FOOD AID AND FOOD SOVEREIGNTY AMONG THE POKOT OF EAST POKOT DISTRICT, BARINGO COUNTY, KENYA

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EGERTON UNIVERSITY

NOVEMBER, 2014

DECLARATION AND RECOMMENDATIONS

DECLARATION

This thesis is my original work and to the best of m	y knowledge has not been presented either in
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DEDICATIONS

I dedicate this work to all the people living in difficult situations of the world especially in East Pokot who overcome adversity and make their lives count circumstances notwithstanding.

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I am greatly indebted to the people of East Pokot District especially the residents of Nginyang and Mondi Divisions for their unequivocal support. I also thank most sincerely University of Cologne, Germany, for the funds to carry out this research especially Dr. Clemens Greiner through the RCR Project. I would like to thank Dr. Kibet Ng'etich for his availability and guidance throughout the time of this work without forgetting Dr. Eric Kiprono Bor who was also very instrumental in this study. I am indebted to the family of Ven. Canon Christopher Chochoi of St. Paul's ACK Church Nginyang for his support and introducing me to the community, assisting in identifying the interpreters, and securing very comfortable and safe accommodation. I cannot forget my interpreters Nathan Chochoi and Joseph Akiru alias Manzu not forgetting Charles Loita for helping at Chemolingot data collection. My dad, the late Samson Okall and my mom Agneta Agola (Nyagodunga) for ceaseless prayers and moral support and Brother Wilson Muruku for keeping me on my toes and focused. My gratitude goes to Alyssa Harriett Hawi and Velma Apiyo, who both were there for me sometimes when the going was very tough urging me on and also, proofread the work. I am very grateful to my landlord and friend Enos Amwayi (baba Kudude) for being very understanding and magnanimous all the time of this research. I cannot forget all men and women of good will who assisted in any way directly or indirectly. To all I say thank you. Last but not least, I must acknowledge the Almighty God for His divine enablement and favour that made all these things possible. To God be the glory and honour great things He is doing. Thank you so very much indeed.

ABSTRACT

This study focused on Food Aid and food sovereignty among the Pokot of East Pokot district, Baringo County of Northern Kenya. Food aid by the colonial government was a reality in East Pokot as far back as 1930s. Civil societies/NGOs also joined in making this exercise a perennial phenomenon in this region to date. The study established the traditional coping mechanisms of the Pokot; examined the effects of food aid on the attitude and practice of the people towards their own food sovereignty and determined the people's perception of environmental changes with regard to their access to and consumption of wild fruits and animals found locally as a current safety net measure. The study embraced the Rational Choice Theory also known as Rational Action Theory (RAT), which postulates that all humans are rational as they make decisions and the respondents were found to be purposeful as they made food related choices. Multistage sampling, simple random sampling and purposive sampling techniques were used with the household as the unit of analysis. Krejcie and Morgan tables were used to determine the sample size of 169 heads of household and key informants from Mondi and Nginyang Divisions. The data were collected using semi-structured interview schedules, and focus group discussions, coded and analysed using the Statistical Package for Social Sciences (SPSS) and thematic analysis. This study found out that: food situation was very bad before food aid; traditional coping mechanisms are currently seen as irrelevant; goats and camels were preferred; food aid was still being supplied and people were very happy, healthy and had high fertility; East Pokot could not be food sovereign perceptively; the future food situation was very desperate thus respondents were ready to do business, farming, and education to cope; environment has changed significantly; some wild foodstuffs were extinct and there were also new-arrivals like prosopis fujiflora and cactus; camels also though domesticated were adopted from the neighbouring Turkana people. This study recommends that Food aid providers give food sovereignty priority over food aid per se; meat production projects be established with expanded livestock marketing; commercial domestication of cactus for jam production; social support systems initiated to boost the people's purchasing power; positive aspects of indigenous knowledge be incorporated into the food sovereignty strategies; the traditional environmental controls and modern methodologies be used together; and deliberate measures to plant traditional trees like Sorich, loma, mwarubaine and the like be put in place.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACK Anglican Church of Kenya

AoA Agreement on Agriculture

ASALs Arid and Semi-Arid Lands

BDSAAP Baringo District Semi-Arid Area Project

CDN Catholic Diocese of Nakuru

CAFOs Confined Animal Feeding Operations

FAO Food and Agriculture Organization

FGDs Focus Group Discussions

IFRC International Federation of the Red Cross and Red Crescent Societies

IK Indigenous Knowledge

ISS Institute of Social Studies

KNBS Kenya National Bureau of Statistics

KRCS Kenya Red Cross Society

LDCs Less Developed Countries

MDG Millennium Development Goals

RAT Rational Action Theory

SAPs Structural Adjustment Programme

SPSS Statistical Package for Social Sciences

SSA Sub-Saharan Africa

SSR Self-Sufficiency Ratio

CHAPTER ONE INTRODUCTION

1.1. Background to the Study

This study investigated the effects of perennial provision of food aid to the inhabitants of East Pokot on the people's capacity to attain food sovereignty, that is, their ability to sustainably produce sufficient and nutritive food for their own consumption locally. Kenya has not been self-sufficient in production of cereals (maize, rice, millet, and sorghum). The Self-Sufficiency Ratio (SSR), according to government's National Food Balance Sheet of 2000 -2005, fluctuated from 69.1% in 2000 to 85.4% in 2002 and 79.6% in 2005. Ideally, SSR of all foodstuffs from cereals to livestock products, vegetables to fruits should be at least 100% or more, meaning that Kenya is food deficient (Government of Kenya, 2002).

Currently, over ten million people in Kenya suffer from chronic food insecurity and poor nutrition, and between 2 to 4 million people require emergency food assistance at any given time. Nearly 30 per cent of Kenya's children are classified as undernourished, and micronutrient deficiencies are widespread (Agricultural Sector Coordination Unit, 2011).

Worldwide, between 1996/98 and 2006/08, the share of emergency aid rose from 38 per cent to 66 per cent of all food aid whilst programme aid shrank from 33 per cent to 12 per cent. Project aid also declined over the decade, from 28 per cent to 22 per cent, as did monetisation-support in form of money (Humanitarian Policy Group Overseas Development Institute, 2010).

There are varied categorisations of food aid generally: for instance, Food Aid Convention (FAC) states that food aid supply to developing countries can be categorised into three by core characteristics of food aid. These include international source of funding, concessionality and food commodities. The second is the conventional categorisation of food aid by activity for example, Emergency or relief food aid, which is targeted on, and freely distributed to victims of natural or man-made disasters; and the Programme food, which is supplied as a resource transfer providing balance-of-payments (BoP) or budgetary support. BoP support is given either by replacing commercial imports or by allowing additional imports where these are inhibited by foreign exchange (FOREX) constraints. This commodity aid is provided directly to a recipient government, or its agent, for sale on local markets. Project food aid is usually provided to

support specific poverty alleviation and disaster prevention activities, targeted on specific beneficiary groups or areas. The commodities are provided on a grant basis and are usually channeled through a multilateral agency, almost invariably WFP, or through international NGOs (Humanitarian Policy Group Overseas Development Institute, 2010).

According to International Federation of the Red Cross and Red Crescent Societies (IFRC, 2008), Sub-Saharan Africa (SSA) is not on track to achieve a single Millennium Development Goal (MDG), and is the only region in the world where malnutrition – an outcome of food insecurity – is not declining. This can be attributed to among others; HIV/AIDS, climate change, environmental degradation, conflict, vast increase in population size, poor governance, decline in public services (health, education), and debt burden. Kenya is a food insecure country and this phenomenon is especially chronic in East Pokot district. MDGs were adopted by the General Assembly of the United Nations (UN) on September 18, 2000 at the UN Millennium Summit. The first of the eight goals to be achieved by 2015 is to eradicate extreme Hunger and poverty targeting to reduce by half the proportion of people who suffer from hunger in the world (Desai & Potter, 2008).

The growing use of the term 'food assistance' instead of 'food aid', but without a clear definition, raises conceptual and practical issues. Food assistance instruments might include direct food based transfers (such as general rations, food-for-work, supplementary feeding or vulnerable group feeding, school feeding), food subsidies, cash transfers and vouchers (including school or user fee waivers) and agricultural and livestock support. Food subsidies, fee waivers and livestock support are rarely considered to be part of food assistance, but do fit some definitions of strict food aid. Another debate continues, over whether food assistance is primarily a humanitarian instrument or whether it should also be used in transition and development contexts. The current study embraced food aid within the context of direct food based transfers.

East Pokot District is one of the regions that epitomize food insecurity in Kenya where food sovereignty mechanisms are conspicuously absent and the people vulnerable to vicissitudes of weather. East Pokot District is a pastoral livelihood zone as compared to agro-pastoral neighboring Baringo district or even West Pokot. The Pokot people are found in the North Rift within the Northern part of Kenya. They predominantly occupy both East and West Pokot districts of Kenya. The Pokot rely mainly on a diet based on milk, blood and meat. East Pokot is

exemplary for many areas where people depend predominantly on pastoralism and a little agropastoralist livelihoods unlike areas such as Turkana, Samburu, Marsabit, Moyale, Garissa, Wajir and Mandera. However, in the 1970s they started crop husbandry especially on the highlands. The 1980s saw rapid increase in farming activities within the highlands but 1990s and 2000s heralded an increase in the growing of maize even within the lowlands such as Kadingding and Churo. Churo is near Leroghi plateau and receives higher rainfall than the rest of the Nginyang division of East Pokot (Bollig, 2006).

Maize is not particularly adaptable to this region because of harsh climatic condition, the government and some Non-Governmental Organizations (NGOs) have been encouraging the people to plant sorghum or millet that are more adaptable to the lowlands than maize. In order to address cultural, social and political impediments to food security and nutrition, the Government will promote production of traditional crops that can facilitate food access and food security over time. The major perennial shocks in the region include famine, drought, insecurity, and a feeling of marginalization of the people by the mainstream government of Kenya (Agricultural Sector Coordination Unit, 2011).

The hazards among the Pokot have many dimensions and varied as explained below: Population growth that has been identified as a major factor rendering the Pokot to be even more vulnerable. For instance, in 1979 the population of East Pokot was 26,917 and population density was 6 persons per square kilometer (Barrow, 1985). However, by 2009, the Pokot had increased by 400 percent to 118,942 with a density rocketing by almost 500 percent to 29 persons per square kilometer (Kenya National Bureau of Statistics, 2010).

Environmental degradation is another hazard that the Pokot face: the Pokot frequently tell stories to explain degradation and substantiate their observations by detailed descriptions of environmental change. Entitlement decline affect the Pokot: the Pokot experienced entitlement restriction due to actions taken by the colonial governments especially concerning land use and herds of livestock. Livestock disease: the Pokot have developed a complex veterinary system to mitigate this hazard. Perennial Droughts and intergroup violence: among the Pokot, droughts feature most prominently in the oral lore and finally, Intergroup violence: Pokot men seek fame in raiding and pre-colonial warfare has been constitutive for a pastoral Pokot identity (Bollig, 2006). However, Greiner (2013) and Cheserek *et al* (2012) variously attribute intergroup

violence amongst the Pokot to mainly availability of guns, commercialisation of cattle raids and political incitements among others.

According to Cheserek *et al* (2012), cattle rustling are the acts of forceful raiding of livestock from one community by another using guns and leaving behind destruction of property and loss of lives. This concept should be understood alongside cattle raids which involve stealing livestock from one community by another without destroying property or killing people. Traditionally the Pokot community practiced cattle raids with neighbouring communities, using crude weapons such as; sticks, spears, bows, arrows and clubs. These raids were practiced as means of reciprocity, for poor families to acquire livestock and restock particularly after droughts or epidemics. In 1990s this cultural practice transformed itself and is now referred to as 'cattle rustling', with the main weapons used being guns. Prior to 1990 cattle raids were meant to steal livestock, by scaring away their owners, but cattle rustling involves destruction of property and murder. Thus cattle rustling have become a commercial entity along the boundaries of pastoral communities and stolen livestock are never recovered. The cattle rustling menace has left the Marakwet and Pokot to bear the brunt of destruction and murder.

