## **UNIVERSITY OF NAIROBI**



**Institute of Diplomacy and International Studies** 

# NATURAL RESOURCE AS A SOURCE OF CONFLICT- CASE STUDY IN

### NORTHERN KENYA (2012-2016)

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### Declaration

I, <u>Mercy Wairimu Kamau</u> hereby declare that this research project is my original work and has not been presented for a degree in any other University.

Signed..... Date..... Date.....

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

Signed	Date
Dr. M Ouma	

# Dedication

I dedicate this research work to my son Ian Prince and daughters Angela Blessings and Shanice Favour for their patience, encouragement and understanding.

### Acknowledgements

I acknowledge my employer, Kenya Defense Forces for giving me an opportunity to undertake this study. I also thank lecturers and administrators of Institute of Diplomacy and International Studies for equipping me with knowledge and skills in strategic management, security and diplomacy. Many thanks also go to my colleagues for their encouragement and team support. May God's blessings be upon you.

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# Abbreviations and Acronyms

ASAL	Arid and Semi-Arid Lands	
CAR	Central Africa Republic	
DRC	Democratic Republic of Congo	
DRR	Disaster Risk Reduction	
DRR	Disaster Risk Reduction	
KHRC	Kenya Human Rights Commission	
NCCRS	National Climate Change Response Strategy	
NDMA	National Disaster Management Authority	
NEMA	National Environment Management Authority	
NSC	National Steering Committee	
UNFCCC	United Nations Framework Convention on Climate Change	
UNHCR	United Nations Higher Commission for Refugees	
USAID	United States of America International Development	

#### Abstract

Natural resources have been considered as source of conflict in many areas across the world. Northern Kenya is one of the areas known to have many cases of conflicts. This study sought to investigate whether occurrence and persistence of conflicts in Northern Kenya is linked to natural resources. The specific objectives of this study are: to determine ways in which distribution of natural resources contribute to conflicts in Northern Kenya; to examine ways in which use of natural resources contribute to conflicts in Northern Kenya; and to identify natural resource management practices that contribute to conflicts in Northern Kenya. This study established that Northern Kenya is endowed with many natural resources distributed randomly. Some resources especially pasture and scanty vegetation are distributed evenly across most areas while other resources such as water are scarcely distributed. The area has large population of people, livestock and wildlife that compete for the available natural resources. The increased competition has resulted into cases of conflicts. Occurrence of conflicts is therefore correlated with distribution and availability of natural resources. The study also established that conflicts among communities in Northern Kenya is significantly attributed to natural resources. While the area is characterized by erratic rainfall, sandy soils that limit vegetation growth as well as limited rivers and swamps, these conditions are made worse by climatic changes. The combination of climate change and ecological differences trigger and sustain conflicts. Conflicts were observed to occur most during drought occasioned by climate change. The study revealed that there are several interventions put in place to address the natural resource-based conflicts. The interventions include legal institutional frameworks aimed at addressing climate change and drought which is a major cause of conflicts in Northern Kenya. Another approach is traditional conflict resolution mechanism aimed at managing natural resource-based conflict. The approaches have been significant, however, there are several challenges that are institutional and systemic. The challenges have limited the management of natural resource-based conflicts in Northern Kenya. The study concludes that conflicts in Northern Kenya are largely attributed to distribution and management of natural resources. The study recommended that government, development partners, humanitarian agencies and local communities to enhance better use of natural resources to prevent conflict among communities in northern Kenya.

#### **CHAPTER ONE**

#### INTRODUCTION AND BACKGROUND TO THE STUDY

#### **1.0 Introduction**

Natural resources have been considered as source of conflict in many areas across the world. Northern Kenya is one of the areas known to have many cases of conflicts. This study sought to investigate whether occurrence and persistence of conflicts in Northern Kenya is linked to natural resources. In this chapter, this study describes background to the study, statement of the research problem, research objectives and questions. The chapter also describes reviewed literature, theoretical framework, significance, scope and limitations as well as methodology.

#### **1.1 Background to the Study**

Unsustainable utilization of natural resources is a major challenge in the world. The exploitation of non-renewable natural resources is strongly associated with conflicts among nations or communities across the world.<sup>1</sup> The conflicts are caused by increase in needs and unsustainable use of natural resources by burgeoning population and worsened by natural factors such as climate change.<sup>2</sup> The human needs exhibited economic, political, cultural and social dynamics are mainly dependent on natural resources. It therefore follows that natural resources are at the centre of human development. As human populations in different countries and communities have different interests over same natural resources, the utilization of such natural resources becomes contentious hence conflicts.

<sup>&</sup>lt;sup>1</sup> United Nations, "Land, Natural Resources and Conflict Prevention: From Curse to Opportunity," UN, 2014; p 13 <sup>2</sup>Annegret Mahler, "Nigeria: A Prime Example of the Resource Curse? Revisiting the Oil-Violence Link in the Niger Delta. GIGA Research Programme: Violence and Security No. 120, January 2010; p 22

There is wide recognition that many civil conflicts are linked to natural resources especially oil, land, water and minerals.<sup>3</sup> For example, there was conflict over water in Shandong and Guangdong Provinces of China in 2000 while similar conflict occurred in India in 2004 and Bolivia as well as Yemen in 1999.<sup>4</sup> In Africa, natural resources have continued to fuel conflicts since the beginning of post-Cold war. To demonstrate this, Alao notes that increase in number of armed groups in Liberia, Democratic Republic of Congo (DRC), Angola and Sierra Leone was facilitated by exploiting natural resources inside their territories to prosecute wars against their respective governments.<sup>5</sup> In these countries, the natural resources in contention are minerals.

In another frontier such as Sahel and other Africa's arid and semi-arid areas, water and pastures have continued to perpetuate conflict. In the Sahel region, pastoral conflicts are experienced in Burkina Faso, Côte d'Ivoire, Senegal, Nigeria and Mauritania to the Chad-Central Africa Republic (CAR)-Sudan border triangle in the east.<sup>6</sup> In the South pastoral communities in Namibia and Botswana have similarly precipitated conflict.<sup>7</sup> In Eastern Africa, Toposa of Southern Sudan is in perennial conflict with the Turkana of Kenya, Dinka, Dassenach, Didinga and some of the Karimojong sub-clans.<sup>8</sup> In Kenya, inter-tribal clashes are endemic in the pastoral communities:

<sup>&</sup>lt;sup>3</sup>Vlassenroot Kohl and Raeymaekers Trump, "The politics of rebellion and intervention in Ituri: The emergence of a new political complex? African Affairs, 103/412:385–412. 2012, p. 396

<sup>&</sup>lt;sup>4</sup> Peter Gleick, "Environment and Security Water Conflict Chronology," Pacific Institute, Accessed October 06,2017, http://www.worldwater.org/chronology.html.

<sup>&</sup>lt;sup>5</sup> Phillip Arthur Njuguna Mwanika, "Natural Resources Conflict: Management Processes and Strategies in Africa. Available at: www.makepeacehappen.net. Accessed on 13-09-2017; p 18

<sup>&</sup>lt;sup>6</sup> Bassett, T. 'The Political Ecology of Peasant-Herder Conflicts in the Northern Ivory Coast.' Annals of the Association of American geographers. Volume 78.Number 3. pp: 453-472. 1988.; p. 466

<sup>&</sup>lt;sup>7</sup> Blench, R. 'You can't go home again: Pastoralism in the new millennium.' London. ODI, 2001; p 9

<sup>&</sup>lt;sup>8</sup> Bevan, J.. 'Fear and loathing in Karamoja: An assessment of armed violence and the failure of disarmament in Uganda's most deprived region.' Small Arms Survey Working Paper. Geneva: Small Arms Survey Occasional Paper. 2007; p 46

Turkana and Pokot<sup>9</sup>, Marakwet and Pokot communities<sup>10</sup>, Turkana and Samburu, Samburu and Pokot, Rendille and Borana over water and pastures.<sup>11</sup>

In most cases, the role of natural resources in the conflicts has been underestimated with much consideration placed on cultural practices as a major source of conflict. This has limited exploration of effective and sustainable use of land, pasture and water. The underestimation of the role natural resources which are shared by many communities has exacerbated the situation as there many consequences. For example, the occurrence of conflicts among communities in Kenya, Uganda and Sudan has spilled-over wide and far in areas sharing common resources such as water and pasture.<sup>12</sup> The common indicator in these conflicts is limited pasture and water for the pastoral communities. The occurrence of the conflict is therefore associated with natural resource as there is increased competition over water and pasture for the large populations of livestock. A further consequence is transformation of the conflict by use of illegal firearms. This implies that as these pastoral clashes go largely under-reported, there is continued linkage of natural resources to occurrence and sustenance of conflict.

In an attempt to respond to this situation, management of conflicts arising from natural resource use in Kenya has taken both institutional and normative frameworks. However, effectiveness of these frameworks is put into question as there is persistence of conflicts arising from natural resource use in Kenya. The Kenya Human Rights Commission (KHRC) reports that management of natural resources to avert conflicts in Kenya is championed by the government

<sup>&</sup>lt;sup>9</sup>Jonah Leff, "Pastoralists at War: Violence and Security in the Kenya-Sudan-Uganda Border Region," *International Journal of Conflict and Violence*.IJCV : Vol. 3 (2) 2009, pp. 188 – 203; p 189

<sup>&</sup>lt;sup>10</sup>Cheserek, G.J, Omondi P, and Odenyo V.A.O, "Nature and Causes of Cattle Rustling among some Pastoral Communities in Kenya. *Journal of Emerging Trends in Economics and Management Sciences* (JETEMS) 3 (2): 173-179; 2011, p 174

<sup>&</sup>lt;sup>11</sup>GuyoHaro, Godana Doyo and John McPeak "Linkages between Community, Environmental, and Conflict Management: Experiences from Northern Kenya," Cornell University, Ithaca, NY. May 1-3, 2003; p 18

<sup>&</sup>lt;sup>12</sup>Mburu, Nene. Contemporary Banditry in the Horn of Africa: Causes, History, and Political Implications. *Nordic Journal of African Studies* 8 (2): 89–107. 1999; p. 92

and civil society.<sup>13</sup> Other efforts of managing the natural resources and conflicts include both traditional and modern approaches.<sup>14</sup> This indicates that the government and civil society acknowledge existence of conflicts arising from use of natural resources as a threat to national security, social, political and economic development in areas affected by the conflicts. This implies that efforts are made to avert the conflicts yet there is limited documented evidence required to justify why the conflicts caused by use of natural resources are persistent.

#### **1.2 Statement of the Problem**

Communities in northern Kenya are endemically engaged in unending conflicts over water and pastures. In recent past there have been reported cases of clan or ethnic conflict in the region. For example, in Mandera clans engaged in conflict that left 15 people dead and more than 3000 people displaced.<sup>15</sup> In 2014, it is also reported that members of the Degodia and Garre clans engaged in fierce conflict that left unknown number of people killed and displaced.<sup>16</sup> In addition, Turkana and Pokot<sup>17</sup>, Marakwet and Pokot communities<sup>18</sup>, Turkana and Samburu, Samburu and Pokot, Rendille and Borana over water and pastures have engaged in unending conflict over water and pasture.<sup>19</sup> The conflict leads to loss of lives, mass displacement of people, theft of animals, and increase in proliferation of illegal arms, destruction of property or arson. There are several

<sup>&</sup>lt;sup>13</sup> Kenya Human Rights Commission, Op cit., p 39

<sup>&</sup>lt;sup>14</sup>Odhiambo Ochieng, Op cit., p 20

<sup>&</sup>lt;sup>15</sup> Salad Bishar, "Factors influencing inter-clan conflict in Northern Kenya: A case of Wajir County." [Master Thesis]. Nairobi: University of Nairobi

<sup>&</sup>lt;sup>16</sup> Hassan Ali, "An analysis of the Garre and Murulle inter-clan conflicts in Mandera district in Kenya (since the postcolonial era)." Research Paper, Nairobi: University of Nairobi, 2014

<sup>&</sup>lt;sup>17</sup>Jonah Leff, "Pastoralists at War: Violence and Security in the Kenya-Sudan-Uganda Border Region,"

International Journal of Conflict and Violence.IJCV: Vol. 3 (2) 2009, pp. 188-203; p 189

<sup>&</sup>lt;sup>18</sup>Cheserek, G.J, Omondi P, and Odenyo V.A.O, "Nature and Causes of Cattle Rustling among some Pastoral Communities in Kenya. *Journal of Emerging Trends in Economics and Management Sciences* (JETEMS) 3 (2): 173-179; 2011, p 174

<sup>&</sup>lt;sup>19</sup>GuyoHaro, Godana Doyo and John McPeak "Linkages between Community, Environmental, and Conflict Management: Experiences from Northern Kenya," Cornell University, Ithaca, NY. May 1-3, 2003; p 18

security conferences and works on natural resource-based conflict among pastoral conflicts in Northern Kenya, yet empirical studies that support policy formulation and review are quite limited.

