional paper No.3 (2009) Government Printer, Nairobi

¹²⁵ Constitution of Kenya Art. 69

¹²⁶ Ibid; S.6

Land issues requiring special interventions such as historical injustices, land rights of minority communities such as hunters and gatherers, forest dwellers, pastoralists, and vulnerable groups are to be addressed according to the national land policy. Their rights are to be recognized and protected. The policy also provides that measures should be initiated to identify such groups and ensure their access to land and participation in decision making over land and land-based resources. Where land is to be converted to public land by transfer, the community land law states that such transfer is subject to the approval of the members of the community in a general meeting and it is to be done in accordance with the land act.¹²⁷ Further, where community land is to be converted to private land by either transferor allocation by the committee or a county government, such conversion of land requires approval of the county assembly in the case of land held by the county government, and members of a community general meeting in the case of land managed and administered by a committee.¹²⁸ Where land is set aside by a community for public purposes through consultation between concerned communities then the commission of the involved county government has to be involved to ensure that prompt and adequate compensation is made to the affected community.¹²⁹ The community land law, therefore, recognizes the important role of county governments facilitating sustainable, fair and equitable management of community land. This law will go a long way in promoting sustainable management of community land, in a way that stands to benefit the concerned communities. It will also be useful in preventing a repeat of historical injustices that had become synonymous with land matters in Laikipia County and the county in general.

The land act¹³⁰ provides principles that will afford local communities greater opportunity to participate in land management. Amongst the persons to receive the notice are the governor in whose county the public land proposed for allocation is located; and other known interested parties.¹³¹ Failure to provide notice of proposed allocations may be grounds for the commission to direct that the notification procedures be repeated, or even void the allocation grounds that the notification requirements were not properly conducted.¹³² This procedure helps to manage land resource conflicts by allowing the

¹²⁷ Ibid. S. 26

¹²⁸ Ibid. S.26

¹²⁹ Ibid.

¹³⁰ Lawes of Kenya (2012) Act No. 6

¹³¹ Ibid, S. 14(4) (5)

¹³² Ibid. S14 (8)

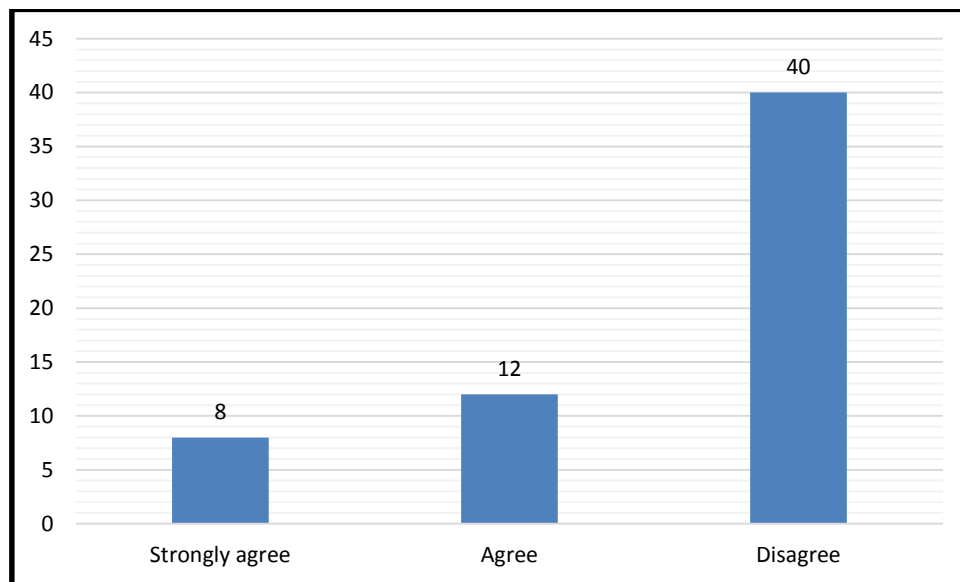
affected communities either by themselves or through their county governments to protest any unjust land allocations.

These land policies if properly implemented could be very effective in helping to prevent the reemergence of land-based conflicts within Laikipia and other affected counties in the country.

3.5.1 Devolution's impact on the management of land conflicts

The researcher was interested in finding out if devolution has had an impact in helping to address land resource-related conflicts in Laikipia

Figure 11: Devolution and land conflicts



Source: Field Data, 2019

67% of the respondents established that devolution did not bring to action their expectations with regard to land conflicts that have long existed within Laikipia County. The residents hoped that with devolution, the land conflicts that occur from time to time amongst them would be resolved and justice served however they felt that this was not the case and most stated that all they could see was the same government as was before. 20% of the residents, however indicated that they had seen an impact and change with regard to land issues, stating that cases would be quickly and effectively solved and it did not take long as land issues for Laikipia County could be handled in, Laikipia and no need for long travels as was before to the capital. They also stated that conflicts amongst them had reduced too.

3.5.2 Forest Resource Management and Devolution

The National Forest Policy 2014,¹³³ provides a revised policy framework for forest conservation and sustainable management and one of its main features is the enactment of a revised forests law to implement the policy; the mainstreaming of forest conservation and management into national land use systems; clear division of responsibilities between public sector institutions and regulatory functions of the sector, thereby allowing Kenya Forest Service to focus on the management of forests on public land, and the role of the county governments in implementing national policies, county forest programs including the delivery of forest extension services to communities, farmers and private land owners, and management of forests other than those under Kenya Forest Service; the devolution of community forest conservation and management, implementation of national forest policies and strategies, deepening of community participation in forest management by the strengthening of community forestry associations, and the introduction of benefit-sharing arrangements; the adoption of an ecosystem approach for the management of forests, and recognition of customary rights and user rights to support sustainable forest management and conservation; and the establishment of national programs to support community forest management and afforestation/reforestation on community and private land.¹³⁴

The Forest Policy recognizes ineffective regulatory mechanisms and inadequate law enforcement, as some of the challenges facing the forestry sector in the country. Further, it observes that these challenges are compounded by dwindling public land, meaning that forestry development has to expand into private and community land, which need incentives and clear methods of engagement to encourage investments in commercial forestry.¹³⁵ With regard to forestry governance, the Policy proposes that there is need to enact supporting legislation following the promulgation of the Constitution to minimize conflicts between industry, communities and governments at both national and county levels over resource management and benefit-sharing. In addition, forest governance needs to take into account emerging issues and best practices at the global, regional and national level. The Policy also observes that the forest sector has had to contend with low productivity of tree crops, low conversion efficiency and weak value addition schemes. These arise from climate change, the small genetic base of crops, emerging pests and

¹³³ National Forest Policy (2009): Sessional paper No. 3; Government Printer, Nairobi.

¹³⁴ Forest Policy (2014) p. 2

¹³⁵ Ibid

diseases, low investments in technology development, and poor investment in the forest-based industry. The Policy thus recommends that there is the need for research and development to refocus on basic forestry disciplines such as productivity, health, crop diversification, processing, value addition, intellectual property rights and indigenous knowledge. Further, the sector also faces challenges in building capacity for sustainable utilization and management.¹³⁶ With regard to the County governments, the Policy recommends that there is great need to build the capacity of county governments to undertake forestry development on community and private lands. Mechanisms for engaging county governments in forestry research and development should also be developed.¹³⁷ Further, livelihood enhancement will be one of the guiding principles with a focus on fighting poverty as a major consideration for all strategies and programs in forest sector development.¹³⁸

In order to promote public participation in forests management, the Policy recommends enhancement of participatory approaches as one of the guiding principles in forest conservation and management so as to ensure that the relevant government agencies, county governments, private sector, civil society and communities are involved in planning, implementation and decision-making processes.¹³⁹ The Policy also advocates for commercialization of forestry activities where forestry operations are to be undertaken in a business manner focusing on result-based management. In this regard, the government will invite the private sector to invest in tree growing, wood processing and value addition.¹⁴⁰

The Forest Policy is intended to provide a framework for improved forest governance, resource allocation, partnerships and collaboration with the state and non-state actors to enable the sector to contribute in meeting the country's growth and poverty alleviation goals within a sustainable environment.¹⁴¹ In response to the Policy, the Forest Conservation and Management Act, 2016¹⁴² was enacted to give effect to Article 69 of the Constitution with regard to forest resources; to provide for the development and sustainable management, including conservation and rational utilization of all forest resources for the

¹³⁶ National Forest Policy (2014) Paragraph 2.2.2

¹³⁷ Ibid; Para 2.2.3

¹³⁸ Ibid

¹³⁹ Ibid Para. 3.3. (e)

¹⁴⁰ Ibid

¹⁴¹ Ibid

¹⁴² Laws of Kenya (2016): Act no. 34

socio-economic development of the country.¹⁴³ This act mainly concentrates on affording communities user rights as against actual control of forests resources.¹⁴⁴ Although the act was to be aligned with the current Constitution of Kenya and the devolved system of governance and therefore, has provisions addressing the issue of devolution, it is still a rather bureaucratic law, with such requirements as the application by communities for any intended participation in the management of forests resources.¹⁴⁵

Implementation of the law is to be guided by such principles as: good governance and access to public information, and a participatory approach to forest conservation and management; devolution of forest resources management and conservation wherever possible and appropriate to those owners and managers of forest resources; adoption of an 'ecosystem approach' in the conservation and management of forests wherever possible; recognition of the rights and responsibilities of communities and private landowners to manage and utilize forest and forest resources; equitable sharing and enjoyment of the benefits accruing from forest conservation and management by the people of Kenya; and protection of indigenous knowledge and intellectual property rights embodied in forest biodiversity and genetic resources.¹⁴⁶ Despite the bureaucratic tendencies still retained in the Act, these guiding principles, if well implemented, would go a long way in facilitating equitable and effective management of forest resources under the devolution system helping to reduce forest-related conflicts within Laikipia County.