The hazards aforementioned have led to the influx of many humanitarian organizations such as Action aid, Acted, Faith Based Organizations (especially Catholic Diocese of Nakuru - CDN), Kenya Freedom from Hunger, Baringo District Semi-Arid Area Project (BDSAAP) as well as FAO Afforestation Project and the like. The government of Kenya also through her various ministries like Ministry of Northern Kenya, Ministry of Special Programmes, Ministry of Water and irrigation participated in some of the interventions. All these organizations are involved in Food Aid distribution in one form or another perennially. Internationally the World Trade Organization also has the principle of the "right to export' at all costs and the "right to import" food as the best way to ensure food security but nothing much is stated about the food sovereignty in developing countries like Kenya and by extension in East Pokot

Maher (1937:16), states that "Owing to the impossibility of reaching Churo by road owing to the rains, I was unable to inspect the area". This shows how much the environment must have changed since then. He was the Agricultural Officer during this period in East Pokot. He continues, "Acceleration of the deterioration of the grazing lands was caused also by the ravages of locusts in 1927, 1928, 1929 and 1930. These insects by biting out the heart of the grass right

down to the roots caused much grass to die and when the locusts were followed by hungry flocks and herds, the pasturage received a blow from which it never properly recovered. This was impossible." Certainly, this gives some baseline information on the environment of East Suk (East Pokot) as it was during the colonial times (Maher, 1937).

Maize was introduced abundantly as famine relief first in the 1919-1920 (Kandagor, 2010). The Pokot developed diverse ways by which they sustain themselves without this external support. Drought brings with it the pertinent catastrophes such as famine; losses of human lives, of livestock and chronic malnutrition. Dependence on only one grain (maize) in the dry season and the vulnerability to adverse price changes is a pattern noted in other pastoral areas of Africa as well (Little, 2009). This study analysed some of the coping mechanisms, resilience, and indigenous knowledge on food and feeding that when strengthened may ensure the people's food sovereignty in East Pokot District.

Food aid was important in alleviating short term hunger problems during disasters of 1928 to 1933 in the then Baringo district, but its importation had a profound effect on the production and consumption of local grains. Substantial subsidies for European produced maize (an indirect form of food aid) and the complex of support services surrounding that commodity forced out local production of millet and sorghum. While the immediate situation was improved, the long-term effects on food security of massive importation of maize were not favorable for the Il Chamus, the Tugen and the Pokot of the greater Baringo region (Little, 2009). Consumption of wild vegetables (*Solanum* spp., *Amaranth* spp., *nymphae* spp., water lilies) and fish was especially important to the poor and very poor homesteads.

In spite of all these efforts, the food situation in East Pokot continues to deteriorate and the suffering more acute. Given that the people have been living there for centuries even before such food aid supplies came into being, pastoralist communities have developed coping mechanisms to survive the sustained periods of drought. Generally, strategies to cope with disasters may range from the intensified sharing of food within a defined group of people to extended spatial mobility and ritual. Due to the development of closer links to market, the increased sale of assets is an additional option. Reliance on international food aid is becoming increasingly important in many African arid regions (Little, 2009).

Hazards and vulnerabilities undermine the food security situation in East Pokot and also erode the capacity of the Pokot people to enjoy food sovereignty. A country or a community is said to have "food sovereignty" when its people consume safe and nutritious food largely grown by their own small farmers. Significantly fewer countries sustain this sovereignty today than a generation ago. The reigning development model pushed by World Bank (WB) and other experts has left many countries exporting more cash crops like flowers and gourmet vegetables, and importing more of their staple foods like maize, wheat, or rice and Kenya is no exception.

1.2. Statement of the Problem

East Pokot district has experienced catastrophes such as drought, famine, and insecurity for over eight decades since the *Koringring* earthquake and *Katarngany* drought of 1928 and 1930 respectively. This perennial state of high vulnerability has been brought about by both climatic and human activities leading to low productivity of food locally in East Pokot district with more emphasis put on food security through importation. Thus apparently, there is less attention given to productivity from within using locally available resources and potentials. As such, there was need to determine the effects of all forms of Food Aid on the food sovereignty of the people of East Pokot District and the possibility of a paradigm shift from food security via food importation to community empowerment initiatives for enhancement of local productivity. Hence, this study focused on some of the dynamics inherent in food aid distribution to a people with a view to understand, strengthen and promote food sovereignty of the people of East Pokot district. Thus the problem was to find out the extent to which food aid supplies affected people's food sovereignty in East Pokot.

1.3. Objectives of the Study

1.3.1 Broad Objective

To examine the effects of Food Aid on the people's food sovereignty in East Pokot

1.3.2 Specific Objectives

The following were the specific objectives of the study that had been spelt out beforehand:

- i. To establish the traditional coping mechanisms of the people of East Pokot during famine before the advent of Food Aid.
- ii. To examine the effects of Food Aid on the attitude and practice of the people of East Pokot towards their own Food Sovereignty.
- iii. To determine the people's perception of the environmental changes with regard to their access to and use of wild food in East Pokot district.

1.4. Research Questions

The following were the research questions of the study, which were directly derived from the specific objectives of the study:

- i. Which traditional coping mechanisms were used by the Pokot people to mitigate the effects of famine before the advent of Food Aid?
- ii. What effect does Food Aid have on the attitude and practice of the people of East Pokot district towards their own Food Sovereignty?
- iii. How do the people of East Pokot district perceive environmental changes and how these changes have impacted their access to and use of wild food?

1.5. Justification of the Study

This study examined the effects of food aid on the food sovereignty of the people of East Pokot with reference to the inhabitants of Mondi and Nginyang administrative Divisions hence:

First, in addressing itself to the core issue of food aid and its effects, this study contributes towards inspiring and motivating the people of East Pokot district to critically think and recognize dependency syndrome that is perpetuated by perennial food aid phenomenon. Food security as defined by World Trade Organization gives multinationals/foreign countries with surpluses an opportunity to find market for their surpluses as they paralyze local productivity and entrench overdependence on external sources.

Second, by exploring food sovereignty potential as revealed by the indigenous knowledge of the Pokot, their attitudes and practices, this study informs and adds to the body of knowledge about the possibility of incorporating some of the positive aspects of the indigenous knowledge into strategies geared towards ensuring food sovereignty in East Pokot district. Such an effort ensures that agricultural and food policy makers come up with policies that employ people friendly approaches and relevant technologies.

Third, the study provides relevant and valuable information to the government, multinationals, NGOs, and other stakeholders that can help in channeling the aid into ways that guarantee sufficient nutritious and culturally acceptable food from within. The amount of resources used during emergencies to provide food aid are by far more than the amount that would be required to empower the people to produce and consume their own food in any locality through own efforts. Since 1930s the current Baringo County has always suffered hunger perennially and food aid has always been provided to the people. Several organizations like the Catholic Diocese of Nakuru, Action Aid, Kenya Red Cross Society (KRCS), Acted, Kenya Freedom from Hunger and the like are also active in food aid provision in East Pokot. This has been going on for a long time now as per the findings and sustainability of the supply of this food aid is not guaranteed.

Fourth, this study helps in identifying the locally available safety nets that can ensure resilience of the people themselves even under adverse environmental conditions: by studying the environmental changes that have occurred in the recent past and its effect on food system in East Pokot, and how such changes have impacted the sources of food including both domesticated and the wild foodstuffs. The study enhances environmental awareness and conservation measures and also stirs up the interest of the respondents and stakeholders to use available cultural measures as well as strengthen such efforts with modern methodologies as needs necessitate.

Finally, the study goes a long way into providing the Kenya government, the Faith Based Organizations, and other Non-Governmental Organizations working in this district with vital information on the effects of all their well-intentioned efforts has had the people's ability to produce and consume their own food. It also explored other sources of food such as the wild foods whether tubers, fruits, vegetables or even animals. By exploring the coping mechanisms with famine and draught before the advent of food aid and environmental changes, it informs and strengthens the strategies that can be used to establish food sovereignty in East Pokot district by all stakeholders.

1.6. Scope and Limitation of the Study

The study was conducted in East Pokot administrative district, Baringo county of Kenya in the months of March and April 2012. Only the effects of food aid on the food sovereignty of the people of East Pokot as guided by the research questions was considered. Even though provision of food aid is a common phenomenon in the Arid and Semi-Arid Lands (ASALs) of Kenya, this study concentrated only in East Pokot district, which is predominantly inhabited by the Pokot ethnic community of Kenya. The study zeroed in on the food aid that is supplied by the government of Kenya, NGOs, and other multinational organizations from outside the district under study. That is, direct food based transfers such as general rations, food-for-work, food for assets, supplementary feeding or vulnerable group feeding, school feeding, food subsidies, cash transfers and vouchers (including school or user fee waivers). But it did not consider the cultural food aid systems within the Pokot culture (e.g. *omisyo monung*- food for children) as part of food aid under study. This is because according to the Pokot culture it is a way of sharing not necessarily because of food shortages (Bollig, 2006). It is in-built into the Pokot food system and is a form of insurance. During the interviews, the respondents corroborated that the person, who has asked from you, is a partner from whom you can also borrow any time you are in need.

Language barrier was a limitation that hindered direct and quick communication between the researcher and the respondents. Nevertheless, the effect of this limitation was mitigated by employing three interpreters who also acted as guides from the same locality. They were able to interpret and they also guided the researcher from one homestead to another as need arose. My interpreters had good rapport with the men and there was no major challenge convincing the men to agree to be interviewed.

It is probable that the data that were collected were likely to suffer from retrospective or recall biases and from other biases determined by the demand characteristics of the interview. For example, people may modulate and finesse what they say in order to shape it to what they understand to be the context of the interview (Gomm, 2008). To solve the problem of recall biases, the data was coincidentally collected sometime after the food aid was brought and both statistical and thematic analyses of qualitative interview were used promptly as data was collected.

1.7. Definition of Terms

Agro-pastoralists: A people who practice both agriculture (crop farming) and livestock

keeping as their means of livelihood

Attitude: General and enduring positive or negative feeling/affect about some

person, object or issue

East Suk: Derogatory term for East Pokot (during the colonial era).

Food Aid: Food that is supplied often freely by the government, Faith Based

Organizations or other Multinational corporations to people who are food

insecure so as to mitigate their suffering from hunger

Food Security: The physical and economic availability of acceptable, good quality food at

the right time, in the right location and of the right quantity

Food Insecurity: Shortage of food in quantity and quality

Food sovereignty: The capacity of a community or country to be in charge of producing and

consuming their own food using family-owned sustainable farms, fair prices for farmers/pastoralists and strong local food systems, so that

everyone has access to safe, nutritious, culturally appropriate food from

within their own territory)

Household: One person or more persons, who look for food/food aid, cook, eat, and

live together as a unit

Indigenous Knowledge: Traditional knowledge systems

Pastoralists: A people who exclusively depend on livestock for their livelihood, whose

staple food consist of meat, blood and milk.

Traditional Coping Mechanism: Mitigation measures used by the Pokot people traditionally

before the supply or the coming in of food aid began in East Pokot

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1. Introduction

This section provides a review of already done works related to food security as well as food sovereignty, possible effects of food aid on people's attitudes, coping mechanisms of people with famine situations, indigenous knowledge, and some impact of environmental changes on food production. The information about the Pokot as a people is streamlined into the entire review.

Hart (2003) states that the keys to a successful search are: planning the search, acquiring knowledge of the tools by which knowledge is organized and made retrievable, maintaining accurate records, selecting potentially useful items and reading them to extract relevant information, including argument, data, theories, concepts and definitions. On the other hand, Kathwohl (1985) explains that Theoretical Framework shows the interdependence of decisions and allows conscious and controlled decision making for the overall benefit of the study. In this study, the guidelines offered by both Hart (2003) and Kathwohl (1985) were taken into consideration.

2.2.1(i) Food Security vis-à-vis Food Sovereignty

The concept of food security has as many dimensions as the effects it has on humankind. Food security is the access by all people at all times to enough food for an active and healthy life. The definition of food security has broadened since the term first came to prominence in the 1975 World Food Conference. Discussions on food security of mid and late 1970s were strongly influenced by shortfall in the world food production and run-up in prices early in that decade.

Transitory shortfall in aggregate food supply: Initially, food security meant avoiding transitory shortfall in the aggregate supply of food. By early 1980s, the famines striking Africa took place in a world awash in grain. Clearly, the inadequate levels of global food supply were not the cause of hunger. So attention shifted to the lack of access to food by households and individuals due to low incomes (entitlements) as a cause of food insecurity, and other research has shown that for most of the hungry in the world, this lack of access is chronic not transitory. Thus, the conceptual understanding of food insecurity has gradually evolved over the past fifteen years to include not only transitory problems of inadequate supply at the national level but also

chronic problems of inadequate access and unequal distribution at the household level (Staatz *et al*, 1990).