Community centered approaches to management of their resources, policy formulation to support water and land conservation as well as interventions on behavior change have been devised. However, little has been realized due to persistent conflicts among pastoral conflicts in Northern Kenya. The present situation indicates that there is possibility of erroneous or inadequate approaches to natural resource utilisation. There is also possibility of misleading data collection during situational analysis or monitoring and evaluation of the strategies in place. This has been complicated by adverse climatic changes especially drought.

Due to the adverse effects of the conflicts, the underlying issues in access and utilization of the resources should be resolved. The role of the government, community and other stakeholders provides an interface on how resources are accessed and utilised. This requires further examination as conflicts persist possibly due to overlapping, competing and opposing interests of each player in access and utilization of natural resource. Also, with uncertain weather and climatic changes, managing the natural resources provides challenges hence occurrence of the conflict. The overriding question was: why should there be unending conflict in these areas over natural resources despite the collective interventions by the government, civil society and users of the natural resources in Northern Kenya?

#### 1.3 Objectives of the Study

The specific objectives of this study are:

1.3.1 To determine ways in which distribution of natural resources contribute to conflicts in Northern Kenya.

- 1.3.2 To examine ways in which use of natural resources contribute to conflicts in Northern Kenya.
- 1.3.3 To identify natural resource management practices that contribute to conflicts in Northern Kenya.

#### **1.4 Research Questions**

This study sought to answer the following research questions:

- 1.4.1 How does distribution of natural resources contribute to conflicts in Northern Kenya?
- 1.4.2 What are the ways in which use of natural resources contribute to conflicts in Northern Kenya?
- 1.4.3 What are the natural resource management practices that contribute to conflicts in Northern Kenya?

#### **1.5 Literature Review**

Literature indicates that natural resources are linked to conflicts through patterns of distribution, utilization and management practices. Distribution of natural resources is a naturally occurring phenomenal with no human influence. Human behavior conforms to the already distributed natural resources. The exploitation, utilization and management of the resources are heavily dependent on where the resources are allocated and the corresponding quantity.<sup>20</sup> This implies that while some may have similar natural resources, the differences could be about the amount and the extent to which the resources are utilized.

Globally, conflicts arising over natural resources such as land, water and minerals have been witnessed as border conflicts where resources are located on borders of sovereign states. For

<sup>&</sup>lt;sup>20</sup> United States Institute of Peace, "Natural Resources, Conflict and Conflict Resolution," Washington DC: United States Institute of Peace, 2007

example, Nagorno-Karabakh or Mountainous and forested Karabagh land is claimed by countries such as Azerbaijan and the unrecognized state of Nagorno-Karabakh republic as well as Armenia.<sup>21</sup> In Far East there is boundary dispute between North Korea and China over Baekdu Mountain area that has valuable minerals.<sup>22</sup> Similarly, adjacent to this is the dispute over Boraibari land containing iron claimed by Bangladesh and India. Similarly, Kashmir and Jammu has led India and Pakistan to unsettle their interests over the resourceful area for decades.<sup>23</sup> In Africa, conflict in Democratic Republic of Congo (DRC) is strongly linked to abundance of natural resources. This indicates that if the resources were not located near the border, the conflicts could not have occurred.

One of the ways in which natural resources contribute to conflicts is the extent to which the resources are utilized. For example, studies indicate that Africa is endowed with high value minerals. Conflict in DRC, Liberia and Sierra Leone occurred because minerals constituted a significant cause of conflict; situations in which minerals sustain conflicts; and instances in which minerals have been used to resolve conflicts.<sup>24</sup> This implies that conflicts are linked to poor utilization of natural resources. This situation requires proper management of the resources.

Natural resources are limited, and the growing population of people worsens the distribution and utilization of these resources. A body of literature reveals that conflicts are associated with poor management of natural resources. According to this neo-Malthusian

<sup>&</sup>lt;sup>21</sup> Svante E. Cornell, "The Nagorno-Karabakh Conflict" Report no. 46, Department of East European Studies, Uppsala University, 1999, p 26

<sup>&</sup>lt;sup>22</sup> Japan Focus, "China and the Two Koreas Clash Over Mount Paekdu/Changbai: Memory Wars Threaten Regional Accommodation. *The Asia-Pacific Journal: Japan Focus*. Available at: http://www.japanfocus.org/-yonson-ahn/2483#sthash.ShGnue7e.dpuf. Accessed on 15 April, 2018

<sup>&</sup>lt;sup>23</sup> Kallie Szczepanski, "What Are the Origins of the Kashmir Conflict?" Available at:

http://asianhistory.about.com/od/india/f/What-Are-The-Origins-Of-The-Conflict-In-Kashmir.htm. Accessed on 15 April, 2018

<sup>&</sup>lt;sup>24</sup> World Nuclear Association, "Supply of uranium," June 2008. [Online] Accessed 15 November, 2017, at: http://www.world-nuclear.org/info/inf75.html; p 2

perspective, dwindling resources imply intensified incentives for conflict.<sup>25</sup> The opposite perspective holds that an abundance of resources attracts many interests hence conflict. The abundance of natural is an economic stock that attracts many competing and overlapping interests hence becoming a cause and sustainer of conflict.<sup>26</sup> This indicates that dwindling natural resources are potentially a source of conflict as when the resources are abundant. This implies that managing the resources in terms of balancing the rates of utilization is important in averting conflicts.

For example, conflicts in Algeria in 1992 were over oil and gas; in Angola between 1975 and 2002 over diamonds, oil; Cameroon and Nigeria over oil in 1997; Sudan over oil since 1983 among others.<sup>27</sup> This explains why out these conflicts, two distinct features can be obtained. Maphosa notes that, occurrence and sustenance of conflicts in Africa is associated with people who deprive other beneficiaries of their economic value of the resource through looting; and those who use natural resources to control of the state.<sup>28</sup> This explains the extent to which natural resources are linked with economic development of the communities and state.

Based on the empirical review of the relationship between natural resources and conflict, it is important to note that natural resources have been at centre stage for many conflicts in the world particularly Africa. Availability of these resources have continued to shape political affiliations and alignments which determine its distribution and utilization. Political, social and economic factors are inseparable from natural resource exploitation, allocation, distribution and utilization. For instance, societies with bad governance are characterized by instability in political systems which affect economic and social development. In Africa where there are many third

<sup>&</sup>lt;sup>25</sup> Nillesen Eleonora & Bulte Erwin, "Natural Resources and Conflict," *The Annual Review of Resource Economics*, 6: 69-83, 2014

<sup>&</sup>lt;sup>26</sup> Nillesen Eleonora & Bulte Erwin, "Natural Resources and Conflict," *The Annual Review of Resource Economics*,
6: 69-83, 2014

 <sup>&</sup>lt;sup>27</sup> Maphosa Bongani, "Natural Resources and Conflict: Unlocking the economic dimension of peace-building in Africa," Africa Institute of South Africa; *Policy Brief, Briefing* No. 74, March 2012; p 15
 <sup>28</sup> Ibid; p 19

world countries there is low economic development in which natural resource component becomes affected resulting in ineffective exploitation, allocation, distribution and utilization.

In Kenya, many studies have attempted to explain the causes of conflicts in Northern Kenya. The causes include climate changes<sup>29</sup>, cultural practices (cattle rustling)<sup>30</sup> and proliferation of arms.<sup>31</sup> However, the studies do not comprehensively focus on the role of natural resources in occurrence of conflicts. For example, in 1999 Mburu and Nene in the study establishing dynamics of conflicts associated with banditry indicated that insecurity in some areas restricts free movement which results into degradation and shrinkage of grazing land in areas considered safe thereby increasing occurrence of new conflict.<sup>32</sup> In this study, clear link between natural resources and conflict was not established.

In 2003 Ruto, Adan and Masinde in a study on internally displaced persons in northern Kenya established that 73% of conflicts between Turkana and Samburu are caused by competition over natural resources while 15% is caused by crossing borders.<sup>33</sup> Before 2003, Ruto et. al., correlated conflicts with drought. Similarly, a survey done by United States of America International Development (USAID) in 2005 revealed that access and utilization of water and pasture were major factors contributing to conflicts among Turkana, Sabiny and Pokot communities.<sup>34</sup> Similarly, Huho argues that deaths of more than 10 people in a conflict involving

<sup>&</sup>lt;sup>29</sup> Cheserek, G.J, Omondi P, and Odenyo V.A.O, "Nature and Causes of Cattle Rustling among some Pastoral Communities in Kenya. *Journal of Emerging Trends in Economics and Management Sciences* (JETEMS) 3 (2): 173-179; 2011

<sup>&</sup>lt;sup>30</sup> GuyoHaro, Godana Doyo and John McPeak "Linkages between Community, Environmental, and Conflict Management: Experiences from Northern Kenya," Cornell University, Ithaca, NY. May 1-3, 2003

<sup>&</sup>lt;sup>31</sup> Jonah Leff, "Pastoralists at War: Violence and Security in the Kenya-Sudan-Uganda Border Region,"

International Journal of Conflict and Violence.IJCV: Vol. 3 (2) 2009, pp. 188-203

<sup>&</sup>lt;sup>32</sup> Mburu, Nene, "Contemporary Banditry in the Horn of Africa: Causes, History, and Political Implications," *Nordic Journal of African Studies* 8 (2): 89–107, 1999.

<sup>&</sup>lt;sup>33</sup> Ruto Pkalya, Mohamud Adan, Masinde Isabella, "Conflict in Northern Kenya: A Focus on the Internally Displaced Conflict Victims in Northern Kenya," Eds, Karimi Martin, ITDG EA, October 2003.

<sup>&</sup>lt;sup>34</sup> USAID, "Fact sheet: The Turkana-Pokot-Sabiny cross-border conflict management initiative," November 2005 issue.

Pokot and Sabei communities in Mt. Elgon resulted from scramble over pasture and water during intense drought in 2004.<sup>35</sup> The observations by USAID place emphasis on how trans-boundary resources contribute to conflicts between communities in two countries.

In 2005, a study by Guyo, Doyo and McPeak on the relationship between environmental and conflict management in Northern Kenya revealed that many conflicts in the region are caused by poor land use systems in which there is lack of discipline in utilising available water and pasture.<sup>36</sup> It is stated that herders over-utilised natural resources and this was attributed to lack of knowledge in land use systems. In this study, emphasis was placed on knowledge on land use systems.

In 2009 Jonah Leff in his study about the linkages among pastoralists and security in the Horn of Africa established that harsh environmental changes compel pastoralists to migrate to other territories which triggers conflict.<sup>37</sup> In his findings, Jonah found that community territories are important links in conflict whenever such territorial integrity are violated by changes in environmental conditions. Similarly, a study by Kenya National Human Rights Commission in 2010 revealed that most conflicts occur in Kenya whenever one community is threatened by another community over use natural resource.<sup>38</sup> According to the Kenya Human Rights Commission, pastoralists including Samburu, Turkana, Pokot, Marakwet, Rendille, Borana and Somali's.<sup>39</sup>

Despite the conflicts occurring in different social, economic and cultural backgrounds, many findings show that conflicts among pastoral communities result from competition over

<sup>&</sup>lt;sup>35</sup>Huho Julius, Op cit., p 463

 <sup>&</sup>lt;sup>36</sup> Haro Guyo, Doyo Godana, Mcpeak John, "Linkages between community, environmental and conflict management: experiences from Northern Kenya," World Development 33(2): 285-299, 2005.
 <sup>37</sup>Jonah Leff, Op cit., p 194

Johan Leff, Op cit., p 192

<sup>&</sup>lt;sup>38</sup> Kenya Human Rights Commission, Op cit., p 29

<sup>&</sup>lt;sup>39</sup> Ibid; p 29

pasture and water.<sup>40</sup> In this case, Karimi argues that there is mutual enforcement of several factors that contribute to conflict among pastoralists.<sup>41</sup> These findings imply that correlation of occurrence of conflicts to natural resource was not clearly established. Similarly, in 2012, Cheserek, Omondi and Odenyo in another study on the relationship between nature and cattle rustling established that conflicts in Kerio Valley are structural. In the study, conflicts are caused by commercialization of cattle raids, traditional values and illiteracy, availability of guns, political incitement, poverty.<sup>42</sup> In this study, the role of natural resources remains unclear.