3.5.3 Water Resource Management and Devolution

The *Water Act 2016*¹⁴⁷ vests ownership and control of water resources, including their use, in the state to be held by the national government in trust for the people of Kenya. Every water resource in the country is vested in the State, subject to any rights of use granted by or under the Act or any other written law.¹⁴⁸ Further, the Act allows the Cabinet Secretary to exercise control over every water resource in accordance with the Act.¹⁴⁹ The Water Resources Authority is vested with the responsibility for overall sector oversight including policy formulation, coordination and resource mobilization.¹⁵⁰ The Water

¹⁴³ Preamble: Forest Conservation and Management Act 2016

¹⁴⁴ Ibid, S. 49 & 50

¹⁴⁵ Ibid S. 48

¹⁴⁶ Forest Conservation and Management Act 2016

¹⁴⁷ Laws of Kenya (2016) No. 43

¹⁴⁸ Ibid, S. 5,7 & 9

¹⁴⁹ Ibid, SS.4(1) 5

¹⁵⁰ Water Act, 2016; S. 11 & 12

Resources Authority is to serve as an agent of the national government and regulate the management and use of water resources.¹⁵¹

With regard to the user water rights, the Water Act 2016 provides that every person has the right to access water resources, whose administration is the function of the national government as stipulated in the Fourth Schedule to the Constitution.¹⁵² Communities are allowed to participate in water resources management through the formation of the Water Resource Users Associations may be established as associations of water resource users at the sub-basin level in accordance with Regulations prescribed by the Authority.

A Water Resource Users Association should be a community-based association for collaborative management of water resources and the resolution of conflicts concerning the use of water resources.¹⁵³ The Act specifically provides for public consultation in the development of national strategies such as the Water Services Strategy.¹⁵⁴ The courts have affirmed that the provision and management of water services is a shared constitutional function, distributed between the two levels of government.¹⁵⁵ This will be useful in addressing some of the challenges that have been experienced in relation to the devolution of water services.

“An example is a conflict between Kwale County and Mombasa County; and Murang’ a and Nairobi Counties. Kwale and Murang’ counties were under the impression that they can charge for the export of water from their counties to other counties.”¹⁵⁶

The water resources management functions that have been allocated to the national government are spelt out in the Fourth Schedule, Part I, and include: use of international waters and water resources; national public works-water resources development especially on permitting and ensuring compliance to permit conditions on water-retaining infrastructure and works on water bodies; protection of the environment and natural resources with a view to establishing a durable and sustainable system of development, including, in particular-water protection, securing sufficient residual water, hydraulic

¹⁵¹ Ibid S.6

¹⁵² Laws of Kenya 2016, S. 9, No. 43

¹⁵³ Ibid, S. 29 (2)

¹⁵⁴ Ibid, S. 64 (2)

¹⁵⁵ Okiya Omtatah Okiti & 3 others Vs Nairobi City County & 5 others (2014) eKLR, para. 84

¹⁵⁶ Musyoka, A. (2014) “Kenya: MCAs want policy on water use.” Available at: <http://allafrica.com/stories/201407140580.html> Accessed 11-9-2019

engineering and the safety of dams; disaster management- water-related disasters like flooding, drought and landslides; and capacity building and technical assistance to the counties.¹⁵⁷ On the other hand, the water resources management functions that have been devolved to county governments are spelt out in the Fourth Schedule Part 2. These include implementation of specific national government policies on natural resources and environmental conservation, including, soil and water conservation; county public works and services, including-storm water management systems in built-up areas; firefighting services and disaster management-especially on water-related disasters.¹⁵⁸

In order to actualize, the principles of natural resources management as envisaged in the current Constitution, in a framework that engages the county governments, WRMA intends to: provide information on water resources availability, use, allocation and viable options for water resources investments planning to meet any water deficit for the county's developmental needs; support the assessment of water resources to inform planning and decision making; work with the concerned county governments to domesticate the development and management plans as contained in the National Water Master Plan 2030 and jointly prepare an implementation matrix for each plan; apportion the water resources equitably among various users and uses, including maintaining the reserve; and work with the concerned County Governments to protect water resources from harmful impacts.¹⁵⁹

The Water Act 2016 empowers county governments to establish water services providers, which may be a public limited liability company established under the Companies Act, 2015 or other body providing water services as may be approved by the Regulatory Board. In establishing a water services provider, a county government must comply with the standards of commercial viability set out by the Regulatory Board.¹⁴⁶ A water services provider shall be responsible for- the provision of water services within the area specified in the license; and the development of county assets for water service provision.¹⁶⁰ The Act also provides that a county water services provider may with the approval of the relevant licensing authority extend water services to rural or developing areas.¹⁶¹ The Act further provides that nothing in its provisions should deprive any person or community of water services on the grounds only that provision of such services is not

¹⁵⁷ Water Resources Management Authority, Water Resources Management Authority Brief 2013, p.10.

¹⁵⁸ Ibid. p. 11

¹⁵⁹ Ibid, p.5

¹⁶⁰ Ibid, S. 78 (1)

¹⁶¹ Ibid, S. 81

commercially viable.¹⁶² The Act also requires every county government to put in place measures for the provision of water services to rural areas which are considered not to be commercially viable for the provision of water services.¹⁶³ The measures referred to in subsection (2) shall include the development of point sources, small scale piped systems and standpipes which meet the standards set by the Regulatory Board and which may be managed by the Water community associations, public benefits organizations or a private person under a contract with the county government.¹⁶⁴ Further, in order to implement its obligations under this section, a county government should formulate and submit annually to the Regulatory Board and to the Cabinet Secretary, a five year development plan incorporating an investment and financing plan for the provision of water services in the rural areas referred to subsection (1) within its area of jurisdiction.¹⁶⁵ The Cabinet Secretary is also to provide technical, financial and other assistance to a county government to enable the county government to discharge its responsibility under this section.¹⁶⁶

The implementation of these laws and policies calls for wide consultation and participation of all stakeholders, not only between the national government and the county governments but also with all the other relevant stakeholders, including the locals

3.5.3.1 Devolution and water resource-related Conflicts

The researcher was interested in finding out if devolution through the water policies has had any impact in addressing water-related conflicts in Laikipia County.

¹⁶² Ibid, S. 94 (1)

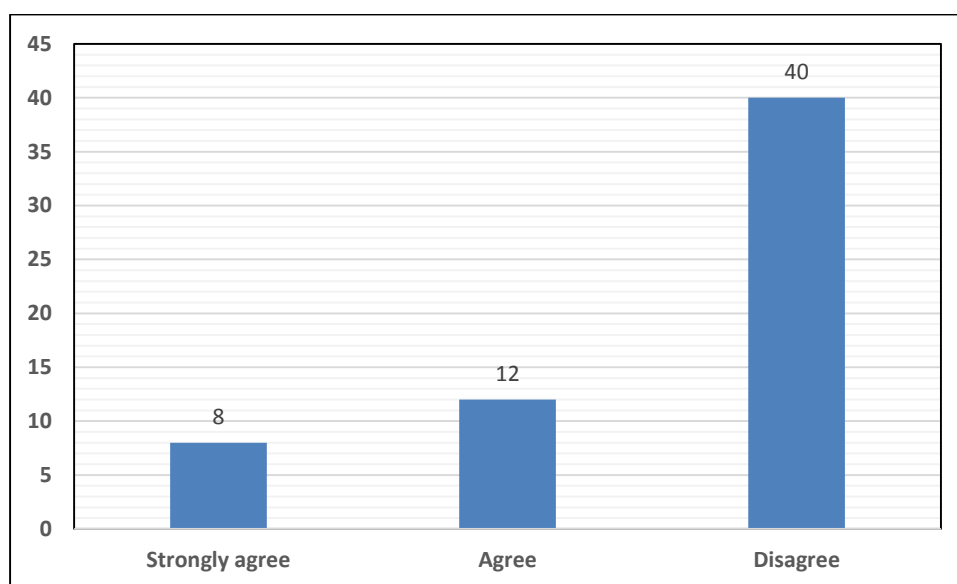
¹⁶³ Ibid, S. 35 (8)

¹⁶⁴ Ibid, S. 33 (3)

¹⁶⁵ Ibid, S. 33 (4)

¹⁶⁶ Ibid, S. 33 (5)

Figure 12: Devolution and water-related conflicts



66% of the respondents expressed dissatisfaction with the impact that devolution had had in relation to managing natural resources and resource-based conflicts.