Entitlement relations in access to and unequal distribution: Inadequate access and unequal distribution can be brought about by entitlement. Ownership relations are one kind of entitlement relations. According to Amartya (1982:1), "It is necessary to understand systems within which the problem of starvation can be analysed. This applies more generally to poverty as such and more specifically to famines." Each link in the chain of entitlement relations "legitimizes" one set of ownership by reference to another or to some basic entitlement in the form of enjoying the fruits of one's own labour.

Types of entitlement relations: Entitlement relations accepted in a private ownership market economy typically include the following among others:

Trade based entitlement (Exchange entitlement): one is entitled to own what one obtains by trading something one owns with a willing party or multilaterally with willing parties. Production based entitlement: one is entitled to own what one gets by arranging production using one's owned resources or resources hired from willing parties meeting the agreed conditions of trade. Own-labour entitlement: one is entitled to one's own labour power, and thus to the trade-based and production-based entitlements related to one's labour power. And finally, Inheritance and transfer entitlement: one is entitled to own what is willingly given to one by another who legitimately owns it, possibly to take effect after the latter's death (if so specified by him or her) (Amartya, 1982). All these entitlement relations that govern possessions when strengthened in East Pokot there is likely to be guaranteed food sovereignty.

Food Availability Decline (FAD) Approach to Famine: Amartya (1982:63) elucidates the illusionary premise on which food aid provision is buttressed in various incidences of famine by aid agencies. "The most common approach to famine is to propose explanation in terms of food availability decline (FAD). This FAD approach has been extensively used to analyse and explain the Bengal famine of 1943 and others. It seems safe to conclude that the disastrous Bengal famine was not the reflection of a remarkable overall shortage of food-grains in Bengal. FAD is a specific hypothesis much used in the literature and deserves to be examined on its own terms rather than being rescued by redefinition. On its own terms, FAD stands rejected"

A person's ability to command food - indeed, to command any commodity he wishes to acquire or retain - depends on the entitlement relations that govern possession and use in that society. It depends on what he owns, what exchange possibilities are offered to him, what is given to him free, and what is taken away from him e.g. a craftsman producing *akala* sandals in Nginyang, may have his food entitlement squashed if the demand for sandals fall sharply, or if the supply of tyres becomes scarce, and starvation can occur with food availability in the economy unchanged. Therefore it is the totality of entitlement relations that govern whether a person will have the ability to acquire enough food to avoid starvation, and food supply is only one influence among many affecting his entitlement relations.

Food Sovereignty and entitlement relations: However, the main advantage of the entitlement approach rests not in simplicity as such, but in providing a more comprehensive account of a person's ability to command commodities in general and food in particular. This study examined Food sovereignty and addressed itself to the entitlements and not merely the supply of food to members of a community since Food sovereignty is reportedly a more sustainable approach to famine situations like East Pokot.

Food Security: Kabiru and Njenga (2010:108), define food security as "involves the provision of adequate food for use at household and country level. Factors influencing food security are weather, income levels, infrastructure, storage facilities, availability of loans and credit facilities, use of modern scientific farming methods and availability of markets." Poor state of all these factors and more are being experienced in East Pokot.

It is clear from these discussions and also as was corroborated by the findings of this study that much emphasis was on the supply side of the food situation with little or no attention to the demand side or even entitlements of the equation, where the people themselves (the recipients) were currently. This study was geared towards this side of the phenomenon and examined the situation and attempted to understand it guided by the Rational Action Theory.

Further, shortfalls in domestic supplies of grain, resulting in massive commercial or food aid imports may represent real food insecurity to those decision makers concerned about the overall foreign exchange position of the importing country or its ability to retain its sovereignty in the face of pressure from its food suppliers. Thus food security within a country that is ensured

through external suppliers is more or less another form of slavery that undermines the sovereignty of a nation leave alone food sovereignty of the people.

However, Njuguna and Mwangi (2009:53), brings out some perspective in their definition of food security that resonates very well with the situation in East Pokot as it goes beyond mere availability. They state, "...This means ensuring constant availability of food even when there is drought; it is food for today and future-this also means being able to feed people for a long period of time." Here they introduce the element of sustainability. The findings of this study is that the people view that 'constant availability of food even when there is drought" in terms of increased and sustained food aid provision. As rational human beings, majority of the people in East Pokot prefer the easier way of meeting their food needs through food aid as opposed to empowerment to start producing on their own according using their entitlements.

Nevertheless, Amartya (1981:37) explains that entitlements approach has some limitations such as ambiguities in the specification of entitlements, concentrate on rights within the given legal structure in that society, some transfers involve violations of these rights e.g. looting or brigandry and finally peoples actual food consumption may feel below their entitlements for a variety of other reasons eg ignorance, fixed food habits, or apathy. In concentrating on entitlements, some of the total reality is obviously neglected in our approach, and the question is how important these ignored elements happen to be and how much of a difference is made by this neglect.

According to Oirschot *et al* (2003:8), food security is the "physical and economic available of acceptable, good quality food at the right time, in the right location and of the right quantity". The major constraints to food security include the following: Low incomes (socio-economic status) reducing access- in certain cases this can be combined with impacts of urbanisation and low Government revenues reducing salaries; Skewed income distribution with many poor people and few rich; Lack of market information or poor market infrastructure; Limited knowledge on post-harvest processing and limited infrastructure and availability of financing; Political instability and natural disasters; Trade barriers between counties; Changing food habits/taste and taboos e.g. preference for bread from wheat whereas millet is an important crop in semi-arid areas; Weak policy environment for non-export crops including poor agricultural planning (off season hunger, poor distribution systems, use of strategic storage of commodities); Poor health

can reduce access to foods. Other problems associated with food insecurity are HIV/AIDS, malaria and general nutritional status; and the know-how among small farmers on agricultural planning, post-harvest handling and processing is poor.

Food Security and Food Availability: There is some slight difference between food security and food availability. Agriculture is an important but not a sole condition for food availability. Similarly self-sufficiency cannot be equated with food availability; this would only happen on a very small scale for subsistence farmers (Oirschot *et al*, 2003). This study looked at the effect of food aid on the people's food sovereignty not food security per se. For that reason, an effort was made into finding out the effect of food aid not on the availability of food per se but also on food self-sufficiency of the people of East Pokot. The problem was how to move from uncoordinated small scale subsistence food production to a wider system that ensures both food security and food sovereignty. Food can be available but not accessible. And food can also be available and accessible lacking in self-sufficiency. Food sovereignty can sort these technicalities out effectively with a change in attitude.

There are three major constraints to ensuring availability of food for a people and these include: (a) political related, (b) those related to health e.g. HIV/AIDS and (c) those related to a lack of inputs. These inputs include infrastructure, credit, sustainable and appropriate technologies. In addition to these three issues, there are a number of overarching factors that include rural to urban migration, changing attitudes of the youth towards Western cultural attitudes and the issue of scientific capacity in many countries in sub-Saharan Africa to provide new knowledge and information. In this regard, this study anticipated that if these major constraints were addressed in East Pokot then there will be no need for perennial food aid within the district.

Certainly, there is need to consider both institutional and technological interventions in order to improve food availability. Institutional issues include technology transfer, financial support, political stability (peace and security especially in East Pokot), training and research as well as the wider enabling political environment. The technological issues included the need for low cost preservation systems, improving the efficiency of the food chain, training, use of sensitivity analysis in priority setting, technology transfer, risk management for small-scale processors, development of appropriate technologies for small-scale farmers, use of appropriate

biotechnology under African control and optimising the use of indigenous foods and technologies (Oirschot *et al*, 2003). Therefore, this study explored the available indigenous foods in East Pokot as well as possibilities of wild food usage as a means to food sovereignty especially during drought and famine. The findings are impressive and are explained in chapter four of this study.

Food sovereignty is the right of peoples to define their own food and agriculture; to protect and regulate domestic agricultural production and trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self-reliant; to restrict the dumping of products in their markets; and to provide local fisheries- based communities the priority in managing the use of and the rights to aquatic resources. Food Sovereignty does not negate trade, but rather it promotes the formulation of trade policies and practices that serve the rights of peoples to food and to safe, healthy and ecologically sustainable production (Windfuhr and Jason, 2005:11). According to Bollig (2006), the flour and beans received as food aid has not been fully incorporated into the Pokot food systems in terms of how it should be shared unlike the slaughtered livestock that is fully entrenched.

Food sovereignty, as a critical alternative to the concept of food security, is broadly defined as the right of local peoples to control their own food systems, including markets, ecological resources, food cultures, and production modes (Wittman, 2011). Food sovereignty concept supports a type of agriculture called agro-ecology that works with nature, rather than against it. The concept of food sovereignty seeks diversified agriculture that protects and advances biodiversity, small-scale farmers who identify themselves as environmental stewards, localized food systems, organic and sustainable methods and agriculture for food over fuel production. The spirit of this study is that the government of Kenya has a significant role to play in formulating food policies that will promote food sovereignty and eliminate dependence on food aid not only in East Pokot but in the whole country.

According to Desmarais (2007), food is a basic human right and all peoples and states must have the right to define their own agricultural and food policies to ensure domestic food security and the wellbeing of its farming population. Food sovereignty means that people have the "right to produce our own food in our own territory" in ways that enhance the environment and people's cultural values. Food sovereignty means ensuring that peasants, small scale farmers,

and rural women have the right to all resources necessary for producing food; they must have greater access to and control over land, seeds, water, credit and markets. Food sovereignty requires far reaching genuine agrarian reform. Moreover, food sovereignty is only possible with the democratic control of the food system and recognition that "cultural heritage and genetic resources belong to all humanity". This means that all life forms – including plants and animals must be protected from patenting (as is the case in hybrid seeds manufactured by seed companies), leaving farmers at the mercy of such companies for exploitation.

Food sovereignty centres on the production of food and those who actually work the land. Hence it goes beyond the common understanding of food security as guaranteeing that an adequate amount of food is produced and made accessible to everyone. Instead, food sovereignty deals head on with questions of what food is produced, where it is produced, how it is produced, and at what scale it is produced. Thus food security cannot be reached without food sovereignty and a paradigm shift to the concept of food sovereignty becomes almost inevitable. Whereas WTO's guiding principles are the "right to export" at all costs and the "right to import' food as the best way to ensure food security in any food deficient country, food sovereignty as a principle prioritizes local production for local consumption (Desmarais, 2007).

Rosset (2006), gives a classical illustration (Table 2.1 below) of the distinctions between the dominant model as championed by WTO through the Agreement on Agriculture (AoA) and other post General Agreement on Tariffs and Trade (GATT) conventions.

Table 2.1: Dominant Model versus Food Sovereignty Model

Issue	Dominant Model	Food Sovereignty
Trade	Free trade in everything	Food and agriculture exempt from trade
		agreements
Production priority	Agro-exports	Food for local markets
Crop prices	"What the market dictates" (leave the	Fair prices that cover costs of production
	mechanisms that enforce low prices	and allow farmers and farm workers a
	intact)	life with dignity
Market access	Access to foreign markets	Access to local markets; an end to the
		displacement of farmers from their own
	***************************************	markets by agribusiness
Subsidies	While prohibited in the Third World, many	Subsidies are ok that do not damage other
	subsidies are allowed in the U.S. and Europe, but are paid only to the largest farmers	countries via dumping (i.e., grant subsidies only to <i>family</i> farmers, for direct marketing,
	but the part only to the targest farmers	price/income support, soil conservation,
		conversion to sustainable farming, research,
		etc.).
Food	Chiefly a commodity; in practice, this means	A human right: specifically, should be
	processed, contaminated, food that is full of	healthy, nutritious, affordable, culturally
	fat, sugar, high fructose corn syrup, and toxic residues	appropriate, and locally produced
Being able to produce	An option for the economically efficient	A right of rural peoples
Hunger	Due to low productivity	Problem of access and distribution, due
		to poverty and inequality
Food security	Achieved by importing food from where	Greatest when food production is in the
	it is cheapest	hands of the hungry, or when produced
		locally
Control over productive resources (land, water, forests)	Privatized	Local, community controlled
Access to land	Via the market	Via genuine agrarian reform
Seeds	Patentable commodity	Common heritage of humanity, held in
Secus	Tatentable commodity	trust by rural communities and cultures;
		"no patents on life"
Rural credit and investment	From private banks and corporations	From the public sector, designed to
	Trom private came and corporations	support family agriculture
Dumping	Not an issue	Must be prohibited
Monopoly	Not an issue	The root of most problems
Overproduction	No such thing, by definition	Drives prices down and farmers into
•	<i>C,</i> •	poverty; we need supply management
		policies in U.S. and E.U.
Farming technology	Industrial, monoculture, chemical-	Agroecological, sustainable farming
2	intensive; uses GMOs	methods, no GMOs
Farmers	Anachronism; the inefficient will	Guardians of culture and crop germplasm;
	disappear	stewards of productive resources;
	**	repositories of knowledge; internal market
		and building block of broad-based; inclusive
Urban consumers	Workers to be noid as little as possible	economic development
Urban consumers Genetically Modified Organisms	Workers to be paid as little as possible The wave of the future	Need living wages
Genetically Modified Organisms (GMOs)	The wave of the future	Bad for health and the environment; an unnecessary technology
Another world (alternatives)	Not possible / not of interest	Possible and amply demonstrated
Source: Rosset (2006:6)	110t possible / not of interest	1 0551010 and amply demonstrated

Source: Rosset (2006:6)

According to Gimenez and Peabody (2008) hunger is the result of a systematic destruction of southern food systems through a series of northern economic development projects. These include: the Green Revolution of the 1960s with marketing of technological packages of hybrid seeds, fertilizers, and pesticides to developing countries in Asia, Africa and Latin America, the

Structural Adjustment Programmes (SAPS) of 1980s and 1990s which was a conditional loan programmes enforced in tandem with World Bank (WB) and International Monetary Fund(IMF) so that LDCs signed IMF agreements to remove their tariff barriers to foreign imports, privatize state corporations and services and dismantle their food marketing boards, which allowed damping of highly subsidized US and European grain surpluses; three, the Free Trade Agreements and the rise of WTO, which was formed in 19995 for global enforcement of market led economic development e.g. WTO AoA restricts government powers to establish agricultural policies and four, expansion of Agro-fuels that exacerbate food-price inflation worldwide.