In view of the studies done before 2012, findings reveal that there is contribution of natural resource to conflicts in Northern Kenya. In areas where conflicts are endemic, there are indications of ecological constrains characterized by reliance on pastoral activities heavily dependent by the communities.<sup>43</sup> This indicates that dependence on pastoral activities increases competing interests over water and pasture especially during drought. Findings by United Nations Higher Commission for Refugees (UNHCR) indicate that risks of conflict occurrence are high during drought.<sup>44</sup> In this case, drought signifies lack of water for the animals, thus few water sources become constrained hence tensions among communities sharing the limited resource.

In response to the causes of conflict in Northern Kenya, government of Kenya through the ambitious programmes under Ministry of Agriculture, Ministry of Devolution and County governments invested in reducing preventing and managing conflicts in Northern Kenya. This is following recommendations from many studies for the adoption of sustainable and responsive

<sup>&</sup>lt;sup>40</sup>Chesereket. al; Op cit., p 173; Kenya Human Rights Commission, Op cit., p 29; Mwasaru; Op cit., p 32; Jonah , Op cit., p 198; Mkutu, Op cit., p 27; Osamba, Op cit., p 14; Buchanan-Smith et. al. Op cit., p 32

<sup>&</sup>lt;sup>41</sup>Karimi M, "Conflicts in Northern Kenya. A Focus on the Internally Displaced Conflict Victims. Nairobi: ITDG, 2003; p 12

<sup>&</sup>lt;sup>42</sup>Cheserek, et. al., Op cit., p. 176

<sup>&</sup>lt;sup>43</sup> Kenya Human Rights Commission, Op cit., p 29; Mwasaru Op cit., p 32; Jonah , Op cit., p 198; Mkutu, Op cit., p 27; Osamba, Op cit., p 14; Buchanan-Smith et. al. Op cit., p 32

<sup>&</sup>lt;sup>44</sup> UNHCR, "Evaluation and Policy Analysis Unit Evaluation of the Dadaab Firewood Project in Kenya," Switzerland: UNHCR, 2001; p 11

approaches that will end the perennial conflicts in Northern Kenya. For example, in the study on resource based conflicts in drought prone areas, it was recommended that communities should be involved in planning for land use systems.<sup>45</sup> This seems to be a comprehensive approach towards ending the natural resource base conflict between Turkana and Samburu communities.

In 2010, traditional dispute mechanisms was entrenched in the Kenya Constitution 2010. Article 159 (2) (c) supports other suitable approaches of dispute resolution including reconciliation, mediation, arbitration and traditional dispute resolution mechanisms.<sup>46</sup> In recognition of this constitutional provision, the government has promoted the use of council elders in resolving land use disputes in arid and semi-arid areas. The use of local peace committees has reportedly been used in resettling conflicts in Samburu, Wajir, Isiolo, Garissa, Pokot and Turkana among others.<sup>47</sup> One such example is Wajir Peace and Development Committee in which the local people owned the process of resolving their conflict through mediation resulting peaceful coexistence.<sup>48</sup> This approach was intended to prevent conflicts in Northern Kenya.

The National Steering Committee on Peace Building and Conflict Management (NSC) under the Office of the President was established due to the rise in incidences of conflict between communities over scarce resources and ethnic based violence.<sup>49</sup> Also, the National Drought Management Authority tasked with promoting development in the Arid and Semi-Arid Lands (ASAL) areas through irrigation, digging of water boreholes, building water pans and initiation of

<sup>&</sup>lt;sup>45</sup> UNHCR, "Evaluation and Policy Analysis Unit Evaluation of the Dadaab Firewood Project in Kenya, 'Switzerland: UNHCR, 2001; p 11

<sup>&</sup>lt;sup>46</sup> Republic of Kenya, "Kenya Constitution, 2010," Nairobi: Government Printers, 2010.

<sup>&</sup>lt;sup>47</sup> Muigua Kariuki, "Traditional Dispute Resolution Mechanisms under Article 159 of the Constitution of Kenya 2010,"

<sup>&</sup>lt;sup>48</sup> Muigua Kariuki, "Traditional Dispute Resolution Mechanisms under Article 159 of the Constitution of Kenya 2010, p. 10

<sup>&</sup>lt;sup>49</sup> Kenya Human Rights Commission, "Morans No More: The Changing Face of Cattle – Rustling in Kenya," KHRC: Nairobi, 2010

alternative livelihood projects was established.<sup>50</sup> These among other interventions such as increasing capacity of County governments in management of natural resources were enhanced.

However, cases of conflicts in Northern Kenya are still reported. This puts into question whether the role of natural resources in occurrence of conflicts was adequately considered. This study will therefore seek to establish whether occurrence of conflicts in Northern Kenya is still associated with natural resource conflicts after the interventions were put in place between 2012 and 2016. This focus of the study was placed on extent to which distribution of the resources and natural resource management practices influence occurrence of the conflicts.

#### **1.6 Theoretical Framework**

Based on reviewed studies, this study adopts the theory of *ecological fallacy* developed by Giacomo De Luca, Jean-François Maystadt, Petros Sekeris and John Ulimwengu in their work on ecological fallacy in DRC in 2012. From this work, Giacomo et., al., note that by way of estimating geo-located natural resources, conflicts are strongly correlated to distribution, utilization and management of the resources. Giacomo et., al., observed these factors foster violence at levels of administration.<sup>51</sup> This belief is used to develop a model that depicts situation where different conflicting interests of the groups utilizing the resources initiate violence.

The model developed can be explained in three levels. The first level describes the location of the conflict. In their work, Giacomo et., al., note that , "conflict events may be measured with more noise at the territory level as underlying sources may be less accurate about the precise territory in which the event takes place."<sup>52</sup> This indicates that resource users do not fight near

<sup>&</sup>lt;sup>50</sup>Cheserek, et. al. Op. Cit.,; 2011, p 174

<sup>&</sup>lt;sup>51</sup> Giacomo De Luca, Jean-François Maystadt, Petros G. Sekeris, and John Ulimwengu, "Mineral Resources and Conflicts in DRC: A Case of Ecological Fallacy. University of Namur WP 1207. Department Of Economics: Working Papers Series 2012,

<sup>&</sup>lt;sup>52</sup> Ibid; pg 30

resource location but create buffer zones away from resource locations. This is done to avoid confrontation in the resource rich areas which are not intended for destruction. This further indicates that different groups value natural resources differently owing to the incentives received from protecting such sites. During fights over protecting such areas, it is accompanied by mass killings and displacement of people from such areas. Those who remain are used as laborers.

The second level shows that conflict in such areas also depends on available natural resources. In this case, Giacomo et., al., note that, "the presence of valuable minerals may translate into a higher opportunity cost for armed group potential recruits, thereby generating a pacifying effect at the local level."<sup>53</sup> From this level, Giacomo et., al., indicate that this level has limitations because this does not account for increase in conflicts in many areas and those involved in the conflict are mainly foreigners. From this observation, it can be noted that the reverse is true where presence of valuable natural resources translates into lower opportunity costs and accounts for more conflicts in many areas. It therefore shows that conflict escalation is linked to discovery of more natural resources.

The third level shows the role of large deposits of natural resources in development of institutions or operational capacity. In this model, Giacomo et., al., postulate that large deposits ensure accumulation of wealth which in turn favour development of institutions. In their argument, Giacomo et., al., note that, "Territories featuring good local institutions would safeguard their population and divert violence more successfully. Institution-based explanations are intriguing and are currently gaining support in the literature."<sup>54</sup> However, Giacomo et., al., provide a criticism to their observations where they acknowledge work of Besley and Persson (2010) who indicate

<sup>&</sup>lt;sup>53</sup> Giacomo De Luca, Jean-François Maystadt, Petros G. Sekeris, and John Ulimwengu, "Mineral Resources and Conflicts in DRC: A Case of Ecological Fallacy. University of Namur WP 1207. Department Of Economics: Working Papers Series 2012; p 30

<sup>&</sup>lt;sup>54</sup> Giacomo et., al., p 31

otherwise where large mineral deposits create weak institutions. From this, it is worth noting that reinforced institutions as a result of large deposits of natural resources could be linked to mass displacement and killings of people by well organized rebel group characterized by good administrative and management structures. Such structures are intended to protect natural resource exploitation at the expense of standards of living of people within such areas.

This model on *ecological fallacy* shows that natural resources in many areas are abundant yet a few people benefit from it at the expense of large populations which are displaced, oppressed, killed or sexually exploited. Therefore, conflict in Northern Kenya shall continue as long as these levels of the model exist. In relation to this, study the three levels inform the contribution of natural resources to conflicts. The first level of location indicates that conflict over natural resources goes beyond the borders and this explains the involvement of neighbouring Counties in Northern Kenya. The second level of this theory about available resources provides insight on economic impacts of the struggle for the resources. The third level of this theory about institutional capacity explains social systems that foster equity and prosperity thus social impacts of the struggle for the resources in occurrence of conflicts in Northern Kenya.

#### 1.7 Significance of the Study

In view of the reviewed literature, it emerged that conflicts in Northern Kenya are occurring due to many reasons. The outcome of the conflicts is unending conflict in which actual linkage to natural resources is yet to be established. Thus, this study is important in making scholarly arguments to the existing literature on conflict and natural resources in the Northern Kenya. It also provides an opportunity for making recommendations to parties involved in conflict resolution on ways of integrating new changes into the resolution process. The study also provides a basis for humanitarian groups to make predictions about occurrence of events that have implications on social, political and economic systems in Northern Kenya and other countries in the Great Lakes region affected by the conflict.

#### **1.8 Hypotheses**

This study sought to test the following hypotheses:

- 1.8.1 There is no significant relationship between natural resources and occurrence of conflict in Northern Kenya.
- 1.8.2 The conflicts in Northern Kenya are largely attributed to distribution and management of natural resources.

#### **1.9 Scope and Limitations**

This study focused on investigating extent to which distribution, factors affecting occurrence of conflicts and management of the natural resources in Northern Kenya. The study also focused on the period between 2002 and 2016 due to high number of conflicts recorded in the period. The limitation of this study was that the findings could not be generalized to represent other regions in Kenya facing similar challenge.

#### 1.10 Methodology

#### 1.10.1 Research Design

This study adopted descriptive case study research design. Descriptive case study traces relationships among the groups to gain a deeper insight into the situation.<sup>55</sup> In social sciences, case study design helps to develop a comprehensive understanding of single case/phenomena by

<sup>&</sup>lt;sup>55</sup> Kumar, Robert, "Research Methodology: A Step by Step Guide for Beginners," Thousand Oaks, CA: Sage Publications, 2005; p 26

providing more realistic responses than purely statistical survey.<sup>56</sup> The case study design supports both quantitative and qualitative data collection and analysis.

#### 1.10.2 Data Collection

This study utilised secondary data collection approaches. The researcher carried out desktop reviews from books, journals and reports. In developing literature review, the researcher obtained the information from the library and the internet.

#### **1.9.3 Data Analysis**

Data analysis utilized content analysis of the secondary literature. Emerging themes based on the objectives of the study were identified. For the first objective, content on distribution of natural resources and occurrence of conflicts in Northern Kenya was analysed. On the second objective, content on factors contributing to natural resource conflicts in Northern Kenya was analysed. On the third objective, content on natural resource management and conflicts in Northern Kenya was analysed by obtaining themes on natural resource management practices and challenges.

#### **1.10.4 Data Presentation**

Content analysis resulted into discussion of emerging themes that were presented thematically. The major themes in the analysed content were presented as sub-titles.

#### **1.11 Chapter Outline**

This study contained the following chapters:

Chapter One: Introduction and Background to the Study

<sup>&</sup>lt;sup>56</sup> Orodho, J.A., "Elements of Education and Social Science Research Methods Nairobi: Nasola Publishers," 2004; p. 17

Chapter Two: Distribution of natural resources and Occurrence of Conflicts in Northern Kenya. Chapter Three: Factors Contributing to Natural Resource Conflicts in Northern Kenya. Chapter Four: Natural Resource Management and Conflicts in Northern Kenya. Chapter Five: Summary, Conclusion and Recommendations

#### **CHAPTER TWO**

# DISTRIBUTION OF NATURAL RESOURCES AND OCCURRENCE OF CONFLICTS IN NORTHERN KENYA

#### **2.1 Introduction**

Distribution of natural resources defines the social, economic and political activities of the people in a given area. The relationship between people during utilizing the available resources sometimes results into different levels of interests. This chapter explores the extent to which distribution of natural resources causes conflicts. The first section describes distribution of natural resources in Northern Kenya and the second section describes occurrence of conflicts in relation to natural resources. The third section provides a summary of the chapter highlighting emerging issues.

