



**UNIVERSITY OF NAIROBI**  
**INSTITUTE OF DIPLOMACY AND INTERNATIONAL**  
**STUDIES**

**THE EFFECTS OF CONFLICTS ON FOOD SECURITY IN IGAD REGION: A CASE**  
**OF LAIKIPIA COUNTY, KENYA**

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**International Studies at the Institute of Diplomacy and International Studies**  
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**DECLARATION**

This is my original work. It has never been presented for an award of a degree in any learning institution. The document should not be copied without the permission of the author or Defense Staff College or the University of Nairobi.

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I approve the submission of this work for examination.

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## **DEDICATION**

To my dear wife, Jenifer Wambui and my lovely children, Gicheru Mwai and Wanja Mwai. You always wanted the best out of me.

## **ACKNOWLEDGEMENT**

God's grace has been sufficient throughout the entire period I undertook the course. The Government of Kenya sponsored me for this Course. I am grateful to the National Defence College in Kenya for the leadership and dedicated staff. Tirelessly, Dr. Kizito Sabala led me throughout this research project. It was a joint effort for many and may God bless all.

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## LIST OF ACRONYMS

IGAD	Intergovernmental Authority for Development
IDPs	Internally Displaced Persons
UN	United Nations
FAO	Food and Agriculture Organization
TV	Television
NGOs	Non- Governmental Organizations
SPSS	Statistical Package for Social Sciences
UDHR	Universal Declaration of Human Rights
TCC	Troop Contributing Countries
AU	African Union
OCHA	Office for the Coordination of Humanitarian Affairs
MoALF	Ministry of Agriculture, Livestock and Fisheries
KMD	Kenya Meteorological Department
KFS	Kenya Forest Service
GDP	Gross Domestic Product
CCA	Climate Change Act
GHG	Green House Gas
MRV	Monitoring Reporting and Verification
NCCAP	National Climate Change Action Plan
ASALs	Arid and Semi-Arid Lands



## ABSTRACT

This study looks at how conflicts have caused food insecurity in the IGAD region, a case of Laikipia County in Kenya. The study acknowledges that residents in Laikipia County have suffered poverty due to conflicts. Empirical evidence has been drawn from previous research, journalist articles and documentation from various parts of the IGAD region and more so the County government of Laikipia. The study answered the following questions: 1) What are the effects of conflicts on food security in the IGAD region? 2) What are the effects of conflicts on food security in Laikipia county of Kenya? and 3) Are the current strategies and policy measures adequate to address the challenge of food insecurity in Laikipia county and Kenya at large? The study set out two hypotheses: 1) There is an inverse relationship between conflict and food insecurity and 2) Ineffective conflict management is directly proportional to food insecurity in Laikipia county in Kenya.

A case study was used for this study to show that the situation in Laikipia county of Kenya is similar to other areas that have had conflicts affecting food security in the IGAD region. Random sampling was employed in selecting 100 respondents in Laikipia county. There were other 10 key informants purposively selected which consisted of Journalists based, NGO workers and county government officials in Laikipia county. Five data collection enumerators were recruited through the chief's offices in Laikipia West, east and North. They collected the data through administering questionnaires to the respondents. The data was then entered in Excel template, cleaned validated and exported to SPSS for analysis. The findings revealed that Laikipia County has suffered conflict which have impacted negatively on food security. Conflicts between different communities are attributed to fight over water and pasture, land rights and theft of livestock. Residents in Laikipia have been experiencing cattle rustling and banditry for over three decades now, where bandits strike with impunity to kill, injure and steal livestock. Hundreds have lost their lives and thousands of livestock stolen and crops destroyed rendering them to transition into poverty. Farmers have been the worst hit by the conflicts since they lose both their crops and livestock. Illegal grazers who are armed destroy electric fences to access and camp in private ranches/land to graze their livestock. They do this as they steal any livestock from the neighborhoods. Farmers have been displaced and flee away for their lives abandoning their crop fields. This has exposed them to food insecurity since they do not have other sources of livelihood. Currently, the government efforts have borne fruits in controlling and containing the illegal grazers even after recruiting and deploying the national police reservists.

The study has generated several recommendations: there is need for instantaneous actions to ensure sufficient food access for the hungry in Laikipia county and Kenya at large. The county government and NGOs need to develop initiatives for other sources of livelihood other than farming in the area already prone to conflicts based on natural resources as well as creation of civil society organizations and formation of suitable institutional policy atmosphere. There should be Policies in Laikipia County to deal with the conflict and food insecurity issues as well as supervisory framework favorable to private and local initiatives. The rural economies can also be diversified through value addition of agricultural products. It is also crucial to have an insurance plan for farmers to cushion them against natural and man-made disasters that make them loose their crops and livestock leaving them devastated economically.

## Chapter One

### Introduction to the Study

#### Back ground to the Study

Food security is a big concern worldwide with more than one billion people lacking sufficient food in terms of availability and dietary. Half the number suffers micronutrient deficiencies. Most of the research institutions and scholars are focusing efforts to improve food insecurity measurement.<sup>1</sup> Food security is characterized by accessibility to harmless food, full of nutrients to meet their dietary needs.<sup>2</sup> Aspects of food security are its availability, its nutritious content, food, accessibility of the food on regular basis, and utilizing it properly such that a population does not have risk of losing the food and resources leading to accessibility of food. If any of these dimensions has problems, then food insecurity can arise. Such problems might include social unrest and severe conflicts. Conflicts and food insecurity is a vicious cycle that often leads to poverty. Whereas conflicts cause food insecurity, the latter is also a primary cause of conflicts when people are competing for scarce resources like land and water. Stress on livelihoods and food systems is a big challenge in the world today.<sup>3</sup>

Conflicts have been a primary cause to problems such as displacement of people, disruption of agriculture, frustrating trading activities, disrupting transport and distribution, disrupting distribution of relief food, increased prices for food commodities and generally,

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<sup>1</sup> Barrett, Christopher B. "Measuring food insecurity." *Science* 327, no. 5967 (2010): 825-828.

<sup>2</sup>World Bank. "*Food Security and Conflict*." World Development Report 2011. Agricultural and Rural Development Department. 2010

<sup>3</sup>FAO. *How to Feed World in 2050*. Proceedings of the Expert Meeting on how to Feed the world in 2050. Rome, 2010.

dwindling of food reserves. Conflicts have been associated with the falling of food prices.<sup>4</sup>The industrial sector is more affected by conflicts as compared to the agricultural sector since the industrial sector cannot continue operating without the raw materials from the agricultural sector. Conflicts have severe impacts on human health and development such as malnutrition that can lead to physically handicapped children.<sup>5</sup>

Conflicts in the society have been fueled by ethnicity, criminal violence, sectarianism, among other things. While the cause of conflicts is a mixture of economic, political, cultural and environmental issues, the effects are severe and felt by all the parties involved. The effects lead to food security problems and are more disastrous if they are associated with natural disasters. Cultural norms such as cattle rustling and banditry are insecurity issues that have caused food insecurity through displacement, death of people, taking away livelihoods and loss of resources. This paper will examine the conflicts-food insecurity nexus and give policy recommendations on how the challenge can be addressed government both at the county and national levels.

## **1.1 Statement of the Research Problem**

People can claim to be food secure when they can access safe and nutritious food. Food production and security is affected by both human and natural factors such as soil degradation, desertification, soil erosion and water availability. Besides, the natural factors affecting food security, conflict is a major challenge as well. The IGAD region, has been faced with food security challenges due to incessant conflicts, population growth, fragile ecosystems, environmental and natural hazards. The conflicts in this region have been caused by factors such

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<sup>4</sup>Frankenberger et al. *Enhancing Resilience to Food Security Shocks in Africa. Discussion paper* , 7<sup>th</sup> Novemebr 2012..

<sup>5</sup>FAO, IFAD, UNICEF, WFP and WHO. *The State of Food Security and Nutrition in the World 2018. Building climate resilience for food security and nutrition*. Rome, FAO. License: CC BY-NC-SA 3.0 IGO.

as the effects of adverse climatic conditions, availability of small arms and light weapons, debilitating poverty, poor governance and violation of human rights among other factors.

The nexus between food security and conflicts is quite complex and dynamic. Conflict can be a cause of food insecurity when it causes people to flee hostile environments hence abandoning farmlands, inaccessibility of inputs and, land degradation and destruction/theft of food stuffs. Conflicts can cause food insecurity as well, when food is unavailable and inaccessible due to disruption of agricultural production and closure of markets for food commodities.

Whatever the cause, millions of people have been affected by food insecurity. Men, women and children have been exposed to malnutrition, while others have run away to become refugees, many have lost their lives and the conflicts have continued to escalate. Whereas conflicts are triggered by various confounding factors, the emergence of conflict also causes food insecurity. This study endeavors to look into how conflicts have caused food insecurity and suffering to the people of Kenya.

### **1.3 Objectives of the Study**

The aim of the study will be to determine the effects of conflicts on food security in the IGAD region, precisely Kenya. Specifically, the study will endeavor:

- 1.3.1 To examine the effects of conflicts on food security in the IGAD region
- 1.3.2 To examine the effects of conflicts on food security in Laikipia county of Kenya
- 1.3.3 To interrogate the policy strategies in addressing food insecurity in Laikipia county and Kenya as a whole.

## **1.4 Research Questions**

The study was prompted by the following research questions:

- 1.4.1 What are the effects of conflicts on food security in the IGAD region?
- 1.4.2 What are the effects of conflicts on food security in Laikipia county of Kenya?
- 1.4.3 Are the current strategies and policy measures adequate to address the challenge of food insecurity in Laikipia county and Kenya at large?

## **1.5 Study Hypotheses**

The study aims to prove two hypotheses:

- 1.5.1 There is an inverse relationship between conflict and food insecurity
- 1.5.2 Ineffective conflict management is directly proportional to food insecurity in Laikipia county in Kenya.

## **1.6 Study Justification and Significance**

### **1.6.1 Academic Justification**

The study looks at the effects of conflicts on food security in the IGAD region. Laikipia county of Kenya will be used as a case study for the research. The study findings can be used future by scholars as a basis of further research. The gaps identified in the study can further be examined by future researchers. The study findings can provide a rich source of literature by the scholars. The study shall add more literature on conflicts and food security in Africa. The research findings shall be disseminated in form of a journal article which can be easily accessed by scholars.

To both scholars and researchers, the study shall give a better understanding of how people suffer food insecurity whenever there are incidences of conflicts in a given area. Relationships between food security and conflicts shall be analyzed. Whereas this is a phenomenon that people accept with mixed reactions, the report shall prove beyond doubts that there is an inverse relationship between food security and conflicts in the IGAD region. It will be a valuable academic paper to the researcher.

### **1.6.2 Policy Justification**

The study will be looking at how conflicts have caused food insecurity in the IGAD region, using Laikipia county of Kenya as the case study. The study will look in to the efforts of IGAD and other regional and non-regional organizations in dealing with conflicts in the region. The findings will inform IGAD on what they should do better to improve on their future work and efforts in enhancing sustainable development in Africa. The context in the Laikipia county of Kenya can be used as a true reflection of what happens or might happen in the IGAD region.

The research findings shall be disseminated to stakeholders in different forms such as policy briefs, stakeholder workshops and reports. This information shall be used by Policy makers to get recommendations on developing guidelines and policies to deals with conflicts and food security issues in their countries. Formulating, adopting and streamlining of policies in Conflicts and food security would be ideal in dealing with the issue. This study will provide a data backup to be used in the IGAD region.

### **1.7 Literature Review**

This subsection reviews literature on conflicts and food security and the possible interventions that can be applied.

## 1.7.2 Food Security and Conflicts

Food Security is the situation when people have adequate access in social, physical, economic, nutritious and safe food, with all dietary requirements for a healthy living.<sup>6</sup> FAO defines food security based on four pillars; accessibility, sufficiency, utilization and stability.<sup>7</sup> The main staple food in Kenya is maize, with other tradition crops, whose production has dwindled for many decades, include millet, wheat, rice, potatoes, sorghum, yams, cassava, and arrowroots. The production of these foods have increased over years. Food crops, livestock and fish production are among the components of food security in Kenya.

Agricultural activities and food production are the biggest influencers of Africa's economy and most of the populations depend on Agriculture. This sector is highly endangered by conflicts despite the fact that Agricultural activities and food production are the most important pillars of the economy of developing countries.<sup>8</sup> Conflict in a country affects availability of labor in the agricultural sector because people are afraid of their safety when they go to the farms. Due to these conflicts, there is market instability and disruption of activities in the areas where agricultural productivity and food distribution occurs.

Conflicts can cause food insecurity whereas food insecurity can cause conflicts. Globally, millions of people have been affected by food insecurity which tends to be concentrated in the

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<sup>6</sup> FAO. *An Introduction of the Basic Concepts of Food Security*, 2008. Retrieved from <http://www.fao.org/3/al936e/al936e00.pdf> on 31<sup>st</sup> October, 2019

<sup>7</sup> FAO. *Food Security*. Policy Brief 3, 2006. Retrieved from [http://www.fao.org/fileadmin/user\\_upload/sifisia/docs/Policy\\_brief\\_October\\_2010.pdf](http://www.fao.org/fileadmin/user_upload/sifisia/docs/Policy_brief_October_2010.pdf) on 31<sup>st</sup> October, 2019

<sup>8</sup> Jessica. "The Impact of Conflict and Instability on Agriculture in Mali and Nigeria., 2018" <https://www.brookings.edu/blog/africa-in-focus/2014/09/08/the-impact-of-conflict-and-instability-on-agriculture-in-mali-and-nigeria/> (accessed September 8, 2018).

conflict-affected regions. Challenges with food accessibility and availability shape short-term and long-term outcomes of well-being and health, when nations and their people can no longer cope with shocks. In areas with conflicts, many households, especially the smallholder farmers are faced with some high income uncertainties. They are affected by price fluctuations and cannot even do local supplies.<sup>9</sup>

Conflict contributes to competition on scarce resources which are the most important factors in food production. For instance, pressure on land leads to reduced crop production. Shortage of food results in inflated food prices. In the IGAD region, most of the conflicts are experienced at the regional and community level where most people in depend on livestock and food production. Conflict interrupts the daily activities of the community members by limiting the movements to the production and market areas and also the social life of the community members is threatened.<sup>10</sup> During displacement due to conflict, food reliefs and other resources are diverted to the camps where the displaced persons are hosted. These resources include those allocated for other development activities. Conflict and food security are among factors that have attracted the attention of investors and humanitarian agencies across the world. Over several years, resources have been mobilized to address food insecurity in the third world countries. Food insecurity have always been associated with conflict and on the other hand eruption of social unrest and civil war have contributed a high percentage of food insecurity incidences.<sup>11</sup> Due to conflicts, agricultural activities cannot be carried out which include preparation of land, planting and harvesting which affects negatively agricultural activities. Conflicts affects the

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<sup>9</sup> Maccini, S. & Yang. Under the Weather: Health, Schooling, and Economic Consequences of Early-Life Rainfall. *American Economic Review*, 99(3) (2009): 1006–26. doi:10.1257/aer.99.3.1006.

<sup>10</sup> Peace Direct. 2014. "Horn of Africa: the linkage between food insecurity, migration and conflict." <https://reliefweb.int/report/somalia/horn-africa-linkages-between-food-insecurity-migration-and-conflict>.(accessed on November 14, 2018).

<sup>11</sup> Pierre Jeanty and Fred Hitzhusen. "Analyzing the Effects of Conflict on Food Security in Developing Countries, 2006.



availability, utilization and access to food. Invariably, agricultural productivity is affected by conflict through destruction of water, food, land and social resources that are used in food production. Most of the resources allocated for use in agricultural production are diverted to conflict resolution and peace keeping efforts and hence affect implementation of agricultural sector programmes.

On the other hand, food insecurity can cause or can be a consequence of conflicts. The relationship between the two creates a vicious cycle of because food insecurity leads to other consequences such as market disruptions, scarcity of food, and further to shrinkage in availability of food. Persistent conflicts and climate shocks coupled with food insecurity have caused millions of people to migrate to other places. The displaced and migrating people will need adequate support in terms of basic needs and if they don't, further instability is created leading to food and nutrition insecurity. Conflict triggers can be climate shocks, natural disasters and weak governance structures that also help to inform food security policies and programs.<sup>12</sup>

### **1.7.3 The Effect of Displacing People on Food Security**

During conflict most people tend to flee due to insecurities. When people are displaced, they can no longer farm. When economically productive labor flee to conflict free areas, it becomes hard to harvest adequate food for the remaining people.<sup>13</sup> Most of the internally displaced people (IDPs) require basic needs like food and shelter for a period of time until normalcy returns to their place of origin or up to when they find alternative sources of income to sustain themselves. Sustaining IDPS strains the host communities who struggle to share their scarce resources. This exacerbates and compounds food shortage problem to crisis level. Even

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<sup>12</sup> IFPRI. Conflict and Migration, 2010. Retrieved from <http://www.ifpri.org/topic/conflict-and-migration> on 31<sup>st</sup> October, 2019.