However, "Promoting resilience is a growing area of interest in development. Resilience is the ability of systems, community or society to resist, absorb, cope with and recover from shocks and stresses ... A resilient community is one in which people can manage risks and recover from shocks such as floods, droughts and violent conflict. It also means people have the ability to adapt to long term trends as climate change in timely and efficient manner without undermining their wellbeing" (Upton and Ibrahim, 2012:6).

2.2.1(ii) Effect of Food Aid on People's Attitude towards Food Sovereignty

Basically, "Food aid is food from external source for survival. The concept of food aid may include more distant relatives who might for one reason or another be unable to provide for their own sustenance from their own resources through age, illness, displacement, crop failures and so forth " (Singer *et al*, 1987:3). The Food aid may be given in the form of a loan, a credit, a sale below the normal market price or a free gift. It may be offered by governments, by international bodies, by regional institutions, by voluntary groups and agencies or by individuals. Most reasonable people will agree that food aid, if improperly handled, can do more harm than good, and there are plenty of horror tales to testify to that. Food aid can be said to have existed in one form or another for almost as long as society (Singer *et al*, 1987).

An attitude is a general and enduring positive or negative feeling about some person, object, or issue. The feeling of people towards an object or issue greatly influences the way they handle it and whether there will be success or failure. The most widely used measurement device for attitude is the Likart Scale (Worchel *et al*, 1991). This study interrogated the effect that food aid

has had on the recipients' attitude towards their own food sovereignty with interesting findings (See Chapter four).

O'Donnell (1994), states that there is likely to be no sudden change in attitudes as a result of exposure to the media or to a situation. However, there is what has been called the "drip effect"; constant repetition tends to familiarize us with the idea that certain types of behavior, perhaps violent or promiscuous are normal. Thus this study was an exploration of the effects of repetitive reception of food aid has had on the people's attitude. Such a study has been done in other areas of life such as in effects of mass media, advertisement but not about food aid provision specifically.

According to Fonte (1991), in primitive societies [sic], food is not like any other good. The rules which govern its exchange are completely specific; indeed, food is often not exchanged at all within the group, as it is the foundation of its identity and solidarity. The groups designated "the other" or "different" are described pejoratively as eaters of food regarded as inedible by the "us" of the group. On the contrary, food that is a taboo for a group may be an item of exchange with other groups. Food aid (mostly corn) is produced in large scale in US not for human consumption but for livestock and horses. It is unfortunate that when corn arrives in Kenya, it erodes food sovereignty prospects of Kenyans. Food deserves to be treated with the uniqueness it demands and not as any other merchandise as people quickly develop attitudes towards food and feeding as they get more exposed to them.

Traditional food cannot always be treated as any other thing. Food is a vital element of primary necessity, often symbolic of hearth and home, if not of mother. Compared to other things, food is shared more promptly, more from need. Food transactions are a sensitive barometer, almost a ritual declaration of social relationships and food is used as mechanisms for starting, maintaining and distributing sociability. Even within a large social sector where money is exchanged with other things, food is protected against monetary (counterfeit) transactions and is often shared and rarely sold. In tandem with this is the Pokot culture, where food is not for sale and sharing of food is the norm rather than the exception. For instance, Bollig (2006) propounds that among the pastoral Pokot, all transfers of livestock are accomplished in order to initiate long term relations among two herders. On the one hand this includes the promise of further exchanges of livestock and on the other hand entails strong emotional ties and social support.

Bride-wealth exchange, bride-wealth distribution, stock-friendships, distribution within the descent group, and exchanges between two fixed descent groups stand out as the major institutions of reciprocal exchange. The coming in of food aid in form of other products different from livestock can certainly be said to have created confusion as far as food sharing and handling is concerned.

Food aid has caused a profound transformation in models of production and consumption, often resulting in the disappearance of local products and diets. Although the social effects on domestic organization, food preparation, and "table manners" have probably been considerable and relevant to the developing countries' capacity to guarantee food security, these have scarcely been documented until now. East Pokot is no exception as far as these parameters of consumption and production are concerned. This study analyzes these attitudes and gives recommendations on the way forward.

2.2.2(i) Coping Mechanisms of the Pokot before Food Aid Regime

Pokot language: On language criteria, the Pokot belong to one of the three language families represented in East Africa: Bantu, Cushitic and Nilotic speakers. The Pokot are Nilotic people. The original Nilotic peoples were differentiated into three dialect groups: the River Lake Nilotic, the Plains Nilotic and the Highland Nilotic languages. The Pokot belong to the Highland Nilotic group. The ancestral Nilotic people probably inhabited the southern fringe of the Ethiopian highlands north-east of the Lake Turkana region. They no doubt kept cattle, possibly drunk their blood, and had some type of age-set organisation (Maisonhaute, 2001).

Diet: The diet of the Pokot varies considerably depending on whether they are pastoral (the East Pokot) or agricultural (West Pokot) in origin. Traditionally, in the more pastoral areas, the main diet would be milk, (fresh or soured), blood, and meat together with wild fruits and vegetables. The pastoral Pokot do not show the same disdain for agriculture that other pastoral tribes do e.g. the Maasai (Maher, 1937:16).

During famine: Every community and even individual must have a coping mechanism so as to face the vicissitudes of life. Among the people of Pokot generally food-ways during famine predominantly consists of slaughtering, sharing, and substitution. The change in dietary habits is an important strategy which is applied early on to cope with famine. More animals are

slaughtered than usual, food is shared more intensively, and / or every day food is substituted with less preferred food (Bollig, 2006).

When milk supplies fall short, market bought cereals make up the major part of the daily food. Intensified spatial mobility is a distinct strategy of pastoral people to cope with a crisis by taking advantage of spatial and temporal structure of resource failure. Diversification is necessary in order to exploit resources that are not affected by drought, epidemics or violence.

Rituals: Diversification in pastoral households ranges from multi-species herding to the so called "ten-cent-jobs" such as brewing, charcoal burning, and the sale of traditional medicine. However coping mechanisms are not confined to material things, according to the findings but also extended to looking for explanations of the misery and hardships. The People of East Pokot try to reduce unpredictability by oracles and attempt to influence the course of events by rituals and or prayers. This study sought to examine the existence or non-existence of these traditional coping mechanisms, which could be either strengthened or transformed through technology to ensure food sovereignty in the district.

2.2.2(ii) Indigenous Knowledge

Mazonde and Thomas (2007:72) define "Indigenous Knowledge (IK) as a body of knowledge belonging to communities or ethnic groups, shaped by their culture, traditions and way of life." The term IK is sometimes used interchangeably with local knowledge, citizen knowledge, traditional knowledge, folk science, and people's knowledge, each with subtle differences, formulated within their own contexts. In the 20th century, IK has been 'muted, rejected and subsequently discovered and celebrated'. The term has nevertheless provoked criticism because IK is seen as static, unchanging, and bounded, whereas in practice it is ever changing and dynamic. IK is mostly tacit as it resides in people's heads, and has for most part, not being codified. It is characterized by no any one single individual can own it as it is a product of culture, tradition and way of life of a community; it is usually passed orally from generation to generation and it usually has potential to provide economic returns to the community that owns it. Certainly, development cannot be meaningful unless IK is integrated into the development process. However, historically, IK has been, and largely continues to be seen as inferior to modern science.

Most communities suffering famine have responded to the crisis a number of times in their history. Famine victims do not respond to stress from a position of ignorance, but from a position of knowledge. They have knowledge of both the stress processes their community suffers and the long term consequences of their individual actions. This traditional knowledge is neither fossilized nor stagnant. It is a means of survival. Traditional wisdom, like any system of knowledge, is constantly evolving, as are the factors causing famine and the political and economic context within which it is set. Can we tap from these traditional wisdom of East Pokot people and ensure food sovereignty in the area and entire Kenya as a whole (Warren *et al*, 1999).

This study interrogated some of the IK about food and feeding systems among the Pokot that when fully incorporated into the development agenda in East Pokot, then a meaningful and sustainable solution to draught and famine can be found in the district and beyond.

2.2.3 Environmental Changes and its Impact on Food Production

According to Njuguna and Mwangi (2009), Food production is the ability to produce or avail adequate food to the community. They state, "There are various factors that determine the availability of food in a given area. These include environmental, geographical location, cultural preferences and consumer knowledge on good nutrition." Environmental matters thus cannot be divorced from food production and food sovereignty issues. Environmental changes directly influence food productivity locally, nationally and internationally as the findings in this study revealed.

Land degradation: Africa's land is suffering from degradation and reduced productivity. The causes of land degradation in the region are climatic variability and management practices, in addition to physical factors, such as the slope of the land and soil structure. The current situation is that approximately 22% of vegetated land in the region (494 million ha) has been classified as degraded, and 66% of this are classified as moderately, severely or extremely degraded according to UNEP 2002. The effects on food security and the anticipated impacts of climate change make land degradation a priority issue for African leaders. In Africa, land tenure and land rights are highly complex and sensitive social and political issues closely linked with poverty and land degradation. Traditional land tenure systems in Africa were developed in accordance with variations in physical

conditions and cultures, although they were largely centred on communal access to resources and sharing of benefits (Boon, 2002).

In the study of people-environment interaction, the acquisition of environmental information, and the use of that information in some form of decision making process, serves as a prelude to overt or "acted out" behaviour. However, the processing and evaluation of environmental information do not influence overt behaviour and human activities directly. These processes operate to change how the mind construes the environment. It is the changed mental construction of the environment that most immediately influences overt behaviour. How a perceiver interacts with an environment to create a mental image of that environment: the information status of the environment influences what the individual comes to know about the real world while the individual's psychological, physiological, and cultural make up determines how that knowledge contributes to the development of an environmental image (Walmsey & Lewis, 1995).

Agro-ecological techniques: When farmers are supported in using agro-ecological techniques—agriculture that works with, rather than against, nature – they can help solve many of the world's environmental challenges: water scarcity and pollution, soil loss and climate change. Agro-biodiversity—protecting domesticated (planted) species in addition to wild species – is a key component of agro-ecology and is essential to combating shrinking biodiversity. When that is done the production and consumption of culturally acceptable foodstuffs will be enhanced sustainably in East Pokot.

2.3. Theoretical Framework

This study had an array of theories that could be used to guide it. However, the main theory that was employed is the Rational Choice Theory otherwise known as the Rational Action Theory (RAT).

2.3.1. Rational Choice Theory

The rational choice theory is cross cutting in the entire study since we are indeed dealing with human beings with rational tendencies and abilities to choose what they feel maximises their utility. This theory is based on the premise that all human beings are rational and tend to make rational choices depending on the scarcity of resources on their environment. The basic

principles of rational choice theory are derived from neoclassical economics as well as utilitarianism and game theory (Ritzer, 1996).