3.6 Analysis of Existing Policies and Legal Frameworks on Natural Resource Management and the extent of their Implementation in Laikipia County.

3.6.1 The 2010 Constitution

The one most outstanding features of the Kenyan constitution with regard to the environment and natural resource is that it encourages public participation in the governance affairs of the country. It lays out the obligations of the state in respect to the environment where public participation is encouraged in the management, protection and conservation of the environment.¹⁶⁷ This feature on participation by local communities on governance affairs of a country is hailed as an indication of good and democratic governance as well as the respect and promotion of the rights of citizens.¹⁶⁸ The constitution further places a duty on every person the responsibility to cooperate with state organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.¹⁶⁹ This is one of the ways used by the

¹⁶⁷ Constitution: Art 69(1)

¹⁶⁸ Gaventa, J. (2004) Towards Participatory Local Governance Assessing the Transformative Possibilities. Applied knowledge Science. Available at: <https://www.gsdr.org/go/display/document/id/2682> Accessed on 29/9/2019

¹⁶⁹ Ibid; Art 69(2)

government through policy to try and mitigate conflicts over resources by making every citizen partisan to participation through governance and care.

“Participation in the management of natural resource management by the citizens of the Kenyan state is not only a right but also a duty of every citizen.” Kariuki Muigai – natural resource management expert.

Table 3.3: Implementation of Constitution Requirements in the management of Natural Resources in Laikipia County

Constitution requirements and other policies	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	F	%	F	%	F	%	F	%	F	%
The policies requirements in the management of natural resources have been implemented in the management of natural resource conflicts in Laikipia.	7	11.6%	10	16.7%	13	21.7%	20	33.3%	10	16.7%
Residents within Laikipia county are aware of the constitution requirements on the management of natural resources	8	13.3%	8	13.3%	14	23.2%	22	36.8%	8	13.4%

Source, Field Data, 2019

This study established that most of the residents from the sample questionnaires filled were not content with the implementation of the policies with regard to natural resources and resource conflict management in Laikipia County. This was indicated from 50 % of the responses. Only 28.3% of the respondents indicated a positive response on the implementation of these policies with a percentage being elites. The rest were in the middle on this representing 23.2% of the respondent’s sample.

In one of the focused group discussions with CBO representatives, the study established that most of the residents were not fully aware or aware at all on their constitutional rights on participation in policy, making nor were they aware on the requirements and policies in place with regard to natural resources and environmental protection. These are conflict resolution CBOs engaged in post conflicts peacebuilding activities within Laikipia County. This lack of awareness or as would otherwise be considered by law as ignorance is clearly indicated in the high respondent feedback on most of the policies and strategies as required by the constitution and other laws and policies as

strongly disagreeing on the implementation, which even if done they would not be aware of.

3.7 Policy Gaps in the management of Natural Resource-Based Conflicts

“Conflicts over natural resources have always played a role in human society, but recent conditions have led to an increase in their intensity, public profile and complexity. Policies have paid relatively low attention to the broader perspective of conflict management. It is important that new mechanisms are sort and institutions to manage these conflicts and resolve them productively in the interests of both long term sustainability and short term economic feasibility.” Stephen R. Tyler¹⁷⁰ This has been the case for in Laikipia where the existing natural resource policies and strategies lack a broader perspective in the way that they approach resource conflicts.

A mapping exercise was carried out in 2018, concerning the progress on the implementation of environmental frameworks and policies across the forty-seven counties in Kenya. Results indicated that most of these bills were still pending¹⁷¹ an indication that the state of affairs in relation to environmental protection and care were one to fathom, with a possibility of undesirable environmental consequences in resources based conflicts and environmental protection. The policy environment for natural resource management has changed dramatically in recent decades. Population growth, agricultural settlement, and growing trade, investment, and economic activity have increased pressure on all resources. As stated by Stephen¹⁷² there is a need to explore new mechanisms and institutional policies to manage these conflicts and resolve them efficiently with a focus on long term sustainability and economic feasibility. It is important to have in place appropriate government policies that can support the application of innovative conflict management mechanisms.

Public policies can also exacerbate conflicts. Policies, government programs and their implementation have in history aggravated conflicts even when the intention was to reduce the conflict.¹⁷³ An indication that the nature and dynamics of local resource conflicts are

¹⁷⁰ Stephen R. Tyler (2012) Policy Implications of Natural Resource Conflict Management. Available at: <http://unpan1.un.org/intradoc/groups/Public/documents/APCITY/UNPAN022237.pdf>

¹⁷¹ Mutunga Vanessa (2018) Natural Resource Management Framework as a Conflict Management Strategy in Kenya: A case of Laikipia County

¹⁷² Ibid

¹⁷³ Ibid

poorly understood and those conventional interventions could be counterproductive.¹⁷⁴ This is the case in Laikipia County, where, despite various government interventions, which are mostly similar, resource conflicts have always reoccurred similar to what the government may claim to have managed. There are cases, however, where the direct interests of the central elite conflict with those of the local or marginalized¹⁷⁵ in these cases the policy tools of the state may be applied in a deliberately one-sided fashion.

A number of difficulties remain in our policy framework. A central issue is resolving the dynamic between local actors, including local governments, and the state. Mutually devised, multi-stakeholder consensus-based conflict resolution puts both responsibility and initiative in local hands. Yet, there must remain a strong and legitimate role for the state. For example, several cases demonstrate that the community alone cannot implement or enforce solutions without the sanction of the senior government.¹⁷⁶ The community also needs the authority of the state to strengthen its ability to deal with large and powerful external interests, such as multinational corporations. It would be helpful to describe and report on other mechanisms to provide community stakeholders with the tools and support needed to engage on a more equitable basis with the state and external interests.¹⁷⁷

The policy interventions needed to support a mature conflict management system are costly and will require effort over a long period. They involve a lot of organizational learning and retooling, not only within the administrative system but also among the participants in each conflict. Participatory methods, research, information-sharing, and better communications will all require time, staff support, and expertise. The high costs of attempting these methods; combined with the even higher costs of failure suggest the need for broader and more systematic sharing of experience. Strategic research and networking effort would help governments identify best practices and resource materials.

Natural resource conflict is not going to go away. Permanent resolution of these conflicts is not likely. Management of the inevitable resource conflicts is important as a public good in the economic sense and, therefore, merits policy support. But there are no magic solutions, no quick technical fixes. The challenge for governments is to create

¹⁷⁴ Ibid.

¹⁷⁵ Chenier J., Sherwood S., & Tahnee R., (1999) Copan Honduras: Collaboration for Identity, Equity and Sustainability

¹⁷⁶ Hirsch L. John (2001) Sierra Leone: Diamonds and the Struggle for Democracy. Boulder: Lynne Rienner

¹⁷⁷ Ibid

opportunities for new institutions and processes supportive of mutual solutions and joint responsibility, redefine their own roles and foster new ones in these processes, and encourage the creativity and courage needed to learn from the experience of these new institutions and roles.

3.8 Summary of the key findings of the study

Before the transition to a devolved government, all law was regulated at a national government level and all resource management was governed there. However, after devolution, various policies and laws on natural resource management and environmental protection have been put to place and improved and run under both the national and county governments levels. Water, land, wildlife, forest and other policies are in place to ensure proper and accountable management of resources. The policies are in existence, however, a good representation of the residents give a clear indication that awareness and knowledge on these policies is not present, they say ignorance is a crime however, this is a large gap in a vision to reduce the reoccurrence of resource-related conflicts in the county as public participation is quite limited and thus members of the community are not aware of the modern and effective ways of managing conflicts. There is a need for education and awareness to the people on their rights, such as the right to participate in policymaking and also on the transitions in resource management so as to reduce the reoccurrence of the conflicts.

CHAPTER FOUR
IMPLEMENTATION CHALLENGES OF RESOURCE MANAGEMENT
POLICIES, PROJECTS AND PROGRAMS IN LAIKIPIA

4.0 Introduction

Various policies and strategies have been put in place in an effort to try and manage resource-related conflicts in Africa, and in Kenya. However, despite there being possibly effective and impactful policies, implementation of the policies has been a challenge. Strategies that have been applied to manage the resource conflicts have also not been effective as the conflicts keep recurring. This Chapter aims at looking into the challenges that have been faced in the implementation of policies and strategies in an effort to manage resource-based conflicts in Laikipia County.

4.1 Emergence of conflicts during policy, program and projects implementation

Natural resource policies, programs and projects offer significant means of addressing many of the needs and concerns that propel resource-related conflicts. What is ironical is that the same policies, programs, and projects can by themselves serve as sources and arenas of conflict, despite their intended attention to ameliorating such conflicts.