#### 2.2 Distribution of Natural Resources in Northern Kenya

Northern Kenya is endowed with different natural resources. The natural resources include abundance of grasslands, few rivers, ground water, wildlife, dotted trees and forest covers and minerals (oil) and construction stones and sand.<sup>57</sup> The distribution of these resources define the economic and social practices of the inhabitant. Land containing grasslands or pasture is the most abundant in most areas except areas such as Marsbit, Wajir and Mandera that contain barren land with dotted vegetation.<sup>58</sup> This has situation has made the areas to be occupied mostly by pastoralists.

<sup>&</sup>lt;sup>57</sup> Republic of Kenya, "Vision 2030: Development Strategy for Northern Kenya and Other Arid Lands," Nairobi: Ministry of State for Development of Northern Kenya and other Arid Lands, 2012

<sup>&</sup>lt;sup>58</sup> Food Agricultural Organisation/Republic of Kenya, "National Integrated Natural Resources Assessment," Nairobi: FAO, 2006

Northern Kenya regions are characterized by presence of lowlands, plateaus and highlands. Lowlands and highlands provide good grazing lands throughout the year due to cool climate or presence of water that supports growth of vegetation.<sup>59</sup> Despite the presence of most rivers that are seasonal, many people still access the rivers for water needs. In Marsabit, seasonal rivers serving people, livestock and wildlife include Dida Galgallu, Chalbi, Milgis and Merille, depression.<sup>60</sup> These rivers do not adequately satisfy the needs of the people especially during drought. This situation is replicated in Turkana, Samburu, Wajir, Mandera and Isiolo.

Distribution of grasslands or pasturelands is continuously affected by conversion of these lands into protected areas. It is stated that most grasslands under community land system have been converted into protected areas.<sup>61</sup> As community land, pasture land supports large number of livestock. However, the conversion of these lands into conservation areas (National Parks) reduce grazing land. This puts constraint on the available grazing land as many pastoralists are forced to utilize the diminishing pasture lands. This is potential for occurrence of conflict.

This is further explained by land ownership or tenure system. In most areas of the Northern Kenya, land is communally owned while some areas have ranches.<sup>62</sup> It is argued that this land tenure system does not promote investment and long-term development.<sup>63</sup> In addition, Ruto et. al., posit that the land tenure system contributes to conflicts between ranch owners and communities around the ranch over water and grazing lands. It has been revealed that 48 people with ranches control 40% of the land mass of Laikipa County.<sup>64</sup> The occurrence of conflict in

<sup>63</sup> Republic of Kenya, Op. Cit., 2014, p. 55

 <sup>&</sup>lt;sup>59</sup> Pragya, "Conflict Assessment: Northern Kenya," Accessed on May 18, 2018 at:http://www.pragya.org
 <sup>60</sup> Ruto Pkalya, Mohamud Adan, Masinde Isabella, "Conflict in Northern Kenya: A Focus on the Internally Displaced Conflict Victims in Northern Kenya," Eds, Karimi Martin, ITDG EA, October 2003

<sup>&</sup>lt;sup>61</sup> Republic of Kenya, "Vision 2030: Development Strategy for Northern Kenya and Other Arid Lands," Nairobi: Ministry of State for Development of Northern Kenya and other Arid Lands, 2012

<sup>&</sup>lt;sup>62</sup>RutoPkalya, Mohamud Adan, Masinde Isabella, "Conflict in Northern Kenya: A Focus on the Internally Displaced Conflict Victims in Northern Kenya," Eds, Karimi Martin, ITDG-EA, October 2003, p. 10

<sup>&</sup>lt;sup>64</sup> Pragya, "Conflict Assessment: Northern Kenya," Accessed on May 18, 2018 at:http://www.pragya.org

Laikipia explains this scenario as Samburu and Maasai people compete over limited resources outside ranches that occupy large sections of Laikipa County.

On border areas such as between Samburu and Turkana, the order for managing communal land differs as the two communities have different preferences on areas for grazing and drawing water.<sup>65</sup> This indicates that land ownership rights vary yet the Samburu and Turkana are pastoralists. Also, large section of Samburu is considered 'Trust Land' and this forced many Samburu people to migrate to other areas as far as Isiolo and Turkana.<sup>66</sup> This explains occurrence of conflict in Baragoi and Isiolo resulting from competition over natural resources.

Most of the inhabitants in the Northern Kenya region rely on underground water since rivers are very few. Underground water obtained from hand dug wells and boreholes is considered the major source of water in most of the areas.<sup>67</sup> This explains the pattern of settlement of people who settle near sources of water. In this regard, large population of people in areas with less supply of underground water for their livestock as well is potential of conflict occurrence.

In Turkana, discovery of oil has added value to the existing list of natural resources in the County. Oil exploration and drilling has occurred in areas previously used as grazing lands in Lokichar.<sup>68</sup> In this regard pastoralists who utilized the grazing lands currently under oil exploration have been displaced as the ground have also been considered restricted. This implies that the pastoralists should seek alternative grazing lands. This could be potential of conflict due to increase

<sup>&</sup>lt;sup>65</sup>Lenairoshi Duncan," Factors influencing conflict resolution in Kenya: A case of Baragoi sub county of Samburu County," A research report Submitted to the Faculty of Arts in Partial Fulfillment of the Requirement for the Award of a Degree of Master of Arts in Project Planning and Management, University of Nairobi, 2014 p. 3

<sup>&</sup>lt;sup>66</sup> Pragya, "Conflict Assessment: Northern Kenya," Accessed on May 18, 2018 at:http://www.pragya.org

<sup>&</sup>lt;sup>67</sup> Food Agricultural Organisation/Republic of Kenya, "National Integrated Natural Resources Assessment," Nairobi: FAO, 2006

<sup>&</sup>lt;sup>68</sup> Republic of Kenya, "Natural Resource Mapping and Context Analysis in Turkana County," Lodwar: County Government of Turkana, 2015

in competition over grazing lands in other areas. This situation could be made worse if oil and other mineral are discovered in Northern Kenya.

Some areas of Northern Kenya have water resources that have been added value to become significant natural resources. In Turkwel, River Turkwel was transformed into an irrigation scheme for agricultural production. It is stated that many Turkana and Pokot people were removed to pave way for 9,000 ha. irrigation scheme in 1980s and none was resettled.<sup>69</sup> This situation created conflict as persons affected have been wondering seeking settlement in areas they are not welcome. This explains partly the perennial conflict over use of natural resources especially water and pasture in Kainuk and Turkwel.

Wildlife in Northern Kenya region is another important natural resource. Wildlife is mostly found in game reserves and national parks and it is estimated that 70% of National Parks and Game reserves are found in ASAL.<sup>70</sup> Northern Kenya region forms large proportion of the ASAL. There has been coexistence between wildlife and pastoralists for many years but competition over water and grazing lands has increased in the past decade.<sup>71</sup> Pastoralists near the Parks and Games reserves such as Marsabit, Samburu National Park and Isiolo National Parks have been restricted into the National Parks. Also, it is estimated that more than 70% of wildlife wonder outside protected areas and this brings them into contact with pastoralists.<sup>72</sup> There has been tension between law enforcing agencies and pastoralists over access to pasture in the parks.

<sup>&</sup>lt;sup>69</sup> Pragya, "Conflict Assessment: Northern Kenya," Accessed on May 18, 2018 at:http://www.pragya.org

<sup>&</sup>lt;sup>70</sup> Food Agricultural Organisation/Republic of Kenya, "National Integrated Natural Resources Assessment," Nairobi: FAO, 2006

 <sup>&</sup>lt;sup>71</sup> Republic of Kenya, "Vision 2030: Development Strategy for Northern Kenya and Other Arid Lands," Nairobi: Ministry of State for Development of Northern Kenya and other Arid Lands, 2012
 <sup>72</sup> Ibid

# 2.3 Occurrence of Conflicts in Northern Kenya

Historical approach to understanding the perennial conflicts in Northern Kenya indicates that conflicts have been occurring since Kenya's independence. Table 1 shows documented cases since 1962 between Turkana and Samburu communities.

Date	Description of the conflict	Cause of the conflict
1962	Turkana attack Samburu.	Turkana attempting to restock their reduced
		livestock due to drought.
1970	Turkana from Lodwar and Baragoi	Turkana attempting to restock their reduced
	attack Samburu.	livestock due to drought.
1980	Turkana attack Samburu.	Turkana attempting to restock their reduced
		livestock due to drought.
1996	Turkana attacked Samburu in Marti and	Turkana attempting to restock their reduced
	Baragoi.	livestock due to drought.
1997	Samburu attack Turkana in Marti and	Revenge for their stolen livestock.
	Tuum.	
2001	Counter attacks between Turkana and	Revenge and control of grazing and
	Samburu in Parkati.	watering lands.
2002	Counter attacks between Turkana and	Revenge and control of grazing and
	Samburu in Parkati and Nachola.	watering lands.
2012	Turkana raid Samburu in Suguta.	Revenge and control of grazing and
		watering lands.
2013	Turkana raid Samburu in Marti,	Revenge and control of grazing and
	WuasoRongai, Maskita and Suyan.	watering lands.

 Table 1: Cases of selected Conflict between Turkana and Samburu<sup>73</sup>

<sup>&</sup>lt;sup>73</sup>Ruto et.al., Op. Cit., p. 28; Lenairoshi, Op. Cit., 2014, p. 3; Pragya, Op. Cit., Accessed on February 18, 2018 at: http://www.pragya.org

Table 1 shows the cases of conflict involving competition over natural resources. It is evident that Turkana raid Samburu frequently motivated by the need to restock their livestock, revenge and control of pastures and water. These cases of conflicts between Turkana and Samburu occur along border points. Tuum and Baragoi are areas that have experienced inter-community clashes since many decades ago. In Tuum area, scarcity of natural resources has been a major source of conflict between Turkana and Samburu communities.<sup>74</sup> Ethnic clashes occur almost daily due to competition over dwindling natural resources.<sup>75</sup> The diminishing natural resources (pastures and water) are correlated with droughts that ravaged the area.<sup>76</sup> This indicates that conflicts occur mostly when supply of natural resources is dwindling.

The Turkana and Samburu counties are arid and semi-arid areas. The counties receive erratic rainfall at limits arable farming. In most areas severe droughts results into crop failure and livestock deaths. This qualifies Samburu and Turkana Counties to be ranked among the areas receiving less precipitation that contributes to occurrence of conflicts.<sup>77</sup> The challenge of harsh environmental conditions to management of the natural resources is predictability of the drought and rain periods. Jonah<sup>78</sup>argues that pastoralists are compelled to migrate by harsh environmental conditions to migrate in search of water and pasturelands.<sup>79</sup> In his findings, Jonah found that dwindling pasture and water compared to high number of livestock compels pastoralists of one community to migrate to other territories, a situation that triggers conflicts with communities

<sup>&</sup>lt;sup>74</sup> Shalom Center for Conflict Resolution and Reconciliation (SCCRR), "Tuum Land of Peace-an SCCRR Action Group Initiative, Issue 8, August 2013, p. 1

<sup>&</sup>lt;sup>75</sup> Shalom Center for Conflict Resolution and Reconciliation (SCCRR), "Tuum Land of Peace-an SCCRR Action Group Initiative, Issue 8, August 2013, p. 1

<sup>&</sup>lt;sup>76</sup>Ruto et.al., Op. Cit., p. 28; Lenairoshi, Op. Cit., 2014, p. 3; Pragya, Op. Cit., Accessed on February 18, 2018 at: http://www.pragya.org

<sup>&</sup>lt;sup>77</sup> Samburu County Government, Op Cit., Accessed May 18, 2018 at: http://samburu.go.ke/

<sup>&</sup>lt;sup>78</sup>Cheserek, et. al. Op. Cit.,; 2011, p 174

<sup>&</sup>lt;sup>79</sup>Jonah Leff, Op cit., p 194

perceived to be invaded. It becomes difficult to predict the incoming drought and extent to which coping mechanisms such as water harvesting, and rotational grazing can be applied.

In 2011, drought in Northern Kenya contributed to conflict in KisimaHamsini/Kom area. This is a convergence zone of Marsabit, Samburu East, Isiolo and Wajir districts that has faced perennial conflicts over water and grazing lands.<sup>80</sup> Odhiambo provides background information of KisimaHamsini/Kom which shows that the area is occupied by the Rendile, Borana, Samburu, and Somali pastoralists for grazing. Odhiambo further opines that KisimaHamsini/Kom area is a reserve of water and pasture for the more than five pastoral communities in Samburu, Isiolo and Marsabit.