Goldthorpe (2000:115) states, "... I would prefer to call it Rational Action Theory (RAT)... to make it sound more sociology than economics...more important is the fact that analytic primacy in sociology lies with the consequences (intended or unintended) of individual action..." But even if one chooses to call it the Rational Choice theory or RAT, the basic principles of the theory still remains. It is applicable to this study as the action or inaction and even choice or indifference still remains with the people of East Pokot as far as their own food sovereignty situation is concerned. People tend to act in a way that maximises their pay offs. The "law of large numbers" will then ensure that it is the rational tendency that dominates (Goldthorpe, 2000).

Churton and Brown (2010:96) state that:

Social Action theorists argue that human action is based on the interpretations of the social actor. This interpretation is informed by social experience and shred meaning systems developed over time through the interaction process. Human beings are seen as unique owing to their capacity to think. Thinking is both influenced by and influences social interaction. This is through contact with other people and social experiences that people formulate and reformulate their ideas, attitudes and beliefs. A crucial part of this process is reflection whereby individuals examine possible courses of action and their consequences through internal monitoring mechanisms.

Rational Action Theory is more or less a Social Action Theory because both emphasize the part the individual plays in the society and believe that the social world is nothing more than a network of social interactions. If individuals did not assign meaning, act, and interact there would be no social world. Social Action Theory is associated with the work of symbolic interactionists, phenomenologists and ethnomethodologists although aspects of the approach can also be found I the work of Max Weber.

However, Rational Action Theory differs from structuralists, who concede that the mind gives life to ideas but the mind is a product of the society in which it exists so individuals may think they are thinking their thoughts, but in fact they are constrained by structures imposed by the society (Churton and Brown, 2010:88).

Ritzer (1996) explains that the focus in rational choice theory is on actors. Actors are seen as being purposive, or as having intentionality. That is, actors have ends or goals toward which their actions are aimed. Actors are also seen as having preferences (or values, utilities). Rational choice theory is unconcerned with what these preferences or their sources are. Of importance is the fact that action is undertaken to achieve objectives that are consistent with an actor's preference hierarchy. Besides emphasis on the actors' purpose or orientation, rational choice theory also takes into consideration at least two major constraints on action.

The first constraint is the *scarcity of resources*. Actors have different resources as well as differential access to other resources. Without resources the attainment of ends may be difficult or impossible. Related to scarcity of resources is the idea of opportunity costs or those "costs associated with foregoing the next most attractive course of action" An actor may choose not to pursue the most highly valued end if her resources are negligible, if as a result the chances of achieving that end are slim, and if in striving to achieve that end she jeopardizes her chances of achieving her next-most-valued end. Actors are seen as trying to maximize their benefits, and that goal may involve assessing the relationship between chances for attaining the second most-valuable objective.

A second source of constraints on individual action is *social institutions*. An individual will typically find his or her actions checked from birth to death by familial and school rules; laws and ordinances; firm policies; churches, synagogues and mosques; and hospital and funeral parlours. By restricting the feasible set of courses of action available to individuals, enforceable rules of the game – including norms, laws, and voting rules- systematically affect the outcomes. These institutional constraints provide both positive and negative sanctions that serve to encourage certain actions and to discourage others.

The other ideas that are basic to rational choice theory according to Friedman and Hechter include: first is an *aggregation mechanism*, or the process by which the "separate individual actions are combined to produce the social outcome." The second is the growing sense of the importance of *information in making rational choices*. The quality and quantity of information available is highly variable and that variability has a profound effect on actors' choices (Ritzer, 1996).

Therefore, people of East Pokot will be able to make informed rational choices concerning their food sovereignty situation if they are provided with the right information and an enabling environment. The enabling environment must take into cognizance the Pokots' unique Indigenous Knowledge, Environmental changes, the available appropriate technologies, and rich social and cultural systems.

2.4. Conceptual Framework

A conceptual framework is a representation, either graphically or in narrative form, of the main concepts or variables, and their presumed relationship with each other. It is usually best shown as a diagram (Punch, 2008:53). The variable that the researcher wishes to explain is the dependent variable. The variable the researcher expects will explain change in the dependent variable is referred to as Independent Variable, also called explanatory variable (Nachmias *et al*, 2006).

When a concept has been defined in terms of a set of indicators that can be used in empirical research, it is said to have been transformed into a variable. A variable consists of a concept and its indicator(s). A concept is the idea, and the indicator is the item or items on which relevant empirical data can be collected. When an indicator has been devised that gives a theoretically acceptable measure of a concept, the indicator is said to be valid. When the indicator can be used to generate reproducible results, it is said to be reliable (Fulcher and Scott, 2011).

Thus this study is explained by the RAT using the conceptual framework illustrated in words where FOOD SOVEREIGNTY = f (Food Aid + Coping Mechanisms + Use of Wild foodstuffs + Environmental changes + Practices and Attitudes + Modern technologies + Indigenous Knowledge)

This study's Conceptual Framework can be diagrammatically presented in terms of dependent variable, and independent variable as shown in *Figure 2.1* below. Intervening variables such as food surpluses from Developed Countries like United States and other Eurozone countries, the innate philanthropy of these countries and supported by the World Food Policies that encourage Less Developed Countries (LDCs) to import their food to ensure food availability lead to and perpetuate the Food Aid phenomenon. As East Pokot district continues to receive Food Aid, the people are influenced and their attitudes and practice are affected, the decisions that people make

both at individual and community levels are also affected. The decisions made by the people manifest themselves in the actions they take. Ultimately these decisions and actions negatively affect the people's food sovereignty. Without any food sovereignty measures in place, the cycle of food aid and high vulnerability continues and worsens given the existing inputs and persistent environmental changes that take place worldwide and specifically in East Pokot District.

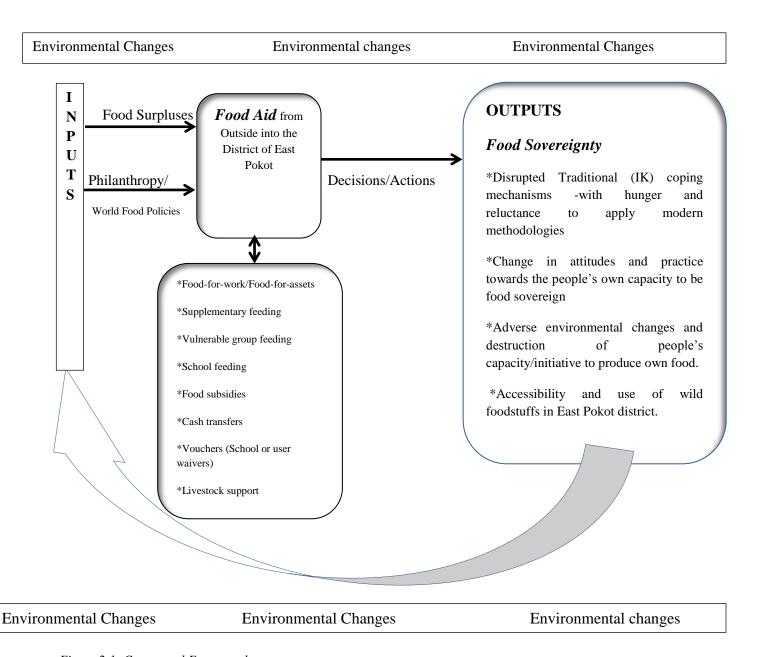


Figure 2.1: Conceptual Framework

CHAPTER THREE METHODOLOGY

3.1. Introduction

This chapter explains how the data was obtained and analysed in this study. Methodology includes a description of research design, sampling techniques, instrumentation and data analysis techniques. It describes in some detail what was actually done and how it was done (Oso & Onen, 2009).

3.2. The Study Area

This study was conducted in East Pokot District, which was curved from the greater Baringo District and is found in Baringo County. The study was carried out between the month of March and April 2012 in Mondi and Nginyang administrative Divisions of East Pokot District in Baringo County.

Ecological zone: East Pokot District is found at the Lower Midland Zone where cotton, sorghum and cowpeas are grown in this area. The production of beef cattle and goats is high in this zone. There is also the inner lowland zone where grazing is the main activity. Camels are more suitable for this region than other types of livestock. Ye-eb nuts (from Somalia) can do well for human consumption (yet from the study there was no indication of such a crop thus it is possible that this crop and its potential had not reached the two Divisions that had been randomly selected). This zone is found at an altitude of 880m and 1000m above sea level and has an average annual rainfall ranging from 300mm - 1200mm – though low, erratic and unreliable both in space and time. The mean annual maximum temperature in the district lies between 25°C to 30°C and occasionally rises to above 35°C (Government of Kenya, 1996).

Vegetation and Land Use: The area under study is generally an open Acacia/ Combretum wooded grassland. Livestock production is the principal land-use economic activity in the area, although there are isolated pockets of cultivable land (Wasonga *et al*, 2003). Cultivation is majorly done in Churo Division with pockets in Nginyang, and Koloa. The Pokot people living in East Pokot District are pastoralists. Nevertheless, some of the Faith Based Organizations, Multinational corporations, and the Kenya Government have introduced crop farming (especially

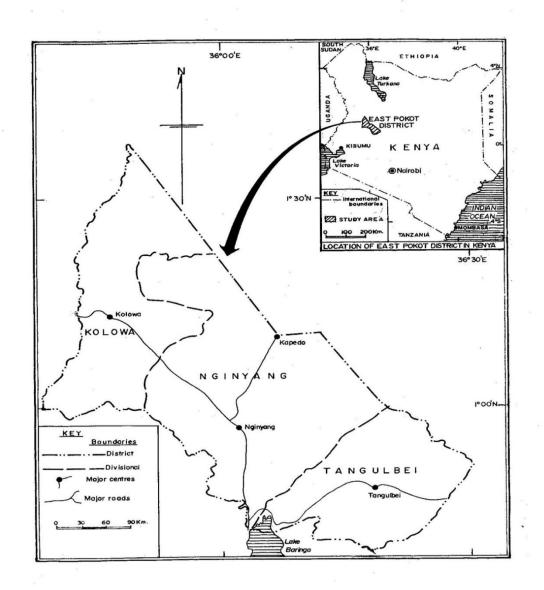
sorghum and millet) and so the Pokot are slowly becoming an agro-pastoralist community (Ityeng *et al*, 2008).

Population and Geographical size: According to KNBS (2010), East Pokot District has a population of 133,189: Males 69,889 and 63,300 females distributed all over the five administrative divisions (Nginyang, Kollowa, Tangulbei, Mondi and Churo) of the district. There were 21,291 households with Nginyang having 3,638 and Mondi 346 households. East Pokot District covers 4,516.8 square kilometers with an average population density of 29 persons per square kilometer. East Pokot is located within the erstwhile Rift Valley Province with a population of 10,006,805 according to the 2009 Kenya Population and Housing Census. Kenyan population was found to be 38,610,097. The population in East Pokot especially those who were 3 years and above and were in learning institutions were 21,586 and heavily skewed in favour of males at 12,285 while there were 9,301 females.

East Pokot District (the Study Area) was chosen purposively due to long history of receiving food aid since colonial times to date yet they have a rich traditional food system. There is harsh climatic condition experienced there due to ASAL conditions, and also because it is within the Rift Valley Region, which is known as agriculturally very productive in Kenya. It was also chosen because many researchers prefer going to West Pokot (West Suk) and other regions in Kenya yet East Pokot is somehow least preferred in the researcher's view.

The Location of the Study area is indicated below on Figure 3.1: Map of Kenya showing East Pokot District

Figure 3.1: Map of Kenya showing East Pokot District



SOURCE: Kenya Administrative Boundaries Map SK 81A at 1:1000000, Edition 4 of 1998

3.3. Research Design

According to Punch (2008:142), research design is the overall plan for a piece of research, including four main ideas: the strategy, the conceptual framework, the question of who or what will be studied, and the tools to be used for collecting and analysing empirical materials. In this

study Descriptive research design was used. Mugenda and Mugenda (2003) state that descriptive research is a process of collecting data in order to test hypotheses or to answer questions concerning the current status of the subjects of study and that descriptive research is a social research with the primary aim of describing rather than explaining particular phenomenon. Neuman (2011) has explained descriptive research as one in which the primary purpose is to "paint a picture" using words or numbers and presents a picture of the specific details of a situation, social setting or relationship. The researcher selected descriptive design because it was the most suitable since the data collected were predominantly qualitative in nature.