<sup>13</sup> Jeanty and Hitzhusen. "Analyzing the Effects of Conflict on Food Security in Developing Countries, 2006.

after the conflict when the IDPs return to their place of origin, settling down becomes difficult and continuing with the agricultural production becomes a challenge and may take time to settle down which contributes to further food insecurity.<sup>14</sup>

Displacement due to conflicts increases pressure on resources like land, water, health facilities and sanitation. In most cases in the areas that the displaced persons are hosted, the land is not suitable for agricultural production. Migration causes increased population and pressure on land hence threatening food security as well. There is thus unfair competition of the market products where the displaced persons experience hostility from the host community due to insufficient market to sell their products. In Kenya conflicts like the post-election of 2007 led to humanitarian crisis which resulted in emergency food needs in the country.<sup>15</sup> Most people were displaced and it was very hard for the host communities to provide food for their families and the displaced persons, hence exacerbating food insecurity.<sup>16</sup>

#### **1.7.4 Conflicts, Trade and Food Distribution**

Conflict have been one of the big factors leading factors to increased food insecurity, which further leads to rising poverty.<sup>17</sup> Food production, and markets accessibility are highly affected by conflict.<sup>18</sup> As a result of conflict, most of the investors in food related ventures relocate to safer areas. This contributes to low or no investment in food production and agricultural sector in general and leads to low food production and limited distribution. During conflict, important economic and agricultural factors which include natural environment and

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<sup>14</sup> Mutheu, Muia Immaculate. "Factors Affecting Food Security of Households." Master's Thesis, Nairobi.

<sup>15</sup> CBS. 2009. *Kenya Food Security Profile*. Nairobi, 2012

<sup>16</sup> Famine Early Warning System. "Kenya food security emergency, 2008. Accessed on October 2019.

<sup>17</sup> Grebmer K, Ruel M, Oppeln C. *The Challenge of Hunger, 2010*

<sup>18</sup> United Nations. *World Economy Survey: World Economic Trends and Policies in the World Economy, 1993*

infrastructure are destroyed as well as damage to social capital which are important aspects in food production and distribution.<sup>19</sup>

Conflict affects food distribution hence creating food shortage which directly affects availability. Conflicts interrupt markets and distribution of both food and agricultural inputs. This makes it difficult to access food. Decreased supply of food leads to increased prices of the commodities.<sup>20</sup> Conflict affects food prices in the market both locally and internationally.<sup>21</sup>Transporting the agricultural products from the farms to the local markets also becomes very difficult because the farmers are afraid of being attacked. Conflicts leads to destruction of transport infrastructure like bridges and roads as well as power and water supplies.

During crisis the crops are left unharvested, where some degrade in their value. Most of the crops are lost during this time leading to depressed harvests. Most people in Kenya depend on the agricultural products from high potential areas and when these areas are experiencing conflict, the impact of the conflict is felt across the whole country. When agricultural produce markets are closed as a result of conflicts, perishable goods are spoilt. This contributes to a huge loss of agricultural products because most of the buyers and sellers are unable to access the market. Even after conflicts are contained, it takes time for the displaced persons to settle down and continue with their normal economic and development activities. In such circumstances, most farmers prefer to invest in seasonal crops which have relatively low economic returns rather than engaging in the perennial crops because they fear conflict recurrence and displacements.

### **1.7.5 Interventions to Mitigate Food Insecurity**

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<sup>19</sup> Henk-Jan Brinkman and Cullen S. Hendrix. *Food Insecurity and Violence Conflict*, 2011.

<sup>20</sup> S, Chus. *Global Food Crisis May Deteriorate: Tackling Climate Change*. Great Britain: Oxfam, 2009

<sup>21</sup> Arias, Maria Alejandra. "Agricultural Production amidst Conflict: : The Effects of Shocks, Uncertainty, and Governance of Non-State Armed Actors," Documents CEDE 011005, Universidad de los Andes - CEDE., 2013

Food insecurity has not only been documented in Africa but also in Latin America and other developing countries in the world. Most affected countries are in Africa, South America and some in the Middle East. However, developed countries have dietary energy supplies that are plenty to satisfy their populations. This has not been the case in the poor and middle-income countries. According to UN and FAO, the dietary requirements provided for one person in the United States is what is taken by approximately three people in Burundi. Food insecurity challenge is attributed to unequal distribution of resources, issues of food availability, and food access which can further be accelerated by conflicts.<sup>22</sup> Interventions in food security should therefore be customized to the specific problems that occasion the challenge. Valuable insights in dealing with the problem can be gained by studying and borrowing experience from other states where it has worked. There are various approaches that can be adopted to improve food security both at household and national level.

The early work on food security was prompted by the spikes in oil prices and Soviet Union grain short fall in the 1970s. The first world food conference held for the first time in 1974 focused on global food supplies. Food accessibility was key thing in the 1980s after being reinforced by studies by Amartya Sen and the World Bank.<sup>23, 24</sup> According to Sen, food insecurity, famines, poverty and inability of a household to acquire resources to buy food were all interlinked. The World Bank added that diet quality and nutritional outcomes were also linked to health care services and the sanitation households are exposed to.

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<sup>22</sup>FAO. *The state of food insecurity in the world. Eradicating world hunger, 2017.*

<sup>23</sup>Sen, Amartya. *Poverty and famines: An Essay on Entitlement and Deprivation. 1981* retrieved from <https://www.prismaweb.org/nl/wp-content/uploads/2017/06/Poverty-and-famines%E2%94%82Amartya-Sen%E2%94%821981.pdf> on 31<sup>st</sup> October, 2019.

<sup>24</sup>Reutlinger, S, and J Van Holst Pellekaan. *Poverty and hunger: issues and options for food security in developing countries, 1986.*

Responses to food insecurity should be developed specific to the context. There are valuable lessons that can be learnt from successful interventions and policies both in the developing and developed countries. Food security interventions can be categorized into four groups: increased agricultural production, increased employment opportunities and, increase human capital and introducing food-based distribution programs and macroeconomic policy interventions.<sup>25</sup> There is also need to have interventions that address governance issues such as transparency in legal systems and conflict clashes. Good governance will prevent crises that can lead to food insecurity.<sup>26</sup> Interventions in micronutrient e.g. food fortification and nutrient supplements which can improve the micronutrient outcomes. These are all important food security outcomes that are beyond the scope of this paper.

#### **1.7.5.1 Agricultural Production for Increased Food Security**

In attaining the second sustainable development goal, zero hunger, there must be increased agricultural production.<sup>27</sup> Agriculture drives the economies in most African countries in driving economic growth and fighting poverty. There are various ways of increasing agricultural production which include availing and distributing farm inputs in the affected areas. This can help mitigate some shocks associated with adverse weather. Agricultural research for development can increase adoption of new improved crops for increased yields. Farmers can as well be supported through subsidies.<sup>28</sup>

#### **1.7.5.2 Food-based Assistance**

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<sup>25</sup>Rose, Donald Diego. "Interventions to reduce household food insecurity: a synthesis of current concepts and approaches for Latin America." *Revista de Nutrição*, 21 pp.159s-173s (2008).

<sup>26</sup> Ibid p.5

<sup>27</sup>UN. *Sustainable Development Goal, 2015*. October. <https://www.un.org/sustainabledevelopment/> (Accessed October 9th, 2018).

<sup>28</sup>Godfray, H, J Charles, et al. ""Food security: the challenge of feeding 9 billion people."." *Science* 1185383 (2010).

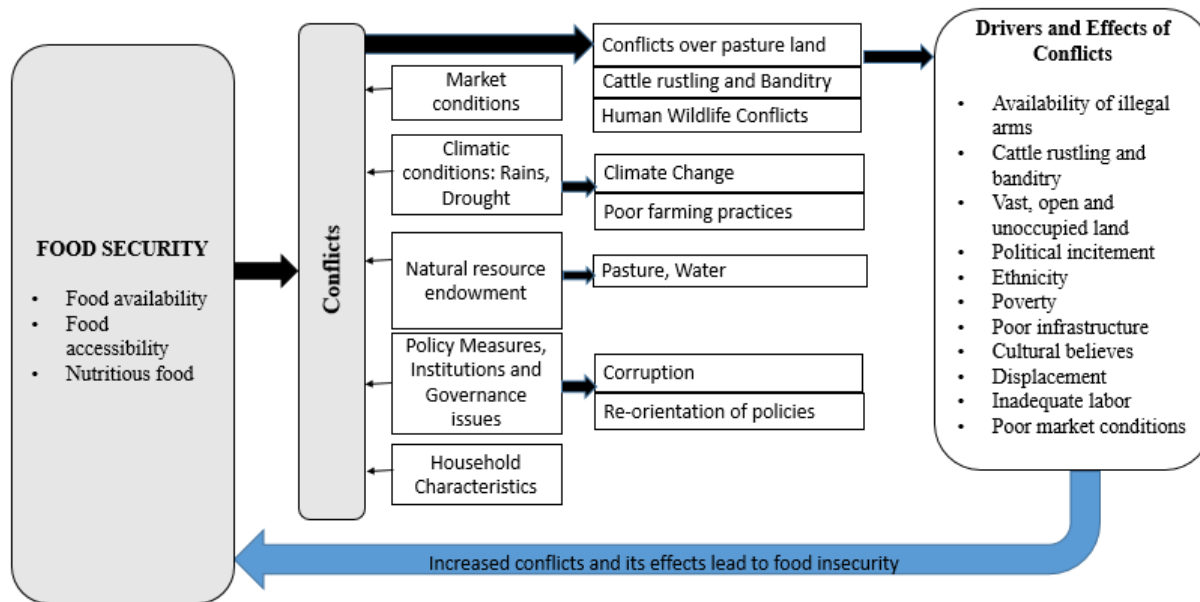
Food-based assistance is targeted to those in need to cope with immediate shocks that have affected food security of households. The assistance programs are also good in mitigating against long term effects. The vulnerable groups such as women, children and disabled are targeted for supplemental food through maternal and child healthcare systems. The developing world has many of such programs. The high income countries have also adopted these programs for social protection. They have programs such as school feeding programs and giving food supplements to children. The programs have yielded increased attendance, improved learning and dietary outcomes in the countries of implementation.<sup>29</sup> Other ways of intervention may include creating employment and income generation interventions and human capital development. The interventions should be designed to meet specific contexts.

## **1.8 Conceptual Framework**

This framework aims at giving the understanding of the underlying causes of food insecurity in order for decision makers and other actors to plan appropriate interventions. It illustrates how variables relate to each other in this study. The standard food security conceptual framework draws on the idea of hierarchy of needs. It assumes that food is first, where food is the primary need that surpasses all other basic human needs. Food insecurity can be caused by factors such as conflicts, market conditions, climatic conditions, natural resource endowment, policies and institutions and household characteristics.

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<sup>29</sup>[http://www.wfp.org/country\\_brief/indexcountry.asp?country=231](http://www.wfp.org/country_brief/indexcountry.asp?country=231) (accessed on 30<sup>th</sup> April, 2019)



**Figure 1: Conceptual Framework**

All the mentioned factors can trigger conflicts which is further escalated by availability of illegal weapons, political incitement, ethnicity, poverty, poor infrastructure, cattle rustling and banditry, and vast open lands which are prone to invasion by herders for pasture,

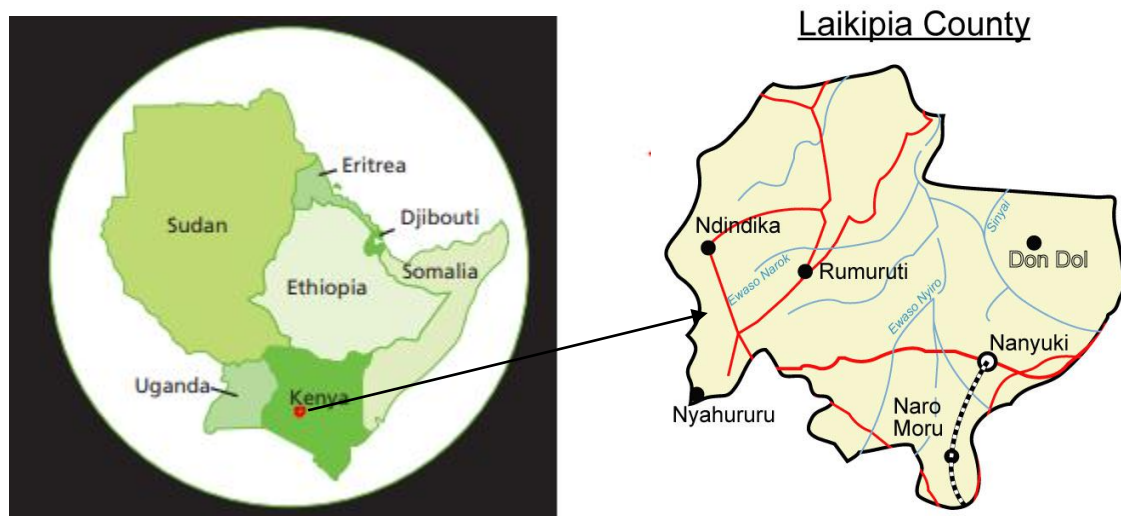
## 1.9 Research Design and Methodology

### 1.9.1 Case Study

The research adopted a case study, where in-depth study was conducted to the chosen group. Data was collected and used in validating the hypotheses of the study. The communities have been observed in relation to how conflicts have made them suffer food insecurity. The research shall further have studied their behavior and elicited information from them to get a better understanding. The study was conducted in Laikipia. This is an area that has been perpetually affected by conflicts in Kenya. Farmers, Food Traders and Distributors, Policy Makers and NGOs operating in Laikipia, Kenya were targeted for the study.

A case study was appropriate for this study because it is less time consuming and appropriate when the data needed seems expensive and hard to obtain. The researcher is able to get a detailed and in-depth data that cannot be physically created. However, a researcher may be subjective to their feelings and hence influence the outcome of a case study.

**Figure 2: Map of the IGAD Region and Laikipia County in Kenya**



**Source:** <https://so.wikipedia.org/wiki/IGAD>

Laikipia county is a good example of the areas that have been hit by food insecurity as a result of conflicts

### **1.9.2 Data Collection**

Primary data was collected from farmers and the traders in Laikipia county of Kenya. Two major methods employed in collecting the primary data were structured questionnaires for the farmers and Key informant guides for the policy makers. Through these methods, the



researcher got appropriate information that was to the specific research issue at hand. The concerned and reliable party collected primary data hence the data was fully audited.<sup>30</sup>

The questionnaire was developed as per the study objectives. Section one was composed of the demographic information, while the second section was composed of questions relevant to conflicts and food security in the IGAD region. Section three had questions relevant to effects of conflict on food security in Laikipia county whereas the fourth section had questions on policy measures that should be undertaken to deal with food insecurity challenges in Kenya. All the questions were structured so that the respondent got specifically the information that was required for the study.

Pre-testing the questionnaire was important to have an effective study. The wording was checked and as well as the order of the questions in the questionnaire. Pre-testing was done with 5-10 people chosen across the target group. After pretesting, the questionnaire was piloted with 10% of the sample size for further improvement of the questionnaire.<sup>31</sup> Afterwards, the questionnaires were emailed to respondents (farmers and traders) to fill and sent back for data analysis. Based on statistical issues, time and resources available, a sample size of 100 respondents, which is the minimum acceptable, was adopted by the researcher.<sup>32</sup> Simple random sampling was employed for the farmers and traders. The Key informant guides were administered to ten respondents by the research assistant. Both Purposive and Convenient sampling techniques were employed in choosing the key informants who were policy makers.

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<sup>30</sup>Jones, Constance. "Advantages and Disadvantages for Research in Psychology." *Social and Personality Psychology Compass* 4, no. 11 ( pp 1008-1017) (2010).

<sup>31</sup>tools4dev. *How to Pretest and Pilot a Survey questionnaire*. <http://www.tools4dev.org/wp-content/uploads/how-to-pretest-and-pilot-a-survey-questionnaire.pdf>, 2014.

<sup>32</sup>C, K. R., & Gaurav, G. *Research Methodology*. New Delhi: New Age International Publishers, 2014.

Secondary data is ideally the data that is gathered and maintained by other researchers. The secondary data sources used by the researcher included electronic journals, books, websites and publications on conflicts and food security.<sup>33</sup>

### **1.9.3 Data Analysis and Presentation**

The data was cleaned, verified and entered in SPSS. Descriptive statistics generated the summary about the data. This was expressed in mean and mode. Data Cross tabulations were done to find the relationship between the conflicts and food insecurity variables. The hypothesis was tested by computing the p-value to find out whether conflict and food security were inversely related and whether poor implementation of policies is directly related to conflicts.

Data was then presented in charts, tables and graphs for easy interpretation as per the data. Presentation was done in a precise, systematic and orderly manner.

### **1.10 Chapter Outline**

Chapter one has the introduces and gives the background information. it also explains the problem at hand, what justifies the study and the conceptual framework followed. Literature review with the empirical evidence, objectives of the study, the questions that prompted the research, hypotheses generated and methodology adopted for the study. Chapter two delved into how conflicts affect food security in the IGAD region. It looked at the empirical literature on where it has happened and how issues relating to food production, distribution, trade and displacement of people will be discussed in detail. Literature was reviewed to get the global context and the African context of conflicts and food security. The chapter brought out the linkage between conflicts and food insecurity.

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<sup>33</sup>Daas, Piet, and Judit Arends-Tóth. *Secondary Data Collection*. Hague: Statistics Netherlands, 2012.

Chapter three looked food insecurity in the Laikipia county of Kenya. Chapter four examined the current policies and strategies in dealing with conflicts and food security in Laikipia county and Kenya as a whole. It looked at the interventions that should be adopted to deal with the issue of conflicts and food insecurity. Examples were drawn from countries where successful interventions have been implemented. This brought out the existing gaps and recommended future actions and priority areas. Chapter five presented the research findings of the study whereas chapter six has the summary, conclusion from the study and what the study recommends.

## Chapter Two

### The Effects of Conflicts on Food Security in the IGAD region

#### Introduction

The causes and effects of food security are evident in the countries in the IGAD region and Horn of Africa. However, the situation is severe in the countries that experience droughts and famines. Food being a basic human right, large populations have suffered food insecurity and starved even to death because they are either too poor to afford or they could not access the food.<sup>34</sup> Food accessibility is affected by issues such as conflicts, poor governance, factors affecting trade and distribution, political instability and catastrophes such as famine amongst others.