According to Odhiambo, the high concentration of communities in this area has been a source of conflict. The conflict first erupts over ownership and control rights. Given that there is no clear owner, each community perceives itself to be the owner hence the need to control water and pasture. With competing ownership rights, each community becomes aggressive and therefore dispute arise over grazing and drawing of water. Odhiambo observed that the conflicts occur also due to lack of proper regulations over utilization of the land, water and pasture. Similar situation occurred in Tana River County where more than 100 people died as a result of Pokomo community denying Orma and Wardei pastoralists access to pasture and water.<sup>81</sup>

The refugee factor is linked to occurrence of conflicts over natural resources. In Kakuma, for example, Aukot opines that refugees have increased demand of available natural resources by competing over firewood and water with local communities.<sup>82</sup>Aukot explains that the Turkana

<sup>&</sup>lt;sup>80</sup>Odhiambo Ochieng, M., "Impact of Conflict on Pastoral Communities' Resilience in the Horn of Africa: Case Studies from Ethiopia, Kenya and Uganda, RECONCILE/FAO, Nakuru, February 2012; p 20

<sup>&</sup>lt;sup>81</sup>Nembrini, P.G. Vergain, J. and Kamau, M., "Water and Conflicts: Emerging Challenges and Opportunities. Water Conflicts in Tana River district Kenya. In Pleijel, E. Edstroem, G. Kioi, S. and ICRC/SRC/KRC (eds) Update: water and sanitation. A newsletter for NETWAS international Vol 12 (2): 6-7, 2005.

<sup>&</sup>lt;sup>82</sup>AukotEkuro, "It is Better to be a Refugee than a Turkana: Revitalizing the Relationship between Hosts and Refugees in Kenya. <a href="http://www.yorku.ca/crs/Refuge/Abstracts">http://www.yorku.ca/crs/Refuge/Abstracts</a> %20and%20Articles /Vol%2021%20No

people have always in been in tension with refugees. In Dadaab, bandits have continued to attack women whenever they collect firewood.<sup>83</sup> This indicates how competition for use of natural resources contributes to conflicts.

#### 2.4 Chapter Summary

This chapter has established that Northern Kenya is endowed with many natural resources distributed randomly. Some resources especially pasture and scanty vegetation are distributed evenly across most areas while other resources such as water are scarcely distributed. The area has large population of people, livestock and wildlife that compete for the available natural resources. The increased competition has resulted into cases of conflicts. Occurrence of conflicts is therefore correlated with distribution and availability of natural resources.

<sup>%203/</sup>aukot.pdf> [Accessed 22 May 2018].

<sup>&</sup>lt;sup>83</sup>Obura, P. "Peace Education Programme in Dadaab and Kakuma, Kenya: Evaluation Summary," Geneva: UNHCR, 2002; p 18

#### **CHAPTER THREE**

# FACTORS CONTRIBUTING TO NATURAL RESOURCE CONFLICTS IN NORTHERN KENYA

#### **3.1 Introduction**

The occurrence of conflicts in Northern Kenya is associated with several factors. Studies indicate that climate change and ecological features contribute to occurrence of natural resource conflicts in Northern Kenya. This chapter provides answers to the second research question on the ways in which use of natural resources contribute to conflicts in Northern Kenya.

#### **3.2 Climate Change**

Climate change refers to variability in climate resulting from human activities.<sup>84</sup> Climate change is also defined by the United Nations Framework Convention on Climate Change (UNFCCC) as changes in climatic conditions of a place resulting from human activities that alter the equilibrium of global atmosphere.<sup>85</sup> Climate change is also defined as a permanent shift in climatic conditions that occur below or above the average conditions.<sup>86</sup> This implies that climate change is signified through increased dry spells, shift in end or start of rainy seasons or number of rainy days. In addition, climate change implies extremes in frequency of occurrence and intensity of drought.

Climatic change and degradation of the environment have led to famine and unsustainable utilization of available land and water resources. Change in climatic conditions poses risks to

<sup>&</sup>lt;sup>84</sup> UNEP, "Kenya Atlas of Our Changing Environment, Division of Early Warning and Assessment (DEWA)," United Nations Environment Programme (UNEP), 2009

<sup>&</sup>lt;sup>85</sup>UNFCCC, "United Nations Framework Convention on Climate Change (UNFCCC) consolidated version with amendments to annexes," Vienna: UNFCCC Secretariat with support from UNOG. FCCC-Informal-103/ FCCC-Informal-140, 2015.

<sup>&</sup>lt;sup>86</sup> Republic of Kenya, "National Climatic Change Action Plan 2013-2017," Nairobi: Ministry of Environment and Mineral Resources, 2013.

functioning of ecological systems whenever events such as drought occur.<sup>87</sup> This situation is therefore unfavourable to pastoralists who rely on water and pasture.

In general, Africa is considered as a continent that is hardest hit by climate change. Studies reveal that Africa is generally facing adverse consequences of temperature increase, changes in hydrological cycle biodiversity loss and submerging of coastal areas.<sup>88</sup> The causes of recurrent droughts in Africa are considered to be poverty and overpopulation that result into overexploitation of natural resources.<sup>89</sup> In Sub-Saharan Africa, a study aimed at investigating the impacts of climate change reveals that climate change affects both natural and human systems. In the study, adverse climate variability characterized by increasing warming trends, increasing aridity and decline in rainfall patterns have continued to exert pressure on utilization of natural resources in Eastern and Southern Africa regions.<sup>90</sup> Situational analysis reveals that conflicts among pastoralists are indirectly contributed by climatic changes or drought.<sup>91</sup> This implies that with favourable ecological changes, there is likelihood of low frequency of conflict.

Analysis on occurrence of conflicts reveals that conflicts occurring in northern Kenya are endemic in the area due to competition over diminishing natural resources occasioned by climatic changes.<sup>92</sup> Notably, drought is a major cause of conflict in Northern Kenya. A conflict tree analysis by Conservation Development Centre et. al. reveals that the effects of drought include: human-

<sup>&</sup>lt;sup>87</sup>Conservation Development Centre et. al., Op. Cit., 2009

<sup>&</sup>lt;sup>88</sup> Madzwamuse Masego, "Climate Change Vulnerability and Adaptation Preparedness in South Africa," Cape Town: Heinrich Boll Stiftung, 2010

<sup>&</sup>lt;sup>89</sup> United Nations Framework Convention on Climate Change, "Climate Change: Impacts, Vulnerabilities, and Adaptation in Developing Countries," Bonn: UNFCCC Secretariat, 2014

<sup>&</sup>lt;sup>90</sup> Serdeczny Olivia, Adams Sophie, Baarsch Florent, et. al., "Climate change impacts in Sub-Saharan Africa: from physical changes to their social repercussions," *Reg Environ Change*, 15(8): DOI 10.1007/s10113-015-0910-2, 2015
<sup>91</sup>Ibid

<sup>&</sup>lt;sup>92</sup>Conservation Development Centre, International Institute for Sustainable Development and Saferworld, "Climate Change and Conflict: Lessons from community conservancies in northern Kenya," Report on conflict-sensitive approaches, November, 2009

wildlife conflict, loss of biodiversity, reduced income, food insecurity and poverty. Others include; poverty, political tensions, reduced return from pastoral livelihoods, land degradation, polarization of ethnic groups and insecurity.<sup>93</sup> The occurrence of drought contributed to increased barrenness of land, decrease in wildlife and livestock population due to lack of thirst and starvation.

According to the Kenya Human Rights Commission, pastoralists are affected most. The adverse effects are observed in the North Rift and North Eastern regions.<sup>94</sup> Those affected include Turkana people, Samburu, Pokot, Marakwet (Keiyo and Tugen), Rendille, Borana and Somali's.<sup>95</sup> Despite the conflicts occurring in different social, economic and cultural backgrounds, many findings show that conflicts among pastoral communities result from climatic changes that diminish pasture and water resources especially during droughts.<sup>96</sup> In this case, Karimi argues that causes of conflicts in the North Rift and North Eastern regions are complex, thus tending to become mutually enforcing.<sup>97</sup> This indicates that use of natural resources is partly contributing to the conflicts.

According to Odhiambo, conflicts in this area involve disputes over water, grazing rights and boundaries. This is what has become the Moyale-Marsabit-Samburu-Isiolo axis of conflict in the Upper Eastern region.<sup>98</sup> Odhiambo observed that the conflicts are caused by differences in cultural approaches to natural resource management. Similarly, in Tana River County pastoral communities have continuously engaged in conflict due to shortages of water and pasture.<sup>99</sup> For

<sup>93</sup>Conservation Development Centre et. al., Op. Cit., 2009

<sup>&</sup>lt;sup>94</sup> Kenya Human Rights Commission, Op cit., p 29

<sup>&</sup>lt;sup>95</sup> Ibid; p 29

<sup>&</sup>lt;sup>96</sup> Chesereket. al; Op cit., p 173; Kenya Human Rights Commission, Op cit., p 29; Mwasaru; Op cit., p 32; Jonah , Op cit., p 198; Mkutu, Op cit., p 27; Osamba, Op cit., p 14; Buchanan-Smith et. al. Op cit., p 32

<sup>&</sup>lt;sup>97</sup> Karimi M, "Conflicts in Northern Kenya. A Focus on the Internally Displaced Conflict Victims. Nairobi: ITDG, 2003; p 12

<sup>&</sup>lt;sup>98</sup> Ibid; p 21

<sup>&</sup>lt;sup>99</sup>Nembrini, P.G. Vergain, J. and Kamau, M., "Water and Conflicts: Emerging Challenges and Opportunities. Water Conflicts in Tana River district Kenya. In Pleijel, E. Edstroem, G. Kioi, S. and ICRC/SRC/KRC (eds) Update: water and sanitation. A newsletter for NETWAS international Vol 12 (2): 6-7, 2005.

example, during the 2001-2002 drought Nembrini, et al. explain that more than 100 lives were lost when Orma and Wardei conflicted over water and pasture against Pokomo.

In the west of Moyale-Marsabit-Samburu-Isiolo axis, there is the Marakwet, Pokot and Turkana conflict triangle. In 1995, drought contributed to inter-ethnic warfare between the Turkana and the Pokot.<sup>100</sup> During the conflict, Nangulu reports that 44 people were estimated to have been killed while 12,000 animals were stolen.<sup>101</sup> Huho explains that disputed lands contain pasture and water during dry season. The disputed lands are found along Turkana and Pokot border with areas such as Kainuk, Lokori and Lorengippi hills being hotspots.<sup>102</sup> Huho explains that it is during such dry seasons that both communities are tempted to access hotspots, a process that sparks clashes.

According to United States of America International Development (USAID), scarce natural resources contributes to conflicts among the Turkana, Pokot and Sabiny communities.<sup>103</sup> Similarly, Huho explains that in 2004, more than 10 people were killed in conflict involving Pokot and the Sabei from Uganda over grazing lands.<sup>104</sup> Huho further explains that opines that during the 2007, the Pokot pastoralists who had migrated to Kenya-Uganda border triggered conflict with the Karamajong. The observations by Huho and USAID indicate how trans-boundary resources contribute to conflicts between communities in two countries.

<sup>&</sup>lt;sup>100</sup> Huho Julius, "Conflict Resolution Among Pastoral Communities in West Pokot County, Kenya: A Missing Link," Academic Research International, Vol. 3, No. 3, November 2012; p 462

<sup>&</sup>lt;sup>101</sup>Nangulu, A.N., "Food Security and Coping Mechanisms in Kenya's Marginal Areas: The Case of West Pokot," Aunpublished? PhD dissertation Eberly College of Arts and Sciences at West Virginia University, 2001; p 36 <sup>102</sup> Huho Julius, Op cit., p 462

<sup>&</sup>lt;sup>103</sup> USAID, "Fact sheet: The Turkana-Pokot-Sabiny cross-border conflict management initiative," November 2005 issue.

<sup>&</sup>lt;sup>104</sup>Huho Julius, Op cit., p 463

Conflicts between pastoralists have been correlated with drought and lack of grazing lands.<sup>105</sup> In this case, it is argued that lack of pasture and water contributes to mass deaths in livestock which triggers cattle rustling.<sup>106</sup> The Kenya Human Rights Commission reports that in 2009 there was drought in the months of September to November which was correlated with clashes between pastoralists. The Kenya Human Rights Commission reports that on 15<sup>th</sup> September 2009, the Pokot attacked Samburu in Kanampui region in Samburu. In this attack, while no livestock were stolen, 31 people died with the fatalities comprising of 21 Samburu and 10 Pokot. In November, conflict between Pokot and Samburu also led to two fatalities due to attempts of protecting grazing lands.