3.4. Unit of Analysis

In this study, the unit of analysis was the household and the respondents were adults (heads of household and key informants) within the East Pokot District.

3.5. Population and Sampling Procedure

This study was conducted among adults (heads of household and a few key informants) inhabiting two of the five administrative Divisions of East Pokot District (i.e. Mondi and Nginyang Divisions). This was because heads of households, the elderly and local chiefs are the custodians of information according to the Pokot culture. The population in this study was 2,984 (KNBS, 2010) households within the two divisions studied while the sample size consisted of Heads of Household (both men [88] and women [81]) who do receive and consume food aid and are also responsible for decision making within their households and community. This gender parity though not intended at the outset of the study, was a good outcome for a balanced data. Generally, population is the aggregate of all cases that conform to some designated set of specifications (Nachmias and Nachumas 2006). The research was of the view that the use of heads of household alone might not have offered sufficient information because some of them were too young (due to early marriages) to know some of the variables such as traditional coping mechanisms that the research was interested in. In this study, the key informants were men and women who were leaders or elderly (about 61 years and above).

The sample consisted of 169 heads of household and key informants selected from the two administrative Divisions of Nginyang and Mondi in East Pokot District. The objective of

selecting key informants in this study, who consisted of 26 respondents who were 61 years and above as well as two local chiefs and one clergy of a local church was to ensure representativeness of the sample. The same interview schedule was administered across board to all the respondents. The 169 respondents were deemed sufficient and representative of the entire population. The number 169 was determined according to statistical tables by Krejcie and Morgan where N = 300, an alpha of 0.05 and a degree of accuracy of 0.05 for categorical data (Bartlette *et al*, 2001).

This study employed multistage sampling, simple random sampling, and Purposive sampling techniques. Multistage sampling was used to select the two Divisions of Mondi and Nginyang from the five divisions (ie Mondi, Nginyang, Churo, Tangulbei and Kollowa) of the district and further select two locations within which the research was conducted. Multistage sampling is where smaller areas are progressively selected until the individual members of the sample have been selected through a random procedure. This helped the researcher to select a smaller and manageable geographical area for research. Simple Random Sampling (SRS) was used to select individual Heads of Households for information gathering. It was most suitable because in SRS, all study objects have an equal chance of being included in the study thus ensuring representativeness of the sample and validity.

3.6. Methods of Data Collection

3.6.1. Instruments This study used primary qualitative data predominantly employing instruments that were prepared by the researcher. Semi-structured interview schedule was used. Focus Group Discussions (FGDs) was also employed where there was need to enrich the data collected. According to Flick (2009:195), a focus group interview is an interview with a small group of people on a specific topic. Groups are typically six to eight people who participate in the interview for one-half to two hours. The study was mainly concerned with perceptions, feelings, attitudes, and practices of the people of East Pokot and such information were best collected through tailor-made Semi-structured interviews, and Focus Group Discussions. These instruments enabled the researcher to balance the quantity and quality of data collected and provided more information for a fuller explanation of the phenomena.

3.6.2. Data Collection Procedure

The data was collected from 169 respondents drawn from the heads of household and key informants within Mondi and Nginyang administrative Divisions of East Pokot District using Interview schedules and FGDs. Interview schedules were prepared and pre-tested before the same was administered to the entire sampled respondents (169). The data was collected by the researcher and two interpreters/guides. The interpreters were employed to help with the data collection because the researcher was not very conversant with the local language and culture of the respondents. By engaging the two local inhabitants the researcher was able to create a very good rapport and mutual understanding that greatly enhanced the quality of the data collected.

3.7. Data Analysis

Fulcher and Scott (2011:94) state that "once these data have been collected, however, they must be organized and presented in ways that highlight their relevance for the theoretical interests that inform the research." In this study both descriptive and inferential analyses were performed for a deeper understanding and clarification of the findings. Likert scales were also used to measure attitudes and perceptions of the respondents especially towards Food aid and environmental changes in East Pokot.

Therefore the data collected was edited for accuracy, completeness, uniformity; fill up computations and also for deciphering any illegibility. After editing, the data was codified, classified and tabulated for presentation and analysis. Tables, charts, and graphs were used for data presentation. FGDs data was analysed using the "tell it like it is" common-sense approach and Evidence: the whole context (Hollway & Jefferson, 2004). The data analysis was driven by rationalizing self-descriptions of informants, which were the touchstone for judging the correctness of any description as well as argue for the importance of the whole in understanding a part by thorough familiarization with the rest of the interview transcript.

Thematic analysis of qualitative interviews as articulated by Gomm (2008:239) was employed. Thematic analysis is a version of content analysis. The term is more used for the analysis of written and broadcast materials but content analysis does not have to be quantitative. The analyst looks for themes which are present in the whole set or sub-set of interviews and

creates a framework of these for making comparisons and contrasts between the different respondents.

The characteristic of qualitative data analysis is that it deals with data presented in terms of words; that it contains a minimum of quantitative measurement, standardization of statistical techniques, and that it aims to transform and interpret qualitative data in a rigorous and scholarly manner (Sarantakos, 2005). Qualitative studies don't report out "data", they report "scenes" – that is, accounts of researchers' engagements over time with informants in their surrounding...rather serve as a corpus from which the researcher actively selects, transforms, and interprets the material at hand (Miles and Huberman, 1994).

Statistical Package for Social Sciences (SPSS) version 20 was used in the analysis of the data in this study as elaborated below: To establish the traditional coping mechanisms of the people of East Pokot during famine before the Food Aid advent, bivariate analysis (Spearman's rho Correlations) was used specifically to determine how the people were surviving before food aid regime and what kept famine away; as well as the relationship between the ages of the respondents and how they understood what kept famine away before the food aid regime. Pearson Chi-Square was used in the examining of the effect of Food Aid on the attitude and practice of the people of East Pokot towards their own food sovereignty. Chi-Square Tests were carried out in testing how people responded to the question on Food aid being stopped and the people helped to produce and consume their own food and the possibility of East Pokot being food sufficient from January to December according to the respondents. The same Pearson Chi-Square Tests were performed to determine the relationship between people's perception of the environmental changes with regard to their access to and use of wild food in East Pokot. The question of concern was whether in the perception of the respondents environmental changes have occurred and to what extent these environmental changes have influenced their consumption of wild foodstuffs.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

This chapter presents the data, discusses the findings and analyses the same in the ways justified in chapter three above. The data in tables are carefully set out, checked and discussed briefly (Chowdhury, 2007). That is, this chapter discusses the findings by drawing out main achievements and explains the results. It also makes links between objectives, and findings and the literature. This section further seeks to discuss what, specifically, the results mean; their interpretation and what the findings tell about the research questions. Besides, an endeavor has been made not to claim more for the results than the data really shows without any speculation.

This chapter has been divided into three sections according to the objectives. These include section 4.1.1 Results and Discussions of the Traditional coping mechanisms of the people of East Pokot during Famine; Section 4.1.2 Results and Discussions on the Attitude and Practice of the Pokot towards their own Food Sovereignty and Section 4.1.3 Results and Discussions on the Pokot perception of environmental changes, access to and use of wild foodstuffs.

4.1.0 Socio-economic characteristics of the respondents

The sampled respondents were from diverse backgrounds, sexes and social economic statuses. This scenario thus necessitated the presentation of this data in a way that can help us get an overview and also appreciate the diversity for a deeper understanding. The main reason for this subsection was to acquaint the reader with some socio-economic background of the respondents that would go a long way into contextualizing the study. The results showed that the respondents generally had socio-economic characteristics as shown on the table below with different subsections:

Table 4.1: Socio-Economic Characteristics of the respondents

Characteristic	Male (Figures)	Female (Figures)	Overall (Figures)	
a) Age: 30 Years and below	13	21	34	
31 - 40	25	14	39	
41 - 50	15	27	42	
51 - 60	18	10	28	
61 – above	17	9	26	
TOTAL(Figures)	88	81	169	
Marital Status: Married	82	71	153	
Widowed	2	3	5	
Single	2	3	5	
Others	2	4	6	
TOTAL(Figures)	88	81	169	
c) Land ownership:				
Community	20	16	36	
Private individuals	67	63	130	
Private/Community	1	2	3	
TOTAL (Figures)	88	81	169	
d) Livestock: 1st line	57	52	109	
2 nd line	19	5	24	
No livestock at all	12	24	36	
TOTAL(Figures)	88	81	169	
e) Cultivation:				
Once a year	42	19	61	
Twice a year	2	0	2	
Never	7	1	8	
Do not know/Not applicable	37	61	98	
TOTAL(Figures)	88	81	169	
f) Other sources of income:				
Selling faggots, grass or water	8	22	30	
Brewing and selling alcohol	1	21	22	
Farming	1	0	1	
Buying and selling livestock	7	2	9	
Employment/Kiosks	14	7	21	
Various odd jobs not specific	9	5	14	
No any source of income	39	18	57	
Depend on relatives/others	4	5	9	
Others	5	1	6	
TOTAL(Figures)	88	81	169	

Source: Field data

Gender Balance (*Table 4.1 above*): In this study, 88 males and 81 females were interviewed constituting 52 per cent and 48 per cent respectively of the total sample size (169). This gender balance ensured that the results captured had a balanced view of both males and females almost in equal measure.

Age cross tabulations (*Table 4.1(a above*): The ages varied from 20 years to 85 years with the modal ages being 31 and 50 years. The majority (115 or 68 per cent) of the respondents were 50 years and below and (36% or 26) were 61 years and above.

Marital statuses (*Table 4.1(b*): The majority (91 per cent or 153) was married, three (3) per cent were single, three (3) per cent were widowed and four (4) per cent were either divorced or separated. Of the married respondents, more men than women were married. It would be thought that under harsh social, economic and environmental conditions marriage would be the last thing in people's minds, however, it emerged that marriage was one of the most useful coping mechanisms amongst the Pokot. Marriage appeared to be a coping mechanism since marriage ensures that both the husband and wife or wives support one another in foraging for food for the entire family. This study found out that there were myriads of ways that the people of East Pokot used to cope with droughts and famines before the NGOs and the Government of Kenya started bringing in Food aid into the district.

Land ownership ($Table\ 4.1(c)$): The majority of the respondents (77 per cent) stated that the land ownership in East Pokot is by private individuals while 21 per cent indicated that there was community ownership of land. Three respondents or point zero two (.02) per cent were not certain whether land ownership is communal or private.

Livestock (*Table 4.1(d*): The majority (64 per cent) of the respondents had what was described in this study as 1^{st} line livestock which included shoats (sheep and goats), cattle, and chicken. Fourteen (14) per cent of the respondents had what was described in this study as 2^{nd} line livestock which included all the first line livestock plus camels and donkeys. Second line livestock was a reserve for the very rich people. The other finding was that there were another 21 per cent of the respondents who had no livestock at all. For a pastoralist not to have livestock at all is not only unheard of but is also an epitome of extreme poverty and vulnerability.

Cultivation (*Table 4.1(e*): The majority (58 per cent) of the respondents were not cultivating at all since they said the question was not applicable to them in East Pokot. There was 36 per cent who said that in East Pokot cultivation is done normally once a year for those who wish to and another five (5) per cent never even thought of farming. One per cent said they cultivated twice a year.

Other sources of income in East Pokot (*Table 4.1(f)*: The majority of the respondents (34 per cent) had no any other source of income and stated that they depended on the food aid and help from well-wishers. The main source of income for the respondents was selling of faggots, grass and water (18 per cent). Second other source of income was brewing and selling of alcohol (13 per cent) and the third source of income was running of kiosks and some other kind of employment in food kiosks or local schools (12 per cent). However there was some 8 per cent who were depending on doing various nonspecific odd jobs.

A situation where the majority 34 per cent said they had no any source of income is worrying and perpetuates vulnerability and dependence on food aid. The brewing and selling of illicit brews can also compromise the productivity of the people and is also a result of unproductivity due to limited opportunities. As such, the situation in East Pokot was very uncertain.

4.1.1 The traditional coping mechanisms of the people of East Pokot during famine

The results constitute the heart of your report in any study (Davies, 2007). Under Objective One, the results were gathered by administering thirty seven (37) questions in total from the interview schedule. However, just a few of the typical findings have been recorded here below for explanation's sake. Under objective one, the study sought to find out the general coping mechanisms (indigenous knowledge) amongst the people of East Pokot District before the advent of Food Aid. In order to understand the coping mechanisms, the study examined the people's sources of income, staple food, changes in the staple food, what constituted bounty according to the people, food preservation techniques, food situation before the influx of Food Aid, traditional foodstuffs still in use, food preferences of the Pokot, use of wild food, current coping mechanisms, and the people's stand on how food sovereignty could be made possible in East Pokot among others.