The right to food has been recognized in the Universal Declaration of Human Rights (UDHR)<sup>35</sup>, the social and cultural rights, amongst other legal documents. There are also sufficient food policy documents that support the issues of food security in the seven IGAD countries. However, millions of people in the horn of Africa are facing chronic hunger. Even during the harsh times when the government is supposed to supply the citizens with food, there are instances when this is not possible at all. People end up lacking both necessary quantities and quality food. During times of war and conflicts, communities in different parts of the IGAD region have restricted or no food at all. The incidences of conflicts impede the situation such that food resources are adversely affected, agricultural activities are hindered as well as destruction of

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<sup>34</sup>Mohamed, Abdel Razig El Bashir, and Samuel Zziwa . 2005. *IGAD Food Security Strategy 2005-2008*. IGAD.

<sup>35</sup> UN. Universal Declaration of Human Rights. The UDHR was created in 1948 at Paris, 2010.

infrastructures for distribution of food such as roads, markets, stores and social amenities.<sup>36</sup> This chapter will look at how conflicts have affected food security in the IGAD region.

## 2.1 The IGAD Region

The countries in the IGAD region are least developed, and have an opportunity for economic integration. The entire region has a stretch of approximately 5.2 million km<sup>2</sup>. More than half of this region is Arid and Semi-Arid land, receiving less than 600mm of rain annually.<sup>37</sup> The rest of this region has a variety of climates which is considered favorable for agricultural production.<sup>38</sup> There are also a variety of agro-ecological zones and ecosystems. Out of the total land in IGAD region, 7 per cent is farmland, 19 per cent is forested, 28 per cent is pasture land whereas 46 per cent is a marginal and unproductive land. Even with the small land area for agricultural production, another big challenge is the variable rainfall patterns which have been majorly attributed to climate change.<sup>39</sup>

Furthermore, the IGAD region experiences drought and dry spells thus vulnerable to climate variations. There is a need for policies and programmes to enhance research capacities in the region and growth. Additionally, land and environmental degradation affects agricultural productivity in the region. This further hinders economic growth. Land degradation contributes to food insecurity and poverty. Land degradation may also fuel social, economic and political tensions that can further cause conflicts, poverty and misery. Incidences of conflicts can cause food insecurity, poverty and competition for natural resources arise. It is therefore important to

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<sup>36</sup> Ibid pp. 10-13

<sup>37</sup> Sandford, Judith, and Steven Ashley. "Livestock livelihoods and institutions in the IGAD region." *FAO IGAD LPI, Addis Ababa* (2008).

<sup>38</sup> Ibid p. 10

<sup>39</sup> IGAD. *The IGAD Region, 2016*. <https://igad.int/about-us/the-igad-region> (Accessed on 16<sup>th</sup> October, 2018)

embrace sustainable management of natural resources, to achieve sustainable development, eradicate poverty and enhance peace and security nationally and through the transboundary.<sup>40</sup>

The IGAD region has over 230 million people with variations in different countries.<sup>41</sup> The variations are more pronounced in the different ecological zones of these countries. For instance, the desert areas are sparsely populated with the areas of favorable climatic conditions being conversely populated. There are some rural areas carrying more than 600 people in a km<sup>2</sup> whereas the urban areas have more than 5000 people per km<sup>2</sup>.<sup>42</sup> Again this varies from country to country with the region being characterized by rural to urban migration people moving out to search for better livelihoods, employment opportunities and better income.

The IGAD region is economically endowed with a variety of resources. Firstly, the climatic conditions are good in different zones. There is a long coastline with deep natural ports and harbors. They are located along major air traffic routes which enhance markets in Africa, middle East and Europe. The massive population is a good market for the resources attracting both domestic and foreign investors. The crops and livestock farming is a source of food as well as creation of employment and foreign earner through export of the cash crops. However, the countries suffer barriers in inter-state transport and communication with the road and railway networks being poor. However, recently, the countries are putting efforts to have these barriers sorted. For instance, Kenya has been building and improving its road and railway networks which shall enhance movements to other countries for trade and communication purposes.

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<sup>40</sup> Ibid P. 2

<sup>41</sup>Mulugeta Kidist. "The role of regional and international organizations in resolving the Somali conflict: the case of IGAD.", 2010

<sup>42</sup> IGAD. IGAD State of the Region Report, a Popular Version, 2016. <https://igad.int/documents/7-igad-state-of-the-region-v9/file>

Good governance produces appropriate structures and institutions that trigger positive outcomes of sustainable development. These countries are putting all efforts to improve their governance systems through their institutions by integrating policies as well as strengthening institutional capacity building. They are working on the issues of decentralization, empowerment, democracy and social inclusion. The civil society and no-state actors are getting their way to help with economic integration. Individual states need to put more focus on fostering good governance, peace, security and humanitarian issues. However, the region is putting considerable efforts to deal food insecurity, drought and desertification.<sup>43</sup> These efforts will contribute towards resilience and enhanced economic development in the region.

To attain sustainable development, peace and security cannot be ignored. These two aspects are interlinked to various human insecurities that bring both intra and inter-state conflicts. Terrorism, human trafficking and small arms, light weapons are some of the causes of insecurity in the region. Insecurity is a big social problem that causes political issues which further threaten development. The IGAD region is more protracted with conflicts.<sup>44</sup> IGAD member-states such as South Sudan are amongst the top fragile countries in the world. The country is also faced with terrorism that hinders peace and development. At least all the countries have had their share of terrorism with Kenya facing the challenge of Al-Shabaab and Uganda and South Sudan challenged by the Lord's Resistance Army. The region is also vulnerable to border disputes that escalate conflicts, border wars and military invasions.<sup>45</sup>

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<sup>43</sup>David J. Francis. Linking Peace, Security and Developmental Regionalism: Regional Economic and Security Integration in Africa, *Journal of Peacebuilding & Development*, 2:3, 7-20, (2006)  
DOI: 10.1080/15423166.2006.875613387186

<sup>44</sup>Wulf and Debiel, "Conflict Early Warning and Response Mechanisms: Tools for Enhancing the Effectiveness of Regional Organizations? A Comparative Study of the AU, ECOWAS, IGAD, ASEAN/ARF and PIF.", 2019.

<sup>45</sup> Ibid Paragraph 6.6

The region has made considerable efforts in fighting insecurity. IGAD itself is an international organization that transformed its objective from fighting drought to deal with peace and security in the conflict affected areas. The organization contributes to peace support and security operations. For instance, Kenya, Uganda, Ethiopia and Djibouti are the leading Troop Contributing Countries (TCC) in the African Union (AU) missions in Somalia, South Sudan and Sudan. To address the protracted conflicts, the countries are embracing democratic constitutional reforms and empowering the citizens through decentralization, federalism and devolution. This has increased participation, ownership and accountability in the social development process.

## **2.2 Food Security in the IGAD Region**

People living in the IGAD countries are faced with inadequate food availability. A good percentage of the population depends on food aid for survival. Approximately, 12 million people in the IGAD Region are facing food and livelihoods insecurity, with farmers' worst hit by recurring droughts.<sup>46</sup> To be able to tackle the food security challenge facing the IGAD region, it is first important to understand the causes of food insecurity. The cause can be individual, national, regional and global. Globally, there are macro-economic shortcomings that have led to economic decline in poor countries.<sup>47</sup> These shortcomings may include unfair trade practices of the developed countries thus eroding poor countries terms of trade. Challenges with economic empowerment has caused loss of entitlement to food for the poor people.<sup>48</sup> Poor balance of payments and shortages of foreign exchange have made poor countries to depend on loans from

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<sup>46</sup>FAO. "Saving lives in the IGAD region: early action to prevent a food insecurity catastrophe." *Food and Agriculture Organization of the United Nations*, 2017. January 18. Accessed October 21, 2018. <http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/463707/>.

<sup>47</sup>Benson, Mochoge, and Samuel Zziwa. *Agricultural and Food Security Challenges for the IGAD Region*. Conference Paper No.3, NEPAD, 2004.

<sup>48</sup>Adar, Korwa G. "Conflict resolution in a turbulent region: the case of the Intergovernmental Authority on Development (IGAD) in Sudan." *African Journal on Conflict Resolution* 1, no. 2 (2000): 39-66.



rich countries. The result is a debt burden that is too high for the countries to bear. Economic Liberalization and uncontrolled food imports damages the local market.

Regionally, African countries have overplayed the importance of national boundaries thus limiting movement of goods and services among them. The main setback here are trade tariffs, poor communication and poor infrastructure. The countries have also continually engaged in conflicts both internally and across the borders. The conflicts sap the meagre financial resources and disrupt agricultural production in the rural areas.<sup>49</sup>

### **2.3 Causes of Food Insecurity in the IGAD Region**

Even with the small land area for agricultural production, another big challenge is the variable rainfall patterns which have been majorly attributed to climate change.<sup>50</sup> Furthermore, the IGAD region experiences drought and dry spells thus vulnerable to climate variations. There is therefore a need for policies and programmes to enhance research capacities in the region and foster growth. Additionally, land and environmental degradation affects agricultural productivity in the region. This further hinders economic growth. Land degradation affects food production contributes to food insecurity and poverty which in turn fuels social, economic and political tensions that can further cause conflicts, more poverty and misery. Food security is most affected when the incidences of conflicts, poverty and competition for natural resources arise. It is therefore important to embrace sustainable management of natural resources to achieve sustainable development and eradicate poverty and enhance peace and security nationally and across boundaries.<sup>51</sup>

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<sup>49</sup> Ibid p.3

<sup>50</sup>IGAD. 2016. *The IGAD Region*. 2018. <https://igad.int/about-us/the-igad-region> (accessed on 16th October, 2018)

<sup>51</sup> Ibid p. 2

The variations are more pronounced in the different ecological zones of these countries. For instance, the desert areas are sparsely populated with the areas of favorable climatic conditions being densely populated. There are some rural areas carrying more than 600 people in a km<sup>2</sup> whereas the urban areas have more than 5000 people per km<sup>2</sup>. Again this varies from country to country.<sup>52</sup> The IGAD region is also characterized by rural to urban migration as inhabitants search for better livelihoods through employment opportunities and better income. Urban areas are thus prone to socio-economic and environmental challenges that affect peace and stability.

#### **2.4.1 Conflicts in the IGAD Region**

People of this region have economic interdependence as well as socio-cultural affinities which enhance economic integration. Despite this, the IGAD nations have not finalized clear policies to enhance economic cooperation in the region towards achieving peace and stability. The region experiences intermittent conflicts within the nations, low economic performance, poor governance and prolonged droughts which affect food security.<sup>53</sup>, <sup>54</sup> The conflicts experienced at the IGAD region have taken a toll to millions of people have been displaced from their homes and many lost livelihoods.<sup>55</sup> The conflicts have continued to drain resources away from development, with deepening poverty that escalate more violence. Some of the political leaders in these countries have also contributed to the fluid security situation hence undermining better future of the citizens. The citizens have witnessed their undemocratic leaders ruin

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<sup>52</sup> Ibid p.1 paragraph 2

<sup>53</sup>Samatar, Abdi Ismail, and Waqo Machaka. "Conflict and peace in the Horn of Africa: A regional approach." In *In Quest for a Culture of Peace in the IGAD Region: The Role of Intellectuals and Scholars*, by Heinrich Böll Foundation, 2006 p. 26

<sup>54</sup>Bereketeab, Redie. *The Horn of Africa: intra-state and inter-state conflicts and security*. Pluto Press and Nordiska Afrikainstitutet, 2013.

<sup>55</sup>Maxted, Julia, and Abebe Zegeye. "Human stability and conflict in the Horn of Africa: part two." *African Security Studies* 11, no. 1 (2002): 54-59.

opportunities for peace and turned their future expectations into desperation. The Eritrean-Ethiopian border war and the Somali civil war after the departure of the authoritarian leadership of Siad Barre are good examples. Some of the regimes in most of the region have had a propensity to exacerbate the situation rather than to ameliorate it. For growth and development, good leadership and governance is paramount.

In Ethiopia, over one million people got displaced in September 2017 due to conflicts. The conflicts caused displacements of populations hence disrupting social interactions and their livelihood activities such as tilling the land, livestock farming and performance of their daily businesses and errands. The risk of deterioration beyond control has been decreasing in Ethiopia, however, Ethiopia needs increased humanitarian support to sustain livelihoods.<sup>56</sup>

In 2011, Somalia was on the right track of recovering from food insecurity and famine. Currently, the situation is worsening again due to poor rainfall, low water levels, stress and insecurity that has hit most of the country due to militia attacks. These challenges have resulted in total crop failure, reduced rural employment opportunities, lack of pasture and water shortage. More than two million are unable to meet their daily basic needs and hence needs livelihood support. Children under 5 years face nutrition challenges and are at the risk of nutrient deficiency disease and death.<sup>57</sup>

According to relief web, over 3 million people in South Sudan were food insecure in 2015, with over 30,000 people living in the Unity State. In 2016, over four million people were food insecure and stressed. It has been observed that food security situation is at the

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<sup>56</sup>FEWSNET. *Food security improves significantly in southeastern areas, but continued assistance is needed*. Food Security Outlook, USAID, 2018

<sup>57</sup>World Food Programme. *What the World Food Programme is doing in Somalia. An Evaluation of WFP's Portfolio (2012-2017)*, 2018. Retrieved from <https://www.wfp.org/publications/somalia-evaluation-wfps-portfolio> on 1<sup>st</sup> November, 2019.

compromised level due to the crisis, conflicts coupled with economic crisis and poor agricultural production. Out of the many people in need of humanitarian assistance, a good number are facing famine conditions. Conflict has continued to disrupt normal livelihoods as economic conditions remain very poor.<sup>58</sup>

#### **2.4.2 Climate Change as a Driver of Conflicts**

According to FAO, households in Somalia, Kenya and Ethiopia have livelihood insecurities and still depend on farming have recently been struggling with knock-on effects of recurring droughts. The erratic rains have cost the farmers their crop and livestock yields suffering from rising debts, poor terms of trade for livestock and low milk production as well as limited seed and cereal stocks. The projections made by FAO in 2017 indicated that the Eastern Africa region will be more food insecure if immediate timely measures will not be undertaken.<sup>59</sup> Failed rain seasons have caused severe scarcity of pasture and water for livestock. Crop growers have been devastated due to expected low harvests in the affected areas. Livestock get emaciated and susceptible to diseases which causing death for thousands of animals.<sup>60</sup> Drought and severe climate change call for IGAD and FAO to assist the countries cope with the impacts. Strengthening the partnership between these regional organizations is critical in building resilience to shocks and crisis. The situations should be monitored as they develop.<sup>61</sup>

Climate Change and inadequate rainfall have been the cause of food insecurity especially in the northern parts Kenya and other African countries for the last over six years. This situation

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<sup>58</sup>Relief web. *South Sudan: Food Insecurity - 2015-2018*. OCHA, 2018. Retrieved from <https://reliefweb.int/disaster/ce-2015-000183-ssd/thumb> on 1<sup>st</sup> Nov 2019.

<sup>59</sup>FAO. "Saving lives in the IGAD region: early action to prevent a food insecurity catastrophe, 2017. Accessed. <http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/463707/>.(accessed October 21, 2018)

<sup>60</sup> Ibid p.3

<sup>61</sup>Benson, Mochoge, and Samuel Zziwa. *Agricultural and Food Security Challenges for the IGAD Region*. Conference Paper No.3, NEPAD, 2004.

might change in the next few decades. Increase in temperatures and decline in precipitation in the semi-arid regions of Africa due to climatic change are likely to reduce crop yields (corn, rice, wheat) which are important staple foods in most African countries. The IGAD region relies heavily on agricultural production to meet their food needs. These areas are substantially affected by climate variations and food price fluctuations. In the food insecure region, many farmers consume the food harvested and sell the surplus in the local market. This has exposed them to climate related crop harvests variability because when crop production reduces and negative effects on livestock, farmers income goes down while costs of living continue going up.<sup>62</sup>

According to different research, climate change has already impacted agricultural production hence reducing food availability. Reduced agricultural production will be made more difficult by other changes such as changes in the food value chain and rising oil prices. The worst hit regions are the ones with low technological sophistication for increased farm mechanization and productivity. Today, millions of people live by what they produce on the farm. Adverse weather conditions and unpredictable changes reduces the production and this coupled with the increasing population is a recipe for more hunger and general food scarcity.

#### **2.4.3 Poor Governance and Lack of Accountability Affecting Food Security**

Nationally, the root cause of food insecurity is the economic decline due to ineffective policies, poor governance and lack of accountability. After independence in these countries, democracy was never given a chance to take root because of military takeovers. Military regimes bred corruption. When it came to national budgeting and planning, they paid little attention to agriculture. Global Food production is not proportional to population growth rates. The

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<sup>62</sup> Food security under climate change retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1130&context=nasapub>

agricultural research agenda has been restricted and solely focused on the cash crops until recently when the orphan crops are being considered.<sup>63</sup> At the individual level, economic development is hindered by socio-psychological factors such as lack of innovativeness to find alternative sources of income, lack of savings, laziness and indulging in social crimes such as drug and substance abuse and thuggery. For economic growth to occur and reduction in food insecurity, the regional countries have a myriad of issues to address. Good governance and priority driven capital investments are needed. The governments need to be determined to make real change in implementing policies, ensure proper planning and use of resources, and mainstream food security concerns in the global agenda.

Good governance produces appropriate structures and institutions that trigger positive outcomes for sustainable development.<sup>64</sup> In the recent past, these countries have directed efforts towards improvement of their governance systems through revamped structures and institutions and are integrating policies as well as strengthening institutional capacity through targeted fiscal measures. They are working on the issues of decentralization, empowerment, democracy and social inclusion. CSOs are getting involved to help in awareness and economic integration. The governments need to put more efforts to foster good governance, peace, security and humanitarian issues. The region has made considerable strides towards dealing with food insecurity, drought and desertification and made efforts are aimed at contributing towards sustained economic development in the region.