Climate change also increases occurrence of pests and diseases. Occurrence of droughts reduces availability and access to water and grazing lands. As people and animals are biological in nature, the lack of water and adequate food is a vulnerability to occurrence of diseases. In a study on effects of climate variability on pastoral livelihoods in Baringo, findings indicate that occurrence of droughts of 1994, 2000 and 2009 correlated with increase in occurrence of livestock diseases such as Trypanosomiasis, Babesiosis, Anaplasmosis, East Coast Fever as well as human diseases such as Malaria, Typhoid and Rift Valley Fever.<sup>107</sup> Drought in this context increased breeding of vectors such as ticks, mosquitoes and other water-borne vectors.

Drought is therefore providing enabling conditions for thriving of vectors that cause the diseases. In addition, as livestock herders seek for more pastures and water, this mobility increases spread of the diseases. It is during such situations that conflicts occur as pastoralists engage in

<sup>&</sup>lt;sup>105</sup> Kenya Human Rights Commission, Op cit., p. 19; Mwasaru Op cit., p 35; Jonah, Op cit., p 192; Mkutu, Op cit., p 27; Osamba, Op cit., p 14; Buchanan-Smith et. al. Op cit., p 32

<sup>&</sup>lt;sup>106</sup> Ibid, p 19

<sup>&</sup>lt;sup>107</sup> Lelenguyah Geoffrey, "Effects of Climate Variability on Pastoral Livelihoods in Marigat District, Baringo County, Kenya," [Master Project], Nairobi: Kenyatta University, 2013, p. 76

cattle rustling with a view of replenishing their livestock. For example, in Baringo conflict between Turkana and Pokot communities occurred after the outbreak Rift Valley Fever where thousands of livestock were lost.<sup>108</sup> In this situation, the Pokot communities had lost more livestock to Rift Valley Fever and therefore attacked Turkana communities with a view of replenishing their livestock.<sup>109</sup> This indicates that climate change causes occurrence of pests and diseases which decimate the livestock hence conflict.

#### **3.3 Ecological Features**

Ecological features such as soil, rainfall patterns and general vegetation cover contribute to conflicts in Northern Kenya. Statistics indicate that most of the region has sandy soils, receives erratic rainfall and has scarce vegetation. For example, Samburu County receives rainfall less than 1200mm which limits arable farming.<sup>110</sup> It is argued that Samburu County is supported and dependent on livestock related activities that constitute 90% of the economy of the County.<sup>111</sup> Livestock contributes to food production, employment and other social-cultural needs. However, the livelihoods are affected by low precipitation and water deficits because the County has no permanent rivers except for Waso Nyiro.<sup>112</sup> This puts strain on available water and pasture for the many livestock hence conflict between Samburu and Turkana communities.

In another example, Turkana County receives less than 450mm of rainfall annually.<sup>113</sup> Temperature range is between  $24^{0}$  C  $-41^{0}$  C.<sup>114</sup> These climatic conditions qualify the County as

<sup>&</sup>lt;sup>108</sup> Lelenguyah Geoffrey, "Effects of Climate Variability on Pastoral Livelihoods in Marigat District, Baringo County, Kenya," [Master Project], Nairobi: Kenyatta University, 2013, p. 76

<sup>&</sup>lt;sup>109</sup> Lelenguyah Geoffrey, "Effects of Climate Variability on Pastoral Livelihoods in Marigat District, Baringo County, Kenya," [Master Project], Nairobi: Kenyatta University, 2013, p. 76

<sup>&</sup>lt;sup>110</sup> Samburu County Government, Op Cit., Accessed February 18, 2018 at: http://samburu.go.ke/

<sup>&</sup>lt;sup>111</sup> Republic of Kenya, Op. Cit., 2014, p. 55

<sup>&</sup>lt;sup>112</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

<sup>&</sup>lt;sup>113</sup> Republic of Kenya, Op Cit., 2014, p. 20

<sup>&</sup>lt;sup>114</sup> Ibid, 2014, p. 21

arid or semi-arid land that does not support farming. The available resources (water and pasture) are extremely overutilized hence conflicts. For example, In Tuum area, scarcity of natural resources has been a major source of conflict between Turkana and Samburu communities.<sup>115</sup> In 2003, there were clashes occurring almost daily due to competition over dwindling natural resources.<sup>116</sup> This situation occurs in other similar counties such as Marsabit, Wajir, Isiolo and Mandera.

In Wajir, the distribution of natural features such as rivers, swamps and vegetation abundant areas contribute to conflict in Northern Kenya. It is indicated that drought-induced conflict occurs near Tana River and the seasonal Ewaso Nyiro River.<sup>117</sup> The distribution of this significant feature in this region is a source of conflict due to claim of ownership by different communities in the region.

In another case, In 2011, drought in Northern Kenya contributed to conflict in KisimaHamsini/Kom area. This is a convergence zone of Marsabit, Samburu East, Isiolo and Wajir districts that has faced perennial conflicts over water and grazing lands.<sup>118</sup> Odhiambo provides background information of KisimaHamsini/Kom which shows that the area is occupied by the Rendile, Borana, Samburu, and Somali pastoralists for grazing. Odhiambo further opines that KisimaHamsini/Kom area is a reserve of water and pasture for the more than five pastoral communities in Samburu, Isiolo and Marsabit.

In the west of Moyale-Marsabit-Samburu-Isiolo axis, there is the Marakwet, Pokot and Turkana conflict triangle. Reserves of water and pasture during dry season are found in valleys of

 <sup>&</sup>lt;sup>115</sup> Shalom Center for Conflict Resolution and Reconciliation (SCCRR), "Tuum Land of Peace-an SCCRR Action Group Initiative, Issue 8, August 2013, p. 1
 <sup>116</sup> Ibid, p. 1

<sup>101</sup>**a**, p.

<sup>&</sup>lt;sup>118</sup>Odhiambo Ochieng, M., "Impact of Conflict on Pastoral Communities' Resilience in the Horn of Africa: Case Studies from Ethiopia, Kenya and Uganda, RECONCILE/FAO, Nakuru, February 2012; p 20

Kainuk and Kerio as well as Lorengippi hills and Lokori along the borders of Turkana and West Pokot Counties.<sup>119</sup> The communities consider Kerio Valley as an important feature that should not be shared by rival groups. Any access and utilization of water and pasture in the valley by Pokot and Turkana communities has therefore led to fighting.

## **3.4 Chapter Summary**

This chapter has established that conflicts among communities in Northern Kenya is significantly attributed to natural resources. While the area is characterized by erratic rainfall, sandy soils that limit vegetation growth as well as limited rivers and swamps, these conditions are made worse by climatic changes. The combination of climate change and ecological differences trigger and sustain conflicts.

<sup>&</sup>lt;sup>119</sup> Haro Guyo, Doyo Godana, Mcpeak John, "Linkages between community, environmental and conflict management: experiences from Northern Kenya," World Development 33(2): 285-299, 2005.

## **CHAPTER FOUR**

# NATURAL RESOURCE MANAGEMENT AND CONFLICTS IN NORTHERN KENYA 4.1 Introduction

Conflicts in Northern Kenya have continued to occur despite several interventions. This chapter provides the answers to the third research question about the natural resource management practices that contribute to conflicts in Northern Kenya. The chapter describes the natural resource management practices applied in Northern Kenya. The chapter also identifies challenges of natural resource management practices.

## **4.2 Natural Resource Management Practices**

Several interventions have been put in place to address the challenges of natural resource conflicts. There are government, civil society and local interventions discussed as follows:

## 4.2.1 Climate Change and Drought Preparedness Programmes

In Kenya, government institutions are engaged in implementing climate change and drought preparedness programmes. The drought preparedness program is part of the mandate of the National Disaster Management Authority (NDMA) that provides a framework at which drought and other disasters are prevented and managed if they occur.<sup>120</sup> In addition, NDMA is tasked with mobilising resources and operations aimed at responding and recovering from effects of disasters.<sup>121</sup> The coordinating function integrates all key players in disaster management and include government Ministries, private sector, international bodies (UN), Non-Governmental

<sup>&</sup>lt;sup>120</sup> UNEP, *Kenya Atlas of Our Changing Environment*, Division of Early Warning and Assessment (DEWA) United Nations Environment Programme (UNEP), 2009

<sup>&</sup>lt;sup>121</sup> Uhe Peter, Philip Sjoukje, Kew Sarah et. al., "The Drought in Kenya, 2016-2017," Nairobi: Raising Risk Awareness, 2017.

organisations (local and international) and County governments. It therefore follows that Kenya has a disaster preparedness framework that brings on board many players in different sectors that are not only directly affected by drought but also are concerned with humanitarian support.

As part of drought preparedness, Kenya has a Disaster Risk Reduction (DRR) as a national platform that supports policy implementation of disasters. In this platform, the major purpose is to support establishment and development of strategies that reduce risks associated with disasters.<sup>122</sup> This platform provides for activities that support national policy implementation in disasters such as situational analysis, advocacy, benchmarking, development of workplans, monitoring and evaluation. Specific to climate change, Kenya recognised the adverse effects climate has globally. In this effect, the Kenyan government formulated the 2010 National Climate Change Response Strategy (NCCRS) with an overall objective of reducing vulnerability to climate change.<sup>123</sup> This shows the extent to which national policies form a basis at which preparedness of the country in matters climate and drought.

Other than the NCCRS policy, the government of Kenya has relevant national legal, Action Plans and institutional frameworks on managing climate change that include: Kenya Constitution, 2010; Vision 2030; Integrated National Transport Policy, 2010; National Disaster Management Policy 2012 and National Policy for the Sustainable Development of Northern Kenya and other Arid Lands. Other frameworks include: Environment Management and Coordination Act; Energy Policy and Act; Water Act, 2002; Kenya Forestry Master Plan. This was informed by the irregular climatic conditions experienced in Kenya especially unpredictable drought seasons that take longer before rains come. This indicates that government too has been prepared in matters of drought

<sup>&</sup>lt;sup>122</sup> UNEP, *Kenya Atlas of Our Changing Environment*, Division of Early Warning and Assessment (DEWA) United Nations Environment Programme (UNEP), 2009

<sup>&</sup>lt;sup>123</sup> Republic of Kenya, "National Climatic Change Action Plan 2013-2017," Nairobi: Ministry of Environment and Mineral Resources, 2013.

from the perspective of climate change management where key stakeholders are allocated specific roles and a clear road map of activities to be carried out are listed.

In areas severely affected by drought especially arid and semi-arid lands, the government placed more emphasis on controlling erosion as a means of reducing occurrences of drought occasioned by bareness of lands.<sup>124</sup> In addition, the Kenyan government has formulated a National Disaster Management Policy as part of its preparation in disasters such as drought. The policy is intended to provide a framework in which key players in disaster management can maintain an efficient, effective and sustainable system that is well coordinated.<sup>125</sup> The policy's rationale is to minimize loss of lives, property, economic and social disruptions. In addition, the policy provides for strategic plans and strategic stockpiles of life support essentials such as food.<sup>126</sup> Other policies and blue prints include Vision 2030, Strategy for Revitilising Agriculture (SRA), ASAL Development Policy, ASAL Vision and Strategy, Drought Contingency Plan among others.<sup>127</sup> This indicates that through policy, Kenya is prepared to respond to drought.