4.1.1 Imposition of policies without local participation

Natural resource policies and interventions are often formulated without the active and sustained participation of communities and local resource users. Governments have relied on centralized management strategies based on centralized control by administrative units and technical experts. These policies and practices frequently fail to take into account local rights to and practices regarding natural resources. The introduction of new policies and interventions without local input may end up supplanting, thus undermining and sometimes even eroding community institutions governing resource use.¹⁷⁸ Under the Kenyan constitution,¹⁷⁹ after devolution, the involvement of locals in the preparation of policy and strategy is a requirement. However, despite this, locals in Laikipia have not been involved in these preparations. In an interview with one of the policymakers in Laikipia County, the following was stated,

¹⁷⁸ Matiru Violet (2000) Conflict and Natural Resource Management. Food and agriculture organization of the United Nations (FAO)

¹⁷⁹ Ibid

“The locals are sometimes required to sign off into petitions and policies as a way of getting participation, policies and strategies that they know nothing about despite being policies that have an impact on their lives and how they run their everyday lives. Eventually, these policies, upon implementation, end up being the result of resource conflict re-emergence.” county administrator Laikipia County.

4.1.2 Lack of harmony and coordination amongst bodies of law and legal procedures

Countries are characterized by legal pluralism where the operation of different bodies of formal and informal laws and legal procedures are within the same socio-political space.¹⁸⁰ These legal orders may be rooted in the nation-state religion, ethnic group, local custom, international agreement or they often overlap resulting in different legal bodies that can be complementary, competitive or contradictory. Resource conflicts sometimes emerge because there is a lack of harmony and coordination among these different legal orders, particularly when policies, programs and projects fail to consider local situations.¹⁸¹

“With devolution, the national and local governments are supposed to work and coordinate in various ways. Budgets, controlling climate change issues which have in a great way hit counties especially here in Laikipia. But most times budgets release is late; amounts disbursed are in amounts that cannot manage the planned projects for the counties. This results in a lack of implementation of planned resource conflict management projects” Interviewee, Laikipia County

The lack of cooperation, harmony and coordination between the national government and County governments affects the implementation of programs and projects intended to minimize or resolve resource conflicts within Laikipia County. Factors such as delay of funds to respective counties affect implementation resulting to end of build trust amongst the players. These eventually results in the reemergence of conflicts in the competition against and for the available limited resources.

4.1.3 Poor identification of and inadequate consultation with stakeholders

Stakeholders are people who possess an economic, cultural or political interest in, or influence over, a resource. The stakeholders may need the resource for subsistence, large

¹⁸⁰ Ibid pp. 8

¹⁸¹ Ibid

and small commercial activities, conservation, and tourism or for cultural reasons such as the use of sacred sites. The concept is complex and dynamic because stakeholders are not generally homogeneous but can be further divided into subgroups according to their specific interests.

Conflicts can occur because planners and managers identify stakeholders inadequately, or they refuse to acknowledge a group's interest in a resource. Policies and interventions face challenges in defining exactly what constitutes a community because of the limited ability of planners to identify the range of interests within it. When planners and managers fail to identify and consult with the full spectrum of stakeholders, they limit their understanding of these groups' diverse needs and priorities and their indigenous knowledge of the situation.¹⁸² This increases the likelihood of conflicts emerging

4.1.4 Uncoordinated Planning

Despite growing recognition of the need for integrated approaches to natural resource management, many governmental and other agencies still rely on sectoral approaches with limited cross-sectoral planning and coordination. For example, the agricultural service may promote cash crop expansion in forests to raise incomes without recognizing its adverse effects on other resource users. Overlapping and competing jurisdictions and activities among agencies may result in their inability to reconcile the needs and priorities of various stakeholders.

4.1.5 Inadequate or poor information sharing

Effective sharing of information on policies, laws, procedures and objectives can enhance the success of programs and reduce conflicts. In contrast, the lack of information on the intention of the planning agencies may lead to suspicion and mistrust.

“Villagers destroyed a water piping system because they believed it would reduce water flow to their community. This destruction occurred despite the fact that hydrological studies indicated that the system would pose no threat to the water supply. The planners and project staff did not effectively communicate this information to the local community.”

¹⁸² Ibid pp. 55

4.1.6 Limited institutional Capacity

Conflicts arise when governmental and other organizations lack the capacity to engage in sustainable natural resource management. Organizations not only face financial constraints for staff and equipment but they also often lack the expertise to anticipate conflicts or to handle conflicts that arise in the course of their activities.

4.1.7 Inadequate monitoring and evaluation of programs

Programs and projects are often also designed without clearly defined monitoring and evaluation components, especially regarding natural resource conflicts. Without systematic monitoring and evaluation of natural resource management activities, it is more difficult to identify, pre-empt or address conflicts. Monitoring and evaluation is the key to the success of any project or program. It helps in the assessment of gaps and in identification of the way forward.

4.1.8 Lack of effective mechanisms for conflict management

For natural resource management programs to be effective, mechanisms for participatory conflict management and resolution need to be incorporated from the outset into their design and implementation. These mechanisms should ensure that open or smouldering conflicts are constructively dealt with to reduce the chances of their escalation. In some organizations, such mechanisms cannot be easily installed because existing legislation or policy does not permit it.

4.2 Lack of public participation in policymaking

Article 118 (1) ¹⁸³ of the constitution mandates for public participation. In Laikipia however, the lack of public participation impedes on conflict resolution and mitigation. As the data in the previous chapter indicates respondents are not aware of their right to participate and thus strongly disagree with the current policies existing nor being impactful in the effort to manage natural resources and promote environmental protection.

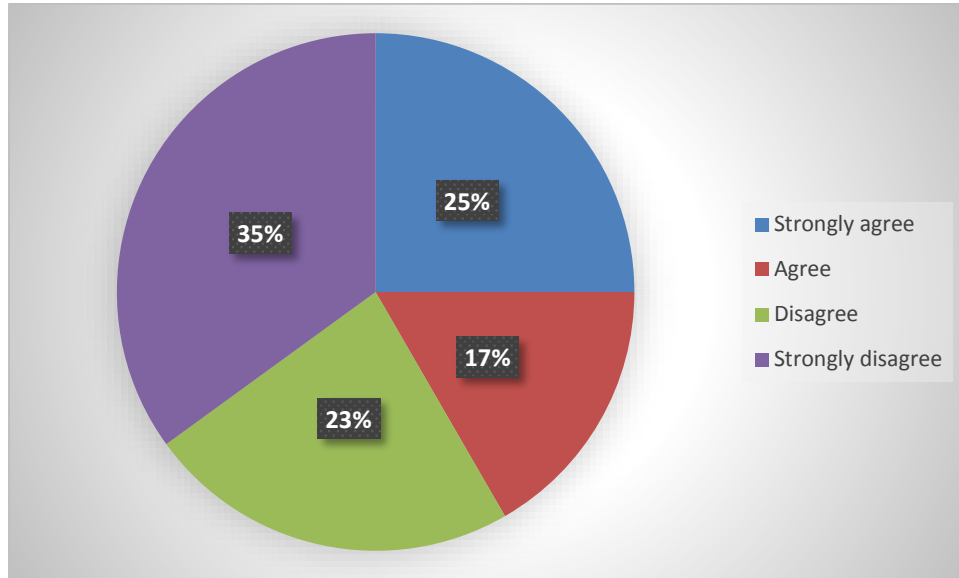
4.2.1 Public Participation in the making of local or national policies in Laikipia county

The researcher wanted to establish if the public participates in any of the county government decision-making processes such as the implementation of policies through giving ideas and proposals as per their need and any other issues.

¹⁸³ Constitution of Kenya (2010) Art 118(1)

Respondents were asked to indicate if they have ever participated in any policy-making decisions, or any sign off of bills or asked for their thoughts by community leaders on matters of the public for their contribution.

Figure 3: Public participation levels in Laikipia County



58% of the respondents indicated that they had never in any way participated in any public activity that required their input or thoughts with regard to policy or programs on resource management. The writing and implementation of the policy should go hand in hand, and implementation is intended to action strategies intended to positive and impactful results. Empowerment promotes the participation of people, organizations, and communities towards the goals of increased individual and community control, political efficacy, improved quality of community life, and social justice¹⁸⁴ however in Laikipia there is the lack of this empowerment and thus the lack of participation.

4.3 Gaps and Bottlenecks in the implementation

4.3.1 Existence of policy gaps in implementation of projects and programs

While efforts are made to promote projects that aim at attaining sustainable natural resource management, sometimes there just no dedicated policy(ies) relating to the program or project, and when available these policy(ies) are not specific but are instead conjoined and mainly address other preferred or considered priority areas.¹⁸⁵ In Kenya’s strategic

¹⁸⁴ Wallerstein, N., “Powerlessness, empowerment and health: Implications for health promotion programs.” *American Journal of Health Promotion*, 6(3), 197-205

¹⁸⁵ Ministry of environment and Natural Resources (2016) Kenya Strategic investment framework for sustainable land management 2017-2027

investment framework for sustainable management (SLM), for example,¹⁸⁶ the priority areas under the SLM are like agriculture, water, environment and soils circumstances under which priority setting with regard to effective implementation of SLM is limited by competition for resources between SLM priorities and other sectoral priorities. In this regard, there is a need to raise the profile and publicity of any project, or strategies such as the SLM in order to be accorded the requisite consideration and weight for a dedicated policy.