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<sup>63</sup> Ibid p.4

<sup>64</sup>Thomas G Weiss Governance, good governance and global governance: Conceptual and actual challenges, Third World Quarterly, 21:5, 795-814, (2000) DOI: [10.1080/713701075](https://doi.org/10.1080/713701075)

## 2.5. Conclusion

Food security and conflicts nexus is quite complex and dynamic. Food insecurity can cause or can be caused by conflict.<sup>65</sup> Conflicts have resulted in food insecurity because they affect agricultural production and food distribution. Violence has been triggered by food insecurity as well. Either way, millions of people are affected. Those that cannot find food in their places become IDPs and refugees. If refugees and IDPs are not well coordinated and supported, they can cause further instability. It then becomes a vicious cycle of poverty.

The IGAD countries that are worst hit by food insecurity are South Sudan, Sudan and Somalia.<sup>66</sup> The other countries have diverse challenges with issues of poverty and famine but have put up structures to help mitigate the situation. Conflicts can also be triggered by natural disasters, climate change, poor governance, price fluctuations and social exclusion. All of these causes and early warning systems can help inform government policies and programs targeted at increased food security as well as locally sustainable strategies that can increase citizens' resilience.

Conflicts can be triggered by natural disasters, poor governance, climate change, price fluctuations and social exclusion. All of these causes can help inform the policies and programs in food security and come up with food security strategies that can increase resilience.

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<sup>65</sup>Henk-Jan Brinkman and Hendrix, "Food Insecurity and Violent Conflict."

<sup>66</sup>Natsios, Andrew S. *Sudan, South Sudan, and Darfur: what everyone needs to know*. OUP USA, 2012.

## Chapter Three

### Conflicts and Food Security in Laikipia County

#### Introduction

Human security is not about the normal traditional form of state security, but also conceiving economic growth and humans rights.<sup>67</sup> Humans are secure if they can meet their needs, are given their rights, can manage stress and maintain their cultures<sup>68</sup>, can to live in dignity and safe from any forms of hazardous impacts.<sup>69</sup> Issues of food security become aligned with security, particularly in encompassing natural property ownership, environmental management processes which incorporates land degradation, land distribution, land use rights, poverty and natural resource management rights. While a lot of research has concentrated on the links between security, development and environment, security resource scarcity and competition, little has been done on the link between food insecurity and conflicts. However, the links can be drawn from the relation between human security and natural resource management.

#### 3.1 Overview of Laikipia County

Administratively, Laikipia county lies in Rift valley and is populated with approximately 400000 people. The area is located at an altitude of 1600 and 2300 meters above sea level, which

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<sup>67</sup>Tadjbakhsh, Shahrbanou, and Anuradha Chenoy. *Human security: Concepts and implications*. Routledge, 2007.

<sup>68</sup> Barnett, J. & Adger, W. N. (2007). Climate change, human security and violent conflict. *Political Geography*, 26(6), 639–655

<sup>69</sup> Schnurr, M. A., & Swatuk, L. A. (2012). Towards critical environmental security. In M. A. Schnurr & L. A. Swatuk (Eds.), *Natural resources and social conflict: Towards Critical environmental security* (pp. 1–14). London: Palgrave Macmillan.



makes it ideal for extensive agro-pastoralism and pastoralism production. The County covers approximately 94000 km<sup>2</sup> and is 220km from Nairobi. The county is located at the Equator and borders Samburu towards from the Northern side, Isiolo to Northeast, Meru to the East and Nyeri to the South, Baringo to the West and Nyandarua to South West. The population of Laikipia county is multi-cultural, with Kikuyu and Maasai community forming the biggest portion of the population. Other tribes are Borana, Samburu, Turkana, Meru, Somali, as well as British and Asian settlers. The Maasai, Turkana, Samburu and Borana form the pastoralist community. The climate in Laikipia county is cool ranging from 16<sup>o</sup>c and 26<sup>o</sup>c. The average annual rainfall is 400mm and 750mm with the farming zones receiving higher rainfall.<sup>70</sup>

Agriculture (pastoralism and crop farming) are the mainstay of Laikipia county. The crops grown include wheat, peas, maize, carrots, potatoes and horticultural crops. The livestock kept are majorly cattle, goats and sheep. Laikipia private ranches such as Borana, Solio and Oljogi form a significant source of beef for local consumption. The Kikuyu and Meru engage in crop farming while the Somali and Asian settlers engage in Business.<sup>71</sup>

As a home for wildlife and especially the big five, Laikipia county benefits from Tourism. Half of the land mass in the county is for large scale ranchers and private/community conservancies. The wildlife conservancies and ranches owned privately attracts tourists from all over the world. White Rhino, Bongo, wild dog, very rare animal species are found in the conservancies in Laikipia county. They are a source of beef as well and many other valuables.

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<sup>70</sup> Laikipia county. <http://www.kenya-information-guide.com/laikipia-county.html> (accessed 2nd May 2019)

<sup>71</sup>Huho, Julius Mburu, Josephine KW Ngaira, and Harun O. Ogindo. "Drought severity and their effects on rural livelihoods in Laikipia District, Kenya." *Journal of Geography and Regional Planning* 3, no. 3 (2010): 035-043.

Some of the tourist attraction sites are Mt. Kenya, Ole Pejeta, Laikipia plateau, Thomson fall among others..<sup>72</sup>

### **3.2 Agricultural Production in Laikipia County**

In Laikipia county, livelihoods are mainly based on crop production and livestock keeping. The residents keep livestock such as cows, goats, sheep, camel and chicken. The crops grown are beans, peas, maize, wheat, potatoes, carrots and horticultural crops. The rain fed agriculture in Laikipia county has been faced with various challenges among them unreliable rainfall and conflicts. Laikipia county is within this land mass and reliability of rainfall in the county has declined.<sup>73</sup>

#### **3.2.1 Crop Production**

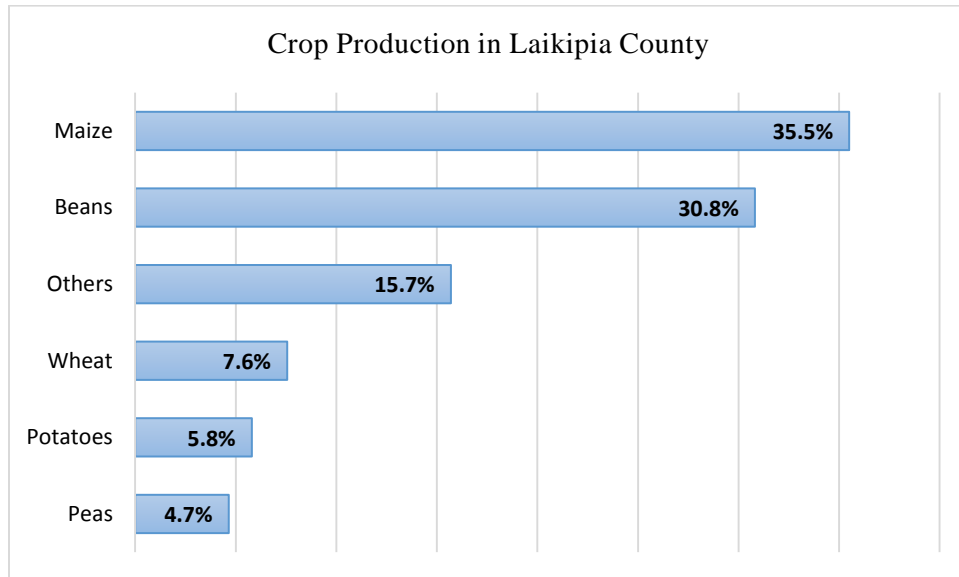
Crop production is practiced in some parts of Laikipia North, Laikipia West and Laikipia East. The crops grown are sorghum, maize, horticultural crops, potatoes and beans. Both small and large scale farmers do crop cultivation. In the study out of the 100 respondents, 78% were crop farmers whereas 22% were not in crop farming but engaged in other occupations. Pastoralists were not interviewed, but the crop farmers and businessmen living in the crop production areas participated.

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<sup>72</sup> Laikipia county. <http://www.kenya-information-guide.com/laikipia-county.html> (accessed on 30th April, 2018)

<sup>73</sup> Ameso et al., "Pastoral Resilience among the Maasai Pastoralists of Laikipia County, Kenya." *Journal of Land* (2018), 7,78

**Figure 3: Crops Grown in Laikipia West**



**Source:** Farmers in Laikipia West

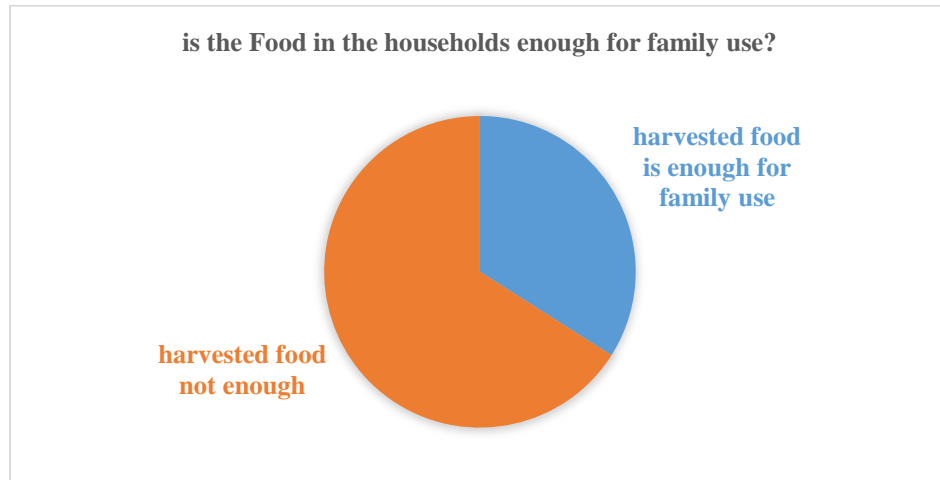
According to the study, Maize was a common crop grown by 35.5% of the farmers, followed by beans at 30.8%. wheat was grown by 7.6%, whereas potatoes and peas were grown by 5.8% and 4.7% respectively.<sup>74</sup> Other crops that are grown in Laikipia county are Sorghum, horticultural crops, vegetables and fruits.<sup>75</sup> One of the farmers posited that they commonly plant maize and beans for subsistence purposes.<sup>76</sup>

<sup>74</sup> Mr. Njeru from Laikipia West said that they onoy plant maize, beans and irish potatoes as their staple food.

<sup>75</sup> 100 respondents were interviewed, majority of which were farmers and business people living Laikipia West, an area that has been prone to conflicts.

<sup>76</sup> Jacob Mwangi of Kirima Village in Mohetetu Location in Laikipia West. He was interviewed in April 2018.

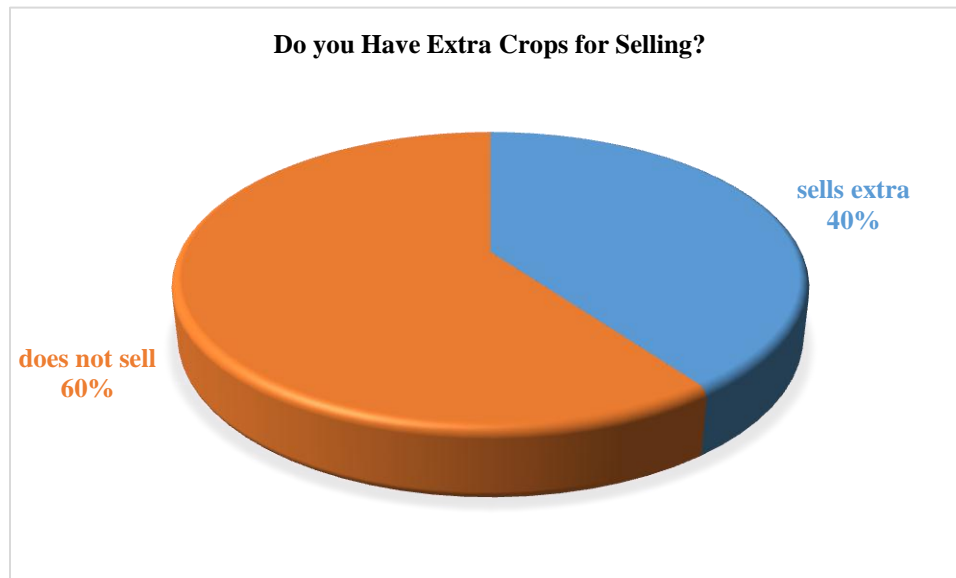
**Figure 4: Is the food Harvested in the households enough for family use?**



**Source: Farmers in Laikipia County**

Out of the total farmers interviewed, 34% confessed that the food crop they harvest is enough for family consumption and for selling whereas 66% said that the food produce was not enough for family use and they were forced to dig deeper in to their pockets to buy food for the family. During the circumstances when they could not afford, they relied on relief food.

**Figure 5: Do the Farmers have extra crops for selling?**



**Source: Farmers from Laikipia West**

From the 34% that have extra food, 40% have extra for selling while 60% reported that the food is just enough for family use and no extra for selling. Farmers in Laikipia West basically mixed farmers who plant maize and beans for family use and keep small herds of livestock for small scale milk production and not basically for selling. There are however a few who have extra farm produce for selling.<sup>77</sup>

In 2014, World Bank and GOK,<sup>78</sup> did a study which found out that maize is the popular crop produced in majority of the households in Laikipia county. Agriculture and livestock are the main source of livelihood, depended up on by 75% for income and by more than 60% of the population in the county. Farmers rely on rains for agricultural production which make them

<sup>77</sup> Elizabeth Karuiru of Mathira village in Thone Location was interviewed in April 2018. He keeps small herds of livestock as well as practices crop farming.

<sup>78</sup> World Bank in Collaboration with the Republic of Kenya 2014. Climate Risk Profile: Laikipia County.

vulnerable to climate variabilities.<sup>79</sup> Crop farming has been impacted by severe droughts, unpredictable weather patterns and crop destruction by illegal grazers/herders. Food relief/aid is common in Laikipia West where crop failure has seen people experience food and water shortage.<sup>80</sup> Approximately 43% of the population live under absolute poverty while 27.7% suffer from food poverty and rely on food aid during the seasons of hunger and famine.<sup>81</sup> Besides, majority of the pastoralists do not practice crop farming as a substitute to source of food for their families. Whenever drought strikes the pastoralist are affected economically through loss of their livestock which they depend up on.<sup>82</sup>

In efforts to increase crop production in the county, the government has introduced contract farming of drought resistant crops such as millet, sorghum, black beans, chickpeas, canola, sunflower, and assorted fruits. The government has a programme that distributes free seeds to farmers for planting. There have been highly targeted interventions to maximize the involvement of women and youth in value chains and increase economic gains and decision making. The government has introduced off-farm adaptation strategies that include education and research on climate smart agriculture, field schools, early warning systems, afforestation, extension services, insurance for the farmers, and sub-county specific climate based advisories in Kenya forest service (KFS), Kenya Meteorological Department (KMD), Ministry of Agriculture, Livestock and Fisheries (MoALF) and others. Communities resilience is being improved through climate risk management, restructuring community action groups and enhancing capacity in environmental protection and sustainable use of resources.

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<sup>79</sup> Ibid p.1

<sup>80</sup> Huho Julius & Mugalavai Edward. The Effects of Droughts on Food Security in Kenya. International Journal of Climate Change: Impacts and Resources Vol 2 (2010), 61-72. 10.18848/1835-7156/CGP/v02i02/37312

<sup>81</sup> Ibid p.1

<sup>82</sup> Gufu Oba, The Importance of Pastoralists' Indigenous Coping, Strategies for Planning Drought Management in Arid Zone of Kenya. Nomadic People, New Series, Vol. 5, No. 1 (2001), pp. 89-119

### 3.2.2 Pastoralism

Livestock production is an important economic activity practiced by 60% of small holder farmers in Kenya.<sup>83</sup> Ranching is very common in the arid and semi-arid lands of Kenya where pastoralism is the means of subsistence amongst the pastoral groups. Pastoralism is practiced in the 75% of the ASALs land in Kenya.<sup>84</sup> The Maasai community, who practice pastoralism in Kenya, are known to have a great affinity for livestock rearing. There are also other pastoral communities such as the Pokot and Borana with some of them inhabiting Laikipia county. Pastoralists rely primarily on livestock for their livelihood and their region is the most marginalized in Kenya. Over 80% of the beef consumed in Kenya is produced by pastoralists from the northern part of Kenya and other neighboring countries. The livestock sector in Kenya contributes about 12% of GDP and 42% of agricultural GDP.<sup>85</sup>

According to a feasibility study conducted by World Bank, Laikipia lies in a region where natural vegetation and other characteristics of the region gives it a favorable opportunity to leverage and intensify in livestock production. In 2017 livestock population in the county was estimated at: Dairy cattle-55,000, Beef cattle-200,000, Sheep-450,000, Goats-350,000, Camels-10,000, Donkeys-12,000, Poultry-320,000, and Pasture grass-2,000 ha. This study utilized a sample size of 100 farmers and business men and women in Laikipia county.