Other than policy, the government has created institutions to ensure that proposed actions on drought mitigation are implemented. For example, the National Drought Management Authority (NDMA) and National Environment Management Authority (NEMA) are mandated to ensure prevention and management of drought in Kenya.<sup>128</sup> The legal and institutional frameworks dedicated to managing climate and drought challenges stipulate the actions of improving resilience

<sup>&</sup>lt;sup>124</sup> Mortimore Michael, "Dryland Opportunities: A new paradigm for people, ecosystems and development" Gland, Switzerland; IIED, London, UK and UNDP/DDC, Nairobi, Kenya: International Union for Conservation of Nature and Natural Resources, 2009

<sup>&</sup>lt;sup>125</sup> UNEP, *Kenya Atlas of Our Changing Environment*, Division of Early Warning and Assessment (DEWA) United Nations Environment Programme (UNEP), 2009

<sup>&</sup>lt;sup>126</sup> Akali Moses, "Disaster Preparedness and response strategies in Kenya," Conference Paper, January 2013

<sup>&</sup>lt;sup>127</sup> Republic of Kenya, "Review and Analysis of Existing Drought Risk Reduction Policies and Programmes in Kenya," National Report on Drought Risk Reduction Policies and Programmes, May 2008. Nairobi: Ministry of State for Special Programmes, 2008.

against climatic changes and drought. According to National Climate Change Action Plan 2013-2017, the government of Kenya highlights actions aimed at improving resilience to climate change and drought. These actions include modernising meteorological systems and a responsive early warning system.<sup>129</sup>

The institutional frameworks supporting climate change and drought preparedness programmes were not primarily designed to address natural resource-based conflicts but generally mitigate challenges of climate change. However, while natural resource-based conflicts require resolution, mitigating climate change and drought effects implies that natural resource-based conflicts are also minimized. In Northern Kenya's Counties, the government is implementing climate change and drought preparedness programmes by engaging in the following restoration activities contributing to conflict resolution in the Counties: Building of dykes, dams, water pans and de-silting of old dams; Support in the provision of seeds and fertilizer for planting; Support in food relief, water and livestock feeds; Livestock off-take during severe drought; Provision of medicine and vaccination to prevent disease outbreaks; and evacuation to safer grounds in case of floods.<sup>130</sup> Others include environmental conservation such as tree planting and water harvesting and initiation of projects that bring the conflicting communities to work together e.g. Lendorok Irrigation project in Mukutani which has resulted into 2 warring communities work together harmoniously. These initiatives are aimed at strengthening of peaceful coexistence of the warring communities in Baringo, Turkana, Samburu, Wajir, Isiolo, Mandera, West Pokot, Laikipia and Marsabit Counties.

<sup>&</sup>lt;sup>129</sup> Republic of Kenya, "National Climatic Change Action Plan 2013-2017," Nairobi: Ministry of Environment and Mineral Resources, 2013

<sup>130</sup> Ibid

Apart from government, civil society as well as Non-Governmental Organisations have also engaged in climate change and drought management programmes. For example, ACTED is an NGO in Northern Kenya that reduces negative and adverse effects of climate change as well as improving resilience of the communities towards drought.<sup>131</sup> ACTED has achieved the following outcomes: increased and enhanced provision of humanitarian support especially construction of water pans; identification of diverse or alternative economic activities such as water melon farming in Turkana, Samburu, Isiolo and Garissa to reduce overreliance on livestock rearing.<sup>132</sup>

Kenya Red Cross has also engaged in identification and successful implementation of long term and sustainable climate change projects; and significant reduction in climate change vulnerabilities and impacts in Northern Kenya and other ASAL areas.<sup>133</sup> In addition, Red Cross has increased public awareness on climate change and drought preparedness in ASAL Counties; accelerated uptake of Drought Contingency Fund; and enhanced collection and dissemination of drought information.<sup>134</sup> These achievements indicate positive progress in managing climate change and drought in Kenya.

Cash transfers have also been disbursed to about 1500 households with monthly cash transfers of 3,000 Kenyan Shillings over a period of four months and in three different sub-counties that are worst affected by the drought.<sup>135</sup> In addition, the Kenya Red Cross Society supports residents through provision of clean water where KRCS has rehabilitated three boreholes in Tangulbei, Yatya and Nginyang.<sup>136</sup> The interventions in Baringo also involve peace talks between

<sup>&</sup>lt;sup>131</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

<sup>&</sup>lt;sup>132</sup> Ibid

<sup>&</sup>lt;sup>133</sup> Kenya Red Cross, "Baringo residents struggle with drought and conflict over resources," Nairobi: Kenya Red Cross Society, 2017.

<sup>&</sup>lt;sup>134</sup> Kenya Red Cross, "Baringo residents struggle with drought and conflict over resources," Nairobi: Kenya Red Cross Society, 2017

<sup>&</sup>lt;sup>135</sup> Kenya Red Cross, "Baringo residents struggle with drought and conflict over resources," Nairobi: Kenya Red Cross Society, 2017.

<sup>&</sup>lt;sup>136</sup> Ibid

the Pokot, Ilchamus and Tugen communities who have been fighting for control of available resources. KRCS has been on the lead to initiate peace between the warring clans.<sup>137</sup>

In 2017, Kenya Red Cross Society pleaded for the president of the Republic of Kenya to help solve conflict in Baringo. It is reported that the plea was intended to prompt the government use its machinery including security forces and other policies in resolving the conflict.<sup>138</sup> This was part of the major media campaign aimed at bringing the situation in Baringo to the attention of the whole nation.<sup>139</sup> The efforts made by Kenya Red Cross Society imply that the interventions are diverse and it is expected that the conflict should not be worsening.

## 4.2.2 Traditional Approaches

In 2010, traditional dispute mechanisms were entrenched in the Kenya Constitution 2010. Article 159 (2) (c) supports alternative forms of dispute resolution including reconciliation, mediation, arbitration and traditional dispute resolution mechanisms.<sup>140</sup> In recognition of this constitutional provision, the government has promoted the use of council elders in resolving land use disputes in arid and semi-arid areas. The use of local peace committees has reportedly been used in resettling conflicts in Samburu, Wajir, Isiolo, Garissa, Pokot and Turkana among others.<sup>141</sup> One such example is Wajir Peace and Development Committee in which the local people were strategically involved in conflict resolution.<sup>142</sup> This approach was intended to prevent conflicts in Northern Kenya.

<sup>&</sup>lt;sup>137</sup> Kenya Red Cross, Op. Cit., 2017

<sup>&</sup>lt;sup>138</sup> Magut Agewa, "Red Cross urges President Kenyatta to help solve conflict in Baringo," Nairobi: Saturday Nation, February 25, 2017.

<sup>139</sup> Ibid

<sup>&</sup>lt;sup>140</sup> Republic of Kenya, "Kenya Constitution, 2010," Nairobi: Government Printers, 2010.

<sup>&</sup>lt;sup>141</sup> Muigua Kariuki, "Traditional Dispute Resolution Mechanisms under Article 159 of the Constitution of Kenya 2010,"

<sup>&</sup>lt;sup>142</sup> Muigua Kariuki, "Traditional Dispute Resolution Mechanisms under Article 159 of the Constitution of Kenya 2010, p. 10

The National Steering Committee on Peace Building and Conflict Management (NSC) under the Office of the President was established following increasing and unending conflict among pastoral communities and other ethnic groups.<sup>143</sup> In most communities of Northern Kenya, Omondi explains that in case of disputes over utilization of watering sources, such disputes are referred to the council of elders. This situation exemplifies traditional opportunities of resolving conflicts and ensuring sustaible utilization of land and other natural resources. In this situation, there is balance in movement of livestock, access to grazing land and pasture across territorial boundaries between Turkana and Samburu.<sup>144</sup> The traditional approaches remain significant in addressing natural resource-based conflicts in Northern Kenya.

## **4.3 Challenges of Natural Management Practices**

There are challenges in the use and management of natural resources in Northern Kenyan counties. The challenges are categorized as cultural, economic, institutional and environmental.

## **4.3.1 Cultural Challenges**

Cultural challenges to use and management of natural resources in Northern Kenya Counties are manifested through traditional practices of the communities. The communities are mainly nomads who traditionally practice cattle rustling and communally own land.<sup>145</sup> Cattle rustling activities are linked to poor use and management of natural resources. Considered traditionally as wealth of the nomad communities, large cattle herds are supported by vast grazing

<sup>&</sup>lt;sup>143</sup> Kenya Human Rights Commission, "Morans No More: The Changing Face of Cattle – Rustlingin Kenya," KHRC: Nairobi, 2010

<sup>&</sup>lt;sup>144</sup> Opiyo et. al., Op Cit., 2012, p.450

<sup>&</sup>lt;sup>145</sup> Mkutu, Kennedy, Op Cit., 2003; p 26;

lands and adequate water supplies. In this context, the communities often raid each other to increase their wealth and control watering and grazing lands.<sup>146</sup>

It therefore becomes imperative to indicate that modern cattle practices aimed at regulating livestock to achieve land carrying capacity are thwarted due to frequent cattle rustling among the communities in northern Kenya. Sometimes, for example, there are more cattle in Turkana than in Samburu due to the traditional cattle rustling activities. In this case, some grazing areas in Turkana are constrained prompting land degradation. In respond to increased lack of water and pasture, the Turkana move the cattle to Samburu thereby igniting conflict arising from control of the watering and grazing land.

This situation is exacerbated by communal land tenure system as the Samburu are threatened from utilizing the communally owned land.<sup>147</sup> This situation is also evident in Kerio valley in Elgeyo Marakwet and Baringo Counties. Chesereket. et. al.<sup>148</sup> argues that traditional values such as cattle rustling and communal land ownership are challenges to management and use of natural resources in Elgeyo Marakwet and Baringo Counties. Managing natural resources in lands that are communally owned is a challenge due to conflicting interests among the users.

It is argued that this land tenure system does not promote investment and long-term development.<sup>149</sup> In addition, Ruto et. al., posit that the land tenure system contributes to conflicts between ranch owners and communities around the ranch over water and grazing lands. On border areas such as between Samburu and Turkana, the order for managing communal land differs as the two communities have different preferences on areas for grazing and drawing water.<sup>150</sup> This

<sup>&</sup>lt;sup>146</sup> Cheserek et. al; Op cit., p 173; Kenya Human Rights Commission, Op cit., p 29; Mwasaru; Op cit., p 32; Jonah , Op cit., p 198; Mkutu, Op cit., p 27; Osamba, Op cit., p 14; Buchanan-Smith et. al. Op cit., p 32

<sup>&</sup>lt;sup>147</sup>Ruto et. al., Op Cit., October 2003, p. 10

<sup>&</sup>lt;sup>148</sup>Cheserek, et. al. Op Cit, 2011, p 174

<sup>&</sup>lt;sup>149</sup> Republic of Kenya, Op. Cit., 2014, p. 55

<sup>&</sup>lt;sup>150</sup>Lenairoshi Duncan, Op. Cit., 2014 p. 3

indicates that land ownership rights vary yet the Samburu and Turkana are pastoralists.

Creating a balance and stability in the use of natural resources is partly supported by traditional institutions. However, there is a challenge to employing traditional institutional frameworks in managing grazing lands and watering points for the nomads. Omondi argues that traditional institutions have lost their influence due to interference from uneducated youth, biased peace committees, government and politicians. This renders traditional frameworks ineffective in managing natural resources for the nomads in Turkana and Samburu communities.

## **4.3.2 Economic Challenges**

There are economic inequities manifested through poor resource allocation in the northern frontier Counties. For example, in northern Kenya there is marginal economic development.<sup>151</sup> The communities in these marginilised areas are characterized by low economic empowerment.<sup>152</sup> Lack of economic policies in this area is a challenge to management of natural resources. Duffield argues that neo-liberal policies that are not responsive to needs of different communities create situations of low economic empowerment characterized by high illiteracy levels.<sup>153</sup> In this situation, lack of economic empowerment in Northern Kenya results into youths to rely on unsustainable livestock rearing practices including use of violence.

Historically neglected and deprived, the communities are not well represented politically.<sup>154</sup> This limits investment in the area and limited awareness of existing government schemes and development funds and capacity to access these rights and benefits. This is opportunities. Due to low economic opportunities to participate, the residents in the Northern

<sup>&</sup>lt;sup>151</sup> Anon.; 2006; Kenya National Human Development Report, Human Security and Human Development: A Deliberate Choice; 86 p.

<sup>&</sup>lt;sup>152</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

<sup>&</sup>lt;sup>153</sup> Duffield, Mark, Op Cit., 1997, p. 11

<sup>&</sup>lt;sup>154</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

Kenya Counties resort to traditional hegemonies that restrict their ability to address most of these issues.<sup>155</sup> This seems to increase their vulnerability in the face of economic problems.

In Turkana and Samburu areas, for example, local business and political elites use cattle rustling as a means for commercial profit, capitalizing on the breakdown of traditional lines of authority.<sup>156</sup> Buchanan-Smith and Lind suggest that there are typically five large raids in Southern Turkana in a given year.<sup>157</sup> Buchanan-Smith and Lind indicate that large infrequent raids, coupled with repeated small-scale incidents create an environment of insecurity and financial hardship. This unprecedented nexus is not conducive for economic development of the Turkana and Samburu communities. This situation is replicated in other counties of northern Kenya.

Another economic challenge is that there is little effort by the state to commit resources for developing and promoting viable livelihood options and, limited choices of viable activities in the dry lands besides livestock rearing.<sup>158</sup> In particular, conflict management through economic strategies is made difficult due to remoteness of the area and nomadism of pastorals.<sup>159</sup> This is partly attributed to frequent disruption of livelihoods and unemployment.<sup>160</sup> This is an indicator of lack of investment in infrastructure such as roads, communication lines and energy that promote creation of employment opportunities.