4.3.2 Institutional Gaps

During the implementation of programs focused on natural resource and environmental management, governments may have in place several institutions engaged but there lack a central coordinating mechanism by the national government for counties.¹⁸⁷ Currently, there are ministries within the National government and also others within the County government.

For the land management strategy, for example, despite there being several institutions that are engaged together, the government lacks a central coordinating mechanism for SLM investment. However, there is a focal ministry that links farmers to the SLM that does not host affiliate institutions dedicated to SLM issues.

Without clear coordinating mechanisms among these institutions, implementation of SLM in the country faces many challenges, hence the need for the KSIF coordinating mechanism.

4.3.3 Poor monitoring and evaluation of established strategies and programs

The success of any strategy, program or project is in attaining the intended impact or progress. This can only be measured through proper monitoring and evaluation.¹⁸⁸ Any projects that are set up the aim to manage natural resources and promote environmental protections should be measured, otherwise, the intended results may not be achieved despite massive funds invested. During a discussion with members of NGOs in Laikipia County, they mentioned that most established projects such as afforestation are not well monitored and thus despite hearsay that trees have been planted no trees can be identified

¹⁸⁶ Ibid

¹⁸⁷ Ibid'pp. 40

¹⁸⁸ Ibid

on the ground. Afforestation has an impact on watersheds and other water sources and sometimes even as cattle feed for tree shrubs.

“As NGOs, monitoring and evaluation of projects is a must. From educational to environmental projects key indicators must be measured to assess impact. However, most projects here are not monitored despite these projects having used a lot of funds. This then results in poor results where resources are not protected and renewable restored can not be renewed. This is why resource conflicts here cannot end because no one is ready to protect the already existing ones.”

4.3.4 Poor and Delayed funds allocation

Despite the various process aimed at managing natural resources and promoting environmental management in Laikipia County resource allocation has been undermined by various weakness. ¹⁸⁹ In the case of the SLM project that focuses on land resource management have no specific sector working groups, for the SLM interventions. SLM issues are combined with cluster activities in agriculture and rural development ¹⁹⁰ and the environment, water and natural resources sub-sectors.

At the County level, the County Integrated Development Plans (CIDPs) are prepared in a hurry and in a period of transition when counties do not have adequate capacity to analyze and prioritize SLM issues. These weaknesses persist because of the adverse impact of SLM neglect that takes time and manifest gradually and also because SLM activities and interventions are not always visible enough to the technical officers, policymakers and even the political leaders enough to attract attention that would lead to an increment in the SLM and other natural and environmental-related budgetary provisions. As indicated in the table below, the financing gap keeps widening over time.

Table 4.1: SLM Financial Gap

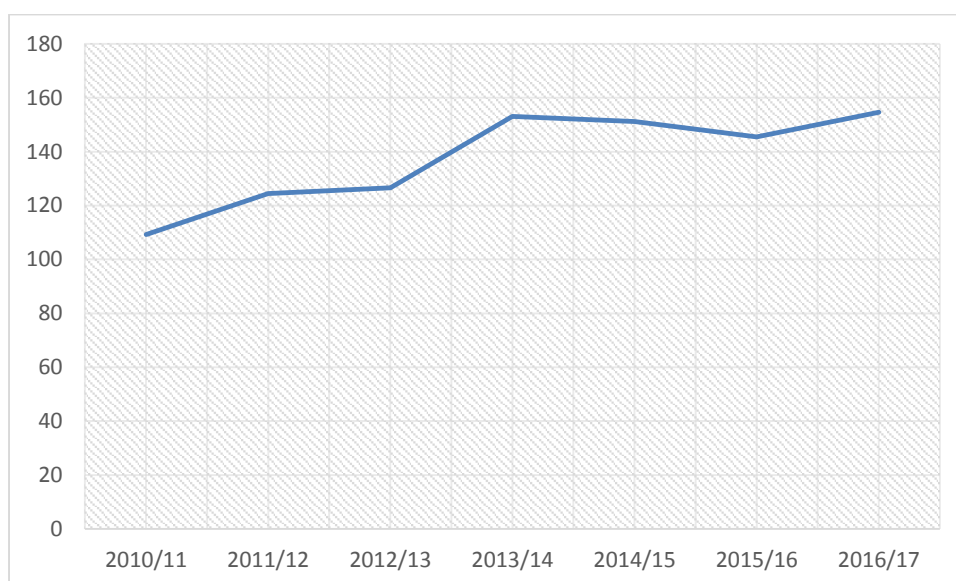
Financial year	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Resource allocation	84.10	73.20	84.20	64.60	69.60	87.90	93.50
Resource requirement	193.4	197.60	211.05	217.65	220.75	233.40	248.05
Financial Gapping	109.3	124.40	126.65	153.05	151.15	145.5	154.60

Source: Field Data, 2019

¹⁸⁹ Ibid'pp. 41

¹⁹⁰ Ibid'pp. 42

Figure 8: Natural resource financial gap trend assessment; SLM Case



The financial gap for natural resource and environmental-related activities widens over the years indicating that this is not considered a priority despite them being conflict causing agents.

4.4 Challenges in the implementation of Peacebuilding NRM projects

According to Njoka,¹⁹¹ interventions that are out in place to reduce or prevent conflicts as a result of limited resources are experienced in certain areas of Kenya especially the semi-arid zones such as Laikipia County. Pastoral and agro-pastoral institutions are weak, with their effectiveness curtailed by internal governance weaknesses and lack of capacity to institute or enforce agreements among members and ward off external aggressors, particularly in the face of changing political environments.

Rampant corruption coupled with weak governance capacity is also a factor that affects the implementation of projects. This has often resulted in the misappropriation of resources targeted at the development and humanitarian needs of the ASALs. The result is normally failure to deliver, incomplete projects, wastage of resources and consequently very little or no impact on livelihoods.¹⁹² There is weak government presence in pastoral areas, like Laikipia Count understaffing and limited resources which affect service provision. This further constrains the role of the government as a facilitator and coordinator of development and humanitarian work. Policy reforms go at a slow place, owing to vested

¹⁹¹ Njoka J.T., (2011) Enhancing Resilience to Climate Change in the Horn of Africa; A Report by USAID.

¹⁹² Ibid pp 12

political interests that delay or derail the legislative process. For example, several policies are still in draft form and have not been finalized, key among them the ASAL policy.

Relevant government departments do not enforce the policy. For example, environmental regulations enshrined in the Environmental Management and Coordination Act (1999)¹⁹³ are rarely observed in implementing projects, which results in negative environmental impacts that erode positive gains. Project design challenges arise from poor understandings of the drylands among some actors. For example, poor location of boreholes results in the abandonment or sedentarisation of pastoralists around water points, leading to environmental degradation.

There has been a failure to integrate modern practices with indigenous knowledge, which implies a failure to build on people's knowledge and practices, such as by integrating modern early warning systems with traditional knowledge. Land tenure and access challenges exist, especially on pastoral land, which comes under customary tenure. Where tenure is not clear, disputes arise over ownership and by extension over benefits associated with investments, particularly in natural resource management.

4.5 Challenges experienced by Stakeholders in implementing NRM programs

In the management of natural resources, different resources are managed by different stakeholders in the County. For water resource management the overall in counties is the ministry of environment, which delegates the responsibility further to ensure proper implementation mechanisms. In Laikipia County, there is the water resource users association (WRUA) that helps to manage and ensure efficient supply and management in water use. The organization is also expected to arbitrate, do community mobilization, ensure equitable distribution of water resources, do capacity building, offer good leadership and training to the entire community, empower and enable the WRUA members implement their constitution and by-laws.¹⁹⁴

¹⁹³ Ibid, pp. 45

¹⁹⁴ Wachira S., (2013) Influence of Water Users' Associations (WRUA) in water conflict Resolution among the communities of Sub catchment 5BE in Meru – Laikipia Counties, Kenya Available at: <https://erespository.uonbi.ac.ke/bitstream/handle/11295/56253/Abstract-pdf?sequence=3> Accessed 30/10/19

In an interview with the water stakeholders; WRUA Laikipia County, the stakeholders indicated that they do encounter a lot of challenges in their efforts to try and manage water resources and also mitigate water-related conflicts. Some of the challenges that they face include; working with self-centred people who are solely interested in achievement of their personal interest, poor and inadequate facilitation, sometimes as an organization, they lack the capacity to handle community issues, scarcity of resources with regard to financial and logistical facilitation, bias in resolving conflicts, and this is usually as a result of the diverse interests amongst the various members.