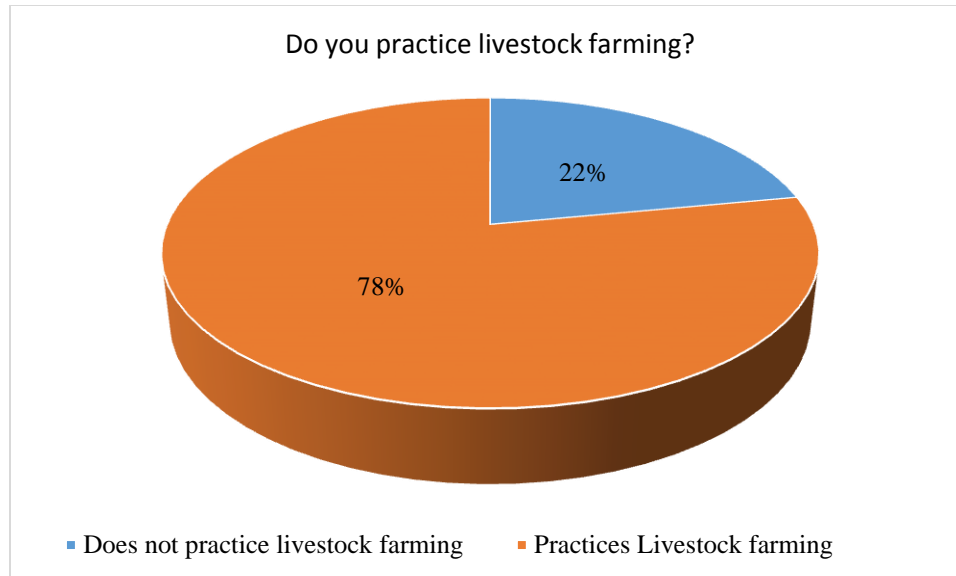
#### **Figure 6: Percentage of Farmers Practicing Livestock Keeping in Laikipia West**

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<sup>83</sup> FAO. The Economic Lives of Smallholder farmers: An Analysis Based on Household Data from Nine Countries, 2015

<sup>84</sup> Kenya Economic Report 2017

<sup>85</sup> Ibid pg. 12



**Source: Farmers from Laikipia West**

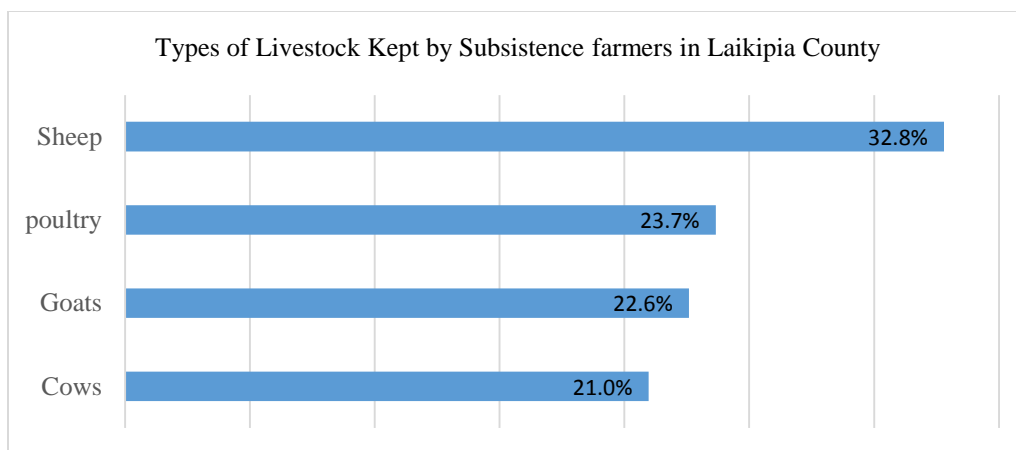
From the study, it was evident that livestock farming is a common livelihood activity in Laikipia county. 78% of the total population reported that they practiced livestock keeping, while only 22% were not practicing the activity. The common types of livestock reported by the respondents were sheep constituting 32.8%, poultry by 23.7%, Goats by 22.6% and cows kept by 21% of the famers according to the illustration shown below.<sup>86</sup>

**Figure 7: Types of Livestock kept by Subsistence Farmers in Laikipia West**

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<sup>86</sup> Madam Flora Mwangi is a livestock farmer in KLaikipia West. She grows crops as well. They have been faced with challenges of drought and wildlife conflicts.





**Source: Farmers in Laikipia County**

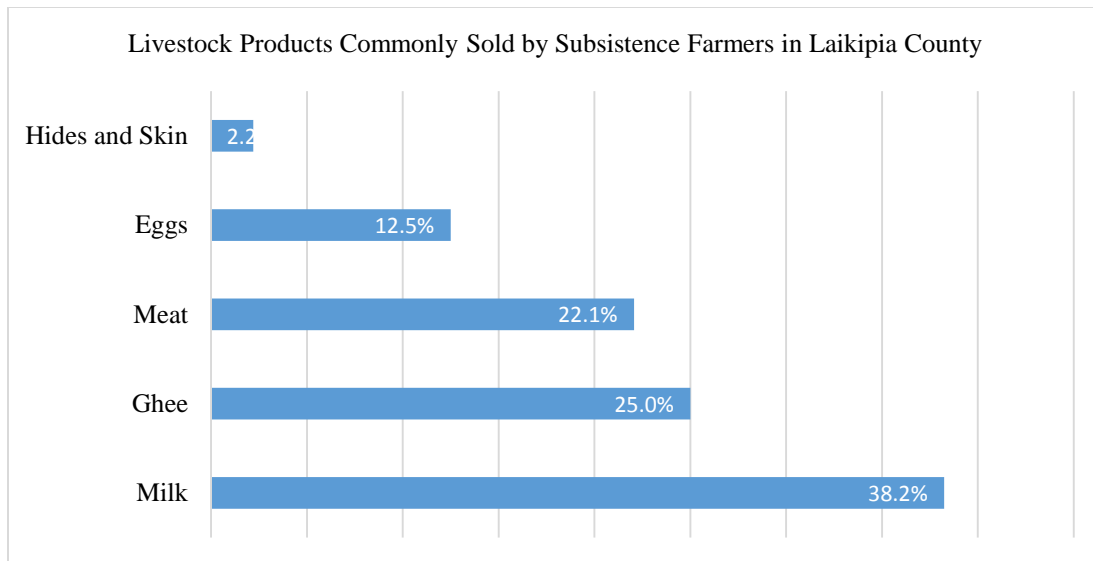
Sheep is a popular livestock that supports 61-80% of the population in the county.<sup>87</sup> In the drier Northern side, every household keeps sheep while in East and West Laikipia, sheep is kept to support crop production value chains. Chicken is also heavily reared by 81-100% of the population. Women and youth are involved at all levels of poultry production. Goats and cows are also very popular and profitable to the communities. Livestock farming supplements crop production especially when rainfall is not reliable.<sup>88</sup>

The farmers acknowledged that livestock production was profitable to them, with 70% being able to earn income from selling livestock products as opposed to 30% who were not selling livestock or their products. The livestock products that farmers could sell to earn income were milk leading at 38.2%. followed by Ghee at 25%, Meat at 22.1% and eggs reported by 12.5% of the farmers. Only 2.2% reported that they were selling hides and skins.

**Figure 8: Livestock Products sold by subsistence farmers in Laikipia West**

<sup>87</sup> Kavoi Maina. What you must do to get high yields from sheep and beans. Daily nation, August 1 2014. Retrieved from <https://www.nation.co.ke/business/seedsofgold/What-you-must-do-to-get-high-yields-from-sheep-and-beans/2301238-2405490-rs1s3ez/index.html> on 1<sup>st</sup> Nov 2019.

<sup>88</sup> Lawrence Kaberia, og Check point village, Mutara Location, Laikipia West. They depend on livestock, sheep and goats, when crop productions has failed. He was interviewed in April 2018.



**Source: Farmers and businessmen in Laikipia West**

Currently, dairy farming is the major value chain in Laikipia county, involving 41-60% of the total population.<sup>89</sup> Most farmers keep dairy cattle for commercial milk production under small scale-mixed farming systems. Zero grazing of livestock is practiced in the areas of Nanyuki, Kinamba, Nyahururu and Marmanet. Free range grazing is basically towards West Laikipia which includes areas of Sosian, Ol'Moran, Lolagai, Umande and Doldol. In most of the households, men are the decision makers in the dairy value chain. Women are basically in feeding and milking of the cows. The youth are engaged in the cooling plants and other parts of the value chain. Milk production is affected by inadequate pasture and water for the cows. Milk from the households is usually collected and marketed through cooperatives.

<sup>89</sup> Paul Ngairu reported that dairy farming has been very profitable to him and that is what he depends on for livelihood and for paying school fees for his 3 children.

### 3.3 Conflicts in Laikipia County

Since 2008, the annual population growth rate in Laikipia county has been 4.7%. During the period, the weather has experienced erratic rainfall that is unpredictable.<sup>90</sup> Migrant farmers from other parts of central region who have settled in the county have not been able to successfully adapt to the different agricultural systems in the semi-arid conditions. The boom experienced in the horticultural sector has seen increased water usage and led to competition and hostile relations among farmers and herders. Crop production as well as wildlife and livestock rearing have highly been affected by the changes. There has been major disruption in social and economic activities through crop destruction by wild animals (Elephants), predation and competition with livestock<sup>91</sup> and destruction of infrastructure. There are agro-pastoral conflicts, between farmers and pastoralists who compete for resources such as pasture and water with cases of livestock being grazed on crop farms. Livestock rustling and banditry have resulted in theft of hundreds of livestock.<sup>92</sup>

The study revealed four type of conflicts that are experienced in Laikipia county: conflicts over pasture land, cattle rustling and banditry and human-wildlife conflicts. Other conflicts were as a result of water shortages and political incitements.

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<sup>90</sup>Ulrich et al., “Small-Scale Farming in Semi-Arid Areas: Livelihood Dynamics between 1997 and 2010 in Laikipia, Kenya.”

<sup>91</sup>Graham, Maximilian D., et al. “Mobile Phone Communication in Effective Human Elephant–Conflict Management in Laikipia County, Kenya.” *Oryx*, vol. 46, no. 1, 2012, pp. 137–144., doi:10.1017/S0030605311001104.

<sup>92</sup>Campbell, L, S Dalrymple, and A Crawford. 2009. *Climate Change and Conflict. Lessons from Community Conservancies in Northern Kenya*. Conservation Development Centre, International Institute for Sustainable Development and Safeworld.

**Table 1: Types of Conflicts Experienced in Laikipia West**

<b>Type of conflict</b>	<b>No. of People reporting</b>	<b>Percentage</b>
Conflict over pasture land	69	34.5%
Cattle rustling and Banditry	60	30.0%
Human-Wildlife Conflicts	7	35.0%
Others	1	0.5%
	<b>200</b>	<b>100.0%</b>

**Source: Residents of Laikipia West**

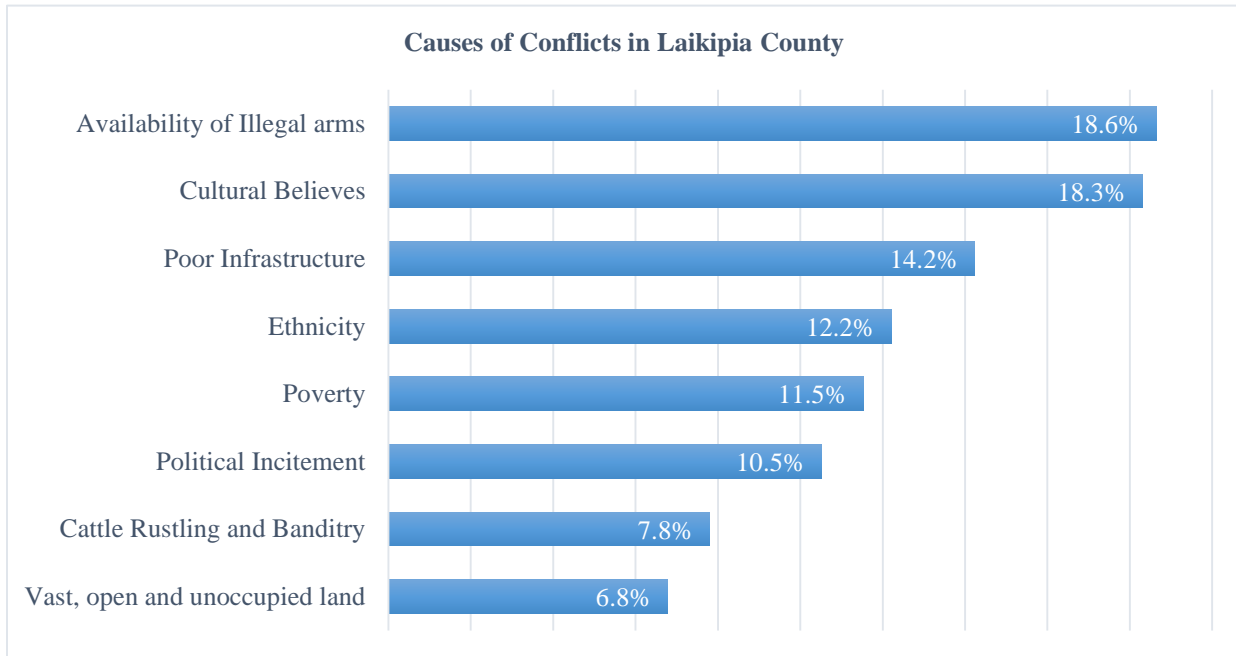
The root cause of the crises facing pastoralist is climate variability as a result of natural and human actions leading to recurrent droughts which eventually lead to water scarcity, conflicts over land resources. The pastoral community in the ASALs are also afflicted by vulnerabilities such as poverty, conflicts and diseases that make them clash with other communities from time to time.

The study revealed that conflicts were as a result of several causes. Availability of illegal arms was rated highest at 18.6%. This was followed by cultural believes at 18.3%. Some pastoralist believed that they have a cultural right to own livestock. During initiation ceremonies amongst the pastoral communities, young men are supposed to go and source for cows from wherever they can get them. This way, they will be respected and initiated to be senior Morans and elders.<sup>93</sup> Among the respondents, 14.7% attributed conflicts to poor infrastructure. Ethnicity was also ranked highly at 12.2%. Laikipia is a home to multiple ethnic communities with Kikuyus and Maasai communities taking the largest portion of the population. Other causes of conflicts were poverty, political incitement, cattle rustling and banditry, and the vast, open and unoccupied lands that attracts the pastoralists to invade and graze their livestock.<sup>94</sup>

<sup>93</sup> Said Debra Lekidayo, a pastoralist from Laikipia West county.

<sup>94</sup> Retrieved from <http://www.kenya-information-guide.com/laikipia-county.html>

**Figure 9: Causes Conflicts in Laikipia county**



**Source: Residents in Laikipia County**

Together with her neighboring counties, Laikipia has been characterized by a multifarious web of violence for two decades now.<sup>95</sup> Conflicts are experienced in the north of the and often spreads to the west and the east. In Baringo, Pokots fight Tugens, from Isiolo, Samburus fight Turkanas , more factors which have contributed immensely to the conflicts in Laikipia.<sup>96</sup> These conflicts have been majorly due to competition for scarce natural resources and have sometimes been exacerbated by sectoral political interests in a manner that has contributed to their prevalence, duration and intensity. Laikipia county has experienced insecurity partially due to its geographical location that makes it a susceptible environment for cattle rustling and banditry. These include proximity to the Suguta Valley which is very hostile in terrain in

<sup>95</sup> The Star. Decades Old Tensions Driving Laikipia Conflict, 2017

<sup>96</sup>The Conversation. Decades old tensions are driving the conflict in Kenya’s Laikipia region, 2017.

<https://theconversation.com/decades-old-tensions-are-driving-the-conflict-in-kenyas-laikipia-region-75071>

Samburu County and abandoned lands left for fallowing, influx of weapons, politicization of ethnicity, tribally inclined leadership and poor governance. These factors have increased the complexity of natural resource conflict, food insecurity and conflict management.<sup>97</sup> As the pastoralists gain resilience to the changing weather situations, they turn to sourcing for more pasture from privately owned farms which leads to conflicts between herders, farming communities and private ranchers. Pastoralism as a food system has been affected by challenges such as harsh weather conditions, rustling and banditry, food losses, poor prices for livestock and prevalence of diseases introduced by migratory flocks of cattle.

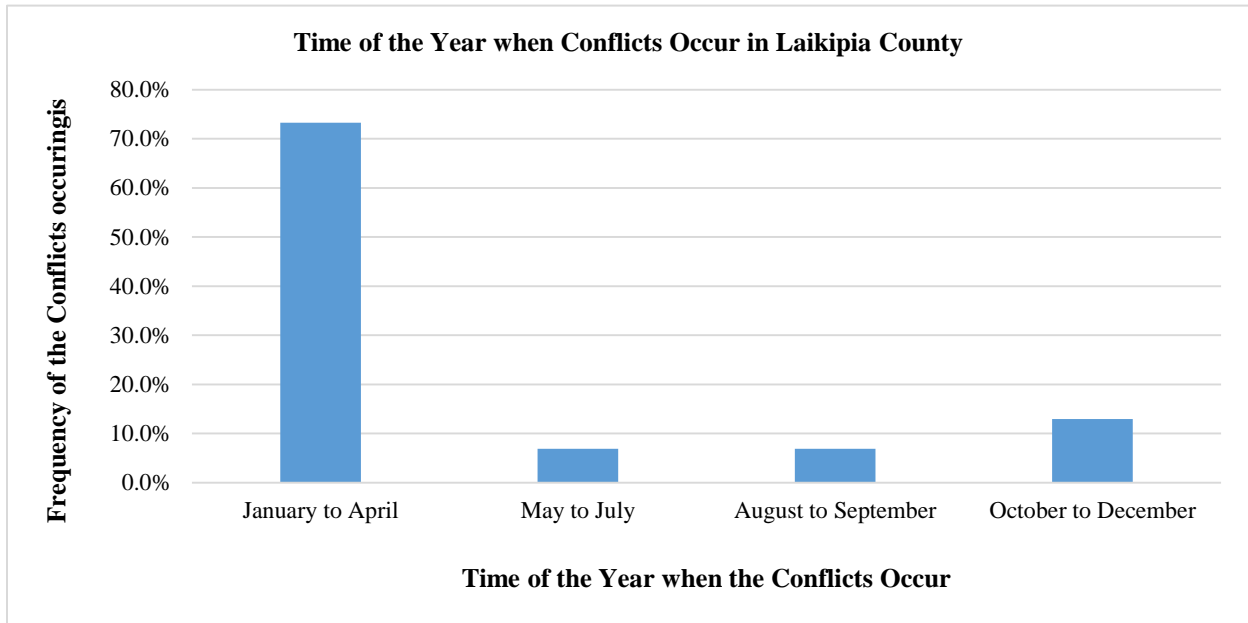
The conflicts were reported to be seasonal with the months of January to April being the most dangerous months. This is because this is a period of drought when there are no adequate livestock pastures in the ranches and therefore the pastoral community migrate with their livestock through ranches and crop farms to Mount Kenya forest in search of pasture. During the movement, livestock destroys crops and the farmers are left with nothing or little to harvest.<sup>98</sup> The pastoralists are usually armed and the farmers will do nothing to stop them from trespassing their farms destroying the crops. In the cases where farmers resist conflicts arise resulting in to injuries and in other incidences death. In Laikipia county, the dry period starts from October running all the way to April. However, during October to December, a few cases of conflicts are reported but the climax period is in January to April. Being a pastoralist dominated county, conflicts are experienced throughout the year. During the wet season, pastoralists move back to their land since livestock feeds becomes available. The figure below shows the frequency of occurrence of conflicts in Laikipia county throughout the year.