Samburu and Turkana Counties have the highest percentage of poor population. It was established that 83% of Samburu population and 95% of the Turkana population are poor and this situation is worsened by drought and unfavorable ecological changes. This indicates that source of livelihood

<sup>&</sup>lt;sup>155</sup> Pkalya et al., Op Cit.; 2004, p. 24

<sup>&</sup>lt;sup>156</sup>Jonah Leff, Op cit., p. 198.

<sup>&</sup>lt;sup>157</sup>Buchanan-Smith, et. al. Op Cit., 2005; p 36

<sup>&</sup>lt;sup>158</sup> Opiyo Francis, Wasonga Oliver, Schilling Janpeter, Mureithi Stephen, "Resource-based conflicts in droughtprone Northwestern Kenya: The drivers and mitigation mechanisms," Wudpecker Journal of Agricultural Research Vol. 1(11), pp. 442 - 453, December 2012, p.450

<sup>&</sup>lt;sup>159</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

<sup>&</sup>lt;sup>160</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

which is livestock farming is threatened thereby worsening the source of survival.<sup>161</sup> This situation becomes a security threat to the survival of the people in the arid and semi-arid lands.

## 4.3.3 Incompatibility of Drought Management Policies with Traditional Methods

Integrated solutions are considered important in managing complex situations. In drought management, there has been failure of integrating traditional approaches with modern approaches. The traditional opportunities of managing natural resources include traditional conflict management systems managed by clan elders. The traditional elders help in managing natural resources through determining the areas under which grazing should be done. The elders also managed conflicts through traditional mechanism that prohibited warriors from making unnecessary attacks.

This is the basis of nomadism that enhances acceptability, ownership and sustainability in utilization of water and pasture. In this situation, there is fair and equitable sustainable utilization of resources between Turkana and Samburu. Ultimately, the system has reduced occurrence of conflicts, however, other complimentary measures are required.<sup>162</sup> In view of drought, the use of traditional approaches as prescribed by elders is intended to manage the adverse effects of drought.

However, this has not been explored to a large extent. With devolution, attempts have been done to utilize traditional approaches, yet this has not been employed extensively due to lack of compatibility structures. For example, with the current devolution, the Turkana and Samburu Counties are empowering local communities through use of traditional approaches of managing droughts such as enforcement of customary resources leading to sustainable resource

<sup>&</sup>lt;sup>161</sup> Anon.; 2011; Eastern Africa- Drought Humanitarian Report no. 3; United Nations Office for the Coordination of Humanitarian Affairs ; 11p

<sup>&</sup>lt;sup>162</sup>Opiyoet. al., Op Cit., 2012, p.450

management.<sup>163</sup> The challenge in this strategy has been overreliance of the people to aid which has limited the deployment of traditional approaches in managing drought hence the sustained conflicts in the area. This applies to other Counties in Northern Kenya especially Wajir, Isiolo, Mandera and Garissa.

### 4.3.4 Fragmented Policies and Legal Frameworks

Kenya has many legal frameworks and policies that are related to management of drought. These legal frameworks are fragmented. By 2012, there was overlapping of mandate as well as fragmentation and poor coordination in the legislative and institutional framework on Disaster Risk Reduction (DRR).<sup>164</sup> In addition, management of disasters is not specifically supported by specific regulatory framework but disjointed frameworks. In addition, the devolution system has provided for the management of disasters in the counties. This has made county governments to be involved in drought and climate change management.

These provisions have created many parties involved in drought management, yet the roles are the same. While this is intended to promote efficiency, there are cases of overlapping roles. In government system, the Central government through the Ministry of Agriculture, Ministry of Devolution and other parastatal bodies has been mandated to manage drought across Kenya. In the same situation, the Devolved governments play similar roles. This is also compounded by roles of non-government organizations. These parties are often found in the same region working on the same role, yet results have not been fulfilling the needs in drought management. This puts into question the extent to which the policies are effective. This becomes a challenge in terms of

<sup>&</sup>lt;sup>163</sup>Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

<sup>&</sup>lt;sup>164</sup> International Federation of Red Cross and Red Crescent Societies, "Background Report: Law and Regulation for the Reduction of Risk from Natural Disasters in Kenya," A National Law Desk Survey, September 2012.

addressing objectives of drought management hence sustained conflicts in Northern Kenya Counties.

#### 4.3.5 Under development

Counties in northern Kenya are characterised by lack of development in infrastructure and other social amenities such as schools, electricity and water supply. Kenyan Government has failed to invest sufficient human and financial capital in abating the conflict and the underlying underdevelopment in the pastoral regions.<sup>165</sup> Despite the government establishing the Ministry of State for the Development of Northern Kenya and other Arid and Semi-Arid Areas and National Drought Management Authority to promote development in the ASAL areas, conflict over natural resources continues unabated. The establishment of these institutional frameworks was to ensure proper management of drought, available water and grazing land. This was intended to have a positive effect on the reduction of cattle-rustling as death of cattle will be reduced and so will the scramble for natural resources such as water and pasture.

Tackling illiteracy that contributes to cattle rustling and natural resource conflicts requires investment in education system in the area as a means of empowering the communities. As ASAL zones, for example, Turkana and Samburu lack adequate schools, health facilities and other social amenities or infrastracture.<sup>166</sup> This becomes a challenge due to lack of school infrastructure. The Turkana and Samburu fall within the hardship areas that are discouraging to deployment of government personnel. This increases marginilisation. The perpetual conflict makes it difficult to carry out effective development action and infrastructure building.<sup>167</sup> This situation limits exploration of opportunities for development by people from other regions.

<sup>&</sup>lt;sup>165</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

<sup>&</sup>lt;sup>166</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

<sup>&</sup>lt;sup>167</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

However, with limited government intervention of promoting local livelihoods such as livestock development the area remains under development. For example, the modern institutional frameworks devised by the government and civil society do not comprehensively address the conflicts over natural resource use. Activities such as irrigation, digging of water boreholes, building water pans and initiation of alternative livelihood projects are not evenly distributed yet the communities are widely spread. This means that there are areas that are deprived of the social amenities which places pressure on the available social amenities. Due to different interests in culture, tensions arise thereby exacerbating the conflicts manifested in competition over natural resources.

## 4.3.6 Security Challenges

Northern Kenya Counties are within the sector with intense arms proliferation. The sector covers the Mandera, Isiolo, Wajir, Marsabit, Samburu, Laikipia, Turkana, West Pokot, Marakwet, Trans-Nzoia, Mount Elgon and Baringo in Kenya. This area is neighboring conflict and bandits infested areas in the neighboring countries such as Somalia (Al-Shabaab), Ethiopia (Oromo), South Sudan (Toposa) and Uganda (Teso).<sup>168</sup> Within this sector, arms are traded easily and become available to cattle rustlers or communities to protect their animals. It is estimated that small arms are used in 96.9 per cent of cattle rustling conflicts.<sup>169</sup> This is an insecurity condition in which management of the natural resources becomes difficult if all parties in the conflict are not disarmed or cut off from arms supply. Disarming one community such as the Samburu only contributes to dominance of the Turkana over grazing lands. Consequently, disarming the Turkana and Samburu

<sup>&</sup>lt;sup>168</sup> Pragya, Op. Cit., Accessed on February 18, 2015 at: http://www.pragya.org

<sup>&</sup>lt;sup>169</sup>McEvoy, Claire, et. al, Op Cit., 2008, p. 42

only makes the Turkana and Samburu vulnerable to attacks from the neighboring communities such as Pokot, Toposa and Rendille.

This demonstrates a security nexus in which achieving holistic conflict and natural resource management is difficult. For example, this is compounded by large number of armed bandits than security officers.<sup>170</sup> This indicates weakness in provision of security in such areas thereby contributing to low state control. In this situation, there is emergence of militia that control the grazing and watering lands.<sup>171</sup> This implies that whoever has a gun, controls pasture and watering points. This is not suitable way of managing natural resources where co-existence is required. Interventions such as increased security forces and disarmament become ineffective due to the vast and rugged landscape.

## **4.4 Chapter Summary**

This chapter has established that there are several interventions put in place to address the natural resource-based conflicts. The interventions include legal institutional frameworks aimed at addressing climate change and drought which is a major cause of conflicts in Northern Kenya. Another approach is traditional conflict resolution mechanism aimed at managing natural resource-based conflict. The approaches have been significant, however, there are several challenges that are institutional and systemic. The challenges have limited the management of natural resource-based conflicts in Northern Kenya.

<sup>&</sup>lt;sup>170</sup>Mkutu, Kennedy. Op cit., p 44

<sup>&</sup>lt;sup>171</sup>Osamba, Joshia. Op cit., p 23

#### **CHAPTER FIVE**

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **5.1 Summary**

This study investigated extent to which natural resource is a source of conflict in Northern Kenya between 2012 and 2016. The specific objectives were to: determine ways in which distribution of natural resources contribute to conflicts in Northern Kenya; examine ways in which use of natural resources contribute to conflicts in Northern Kenya; and identify natural resource management practices that contribute to conflicts in Northern Kenya. The study was therefore expected to answer the following three questions. The first question was how does distribution of natural resources contribute to conflicts in Northern Kenya? The second question was what are the ways in which use of natural resources contribute to conflicts in Northern Kenya?

On the first research question about extent to which distribution of natural resources contribute to conflicts in Northern Kenya, this study established that Northern Kenya is endowed with many natural resources distributed randomly. Some resources especially pasture and scanty vegetation are distributed evenly across most areas while other resources such as water are scarcely distributed. The area has large population of people, livestock and wildlife that compete for the available natural resources. The increased competition has resulted into cases of conflicts. Occurrence of conflicts is therefore correlated with distribution and availability of natural resources.

On the second research question on the extent to which use of natural resources contribute to conflicts in Northern Kenya, this study established that conflicts among communities in

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Northern Kenya is significantly attributed to natural resources. While the area is characterized by erratic rainfall, sandy soils that limit vegetation growth as well as limited rivers and swamps, these conditions are made worse by climatic changes. The combination of climate change and ecological differences trigger and sustain conflicts. Conflicts were observed to occur most during drought occasioned by climate change.

On the third research question about the extent to which natural resource management practices contribute to conflicts in Northern Kenya, the study established that there are several interventions put in place to address the natural resource-based conflicts. The interventions include legal institutional frameworks aimed at addressing climate change and drought which is a major cause of conflicts in Northern Kenya. Another approach is traditional conflict resolution mechanism aimed at managing natural resource-based conflict. The approaches have been significant, however, there are several challenges that are institutional and systemic. The challenges have limited the management of natural resource-based conflicts in Northern Kenya.

Putting the findings of this study into the theoretical framework of the theory of *ecological fallacy*, this study there are significant indications that conflicts are strongly correlated to distribution, utilization and management of the resources. The occurrence of drought and other climatic changes cause strain on available resources (water and pasture). As different groups value natural resources differently owing to the incentives received from protecting such sites, the strain on resources is worsened by competing interests among the groups of people. In addition, occurrence of conflict is related to management of the same resources. Poor management of the natural resources worsens the already dire situation.

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## **5.2** Conclusion

This study has significantly established that conflicts in Northern Kenya between 2012 and 2016 result from changes in climatic conditions, distribution of pasture and water as well as poor management of water and pasture. The causal factors are natural resources that contribute to occurrence of the conflicts in different proportions. In view of these findings, it can be concluded that conflicts in Northern Kenya are correlated with natural resource distribution, usage and management. However, while climate changes such as drought are occurring, the phenomenon has been there for many years. This situation indicates that management of drought is therefore critical in minimizing occurrence of conflicts. This study therefore rejects the first hypothesis that there is no significant relationship between natural resources and occurrence of conflict in Northern Kenya are largely attributed to distribution and management of natural resources.

#### **5.3 Recommendations**

This study recommends the following:

## **5.3.1 Holistic Approach to Natural Resource Conflicts**

There is need for holistic approaches to address the conflicts. Cultural, economic, institutional and environmental challenges should be addressed in an integrated manner. The efforts of the elders of the communities should be supported by economic activities while environmental approaches should be complimented by good institutional practices.

## **5.3.3 Promoting Alternative Livelihoods**

The government should enhance better use of natural resources to prevent conflict among the pastoral communities. With endowment of wildlife, minerals and oil, the government should initiate ways of utilizing the resources to reduce overreliance of the communities on cattle rearing. This will in turn empower the community through employment.

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