4.6 Establishment of unsustainable solutions

Programs run for years while the project begins and end. Sustainability ensures or is continuity. Within Laikipia County, as stated by some of the key informants, most of the projects set up in an effort to mitigate resource conflicts are not sustainable.

“Project sustainability is key to the attainment of intended goals. However, most of the project and programs that are set up here are not well thought of as most end within a year of implementation and end up being of no use to the residents. Peacebuilding organization do not put to place required project management skills and actions to a successful project. Of what use is it then?”

Most of the projects set up as indicated in some of the group discussions were described as wanting and the community indicated that despite the projects being established they do not work. In an interview with an expert in project management in the county, it was stated that the major gap with resource projects in Laikipia County is that there lacks handover ownership to the intended parties from the foundation inception stage of the program. Instead of the community who this project is intended being involved in labour and provision of ownership early in the project, the project is handed over to the community at the end. This results to lack of ownership and as soon as the funding party exits the project ends and the residents go back to the old ways of fighting for resources and thus the reemergence of conflicts in the County. The community go back to conflicting for a resource such as water where a solution had been established for them. Ownership is the power to community project sustainability.

4.7 Summary of Key Findings

Chapter Four highlights some of the challenges that affect the implementation of policies, programs and projects whose objective is to help manage natural resource-related

conflicts through effective resource management and environmental protection. It is quite unfortunate that most of the established challenges are as a result of failure to implement already existing mechanisms that are intended to promote sustainable peace. Over % of the residents lack knowledge on the power of participation in community engagements and thus the experience with these challenges.

Participation of government officials in corruption instead of enabling active strategies results in a completely failed system. As seen above water agencies whose mandate is to promote resolutions area also faced with a large summary of challenges making the implementation of their roles a tragedy.

Unsustainable means of policy, project and program implementation have resulted to the continuous recurrence of conflicts in Laikipia county, lack of continued education and awareness on citizenry rights and lack of coordination amongst parties and stakeholders has resulted to a circumferential result of unending conflict.

CHAPTER FIVE

SUMMARY, RECOMMENDATION AND CONCLUSION

5.1 Introduction

This chapter provided for the summary of study results as discussed and reviewed in the above chapters giving a summary and also recommendations. The chapter provides a summary on the relationship between natural resources and resource conflicts, policies and strategies in place in an effort to manage resource conflicts and challenges in the implementation of these strategies and policies.

5.2 Summary of the Study

This section will provide a conclusive summary of the findings identified throughout this study and bringing to clarity the gaps that result in un-attainment of sustainable management of natural resources resulting in recurrent resource conflicts in Laikipia County.

5.2.1 Nexus between natural resources and conflicts in Laikipia County

This study has established a great link between natural resources and the existence of conflicts within Laikipia County. Human-elephant conflicts are indicated as some of the conflicts that occur because of the existence of both animal conservancies and humans within close proximities of the same areas. This is sometimes seen to occur during the extended dry periods when elephants break into farmlands in search of food destroying crops, the result has always been either the death of the people or the elephants. Despite great efforts which have seen achievements where electrical fences have been put up around the conservancies to prevent the animals from breaking out, and there has been reduced by 65% in breakages from 105 to 23 in one of the conservancies it is unfortunate that these breakages are still happening and thus human-animal conflict.

Scarcity of resources is another factor that has seen the reemergence and recurrent resource conflicts in the County. With the current changing weather patterns where there are extended droughts and flooding, extending the scarcity aspect as expressed by 76% of the respondents; water has become limited, land crops are not surviving the weather, and if they do they are destroyed by elephants and as a result of all these stresses then conflicts in the County keeps reemerging in a fight for the scarce but needed resources. Increase in population has always meant more demand for the available resources; water, land and

pasture. This has resulted in the encroachment of forests by local inhabitants explaining the animal-human conflicts in the county too.

Cattle rustling in the region is considered either a tradition and as in recent times as indicated by this research as a business, a business for economic and also political gain as indicated during the focused group discussions. The persons engaging in the rustling activities as was in the traditional times are now not just pastoralists but also other members of the community; a clear transition in the conflicts in the county. Arms proliferation is also another causal factor in the continuity of the conflicts in the region. The socio-economic dynamic has resulted in increased resource conflicts.

The land is also regarded as a scarce resource not just in the County but in Kenya in general. In Laikipia however, historical land injustices have existed for so long with no root cause address solutions. Pastoral communities believe that ranchers took the land away from them, while immigrants into Laikipia County in areas such as Rumuruti and Witeithie areas also seen as land snatchers. These emotional stresses have constantly resulted in violent conflict emerging amongst the communities especially when the pastoral communities are denied access to these lands for grazing. Pastoral communities believe in community ownership of land and the subdivision to them is a nuisance which results in conflicts in the county amongst the parties.

This interaction and linkage in needs, as described by Maslow and lack of satisfaction of needs has resulted in the constant recurrence of conflicts in Laikipia county. the existences, scarcity and gap in fulfilment are the reasons for this.

5.2.2 Existing policies and strategies in the management of resource-based conflicts

The study findings reveal that there are various effective policies and strategies that are existent in the effort to manage resource-based conflicts. These policies and strategies exist as a natural resource and environmental protection means. There are policies on water, land forests and also on wildlife management., and with devolution implementation has been moved down to the county level. This is so as to ensure effective and easy implementation.

Unfortunately, as per the findings of this study, these policies and strategies are fairly unknown to the persons they are meant to greatly impact or affect. 74% and 54% of pastoralists and smallholder farmers interviewed, reported a lack of knowledge and awareness with regard to these policies and strategies of resource management.

ranchers, academicians and government officials are the highest percent of a person clearly and thoroughly aware of the policies with only 26% and 46% representative sample of pastoralists and SHF who are the majority of the Laikipia citizenry having an idea of the policies. The elite in the community seems to be aware, unlike the join elite who may require more education and knowledge for clear understanding. These lack of knowledge links to reports found in the effectiveness of these strategies o resource management in Laikipia were 63% per cent of the respondents indicated them as non-effective.

With regard to the preferred strategy to manage conflicts within Laikipia County. Respondents indicated that nonviolent strategies are the most preferred especially where a third party is involved; thus mediation and negotiation being the preferred methods by most inhabitants representing 60% of the responses. Disarmament, a method is not a preferred with most of the respondents indicating that disarmament procedures when carried out in the County are not peaceful but very aggressive by the law enforcers, worse still are the government enforcement methods that result to deaths and even injuries of hundreds.

Modern strategies that are preferred by most respondents are the restoration and rehabilitation of environmentally degraded areas and also the valuation of the environment and natural resources, with 63.4% of the respondents indicating that environmental degradation is one of the major reasons why resource shave greatly depleted and that there is a need to replenish these resources, through activities such as afforestation and protection of water sources. The collaborative approach was preferred by 23.3% of the respondents who indicated that coming together of various institutions with a common goal would help to reduce conflict reemergence and improve resource management strategies.

The study found that there is a need to strengthen and exploit more on the strategies and policies used in resource management in Laikipia County and also a need t=for education on rights and policies for the citizenry.

5.2.3 Challenges in the implementation of projects programs and policies for management of resource conflicts in Laikipia County

The study identified that the County faces a number of challenges that limit the implementation of resource management policies, strategies; programs and projects in Laikipia County. Policies are formulated and implemented without proper, active and

sustainable public participation. This is despite this being a constitutional requirement, but as seen before education and awareness on rights is a gap in select sections of Laikipia County. The citizenry is not aware of their right to participate and the means through which they can do this.

There is also a lack of harmony and coordination amongst the bodies that are and should be engaged in resource management. Lack of coordination is especially seen between national and County governments and this is seen not just with Laikipia County but with other resource-rich counties in Kenya. Poor identification of the right stakeholders to engage in these projects is also a challenge which results in poor consultation and the emergence of corrupt activities and mismanagement of resource management funds.

Gaps in policy are also a challenge that is faced especially in the implementation of resource management projects and programs where policies are too intertwined and there are no specific policies for specific resources. For example, policies on the water will be intertwined with policies on soil, and agriculture, resulting in the assumption of water as an irrigation resource used only leaving out pastoral and business facilities. There also are institutional gaps and poor monitoring and evaluation of already established programs. This results to fall of projects and programs that were meant to sustainably sustain communities helping to reduce or mitigate conflict recurrence.

Implementation of NRM strategies is also limited by the poor and slow allocation of funds. This is so the case with natural resource funds where national government through the treasury allocates very low amounts of the budgetary allocation to resource and environmental management and also delays the release of these funds. This affects all implementation.

There is a need for a review on the implementation of program and projects through the engagement of the right stakeholders in planning and also consultation with the public on the ground on preferred NRM plans. Governments; national and County need to work collaboratively as a fail off this results to reoccurred conflicts due to poor governance.

5.3 Conclusion

Laikipia County is a resource-rich county with an all-inclusive group of the citizenry. Over the years, there has been a consistent and recurrent recurrence of resource-related

conflict despite efforts, projects research and programs being put in place in an effort to reduce these conflicts. Unfortunately, this has not been the case and there is a need for government and other stakeholders to come together to establish sustainable ways to mitigate and manage these conflicts.