For instance, there was need to know if the respondents had other sources of income or livelihood besides Food Aid that was being provided. *Table 4.2* below gives a summary of the findings.

Table 4.2: The respondents' other sources of income

	Frequency	Percentage
Yes	97	57
No	72	43
Total	169	100

Source: Field data

The majority of the respondents (57 per cent) had other sources of income which included selling water, grass, firewood; brewing and selling of illicit brews; general odd jobs; running kiosks among others and only 43 per cent said that they had no any other sources of income (Table 4.2 above). If you compare Table 4.1(f) and Table 4.2 There seems to be some variance of (43-34) 9% which can be attributed to people not knowing where consider, for instance, selling grass as a source of income.

Staple food of the 1950s in East Pokot: To have a glimpse of the livelihoods of the Pokot the study was interested in the historically indigenous staples of the People. Historically, the respondents stated that livestock products were the main source of food in East Pokot (43 percent) Figure 4.1 below.

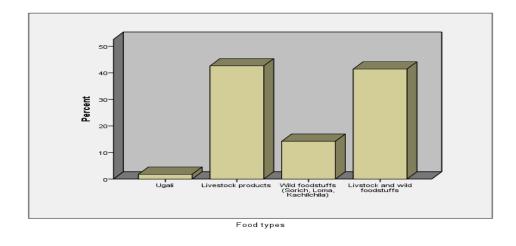


Figure 4.1: The main Food of the Pokot in the 1950s

The results of the study showed that 41 per cent of the respondents could recall that in the 1950s, the staple food of the Pokot constituted of both livestock and wild foodstuffs. Combining the two (both livestock and wild fruits) findings means that 85 per cent of the respondents indicated that in the 1950s the staple food of the Pokot was Livestock products and or wild foodstuffs. Two per cent talked of *ugali* and the rest, 14 per cent propounded that the staple food of the Pokot was wild foodstuffs such as *Sorich*, *loma*, *kachilchila* and the like.

Changes in staple food: According to Kandagor (2010), maize was first introduced in Pokot land around 1919-1920 as relief food. But for practical reasons and ease of remembrance 1950s was settled on. It was important to get the information on the people's understanding of any changes in the Pokot staple food. When asked whether the staple food had changed since the 1950s, the majority of the respondents (95 per cent) affirmed with a "Yes" and only five per cent said "No". The results showed that there was a tremendous change from livestock based food to cereals based with majority (85 per cent) talking of *ugali* as shown in *Figure 4.2* below.

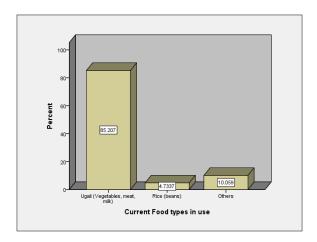


Figure 4.2: Changes in the staple food in East Pokot

The changes in the staple food of the people of East Pokot had started slowly but went on steadily until the livestock based foods are almost out of consideration.

Years of bounty: The study was to find out whether in the recollection of the respondents; there had ever been a time when they had more than enough food within East Pokot and the sources of the food. The results showed that there was a very big change in the staples from livestock based to cereal based especially from the 1980s and specifically in 1984 when the highest number of

food aid was brought in by the Government of Kenya during one of the most vicious famines and droughts in the district. The majority of the respondents (57 per cent) were not able to remember any time in their lifetime when East Pokot had food in plenty. However, 43 per cent remembered a time when there had been food in plenty in East Pokot. Incidentally, they were only able to remember the times during which Food Aid was brought in large quantities by the government of Kenya and NGOs especially Freedom from Hunger and World vision. This implies that plentiful food in East Pokot is synonymous to a more generous provision of Food Aid and not from own local productivity.

Food Preservation amongst the Pokot: Traditionally the Pokot had a rich culture of food preservation as revealed by the findings shown in the Figure 4.3 below. The mode of preservation of foodstuffs, according to the respondents consisted of the use of Kalaar, sun drying, and the making of Soyo from milk (96 per cent).

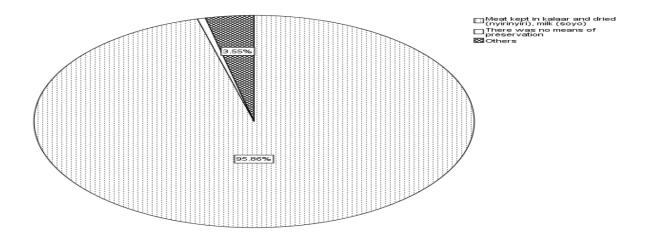


Figure 4.3: Staple food preservation in the past amongst the Pokot

The respondents stated that their current state was that of hand-to-mouth lifestyle where people received Food Aid and eat it all or engage in ceremonies such as circumcisions and *sapana* or just sharing with neighbours. "There is nothing to preserve these days what you get is what you eat and sometimes you stay like that without anything," one of the respondents described. Four (4) per cent talked of lending out livestock to friends during times of plenty to keep and seek it out during drought and famine (*Figure 4.3 above*).

Handling Plenty: The years of plenty were handled in different ways as illustrated in the following (Figure 4.4 below).

The majority (about 58 per cent) were not able to recall any time when they had plenty. However, 23 per cent stated that during plenty the Pokot tend to add more wives and also engage in ceremonies such as circumcision and *sapana* (age-set ceremony). Ten (10) per cent shared with their neighbours during their times of plenty with the understanding that the neighbours would also come to their aid when they were also in need in the future (a form of insurance). Only seven per cent talked of keeping in granaries or preserving in the *Kalaar*.

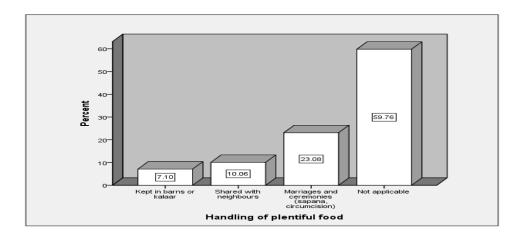


Figure 4.4: Reported handling of years of plentiful food

It appears that human beings as much as they face hardships and near death experiences, immediately the situation stabilizes we forget and revert to our cultural self-indulgences like marriages and other traditional ceremonies.

Food situation before food aid regime: For this study to succeed in meeting the objectives, it was important to get information on the food situation before the Food Aid regime. This was intended to help in understanding what brought about the onset of Food Aid provisions in the District. *Figure 4.5* below shows the results.

The respondents were almost unanimous (96 per cent) that the situation before Food Aid was brought in was very bad and the Pokot were eating wild foodstuffs that were also insufficient,

indulge in livestock raids, and also there were many death cases. Four (4) per cent were of the view that the situation "was normal" since they have never seen any good times.

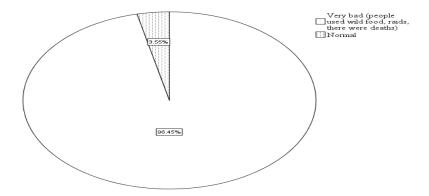


Figure 4.5: Reported food situation before the Food Aid regime

Apparently the food situation in East Pokot district has never improved since the onset of Food Aid even as the climatic condition also deteriorates (see the section on objective three).

Contingency measures the Pokot would take when food aid was stopped suddenly: It was imperative to know how sudden stoppage of Food Aid could affect the people. The results showed that the majority of the respondents (56 per cent) were ready to use wild foods when food aid was stopped. The next largest portion (24 per cent) said that when food aid stopped they were to just die. Fourteen (14) per cent indicated that they were ready to do some businesses such as selling grass and faggots and or sell local brews. Others would just migrate to other places (*Figure 4.6* below).

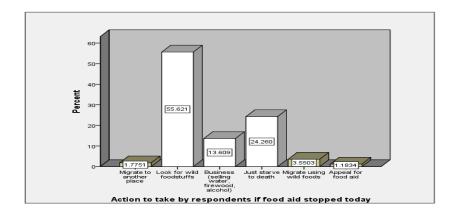


Figure 4.6: Action by respondents when Food Aid was stopped

The result showed that the people regarded the use of wild food in its current state as an option of last resort even as the second majority was seeing starvation to death. There is thus need for mitigation measures before stoppage of the Food Aid provision.

Traditional methods usable today for food sovereignty: The study was interested in finding out some of the traditional coping methods that could be applied in the contemporary times according to the people themselves (see Table 4.3 below).

Table 4. 3: Traditional methods usable today for food sovereignty

	Frequency	Percent	Valid Percent	Cum. Percent
Wild foodstuffs (sorich, lomaa, kachilchila, baboons,)	29	17.2	17.2	17.2
Keep livestock(shoats, camels) and preserve meat	42	24.9	24.9	42.0
None can be used these days	72	42.6	42.6	84.6
Prayers	7	4.1	4.1	88.8
Food preservation methods are still useable	17	10.1	10.1	98.8
Livestock raids from the Turkana	1	.6	.6	99.4
Others	1	.6	.6	100.0
Total	169	100.0	100.0	

Source: Field data

The respondents majorly (43 per cent) were of the view that none of the traditional methods of the Pokot was usable today; since there were no animals in large numbers as in the past. The keeping of hardy livestock like goats and camels got 25 per cent; the reasons given by those who were for hardy livestock seemed to be more realistic as some even proposed that Food Aid should be brought in the form of shoats and camels. Wild foodstuffs had 17 per cent and four (4) per cent of the respondents were of the view that prayers by the community elders could still be used to ensure food sovereignty. Livestock raids and others had the least of one (1) per cent each.

Preferred type of Food Aid to the Pokot: It was possible that the people were being supplied with cereals among others as Food Aid but the people themselves were more interested in Food Aid of a different kind. Thus the question of the preferred type of Food Aid arose and the results were as shown in Figure 4.7 below.

In Figure 4.6 the respondents said that they would use wild fruits as a coping mechanism but when asked whether they were sure the traditional methods could still be applied today they

could not repeat the same standing. This implies that though they would resort to traditional eating of wild foodstuffs, this could not sustain them in their considered view.

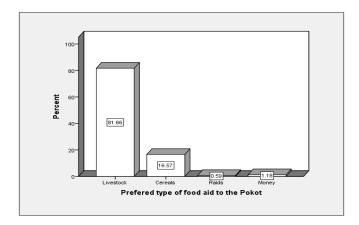


Figure 4.7: Type of Food Aid the Pokot preferred given freedom to choose

The majority of the respondents (82 per cent) preferred food aid in the form of livestock especially camels, goats and sheep due to harsh environmental conditions and resilience of such animals. A sizable number (17 per cent) preferred cereals like maize, rice and beans. One (1) per cent of the respondents preferred Food aid in the form of money; they stated that with money they could start own businesses. Another one (1) per cent stated that livestock raids (cattle rustling) should be allowed as a means of coping with famine. Though the people were receiving Food Aid in the form of cereals and oils, the respondents still wished that the form could be changed into livestock for more satisfaction and relevance- and especially in form of goats or camels.

Main source of food in recent past in East Pokot: For clarification, the study was interested in establishing the main food in the recent past as at the time of the study. *Figure 4.8* below shows that it was predominantly cereals.

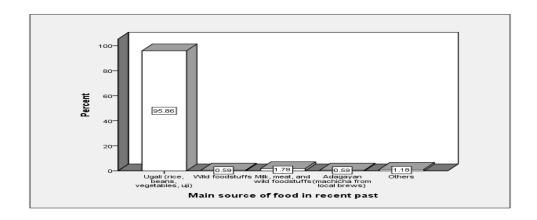


Figure 4.8: The reported main food in the recent past

The change in staple food that was further confirmed when the respondents were asked their main food in the past 14 days as at the time of the study. The majority of the respondents (96 per cent) confirmed that they used ugali with its various accompaniments such as vegetables, beans, meat, and the like. About two (2) per cent used wild foods especially *Sorich* and *loma*. However, there was a small portion of the people one (1) per cent who used *Adagayan* (dregs) from local brews (*Figure 4.8*).

The respondents' view on activities to ensure food sovereignty: This question was intended to find out the respondents' stand on the part they can play to ensure that they had their own food sovereignty holding all other factors constant (*Figure 4.9* below).