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<sup>97</sup>Kariuki, "Inter-Ethnic Conflicts: Trends, Causes, Effects And Interventions In Rumuruti Division Of Laikipia County, Kenya (1963 – 2010)."

<sup>98</sup> This was reported by farmers from Daiga and Kinamba area where crop production is practiced due to the favorable rainfall and other climatic conditions.

**Figure 10: Time of the Year when Conflicts Occur in Laikipia County**



**Source: Residents of Laikipia County**

### **3.3.1 Human Wildlife Conflicts and Food Security**

In Laikipia county in Kenya, there are different types of conflicts that have been experienced and affected food security. There have been human-wildlife conflicts through crop raiding and depredation, predation of livestock, damaging of infrastructure and also dangers to human safety. Elephants roaming in the crop fields, ranches and forest areas have been a mayhem to human and food security. Pastoralists at the border line of the conservancies have together with their livestock been attacked by hyenas and lions. When the land ownership in Laikipia county was moved from communal to individual ownership, the human-wildlife tensions were exacerbated further because the pastoralists were moved further to the periphery. Conflicts are reported between pastoralists, agro-pastoralists, farmers, ranchers and wildlife in

Laikipia. The conflicts are aggravated by poverty, environmental degradation, possession of illegal firearms, cattle rustling, absentee landlords and wildlife problem.<sup>99</sup>

The study revealed that over 80% of the respondents were in agreement that conflicts have caused food insecurity in Laikipia county. According to the study, there are five major aspects through which conflicts cause food insecurity in Laikipia county. Firstly, conflicts cause displacement of people. There are numerous examples where propensity of conflicts and climate change-related effects have caused displacement of significant numbers of poor and vulnerable people. Climate change related effects such as drought lead to lack of food and water even death while seasonal floods result in destruction of property and livelihoods.<sup>100</sup> There are various cause of displacement, the biggest being conflicts. Whenever there are conflicts, there are high chances of inhabitants being hurt and killed. Peaceful coexistence is important towards achieving development. Food security can be also be a cause for conflicts or the reason for conflicts.<sup>101</sup>

A well-functioning food system is very important to ensure adequate, affordable, safe and healthy food. Labor, through workers contribute a great deal towards feeding the world. Some workers depend on income from agricultural labour to feed their families. However, as a very key actor in the food security system, workers are faced by various challenges which trickle down to reducing food productivity and indecent food handling procedures.<sup>102</sup>

The international community faces a great challenge in eradicating hunger and malnutrition right from farm to fork. While some regions are endowed with good climate, soil, water and geography and with a lot of food that can be taken to other less fortunate parts of the

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99 Kumssa, A., Williams, J., & Jones, J. F. *Conflict and Human Security in Africa: Kenya in Perspective*. Palgrave Macmillan, 2011. <https://doi.org/10.1057/9780230119260>

<sup>100</sup> International Refugees 2016. Food Security and Displacement in a Warming World

<sup>101</sup> FAO. Food Security and Conflict: Empirical Challenges and Future Opportunities for Research and Policy Making on Food Security and Conflict, 2018.

<sup>102</sup> International labor Office. Decent Work for Food Security, 2015.



world, food insecurity is a problem to many. There is need for conditions to ensure the supply of healthy and nutritious food. The trade must be open, predictable and non-discriminatory. Conflicts have affected trade and distribution of food such that food cannot be distributed to the conflict prone areas due to fear.<sup>103</sup> Reduced agricultural activities have caused low production of food which cannot meet the demand of the increasing number of hungry population.

From the study, respondents gave several reasons to support their argument. During the drought season, pastoralists trespass and graze on farm land, not respecting the property owners. This triggers conflict and in many cases, farmers run away from the armed pastoralist and migrate to town centers where security has been beefed.<sup>104</sup> Peace is very key to a productive community, without which no economic activity can take place. A farmer from Marmanet in Laikipia west complained that when elephants invade their crop farms, they destroy all the crops and they are left with nothing to harvest and feed their families.<sup>105</sup> Some farmers in Laikipia West talked of soil degradation as a challenge affecting crop production. Overstocking by their neighboring pastoral communities causes soil erosion, thus degrading the land that was once fertile and good for crop production. Pastoralists from the neighboring counties of Isiolo, Baringo, Samburu and West Pokot invade pasture lands from Laikipia West and North. This further triggers cattle rustling and banditry causing conflicts as pastoralists defend their pasture land and livestock.<sup>106</sup>

**Table 2: Ways in which conflicts have contributed to Food Insecurity in Laikipia County**

<b>Why conflicts have contributed towards food insecurity in Laikipia county</b>
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<sup>103</sup> OECD. Food Security rests on Trade, 2019. Retrieved from <http://www.oecd.org/agriculture/food-security-rests-on-trade/>

<sup>104</sup> A respondent from Ndurumo location in Laikipia West. Many farmers have been injured and others lost their lives as a result of the conflicts.

<sup>105</sup> Marmanet is a village in Mohetetu Location in Laikipia West.

<sup>106</sup> This was reported by a farmer from Kagaa Village in Ndurumo location, Laikipia West. He is one of the victims of cattle rustling and Banditry in the area.

1. Pastoralists bring cattle to private land and destroy crops
2. Crop farmers in Laikipia West and North have been displaced by pastoralists and cannot engage in farming
3. Wild animals destroy and feed on crops when they invade crop land
4. Poor infrastructure hence security agencies cannot access areas
5. Conflicts have destabilized people's way of life
6. Farmers live in fear of attacks and therefore cannot invest a lot in farming
7. Where rivers pass, farmers abstract water for farming. This is a cause of conflicts
8. Some farmers are willing to upscale but they lack capital.
9. Cattle rustling and banditry lead to loss of livestock which is a source of livelihood to the farmers
10. Recurrent droughts destroy crops and livestock in Laikipia West and North
11. Theft of mature crops from the field
12. Unproductive soils.
13. Lack of pasture in dry season causes pastoralists to bring livestock in crop farms destroying drought tolerant crops such as sweet potatoes, bananas, sugarcane and others.
14. The pastoral communities do not believe in diversification of crops and livestock, even their livestock has been wiped out by droughts and diseases.
15. People are searching for white color jobs instead of turning to agricultural production
16. Water related conflicts results in limited irrigation

**Source: Residents of Laikipia county**

Wildlife is an important natural resource and environmental heritage in Kenya that is considered as a source of wealth and economic livelihood through tourism.<sup>107</sup> To protect the heritage, the government of Kenya has gazetted parks, national reserves, and conservancies for use by wildlife. However, over 80% of the wildlife live in unprotected areas and therefore always in conflict with the human beings in their settlements.<sup>108</sup> The presence of wildlife in Laikipia has been threatened by the increased demographic changes due to influx of large population from central region and elsewhere in the world. The incoming population engage in intensive agricultural land use which compromise the natural wildlife ecosystem. New farms are therefore exposed to destruction by elephants and other wildlife.

<sup>107</sup>Udoto, Paul. "Wildlife as a lifeline to Kenya's economy: making memorable visitor experiences." In *The George Wright Forum*, vol. 29, no. 1, pp. 51-58. George Wright Society, 2012.

<sup>108</sup>Moses Muhumuza and Kevin Balkwill, "Factors Affecting the Success of Conserving Biodiversity in National Parks: A Review of Case Studies from Africa," *International Journal of Biodiversity*, vol. 2013, Article ID 798101, 20 pages, 2013. <https://doi.org/10.1155/2013/798101>

Conflicts between pastoralists and farmers in Laikipia county is an everyday challenge especially during the dry period in the months of December to April. Pastoralists raid crop lands and destroy crops and encroach in to private ranches and land. The conflict can be managed through use of electric fences. However, there is the challenge of pastoralists spying on farmers' livestock which results in to cattle rustling and banditry. There has never been an agreed solution on this issue. Wildlife is a problem in Laikipia county because they raid crops, kill livestock and destroy water sources amongst other resources. Elephants are more notorious as pertains this menace.<sup>109</sup> Stealing of livestock is a big problem in Laikipia county. The rustling has shifted from large scale that is linked to cultures to small scale which is perpetrated by some community members.<sup>110</sup>

To deal with food insecurity, the county government and non-governmental organizations have employed initiatives that offer short term solutions through distribution of relief food especially in the pastoral areas. There have been issues of transparency with regards to distribution of relief food with some leaders selling the food instead of giving it to the hungry communities.<sup>111</sup>

### **3.5 Conclusion**

Food security in Laikipia county is affected by socioeconomic factors, monthly income, employment status, political factors, climatic factors as well as the security status. The county government has shown deliberate efforts towards dealing with the challenges, more the political and security challenges which are rampant in the area. The challenge of cattle rustling and

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<sup>109</sup>Bond, Jennifer. "Conflict, development and security at the agro–pastoral–wildlife nexus: a case of Laikipia County, Kenya." *Journal of Development Studies* 50, no. 7 (2014): 991-1008.

<sup>110</sup>Bond, Jennifer. "A holistic approach to natural resource conflict: The case of Laikipia County, Kenya." *Journal of Rural Studies* 34 (2014): 117-127.

<sup>111</sup> Relief web. <https://reliefweb.int/report/kenya/team-set-coordinate-relief-food-distribution> (accessed on 2nd may 2019)

banditry, human wildlife conflicts, illegal grazing in pasture lands and conservancies have caused the conflicts which further cause displacements, interrupt agricultural activities, crops on farm land are destroyed amongst other challenges that lead to food insecurity in one way or another. New policies and intervention programs that target conflicts in Laikipia county need to be enacted whereas the existing ones are supported and monitored particularly, among the vulnerable population. Such programmes will ensure pastoralists to do not graze their livestock on conservancies and crop land, wildlife sanctuaries are well fenced in the conservancies so that they do not destroy crops in the farm. Structured interactions and dialogue amongst the local leaders and county government officials of the neighboring counties to deliberate on how to deal with the conflict issues can help address the perennial challenges. Sustained campaigns and intervention by the civil society organizations can play a big role in bringing people together and advocating for a peaceful coexistence.

## **Chapter Four**

### **Policy Measures to Address Food Security in Laikipia County**

#### **Introduction**

To be food secure and thriving, a state needs to have policies and guidelines that enhance food security. Since independence, Kenya has adopted a number of policies to guide in her initiatives towards food security. The constitution of Kenya that was promulgated in 2010 recognizes agriculture as a crucial sector towards attaining economic growth, hence food security. They are policies to guide transformation of subsistence crop production to commercial farming. There are policies that favor adoption of agricultural technologies for increased crop

and livestock production. Currently, the commercial maize farmers in Kenya receive subsidized fertilizers and seeds for farming. There are no insurance mechanisms for the farmers. The current policies are not adequate to shield the farmers in case of farm crop loss due to conflicts or adverse climate change and other losses.<sup>112</sup> When Kenya became a decentralized system of governance, several sectors were devolved with agriculture being one of them. The counties in Kenya are responsible for their food security. This chapter reviews some of the policies and strategies to deal with food insecurity in Kenya and narrows down to the context in Laikipia county.

## **4.1 Food Security Policy and Institutions in Kenya**

### **4.1.1 The Land ACT 2012**

Enacted in 2012, this act was meant to review, merge and justify land laws so that land is viably and sustainably managed together with land based resources and other linked drives. The policy demands instant actions in addressing environmental challenges such as soil erosion, land degradation and land pollution. The policy gives guidelines for preservation and administration of land natural resources, delicate ecosystems, wetlands and arid lands. This policy can always be used in dialogues concerning serious land management, land accessibility, design and use of land, environmental degradation, struggles, unplanned multiplying of informal urban settlements, institutional framework and information management.<sup>113</sup>

Today in Kenya, human activities have resulted in to land degradation, and destruction of environment that need to be conserved and areas that are meant to be protected such as wetlands, riparian land and others. Pollution of the environment is rampant with industrial effluent and the

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<sup>112</sup> AKI. 2016. Situational Analysis of Agriculture Insurance Land scape in Kenya

<sup>113</sup>“Land Act 2012.Pdf.””

motor industry and use of fuel sources that emit Greenhouse gases to the environment. There is need for orientation of the policies to save the environment and protection of areas such as wetlands and riverbanks that are used for grazing by the pastoral communities during the drought season. Destruction of these critical ecosystems have led to pastoralists encroaching crop lands leading to conflicts and destruction of food crops.

Even with the land Act in place, resources in Kenya have been mismanaged and exploited in a way to jeopardize the future generations. The land act talks of Gazette lands that belong to the government and where the wild animals are supposed to be protected. Ironically, Wild life animals sneak in to peoples farms and the government will still protect them as it has been happening in Laikipia county.

#### **4.1.2 The Agricultural Sector Development Strategy (2010-2020)**

This policy guarantees food and nutritional security for Kenyans. It focuses at changing agriculture in to contemporary and profitable feasible sector. The policy aims to restructure and realign inquiries, and governing organizations to raise their effectiveness so that food insecurity is decreased by 35% and the number of people living below absolute poverty line reduced to less than 25%. The strategy aims to raise agricultural yield and returns for small holder farmers, address agricultural exploration, skill propagation and implementation, refining rural substructure and trade-related abilities and hence increase market accessibility, administration of water and land by way of extending the zone beneath viable land management and water control systems.<sup>114</sup>

The strategy stresses on reduction of over-reliance on rain-fed farming in the face of limited high potential agricultural land for irrigation. The strategy encourages diversification in

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<sup>114</sup> Government of Kenya. Agricultural Sector Development Strategy (2010-2020). Ministry of Agriculture, 2010.

to non-traditional agricultural commodities and value addition to reduce vulnerability. Other crucial concern dealt by the strategy is improving food security and reduce the number of suffering population from starvation and hence realize the sustainable development goals. The government of Kenya is trying to implement this policy through offering subsidized farm inputs, building dams for irrigated agriculture and negotiating for export market of the locally produced products such as avocado, tea, coffee and other cash crops.<sup>115</sup>

Proper enactment of the agricultural sector development need that the government invests in research for development, empower the communities and hold advocacy sessions with the communities, more so farmers to understand the sustainable agricultural practices.

#### **4.1.3 The Climate Change ACT 2016**

The laws of Kenya have climate change act that was signed by the head of state on 6<sup>th</sup> May 2016, published in the Kenya Gazette on 13<sup>th</sup> May and came in to force on 27<sup>th</sup> May of the same month. The law was developed through a collaborative process between the Executive, Legislative Arms and the Government of Kenya with support from the private sector, development partners and civil society. The Act of parliament provides for regulatory framework to enhance response to Climate Change, provide for mechanism and measures to achieving low carbon climate development and for connected purposes.<sup>116</sup>The CCA 2016 has provisions for several institutions: The National Climate Change Council coordinates and guides the implementation of obligations and functions of the climate change Act, 2016.<sup>117</sup>The Act also has a provision for Climate Change Directorate that works in supporting Monitoring, Reporting and

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<sup>115</sup> GOK. Agricultural Sector Transformation and Growth Strategy (2019-2029). MoALF&I, 2019

<sup>116</sup> The National Climate Change Act, 2016

<sup>117</sup> Operationalization of the National Climate Change Council, 2016, Draft Working Document was developed with support from UKaid and StARCK+

Verification (MRV) of Green House Gas (GHG) emissions system.<sup>118</sup> Other provisions of the Act are Climate change Fund and Climate Change Units.

The state and the non-state actors have been brought together so that all the stakeholders can evaluate themselves and come up with ways of contributing towards climate change adaptation and mitigation. The cop meetings, the latest being cop 24 that was held in Poland last year aims at tracking whether each country is committed to their nationally determined contributions and reporting of their climate change mitigation strategies. The ministry of planning is the custodian of the monitoring and evaluation framework which should be distributed to the counties to enhance reporting online.

#### **4.1.4 The National Climate Change Action Plan (NCCAP) (2018-2022)**

According to the Kenya climate change ACT 2016, the government of Kenya developed the national climate change action plan (NCCAP) 2018-2022 which is a five-year plan to enable Kenya implement her climate change action. The action plan is meant to be utilized to guide in the mainstreaming of climate change into sector functions. The action plan provides mechanisms to realizing low carbon climate resilient development by prioritizing adaptation and enhanced climate resilience for the vulnerable groups such as women, the minority and the marginalized and persons with disabilities.