5.4 Recommendations

The study makes the following recommendations;

- There is a need for the County to adopt the sustainable development goals and the Vision 2030 goals as short and long term guiding strategies in the management of Natural resources and in the management and mitigation of resource-related conflicts. Through the County environment ministry in collaboration with the National Government and other relevant stakeholders, the key outputs through linkage to the various gaps in resource management should be linked to contributing to the attainment of either of the SDGs and reported frequently on the efforts and achievements made. For example; through the research education and awareness on the people's rights, and on natural resource management is a gap in the County. in a work plan developed by all stakeholders through representation in the county, plans should be established and linked to promoting to the attainment of SDGs 4, 16 and 17 on Quality education, peace, justice and strong intuitions and partnership for the goals. Where every year or mid-year the various stakeholders report to the County ion their efforts toward attainment of these goals in relation to resource management and the County government then reports to the National Government which then report to the United Nations in the form of communication on progress towards attaining the SDGs.
- The rationale behind devolution is guided by different historical dispensations unique to every country.¹⁹⁵ With regard to devolution, Kenya can learn from other jurisdictions through adoption of the community-based resource management program where differences between people and groups are taken into account and there is the introduction of bargaining mechanisms to increase

¹⁹⁵ Juma, T.O., et al, (2014) Devolution and Governance conflicts in Africa: Kenyan Scenario." Public Policy and Administration research. Vol. 4, No. 6, p. 4

the power of marginal groups to negotiate. This is a case of a program in Uganda.¹⁹⁶ The decentralization process can also be institutionalized in response to structural adjustment policies, where there are local institutions on the ground and communications on devolution are maintained between County and National government while the local institutions on the ground keep being successful. A case of this example is Zambia.¹⁹⁷ Or like in Tanzania, where the country has the joint forest management; a case in point where communities are entrusted with the protection of nearby forests. The communities organize committees for forest protection and each body has an executive body to run the everyday activities and affairs.¹⁹⁸ Other case studies that Laikipia County and Kenya, in general, can borrow and learn from on NRM are Nigeria, Mali and Zimbabwe.

- There is also a need for the adoption of interventional measures so as to ensure sustainable development at the local level. This will help to aid pastoral societies to adjust to the climatic changes and learn other climatic conducive and adaptive measures such as rainwater harvesting, value addition to crops and livestock etc.
- To ensure the success of the devolution of NRM, there is a need for management frameworks that encourage the engagement of multiple actors across the two levels of government and affected communities. The central Government still remains relevant in the natural resource management setup, as it is more effective in keeping the county governments in check in a system of counter-checks and balances amongst the 47 county governments and the national government. The active involvement of independent organizations and NGO's will also go a long way in ensuring that the appropriate standards in natural

¹⁹⁶ Campbell, T., (2006) "Devolved natural resource management as a means of empowering the poor; Rhetoric or Reality," *Trocaire Review*, p. 122.

¹⁹⁷ Mukwena R.M. "Situating Decentralization in Zambia in a political Context. "African training and research center in Administration for development." Available at: Research Centre in Administration for Development, available at:

<http://unpan1.un.org/intradoc/groups/public/documents/cafrad/unpan017692.pdf>. Accessed 9/11/19

¹⁹⁸ Prasad, R., 'Forest management in India and the impact of state control over non-wood forest products,' *Unasylva*, Vol. 50, No. 3 (Non-Wood Forest Products and Income Generation), available at <http://www.fao.org/docrep/x2450e/x2450e0c.htm#TopOfPag> Accessed on 9-11-2019

resource management are maintained, educating the locals on the benefits that accrue and from sustainable utilization of the resources around them.

- Kenya can also learn a lot from Zimbabwe. This is by determining how to define the communities. In Zimbabwe, where the Zimbabwean communities are legally defined through political-administrative boundaries, and the interests of individual resource users combined inwards, Kenyan communities benefitting from natural resources may not necessarily be defined through certain fixed parameters such as tribe and also through the incorporation of other unifying factors such as residential status in a county. By virtue of their residing in a geographic area, communities should be defined as resource users, and therefore automatic holders of use and access rights over wildlife and forest resources within the administrative boundaries of their places of residence.¹⁹⁹

¹⁹⁹ Mosimane, A.W. & Aribeb, K.M., "Exclusion through defined membership in people-centered natural resources management: Who defines?" Commons Southern Africa occasional paper, No. 14.

BIBLIOGRAPHY

Abiodun Alao (2007) *Natural Resources and Conflict in Africa: The Tragedy of Endowment*. University of Rochester Press 668 Mt. Hope Avenue, Rochester, NY 14620, USA

Bannon, Ian and Paul Collier (2003) *Natural Resources and Violent Conflict: Options and Actions*. Washington D.C.: World Bank.

Blumberg B., Cooper D.R., & Schindler P.S. (2005). *Business Research Methods*, McGraw Hill: Berkshire.

Bond Jenniefer (2014) *Conflict, Development and Security at the Agro–Pastoral–Wildlife Nexus: A Case of Laikipia County, Kenya*. *Journal of development studies* 50 (7)

Churchill, L.R (1995) “Beneficence”. *Encyclopedia of Bioethics*. Simon & Shuster, Macmillan: New York.

Constitution of Kenya 2010, Art. 69(2).

Douglas-Hamilton I. (1987) ‘African elephants: Population trends and their causes.’ *Oryx*
Environmental Management and Coordination Act (1999) See Sec. 111(1).

Food and Agricultural Organization, *Conflict and Natural Resource Management*. PP.1
<http://www.fao.org/forestry/21572-0d9d4b43a56ac49880557f4ebaa3534e3.pdf>
[Accessed on 29-03-2019](#)

Fox, G.R. (2018) *Maasai Group ranches, minority landowners and the political landscape of Laikipia County, Kenya*. *Journal of Eastern African Studies*. 12(3)
<http://siteresources.worldbank.org/INTEMPowerment/Resources/486312-1095094954594/draft2.pdf>

<https://www.nyu.edu/pages/bkg/methods/005847ch1.pdf>

<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

- Jenkins P.R., and P.H. Hamilton (1982) *The Laikipia elephant problem wildlife conservation and management of tourism and wildlife*, Nairobi
- Kariuki Muigua (2014) *Natural Resources and Conflict management in East Africa*. A paper presented at the 1st natural conflict management group East African ADR Summit.
- Kariuki Muigua (2016) ‘Managing Natural Resource Conflicts in Kenya through Negotiation and Mediation.’
- Kinnarf, M. F. and O’Brien, T.G. (2012) Effects of private land use, livestock and management, and human tolerance on diversity, distribution and abundance of large African mammals. *Conservation Biology*, 26(6)
- Kratli S, Swift (2001)” Understanding and managing pastoral conflict in Kenya: How contemporary understandings and knowledge of pastoral conflict can guide practical work.” Environment Team, IDS Sussex, UK
- Louis K. (2003) “Factors Shaping the course of intractable Conflict.” Eds. *Beyond Intractability*. Eds. Guy Burgess and Heidi Burgess. Conflict Research Consortium, University of Colorado, Boulder
- Marker, S.(2003)‘Unmet Human Needs’, *Beyond Intractability*. (Eds.) Guy Burgess and Heidi Burgess. Boulder: Conflict Information Consortium, University of Colorado.
- Mugenda A. G. (2011) *Social Science Research Methods: Theory and Practice*. ARTS Press; Nairobi
- Muriithi Mutiga (2017) *Violence, Land, and the Upcoming Vote in Kenya’s Laikipia Region; from Early Warning to Early Action*. @Crisis Group
<https://www.crisisgroup.org/africa/horn-africa/kenya/violence-land-and-upcoming-vote-kenyas-laikipia-region>

- Mulama M.S. (1990) Assessment of the crop-raiding by the elephants in Laikipia East Sirima location. Unpublished report. Nairobi: Laikipia Elephant project; Kenya wildlife service.
- Mutunga Vannesa (2018) Natural Resource Management Framework as a conflict management strategy in Kenya; Case of Laikipia County
- Mwagiru M. (2006) Conflict in Africa; Theory Processes and Institutions of Management. Centre for conflict research Nairobi.
- Ochieng Tobias (2008) Coping with Human-Elephant conflict in Laikipia District, Kenya <https://www.researchgate.net/publication/259853146>
- Ojwang, J.B., (2007) “The Role of the Judiciary in Promoting Environmental Compliance and Sustainable Development,” 1 Kenya Law Review-Journal
- Omondi, P., Bitok E., and Kagiri J. (2004) Managing human-elephant conflicts: the Kenya experience. Pachyderm
- Page, N. and Czuba, C.E. (1990) “Empowerment: What Is It?” *Journal of Extension*, Volume 37, Number 5, Commentary, 5COM1.
- Peter Gleick, *Effects of Population Growth on Water Scarcity*, Journal of International Security, Volume 18, No.1 1993.
- Peter Gleick,(1993) Effects of Population Growth on Water Scarcity, Journal of International Security, Volume 18, No.1
- R. Stagner (1967) Psychological Aspects of International Conflicts. London. Belmont Books
- Republic of Kenya (2018) Laikipia County Integrated Development Plan 2018-2022. <https://laikipia.go.ke/assets/file/7518c091-second-county-integrated-development.pdf>

- Rothman, J. (1997) *Resolving Identity-Based Conflict in Nations, Organizations, and Communities* (San Francisco: Jossey-Bass Publishers).
- Sitati N. W. and Walpole M. (2006) ‘Assessing farm-based measure for mitigating human-elephant conflict in Transmara District, Kenya.’ *Oryx* 40 pp. 279-286
- The Constitution of Kenya, (2010) Government Printer, Nairobi.
- The Laws of Kenya (2006) ‘The Forest Conservation and Management’ Act No.34.
- The United Nations Department of Political Affairs and United Nations Environment Programme (2005) “Natural Resources and Conflict: A Guide for Mediation Practitioners.” UN DPA and UNEP
- Thomas F. Homer Dixon (1991)” On the Threshold: Environmental Changes as Causes of Acute Conflict.” *International Security*, Vol. 16. No. 2
- Thomas Homer Dixon (1999) *Environmental Scarcities and Violent Conflict: Evidence from Cases*, *Journal of International Security*. Volume 19, No. 1
- Thomas Homer-Dixon, *Environmental Scarcities and Violent Conflict: Evidence from Cases*, *Journal of International Security* Volume 19, No. 1; Page 5-40
- Thomas Homer-Dixon, *Environmental Scarcities and Violent Conflict: Evidence from Cases*, *Journal of International Security* Volume 19, No. 1
- Thouless, C. (1994) ‘Conflict between humans and elephants on private land in Northern Kenya.’ *Oryx* 28(2)
- United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992.
- United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, A/RES/70/1, para.35.

United States Agency for International Development(USAID), ‘Conflict over Natural Resources at the Community level in Nepal Including its Relation to Armed Conflict (2006) https://pdf.usaid.gov/pdf_docs/PNADF990.pdf Accessed 29-03-2019

United States Institute of Peace (2007) ‘Natural Resources, Conflict, and Conflict Resolution: A Study Guide Series on Peace and Conflict.’ Washington D.C. 20036

UN DESA (2018) World Public Sector Report: Integrated approaches for migration, health, and in post-conflict contexts.
<https://www.un.org/development/desa/publications/world-public-sector-report-2018.html>

Waithaka M. Thomas (2010) ‘An Assessment of the Impact of Land Use Changes on Human-Elephant Conflict in Laikipia West District, Kenya.

Wallerstein, N., “Powerlessness, empowerment and health: Implications for health promotion programs.” *American Journal of Health Promotion*, 6(3)

Warner Michael, (2000) ‘Conflict Management, in community-based natural resource projects: Experiences from Fiji and Papua Guinea. ‘Overseas development institute Portland House. Stag Place London SW1E5DP UK.

William Wallis, (2003) “Kimberley Process: Africa’s Conflict Diamonds: Is the UN-backed Certification Scheme Failing to Bring Transparency to the Trade,” *Financial Times* (London)

World Bank, *Chapter 2. What Is Empowerment?*

Zimmerman, M.A., (2000) “Empowerment Theory: Psychological, Organizational and Community Levels of Analysis,” *Handbook on Community Psychology*, New York: Plenum Press, 2000. p.52.

APPENDICES

Appendix I: Letter of Introduction

My name is **Elizabeth Wanjiku Maina**, a 2nd-year student at the University of Nairobi, studying my M.A. in International Conflict Management. The title of my research study is, **“SUSTAINABLE MANAGEMENT OF NATURAL RESOURCE BASED CONFLICTS: A CASE OF LAIKIPIA COUNTY.”** This study aims at contributing to the ways and strategies in which natural resources conflicts are managed in the country by ensuring more sustainable ways and community-owned strategies to reduce reoccurrence. The re-emergence of these conflicts has been a great challenge to the development of the County and the country in general.

I am currently collecting data on this subject and I would greatly appreciate your assistance by providing me with information that would help to inform this research, and also advance knowledge on the subject. I give you the assurance that this information will be kept private and confidential. Thank you for your participation.

Appendix II: Questionnaire

SECTION A: GENERAL INFORMATION

Date:

Household characteristics:

Sub County:

County:

What gender are you?

- Female ()
- Male ()
- Other ()

Which age group do you belong to?

15-20 years ()

21-30 years ()

31-40 years ()

41-50 years ()

51-60 years ()

More than 60 years ()

Highest Education Level

Primary ()

Secondary ()

Diploma ()

Degree ()

NEXUS BETWEEN NATURAL RESOURCES AND CONFLICT

	strongly agree	agree	neutral	disagree
During the dry season, there is increased conflict between pastoralists and Ranch owners				
Pastoralists should be allowed to access specified areas of ranch areas for water and pasture during emergency climate situations				
Changes in climate have resulted in water scarcities				
Human-elephant Conflict	strongly agree	agree	neutral	disagree
Elephants break out of conservancies onto farmlands				
Human and elephants have been killed during breakages of elephants into farmlands				
There is a need for strategies to be implemented to reduce and sustainably end human-elephant conflicts				
Elephant disturbances are usually seasonal but majorly on the rise during the dry seasons				
Water Scarcity				
Decreased amounts of rainfall and reduced accessibility to water has caused or resulted in increased conflicts				
There is a change in the pattern of rainfall over the last 5 years				
Water scarcity has attracted increased conflicts amongst ranches, and the various communities within Laikipia County				
Cattle Rustling and Theft	strongly agree	agree	neutral	disagree
Cattle rustling is considered as an acceptable activity amongst the pastoral communities within Laikipia County				
Is the increase in cattle rustling as a result of increased droughts and famine thus the death of cattle and thus the need to replace what is lost?				
Would availability to pasture and water points for cattle feeding help to? reduce cattle rustling activities				
Land Conflicts	strongly agree	agree	neutral	disagree
Increased populations and migration has resulted in increased land conflicts				
Past unsolved land ownership and occupancy issues have resulted in increased land conflicts				

Increased ranches and agro activities in pastoral land has led to increased land conflicts				
Agro - pastoral & Ranch Conflicts				
Ownership of arms by pastoralists has led to increased conflicts				
Governance, resources and conflict	strongly agree	agree	neutral	disagree
Government extension agents are available to train farmers, and pastoralists and other Laikipia residents on NRM				
Existing government structures weaken and undermine traditional governance systems				
The SDGs are not inclusive in the current natural resource conflict management mechanisms and strategies				
Failure to continuously monitor and report on the actual status of activities on the conflict in the grassroots has resulted in the continuous eruption of resource-based conflicts				
Insecure access and scarcity of grazing pastures and water has led to constant confrontations between nomads and ranch owners				
Refusal and ignorance by the County government to address communal needs of pastoralists has propagated a bias between white ranchers and pastoralists				

EXISTING POLICIES AND STRATEGIES AND THEIR EFFECTIVENESS IN THE MANAGEMENT OF RESOURCE BASED CONFLICTS

1. During conflicts, which mode of management are used to try and resolve the conflicts? (Tick where applicable; it's okay to tick one or more than one)

organizing peace barazas or meetings	
through Negotiations	
Through the area administrator/ chief	
other (please state the model used)	

2. What are some of the available policies are in place with regard to natural resource management and other factors that result in conflict management such as climatic changes?
3. What are some of the complaints reported by citizens with regard to the modes of natural resources conflict management?
4. Does Arbitration help to recover stolen cattle or resolve other kinds of conflicts within the County?
5. What would be the best strategy for conflict resolution on resource-based conflicts in the County?
 - a. Use of local knowledge
 - b. A mix and continuous process of discussions amongst all involved stakeholders
 - c. Government instructions and orders
 - d. The constitution
6. What are some of the benefits of educating people on developmental ways of conflict management?

PROPOSED POLICY CHANGES TO REDUCE REOCCURENCE OF RESOURCES BASED CONFLICTS

1. What are some of the proposed changes in policy to reduce reoccurrence of resource-based conflicts in the county?

Type of Conflict	The proposed form of management

Appendix III: Focused group discussion and interviews

1. What are some of the available natural resources within Laikipia County? (e.g. forests, minerals, land, water livestock etc.)
2. How are the Natural resources available in your area utilized?
 - a. They are communally used. If yes, How?
 - b. They are privatized or used privately
 - c. Owned by the GOK or LCG?
 - d. All of the above
 - e. Other, please state which
3. Have there been changes in the environment within the County that have led to the reoccurrences of resources based conflicts? Which ones?
4. Are you aware of any U.N developmental strategies to reduce conflicts and promotes peace?
5. What ways would you propose to promote development while reducing and ending reoccurrence of Natural resource-based conflicts?