Kenya is a country that suffers climate related disaster such as droughts, floods, famine whose negative impacts greatly affect the economy and livelihoods of a country that depends on climate sensitive sectors: agriculture, energy, tourism, water, wildlife and health. The impacts of climate change are a threat to the well-being. Kenya has a small global responsibility towards

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<sup>118</sup> Retrieved from <http://www.environment.go.ke/?p=5826> on 29<sup>th</sup> March, 2019



climate change since her greenhouse gas emissions are less than 1% of the total global emissions. The UNFCCC has set out six mitigation sectors: forestry, energy, transport, industry and waste as the priority climate actions. Kenya has committed to mitigation and to lower greenhouse gas emission and meet her nationally determined contribution goal of reducing ghg by 30% by 2030.<sup>119</sup> The NCCAP 208-2022 aligns the six priority sectors in Kenya to support the goal.

National Climate Change Action Plan was launched in 2013. NCCAP addresses the options for low-carbon climate resilient development pathway as Kenya adapts to climate change impacts. NCCAP gives guidelines for finance, policy and legislation, knowledge management, capacity building technology, Monitoring and reporting. The initiatives in the NCCAP include: promoting low carbon resilient development, sustainable management of the agricultural sector, increasing tree cover to 10%. Clean cooking, policies to favor climate change mitigation and adaptation. Key institutions and stakeholders were involved in the climate change planning and are open to consultations in reviewing and implementation processes.<sup>120</sup>The action plan is a road map of what the institutions should do to address climate change. The pastoralists and smallholder farmers' representatives were brought onboard during the drafting of the action plan. Strengthening the policies on climate smart agriculture and pastoralism is needed for effective utilization of the available natural resources.

As Carbon dioxide and other greenhouse gases build up in the atmosphere, they trap more heat and cause climate change. Although Kenya's GHG emissions is less than 1% as compared to the global emissions, Kenya has prioritized adaptation and come up with nationally determined contributions. The mitigation actions in Kenya help to reduce HGG lower than the

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<sup>119</sup> The Kenya's nationally determined contribution (NDC) highlights the emission projections and what Kenya should do to reduce them and greenhouse gases.

<sup>120</sup> The National Climate Change Action Plan (2018-2022)

projected trajectory and deliver the benefits of sustainable development. These low carbon actions in Kenya have contributed towards achieving the government's big 4. The agriculture, forestry, energy, transport and waste sectors have devised actions in mitigation to lower emissions.

#### **4.1.5 National Food and Nutrition Security Policy**

It is through the policy that all Kenyans can enjoy, at all times, safe food, sufficient quantity and quality to satisfy nutritional needs for optimum health. Through the policy, Kenyans can achieve good nutrition for optimum health, the quantity and quality of food available, accessible and affordable to all Kenyans at all times, and, the vulnerable populations are protected using innovative safety nets that are linked to optimal health. The issues of chronic and poverty based food insecurity and malnutrition and acute food insecurity are addressed.

Under food availability and access, the objective of the policy is to increase quantity and quality of food that is available and accessible so that all Kenyans have adequate, diverse and healthy diet. It ensures safe and high quality food by creating public awareness on issues, setting guidelines, standards and regulatory framework. Nutritional interventions are provided as early warning and emergency management are given to protect the vulnerable populations and address food insecurity concerns in developing capacity for early warning and emergency management. Other provisions in the policy are institutional and legal framework and financing, and strategic arrangements for policy implementation, monitoring and evaluation. The entire policy document

is implemented in a manner to acknowledge changes in people's food security and nutritional status and conditions over time.<sup>121</sup>

#### **4.1.6 Agriculture Act (revised. 2012)**

Under the laws of Kenya, chapter 318 is about the agriculture act. This act gives provisions for securing efficient agricultural production to increase food security in the country. According to the act, the agricultural industry is supposed to be reviewed annually and also in special circumstances. The act gives provisions for fixing prices for scheduled crops, and guarantees minimum prices for animal products. The act controls purchase and allows for different prices for different qualities and establishment for price equalization funds. The Act gives guidelines towards promoting and maintaining a stable agriculture to provide for soil conservation, maintaining soil fertility and stimulating development of agricultural land according to the accepted practices of good land management and good husbandry.<sup>122</sup>

#### **4.1.7 Policy Responses to the Challenge of Food Insecurity**

For many years, Agriculture has been the mainstay of Kenya's economy. Directly, the sector contributes 24% of GDP and indirectly, 27% through linkages with manufacturing, distribution and other service related actors. Kenya derives 45% of government revenue through the agriculture sector. 75% of the industrial materials comes from agricultural sector, 50% of which is exported.<sup>123</sup> Over 80% of Kenyans living in the rural areas derive their livelihood from agriculture related activities.

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<sup>121</sup> Retrieved from the National Food and Nutritional Security policy on 28<sup>th</sup> March, 2019.  
<https://extranet.who.int/nutrition/gina/sites/default/files/KEN%202011%20National%20Food%20and%20Nutrition%20Security%20Policy%5B1%5D.pdf>

<sup>122</sup> Retrieved from the laws of Kenya Chapter 318: The Agriculture Act

<sup>123</sup> Retrieved from the agriculture Act, <http://www.environment.go.ke/?p=5826> on 29<sup>th</sup> March, 2019

Kenya has been facing food security challenges, depicted by a high proportion of the population with no access to right food quality, quantity and preferences to meet their dietary needs. Households are spending a large proportion of their income on food with some areas of the country with sections of the population who can barely access any food whatsoever. Food insecurity problems in Kenya have been attributed to frequent droughts caused by climate change, displacements, high cost of food and poor lands that can no longer support high yields due to poor farming practices. The government of Kenya has tried to respond to food insecurity in the country through three major policy interventions, supply, prices and income related policies.<sup>124</sup>

Through the supply related policies, the government has offered subsidies on farm inputs and improvement of agricultural research and extension services. Farmers can now get credit through Kilimo Biashara initiatives. The rural infrastructure, especially the road network has been improved in some parts of the country such that agricultural markets and agri-business networks are expanding. Farmers are now encouraged to plant the drought tolerant crops as well as the orphan crops.<sup>125</sup>

The interventions through price related policies include the involvement of the National Cereals and Produce Board to purchase maize from Kenyan farmers at prices that are higher than the market rate so that farmers are provided with incentives. The maize millers have also been given incentives to bring down the consumer retail prices of maize meals as well as allowing the

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<sup>124</sup> Retrieved from <http://www.foodsecurityportal.org/kenya/food-security-report-prepared-kenya-agricultural-research-institute> on 29th March, 2019.

<sup>125</sup> Ibid paragraph 6

private sector to purchase tax free maize. The government also provides fund to purchase livestock from drought stricken areas.<sup>126</sup>

Income related policies have contributed towards dealing with food insecurity in several ways. The government has efforts to contribute to costs of social amenities such as health costs, education costs, so that the poor can access these services. Through the CDF funds, development in the rural areas has been promoted. The same applies to the equalization fund that is allocated to the less developed counties so that they can help boost development to the level of other counties.<sup>127</sup>

#### **4.2 Efforts Towards Addressing Conflicts and Security in Laikipia County**

The residents of Laikipia county have suffered food insecurity due to conflicts that regularly occur in the region. There have been deliberate efforts by both the national government and the county government in solving the problem. The land use in Laikipia county is classified and distributed in to government land, forest reserves, urban settlements, pastoral areas and large scale ranches. According to Laikipia Wildlife Forum (LWF), 37% of the land in Laikipia is under large scale ranching, 21% is under small scale farming whereas 32% (is a pastoralist grazing land and 10% used for settlement.<sup>128</sup> Livestock industry is an integral economic pillar in the dryland ecosystems. It is good to figure out the root cause of the constant clash in the Livestock, wildlife and crop farming sectors.

The root cause of the clashes in Laikipia county is the severe aridity of the rangelands especially during the dry seasons which fail to support the pastoral livestock, the wildlife, and crop farming economies. Even with the changing climate and land use, the land has remained

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<sup>126</sup> Ibid paragraph 7

<sup>127</sup> Ibid paragraph 8

<sup>128</sup> Abdikarim Daud 2017. Livestock Wealth in Laikipia yet to be fully tapped. Business Daily 12<sup>th</sup> May, 2017.

more or less the same. The wildlife sector and tourism are progressing as the crops and livestock sector remain underdeveloped. The open grass rangelands are dwindling and the pastoralists push their livestock to every accessible land, even in the private and community ranches. There is need to find alternatives to livelihoods to end the clashes.

#### **4.2.1 Addressing Conflicts and Security in Laikipia County by National and County Governments**

Food insecurity in Kenya is either chronic or transitory. Households in Kenya have been unable to acquire food or produce enough food due to instability in food production, income and supplies.<sup>129</sup> As the population increases, the condition is worsening in Kenya due to the diminishing natural resources and other challenges.<sup>130</sup> While 40% of Kenyans live below poverty line, and are food insecure, over half the population in Kenya are at the risk of food insecurity.<sup>131</sup> Another 40% is food secure but suffers shocks such as conflicts.<sup>132</sup> About 51% of people living in the rural areas are food insecure while the urban areas constitute 38% of the population.<sup>133</sup> Only a small percentage of this can access relief food while the rest are helpless.

Kenya has the potentiality of producing more than enough food to feed her population. However, the current policies have had little success in addressing food insecurity in Kenya.<sup>134</sup> Food insecurity in Laikipia county and others in the ASALs raises a critical challenge on the orientation, implementation and efficiency of food security policies that can respond to

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<sup>129</sup> Gitu K. W. Agricultural Development and Food Security in Kenya, 2004.

<sup>130</sup> Ayieko M.W. & Tschirley D. L. Assessment of Kenya's Domestic Horticultural Production and marketing systems and lessons for future. Tegemeo Institute of Agricultural Policy and Development, Nairobi, Kenya, 2009.

<sup>131</sup> KNBS. The 2009 Kenya Population and Housing Census, vol I. Kenya National Bureau of Statistics. Government printer, Nairobi, Kenya, 2009.

<sup>132</sup> KIPPRA. Policy dialogue on food security information needs in Kenya. Kenya Institute for Public Policy Research and Analysis. Nairobi, Kenya, 2011.

<sup>133</sup> KFSSG. The 2010 short rains season Assessment Report. Kenya Food Security Steering Group. Nairobi, Kenya, 2010.

<sup>134</sup> GoK. Kenya Food Security and Nutrition Strategy, 2nd Draft, 2008. Government printer, Nairobi, Kenya, 2008.

environmental and security challenges. In the study, ten key informants (5 men and 5 women) drawn from the county government and Non-governmental organizations working in Laikipia county rated the political will and commitment of the government and that of other stakeholders to range from low to average. These findings are in line with a similar study conducted by Titus Kilonzi, on enhancing food security through policy re-orientation in Laikipia county.<sup>135</sup> The key informants also gave their opinion in terms of food security and peace related policies in County government. They said that the food security and peace related policies need re-orientation, approaching the market environment from the producer-consumer perspective so that they can fully respond to community needs. There is need for a balance in focusing on food production, the production environment and marketing aspect as well as empowering farmers with the right inputs and knowledge. The other 100 respondents gave their opinion on how the national and county government can be efficient to ensure that there is security in the food production environment so as to enhance food security in Laikipia county.

**Table 3: How the national government can make food production environment favorable in Laikipia county**

1. Hold peace meetings amongst the ethnic communities (Maasai, Kikuyu, Pokot, Samburu, Borana and Meru)
2. Employment of more National Police Reservists and Anti-stock Theft Unit
3. Building police post near the conflict prone areas and provision of vehicles
4. Involving peace elders and forming peace committees
5. Identifying and take action on people inciting others
6. Building solar powered electric fences to protect elephants and against encroachers
7. Provision of KWS personnel who monitor wild animals
8. Providing food and financial assistance to old and vulnerable people
9. Provision of quality and standard seedlings to farmers
10. Sensitization through public barazas, nyumba kumi and peace forums

<sup>135</sup> Titus Kilonzi. Enhancing Food Security through Policy Re – Orientation in Laikipia Central, Kenya. International Journal of Humanities and Social Science Vol. 3 No. 12 [Special Issue – June 2013]

11. Dealing with illegal grazers as per the law e.g. through fines
12. Amnesty on firearms surrender and conducting disarmament programmes
13. Water rationing
14. Encouraging citizens to diversify in agriculture
15. Provision of subsidized fertilizer and conducting soil test/ sampling
16. Organizing for agricultural researches
17. Inducting citizens on proper livestock management through modern methods
18. Environmental conservation
19. Resolving human-wildlife conflicts.
20. Resettlement of affected families
21. Offering free and compulsory primary education for all children
22. Facilitating inter-county security committee for a
23. Issuing title deeds for land ownership
24. Promoting inter-cultural social activities
25. Encouraging pastoralists to buy land and develop

**Source: Researcher 2019.**

#### **4.2.1.1 The Amaya Triangle**

The county government of Laikipia has tried initiatives to ends the conflicts in Laikipia county. The *Amaya triangle* is an initiative by the governor of Laikipia county (Ndiritu Muriithi), which aims to bring together the counties neighboring Laikipia county, Baringo, Isiolo and Samburu to reconcile their communities to live in peace and harmony.<sup>136</sup> Through the initiative, each county is expected to invest in borehole drilling and water pans so that their pastoralists have enough water for their livestock and not invade other peoples land. They are also encouraged to educate their pastoralists on modern ways of grazing such as paddocking,

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<sup>136</sup> <http://laikipia.go.ke/assets/file/ebbed7af-amaya-triangle-initiative.pdf>



reducing stocks, feedlots and improved breeds.<sup>137</sup> The community leaders are encouraged to mobilize their people and give them the information. The leaders from the four counties have in most cases not agreed on given solutions because they are not solving the root cause of the problem. The areas that are currently gazetted as conservancies were historically used as pasture reserves by the pastoral community so that they graze their livestock during the dry season. Culturally, the pastoral communities believe that they have the right and are free to graze their livestock wherever they can find pasture. Invading neighbors pasture land has caused conflicts among the pastoral communities where people are injured, killed or displaced. In some areas, the pastoral communities scare farmers who run away so that herders are free to graze on their land. When drought conditions are severe, pastoralists lose their livestock. They then steal from one another to restock causing more conflicts. In extreme cases, pastoralists move from the West to the Eastern side of the county towards Mt. Kenya, where they can find pasture. Due to the cold weather in the slopes of Mt. Kenya, the livestock usually die or are infected with diseases. The pastoralists thus get frustrated and commit suicide.<sup>138</sup>

The respondents further gave their opinions on what other ways they expect the national and county governments to address the conflicts and food insecurity in Laikipia county. This is presented in table 4.<sup>139</sup>

**Table 4: How the county government can make food production environment favorable in Laikipia West**

1. Encourage farmers to practice rotational and mixed farming
2. Distributing seeds, seedlings, subsidized fertilizers and other farm inputs to farmers
3. Encouraging farmers to plant short term crops
4. Encouraging farmers to plant drought-resistant crops
5. Providing agricultural extension services to educate and advise farmers through seminars, field visits and through soil sampling.

<sup>137</sup> This information was availed by the communications department at the governor’s office, Laikipia county.

<sup>138</sup> This information was given by respondents from Umande ward, Laikipia West

<sup>139</sup> These are responses from respondents drawn from Laikipia West and East in the period February to May 2015.

6. Providing cooling facilities for farmer’s milk products and maize driers
7. Helping to solve human-wildlife conflict in the county e.g. constructing electric fences
8. Offering financial assistance through 'Inua-Jamii' program
10. Construction of boreholes/water pans and dams
11. Organizing peace for a to enhance security e.g. AMAYA initiative
12. Construction of food hubs for purchasing excess farm produce
13. Provision of AI services, immunization and vaccines to livestock farmers
14. Providing pasture for livestock during dry seasons
15. Construction of good transport system for their produce
16. Opening markets for selling and purchasing of produce
17. Encouraging water harvesting

**Source: Farmers in Laikipia West**

#### **4.2.3 Efforts by NGOS in Addressing Conflicts and Security in Laikipia County**

A number of NGOs in Laikipia county offer humanitarian and development assistance to the locals in times of food insecurity and conflicts. The respondents involved in the study acknowledged to have interacted with the NGOs and that they have witnessed their activities towards improving agricultural and pastoral production and solving the conflicts and peace building. 70 % acknowledged that NGOs are very beneficial while another 30% said that they have not yet seen the impact of the NGOs.

**Table 5: Humanitarian assistance in times of conflicts**

<b>Response</b>	<b>Percentage</b>
Yes	70%
No	30%.
<b>Total</b>	<b>100%</b>

**Source: Residents in Laikipia County**

In times of conflicts, people are left without food and shelter because majority are displaced and seek refuge in the neighboring villages or towns. The NGOs have been very instrumental in providing medical assistance, education, resettlement plans, construction of dams and water pans, and organizing social forums to educate the communities

on the importance of peaceful coexistence.<sup>140</sup> Table 6 below summarizes some of the efforts made by NGOs in solving the conflicts and enhancing food security in Laikipia county.

**Table 6: Efforts by NGOS in solving conflicts and enhancing food security in Laikipia county**

1. Providing domestic needs to the affected causalities such as food, clothes and shelter
2. Construction of dispensary for health issues
3. Supporting education services such as construction of classrooms for learning and boarding facilities
4. Provision of seedlings to the locals, farm inputs and advise on farming methods
5. Conducting peace campaigns and seminars to educate locals to live harmoniously
6. Organizing inter-community peace committees
7. Funding various community projects
8. Partnering with other stakeholders to enhance peace
9. Conducting research on causes of insecurity and writing proposals
10. Creating awareness on farming practices
11. Drilling of boreholes to reduce conflicts between farmers and pastoralists
12. Training and appointing paralegal workers
13. Enhancing human rights education
14. Sensitization on alternative sources of livelihood e.g. bee keeping since they can't be stolen

**Source: Residents of Laikipia County**

#### **4.8 Conclusion**

Countering the challenge of food insecurity in Kenya has been compromised by a variety of issues such as climate change, land degradation, poor soils, topography, inadequate technology and innovations, limited financial support to farmers, poor markets, poor infrastructure, land tenure, global resolutions, poor habits among other issues. Kenya needs to adopt the multi-dimensional approach and bring all the involved parties on board in dealing with food insecurity. Both long and short term measures are appropriate in dealing with food insecurity, including the support of both local and international partners.

Climate change is a challenge everywhere in the world and undeniable fact that has hit hard in many parts of Kenya and the world at large contributing heavily to food insecurity.

<sup>140</sup> Changwony Audrey Jemutai, 2015. Non-Governmental organizations and their Impact in Resolving Local Conflicts in Kenya, Case Study of Baringo County. Master's Thesis

However, food security issues are a highly politicized agenda and the resources to deal with the condition sometimes fail to serve the intended purpose due to corruption and lack of accountability right from the national government to the county government. With the intervention of prudent public expenditure management and public participation and honesty, the systems can change.

The donor funded projects that implement project based on interventions in agriculture, security and technology have played their part in fighting food insecurity in Kenya. Rampant corruption has affected their deliverables and demoralized the donors. However, the fight is still on to ensure that no single Kenyan dies because of lack of food and suffering related to food scarcity.

## **Chapter Five**

### **Summary of the Findings, Conclusions and Recommendations**

This chapter presents the summary of the findings, conclusion and recommendations of the study.

#### **5.1 Summary**

The IGAD region has a small land area for agricultural production and with variable rain patterns. The region has more than half of the population faced with food insecurity. It is also faced with conflicts that have affected food security hence more suffering of the residents. The situation has been amplifying by the recurrent severe droughts and famine. People have died or

are malnourished because they cannot afford or access food.<sup>141</sup> The conflicts experienced in the region have drained away the resources for development, deepening poverty, which escalates more violence affecting different aspect of human security, food security been one of them. Eritrea, Ethiopia, Somalia, Sudan, South Sudan and Kenya have experienced conflicts as a result of political reasons, social reasons, climate change, poor governance and lack of accountability.

Food security and conflicts nexus is quite complex and dynamic. Food insecurity can both be a cause and a consequence of conflict.<sup>142</sup> Conflicts have resulted in to food insecurity because they affect agricultural production and distribution of the food. Food insecurity can trigger violence. Either way, millions of people are affected. Those that cannot find food in their places become IDPs and refugees. If refugees and IDPs are not well coordinated and supported, they can cause further instability. it then becomes a vicious cycle of poverty.

In Laikipia county in Kenya. There has been low and unreliable rainfall whose onset, timing and duration has been unpredictable.<sup>143</sup> Migrant farmers from other parts of central region who have settled in the county have not been able to successfully adapt to the different agricultural systems in the semi-arid conditions. The boom experienced in the horticultural sector has seen increased water usage and led to competition and hostile relations among farmers and herders. Crop production as well as wildlife and livestock rearing have highly been affected by the changes. There has been major disruption in social and economic activities through crop destruction by wild animals (Elephants), predation and competition with livestock<sup>144</sup> and destruction of infrastructure, compromising physical safety. Livestock rustling and banditry have

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<sup>141</sup> FAO. "Saving lives in the IGAD region: early action to prevent a food insecurity catastrophe, 2017

<sup>142</sup>Henk-Jan Brinkman and Hendrix, "Food Insecurity and Violent Conflict."

<sup>143</sup>Ulrich et al., "Small-Scale Farming in Semi-Arid Areas: Livelihood Dynamics between 1997 and 2010 in Laikipia, Kenya."

<sup>144</sup>Graham, Maximilian D., et al. "Mobile Phone Communication in Effective Human Elephant–Conflict Management in Laikipia County, Kenya." *Oryx*, vol. 46, no. 1, 2012, pp. 137–144., doi:10.1017/S0030605311001104.

resulted in theft of hundreds of livestock.<sup>145</sup> Conflicts experienced in Laikipia county are over pasture and, cattle rustling and banditry, human-wildlife conflicts, water shortages and political incitements. New policies and intervention programs that target conflicts in Laikipia county need to be enacted whereas the existing ones are supported and monitored particularly, among the vulnerable population. Such programmes will ensure pastoralists to do not graze their livestock on conservancies and crop land, wildlife sanctuaries are well fenced in the conservancies so that they do not destroy crops in the farm. Structured interactions and dialogue amongst the local leaders and county government officials of the neighboring counties to deliberate on how to deal with the conflict issues can help address the perennial challenges. Sustained campaigns and intervention by the civil society organizations can play a big role in bringing people together and advocating for a peaceful coexistence.

Countering the challenge of food insecurity in Kenya has been compromised by a variety of issues such as climate change, land degradation, poor soils, topography, inadequate technology and innovations, limited financial support to farmers, poor markets, poor infrastructure, land tenure, global resolutions, poor habits among other issues. Kenya needs to adopt the multi-dimensional approach and bring all the involved parties on board in dealing with food insecurity. Both long and short term measures are appropriate in dealing with food insecurity, including the support of both local and international partners.<sup>146</sup>

The donor funded projects that implement project based on interventions in agriculture, security and technology have played their part in fighting food insecurity in Kenya. Rampant

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<sup>145</sup>Campbell, L, S Dalrymple, and A Crawford. 2009. *Climate Change and Conflict. Lessons from Community Conservancies in Northern Kenya*. Conservation Development Centre, International Institute for Sustainable Development and Safeworld.

<sup>146</sup> Machin, Amanda, and Alexander Ruser. "What counts in the politics of climate change? Science, scepticism and emblematic numbers." In *Science, Numbers and Politics*, pp. 203-225. Palgrave Macmillan, Cham, 2019.

corruption has affected their deliverables and demoralized the donors. However, the fight is still on to ensure that no single Kenyan dies because of lack of food and suffering related to food scarcity.

## **5.2 Conclusion**

The study found out that Conflicts have negatively impacted food security in Laikipia county. The conflicts experienced in Laikipia county were established to be basically amongst the different communities that are fighting for scarce natural resources in terms of pasture, water and farming land. The pastoralists from Samburu, Isiolo and West Pokot clash with pastoralists in Laikipia county when they cross the border to do grazing in Laikipia county. This leads to injuries, loss of live, cattle rustling and banditry hence loss of livelihood for the local farmers, ranchers and pastoralists.<sup>147</sup>

Crop farmers towards Laikipia East, West and North reported that they have been unable to optimize crop production due to various factors. During the dry season, the pastoralists encroach crop land and graze their livestock thus destroying the crops. As the farmers are left with the pain of loss of their livelihood, they engage in conflicts with the pastoralists as retaliatory acts. This further worsens the situation and some crop farmers are forced to flee from their home and hence abandon farming activities. The pastoral communities are known to be equipped with firearms which further scares the farmers to abandon their farms and hence loss of farm labor.

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<sup>147</sup> Mkutu, Kennedy. Pastoralism and Conflict in the Horn of Africa. Africa Peace Forum/Safeworld/University of Bradford, 2014.

Human-wildlife conflicts are frequent whereby wildlife cross from the conservancies to crop farms.<sup>148</sup> This has led to destruction of food crops in most cases leading to total destruction and losses. The wildlife also attacks livestock, with various incidences of hyenas reported to have attacked and killed goats, sheep and other wildlife. The Kenya Wildlife Service together with the Kenya Forestry Service are yet to provide a permanent solution to this challenge though there are efforts to construct electric fences so as to contain the wildlife in restricted areas within the conservancies.

The national and the county government have had initiatives towards addressing the conflicts and food insecurity in Laikipia county. As they plan to re-orient the policies in food security and conflicts, there are also deliberate efforts to restore and maintain peace and empower the crop farmers and the pastoralists. The Amaya triangle is one of the crucial initiatives by the county government of Laikipia which bring together Isiolo, Samburu, Laikipia and Baringo to do deliberations with the aim of solving conflicts which most of the time originates from the pastoral community.<sup>149</sup>

The study aimed to test two hypotheses, 1) To find out whether conflict and food security were inversely related and 2) To find out whether poor implementation of policies is directly related to conflicts. The computed p-value for the two hypotheses was as follows: 0.07 for hypothesis one and 0.09 for hypotheses 2. Both p-values were greater than 0.05. Thus the hypotheses were accepted to be significant. According to the findings, it is true that conflicts cause food insecurity while poor implementation of policies can accelerate conflicts.

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<sup>148</sup> FAO. Human-Wildlife Conflict in Africa: Causes, Consequences and Management Strategies. FAO Forestry Paper 157, 2009

<sup>149</sup> <http://laikipia.go.ke/assets/file/ebbed7af-amaya-triangle-initiative.pdf>



Food security and conflicts nexus is quite complex and dynamic. Food insecurity can both be a cause and a consequence of conflict. Conflicts have resulted in food insecurity because they affect agricultural production and distribution of food commodities. Food insecurity can trigger violence and population displacements. Either way, millions of people are affected.<sup>150</sup> Those who cannot find food in their places migrate to other areas and become IDPs and refugees. Where resultant refugees and IDPs are not well coordinated and supported, they can cause further instability thus creating a vicious cycle of poverty.

The IGAD countries that are worst hit by food insecurity are South Sudan, Sudan and Somalia. The other countries have diverse challenges with issues of poverty and famine but have put up structures to help mitigate the situation. Conflicts can also be triggered by natural disasters, poor governance, climate change, price fluctuations and social exclusion. All of these causes coupled with early warning systems can help inform government policies and programs targeted at increased food security as well as locally sustainable strategies that can increase citizen's resilience.

Food security in Laikipia county is affected by various factors which include socioeconomic factors, monthly income, employment status, political factors, climatic factors as well as the security status.<sup>151</sup> The county government has shown deliberate efforts towards dealing with the challenges, more so the political and security challenges which are rampant in the area. The challenge of cattle rustling and banditry, human-wildlife conflicts, illegal grazing on private pasture lands and conservancies have caused the conflicts which further cause displacements, interrupt agricultural activities, crops on farm land are destroyed amongst other

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<sup>150</sup> Nelson, Gerald C., M. W. Rosegrant, A. Palazzo, I. Gray, C. Ingersoll, R. Robertson, S. Tokgoz et al. "Food Security." *Farming, and Climate Change to 2050* (2010).

<sup>151</sup> Kilonzi, Titus M. "Enhancing Food Security through Policy Re-Orientation in Laikipia Central, Kenya." *International Journal of Humanities and Social Science* 3, no. 12 (2013): 107-116.

challenges that lead to food insecurity in one way or another. New policies and intervention programs that target conflicts in Laikipia county need to be enacted whereas the existing ones are supported and monitored particularly, among the vulnerable population. Such programmes will ensure pastoralists do not graze their livestock on conservancies and crop land, wildlife is well secured in the conservancies so that they do not stray and destroy crops in the farm. We could also have dialogues amongst the leaders and county government officials of the neighboring counties to deliberate on how to deal with the conflict issues. Campaigns and intervention by the civil society organizations can play a big role in bringing people together and advocating for a peaceful coexistence.

Countering the challenge of food insecurity in Kenya has been compromised by a variety of issues such as climate change, land degradation, poor soils, topography, inadequate technology and innovations, limited financial support to farmers, poor markets, poor infrastructure, land tenure, global resolutions and poor farming habits among other issues.<sup>152</sup> Kenya needs to adopt the multi-dimensional approach and bring all the stakeholders on board in dealing with food insecurity. Both long and short term measures are appropriate in dealing with food insecurity, including both local and international partners.

The donor funded programmes that implement project based on interventions in agriculture, security and technology have played their part in fighting food insecurity in Kenya. Pervasive corruption has affected their deliverables and demoralized the donors. However, the fight is still on to ensure that no single Kenyan dies because of lack of food and other attributable suffering.

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<sup>152</sup> de Vries, FWT Penning. *Integrated land and water management for food and environmental security*. Vol. 1. IWMI, 2003.

### **5.3 Recommendations**

The aim of these recommendations is to help address the challenge conflicts pose to food security in Laikipia county. This paper recommends the following:

#### **5.3.1 Actions to Ensure Sufficient Food Accessibility**

Instantaneous actions to ensure sufficient food access for the hungry in Laikipia county and Kenya at large. Development of initiatives for other livelihood options rather than farming in an area already rampant with conflicts based on natural resources. Creation of community organizations and formation of suitable institutional policy atmosphere. These shall be policies at the county and national level to deal with the conflict and food insecurity issues. There should be supervisory framework favorable to private and local initiatives.<sup>153</sup>

With the already existing climate change Act 2016, and National Climate Change Action Plan<sup>154</sup>, the county government together with civil society organizations can empower farmers with initiatives towards climate change mitigation and adaptation. Planting more vegetation cover, rainwater harvesting and planting drought resistant crops can help improve crop production, soil and water conservation.

#### **5.3.2 Value Addition of Agricultural Produce**

Diversifying rural economies through value addition of agricultural products can be done through investing in research for development, enhancing agricultural extension services, developing food storage mechanisms and training farmers on post-harvest handling. Efficient and affordable technologies can be adopted in value addition of farm products. Technologies in

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<sup>153</sup> Kilonzi, Titus M. "Enhancing Food Security through Policy Re-Oriented in Laikipia Central, Kenya." *International Journal of Humanities and Social Science* 3, no. 12 (2013): 107-116.

<sup>154</sup> GOK. NCCAP (2018-2022).

green energy such as making charcoal briquettes using non-forest products, developing early warning systems can help.

### 5.3.2.1 Implementation of Agricultural and Related Policies

The public investment services and policies in agriculture should give priority to enabling and supporting and complementing investments for small holder farmers. Attention should be given to women producers who face specific difficulties and needs. There should be an insurance plan for farmers to cushion them against natural and man-made disasters that make them loose their crops and livestock leaving them devastated.<sup>155</sup>

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<sup>155</sup> Kanter, Rebecca, Helen L. Walls, Mehroosh Tak, Francis Roberts, and Jeff Waage. "A conceptual framework for understanding the impacts of agriculture and food system policies on nutrition and health." *Food security* 7, no. 4 (2015): 767-777.

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## **APPENDICES**

Appendix 1: Research Permit

**Appendix 2: Research Questionnaire**

### **SECTION A: RESPONDENT / INTERVIEWER DETAILS**

1. Date of the Interview
  - a.
2. Gender of the Respondent
  - a. Male
  - b. Female
3. Name of the district
  - a.
4. Name of the location
  - a.
5. Name of the Village

## SECTION B: SOCIOECONOMIC CHARACTERISTICS

6. Are you a crop farmer?
  - a. Yes
  - b. NO
7. If yes, what crop s do you grow?
  - a. Maize
  - b. Carrots
  - c. Peas
  - d. Potatoes
  - e. Wheat
  - f. Beans
  - g. Others (name them)
8. Is it enough for your family consumption?
  - a. Yes
  - b. No
9. Do you have extras for selling?
  - a. Yes
  - b. No
10. How much income (on average) do you earn from crop farming per year?
  - a. 1-2000
  - b. 2001-5000
  - c. 5001-10000
  - d. 10001-15000
  - e. 15001-20000
  - f. 20001-30000
  - g. Over 30,000
  - h. Nothing
11. Are you a livestock farmer?
  - a. Yes
  - b. No
12. If yes, what livestock do you keep?
  - a. Cows
  - b. Goats
  - c. Sheep
  - d. Poultry
13. Do you earn cash from livestock keeping?
  - a. Yes
  - b. No
14. What livestock products do you sell?
  - a. Milk
  - b. Butter
  - c. Ghee
  - d. Meat
  - e. Eggs
  - f. Hides and Skin

15. How much income do you earn from Livestock farming per year? (Kshs)
- a. 1-2000
  - b. 2001-5000
  - c. 5001-10000
  - d. 10001-15000
  - e. 15001-20000
  - f. 20001-30000
  - g. Over 30,000
  - h. Nothing

**SECTION C: CONFLICTS IN LAIKIPIA COUNTY**

16. What conflicts has your area experienced in the last five years?
- a. Conflicts over pasture land
  - b. Cattle rustling and Banditry
  - c. Human-wildlife conflicts
  - d. Others (name them)
17. What causes the conflicts in Laikipia County?
- a. Ethnicity
  - b. Vast open and unoccupied land that that tempts pastoralist
  - c. Cattle rustling and banditry
  - d. Political Incitement
  - e. Poverty
  - f. Poor infrastructure
  - g. Cultural believes
  - h. Availability of illegal arms
18. What time of the year are the cases of conflicts occurring?
- a. January to April
  - b. May to July
  - c. August to September
  - d. October to December

**SECTION D: Conflicts and Food security**

19. In your opinion, do you think that conflict has contributed towards food insecurity in your area?
- a. Yes
  - b. No
20. If Yes, explain

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.....

.....

.....

21. How does conflicts affect the following in relation to food security
  - a. labor
  - b. Trade
  - c. Food distribution
  - d. Agricultural activities
  - e. Displacement
22. What is the national government doing towards addressing conflicts and security in your area?
  - a. ,
  - b. ,
  - c. ,
  - d. ,
23. What is the county government doing towards addressing food insecurity in your area?
  - e. ,
  - f. ,
  - g. ,
  - h. ,
  - i. ,
24. What are the NGOs doing towards addressing conflicts and security in your area?
  - a. ,
  - b. ,
  - c. ,
  - d. ,
  - e. ,
25. Are you aware of any government policies toward addressing food accessibility and security in Laikipia county? (name them)
  - a. ,
  - b. ,
  - c. ,
  - d. ,
26. Do you think that the policies are effective?
  - a. Yes
  - b. No
27. If no, what do you recommend?

*Thank you so much for your participation in this interview*