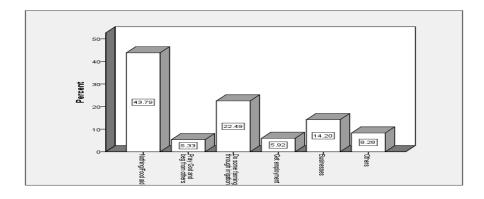


Figure 4.9: What the respondents were ready to do for food sovereignty

Under this question, the majority of the respondents (44 per cent) said that they were not able to do anything but to depend on food aid. Twenty three (23) per cent of the respondents proposed

farming through irrigation schemes if possible, 14 per cent were only seeking for creation of employment opportunities for them and those ready to start their own businesses were eight (8) per cent. There were those who saw prayer as the only way to ensure food sovereignty in East Pokot, six (6) per cent (*Figure 4.9*).

Feeding culture: Who eats first amongst the Pokot? Every people have some culture on food and feeding. This study was intent on finding the Pokot culture as far as feeding was concerned (*Figure 4.10 below*).

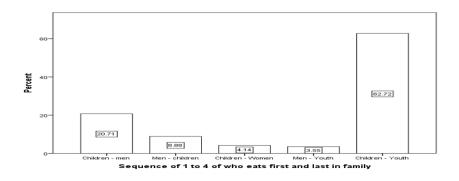


Figure 4.10: Pokot eating sequence of 1 to 4 when food was scarce in a family

It was found out that the children and youth are given priority when food is scarce in a family (63 per cent) of the respondents stated. This was followed by children and men group (21 per cent) and children women (seven per cent) the least combination was the youth and men at four (4) per cent. All the respondents indicated that women were the most unlikely group to be considered in a family setting when food was little. Even the women themselves said that when food was insufficient, they would make sure that the children eat first then the husband and then if there was anything remaining they eat. Indeed some female respondents indicated that they sometimes eat only the ugali that remains on the cooking stick after serving the rest of the family members.

Usage of wild foodstuffs today: To find out the types of food predominantly used during famine and whether wild food would be among those still in use concurrently with Food Aid, the respondents were asked the question and the results were as shown in *Figure 4.11* below

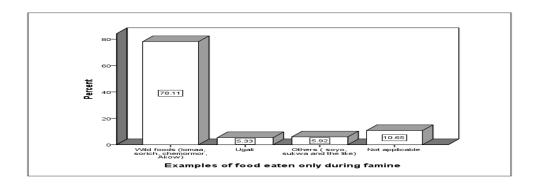


Figure 4.11: Reported Foodstuffs eaten predominantly during famine

The results showed that during drought and famine 54 per cent of the people would use *Sorich* and *Loma*. Five per cent still used *ugali* even during famine and that they were not able to eat wild foods due to health reasons or due to their own taste and preference. Six per cent used *soyo* (preserved milk especial goat milk). The majority who stated that they would use wild fruits on triangulation had not actually eaten the wild fruits in the recent past as at the time of this study.

Respondent's current coping mechanisms: The majority (73 per cent) of the respondents said that their only coping mechanism was Food aid. The next highest was business (12 per cent); were involved in small business enterprises. Education, farming and others had one (1) per cent each (*Table 4.4* below).

Table 4.4: Current coping mechanisms (safety nets) in East Pokot

Coping method employed	Frequency	Percentage
1. Employment/ Casual labour	8	5
2. Business (selling of water, firewood, grass, livestock products)	20	12
3. Depending Food aid only	124	73
4. Trade-in livestock for maize or farming	5	3
5. Eating Wild fruits and food aid	6	4
6. Education of children(so that children could help)	1	1
7. Sell livestock and buy cereals	1	1
8. Involved in small scale Farming	1	1
Total	169	100

Source: Field data

It is noteworthy that the respondents as any rational human beings were using combinations of coping mechanisms but they were being asked for clarification as regards their main coping method and that was what was noted for recording purposes. This method of asking for clarification was used across board in questions of this nature. These findings indicate that there is need for a concerted effort to move away from food aid as the major coping mechanism. The 12 percent who coped by doing businesses, those trading in livestock as well as those employed in casual labour calls for the strengthening of such venture so as to ensure food sovereignty.

Opinions on what one thing could change East Pokot food situation: It was in the best interest of the study to find out what the respondents were yearning for and believed that could turn around their food situation possibly from Food Aid dependent to food Sovereignty. The findings were as shown in Table 4.5 below.

Table 4.5: One thing that respondents felt could change food situation in East Pokot

Item that could improve food situation in East Pokot	Frequency	Percentage
Water/Irrigation/ Farming	43	25
Food aid	91	54
Creation of market for livestock and employment opportunities	4	2
Change of attitude and Education	6	4
Buy for us camels and goats	9	5
Give us capital for starting businesses	3	2
Livestock as food aid especially camels and goats	11	7
Education for our children	2	1
Total	169	100

Source: Field data

According to the majority of the respondents (54 per cent), the one thing that could change the food situation in East Pokot is increased and prompt provision of food aid to the people. This finding was unexpected and was in stark contrast to the spirit of food sovereignty among the Pokot. Substantial number (25 per cent) said that provision of water for irrigation schemes was the surest way to change the food situation in the district. Nevertheless, this option of irrigation schemes definitely requires other investments in community such as education, extension

services, financing, and the like to succeed and avoid failed irrigation projects; a phenomenon that may worsen their food situation- though it is one of the best options. About seven (7) per cent of the respondents said that provision of food aid in the form of livestock especially camels and goats was the best way to ensure their food sovereignty since their staple food had always been livestock and livestock products. Five per cent said that only camels as food aid would ensure food sovereignty in East Pokot because camels are hardy and can thrive even under very harsh climatic conditions like in the case of East Pokot. About (2) per cent wanted the government and the NGOs to give them capital to help them start their own businesses that will not be affected by climatic conditions. One (1) per cent said education of their children when supported by the government and the NGOs was the only way out of famine since "an educated child is like a camel that can be milked all year round" without going dry (Table 4.5 below). Though education for children was only 1 percent, this option deserves much more emphasis since it can provide youth with the skills and capacity to diversify into other livelihood options other than livestock husbandry.

Inferential Statistical analysis for Objective One

It is important to get some more insight into the foregoing results in terms of cross-tabulation statistical analyses of the findings. It is noteworthy that the first objective of this study was to establish the traditional coping mechanisms of the people of East Pokot during famine before the advent of Food Aid. To achieve this objective, the heads of households and other resource persons were asked to react to several statements intended to describe the traditional coping mechanisms of the people of East Pokot during famine before the advent of Food Aid.

The traditional coping mechanisms were defined in terms of what the people were eating in the past, the indigenous knowledge on the types of food and food preservation, how especially the traditional staple foods were sustainably used, and the belief systems regarding feeding amongst the Pokot of East Pokot District. Data under this objective was analysed guided by the research question, "Which traditional coping mechanisms were used by the Pokot people to mitigate the effects of famine before the advent of Food Aid?"

The data was analysed using bivariate analyses (Spearman's Correlation) to establish the traditional coping mechanisms of the Pokot in mitigating the effects of drought and famine in East Pokot district before the advent of food aid (*Table 4.6 and 4.7 below*).

Table 4.6: Correlation between how people survived before food aid regime & what kept famine away in E. Pokot

Symmetric Measures						
		Value	Asymp. Std.	Approx. T ^b	Approx. Sig.	
			Error ^a			
Ordinal by Ordinal	Spearman Correlation	.274	.074	3.680	.000°	
N of Valid Cases		169				

Source: Field Data

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

The results indicated that there was a significant (.274) spearman correlation (*Table 4.6 above*) between how the people were surviving before food aid regime and what kept famine away in East Pokot at the 0.01 level, which means that the correlation was very strong at 0.05 level at which the study was conducted. This means that there is a strong correlation between how people were surviving before food aid and what kept famine away, that is, survival was ensured by the actions the community took. Survival was dependent on the actions people took to keep famine away.

Table 4.7: Correlation between how people were surviving and coded ages or age sets

Symmetric Measures						
		Value	Asymp. Std.	Approx. T ^b	Approx. Sig.	
			Error ^a			
Ordinal by Ordinal	Spearman Correlation	.199	.076	2.623	.010 ^c	
N of Valid Cases		169				

Source: Field Data

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

The correlation was also significant .199 (Table 4.7 above) between how the people were surviving before food aid regime and the coded ages or age sets of the respondents. What kept the famine away is highly correlated to the coded age, which shows that the older generations understand better how to keep famine away given their experiences, which is expected. Thus it can be concluded that the traditional coping mechanisms of the Pokot people mitigated the effects of famine before the advent of food aid according to the respondents of different ages. Historically, the traditional coping mechanisms worked well and mitigated the effects of drought and concomitant famine before the advent of Food Aid regime. However, there have been significant environmental, attitudinal, and practical changes among the Pokot that have compromised the effectiveness of these traditional coping mechanisms among the modern Pokot as revealed in the study objective two below.

The objective of this first section of the Chapter and indeed the study was to establish the traditional coping mechanisms of the people of East Pokot during famine before the advent of Food Aid. Thematic data analysis and interpretation of responses from the 169 respondents who were interviewed and also corroboration by the focus group discussions that were held revealed that the Pokot had a number of mechanisms through which they coped with or mitigated the effects of drought and famine.

The East Pokot people were (and still are) pastoralists who depended majorly on their livestock for livelihoods. The findings revealed that they had a way of ensuring that their livestock and livestock products would supply their needs for the longest time possible during drought and famine. For instance during the interview one elderly respondent (William) from Mondi stated,

In the distant past life was better in Mondi. We had enough *mali* (Swahili meaning wealth but for the Pokot means goats, sheep, cattle and camels). We used to slaughter *mali* especially after the elders had predicted drought and famine, dry the meat in the sun(*nyirinyiri*); dry the blood (*takangwa*) or just use it fresh; allow milk to turn sour in guards, add some special ashes and sometimes honey and make it into *soyo*, which could be usable even after two years by just warming water and a cupful can feed the whole family; we used to boil meat in its own fat until it is ready, add some honey added to it and keep it in metallic cans called *Kalaar*. Such meat could be fresh even for three years and kept under lock and key by *Mzee*(head of household). Every *mzee* had to possess a *Kalaar* (*See plate 4.1 and 4.3*) - even me I have mine because it was a symbol of food security to the households. The *mzee* would give a spoonful to each member of his

family and it could keep them strong the whole day. When all the meat and milk was over, the women and children would go to gather *sorich* (*See plate 4.4*) and *Loma* (*See plate 4.2*). Sorich is a very bitter fruit but when cooked by the riverside for 12 hours it becomes edible since the bitterness is reduced to palatable levels. *Sorich* and *lomaa* only ripen during drought and need a lot of water to cook. There were many other wild fruits like *kachilchila*, *chepolis*, *korosso* and the like. We had many options we would even send our women to Marakwet to get some sorghum and millet when the famine was very bad. The women would also come back with big calabashes for keeping *soyo* from goat milk.

Sorich is the plural and Sorichon is the singular according to the respondents and also (Maundu *et al*, 1999:100). For more information on *Sorich* and *loma* see *Appendix 4.4 and 4.5* respectively. From the above explanation, it is clear that there were preservation and networking as coping mechanisms before the coming in of food aid. The people knew how to preserve what they had to take them through dry spells. They had to have good relations with their neighbours especially the Marakwets. This good neighbourliness is still valued among the two communities according to this respondent.



Plate 4.1: Kalaar and Silangwa (Milk guards) of different shapes (Photo by G. Ocarl on 3rd April, 2012)



Plate 4.3: Preserved meat in Kalaar (*Photo by G. Ocarl on 3*rd *April, 2012*)



Plate 4.2: Ripe Loma fruits (Photo by G. Ocarl 4th April, 2012)



Plate 4.4: Ripe Sorich on a Sorich plant (Photo by G. Ocarl on 6th April, 2012)

However, not all coping mechanisms were peaceful. The younger respondents gave some more varied coping mechanisms. When we arrived in the homestead of John (not his real name) we found him making samosas and his wife preparing the stuffing stew for their samosas. John explained some of the coping mechanisms of the past and the current thus:

In the past, when young men saw that their livestock were getting depleted due to drought, they used to go and "borrow" (raid) from the neighbouring Turkana tribe. The Turkana also raid us even today and that is why you cannot see cattle around here. The few that are still available were taken to the mountains but we do not keep many cattle in Mondi. But incidences of stealing have reduced since the provision of food aid started. However these days some people like us do businesses as you can see. I'm going to sell these samosas at Tululu (local trading centre under trees by the bank of River Nginyang). These days, people are even eating baboons, sengerere(mongoose), and even kawau(hyena) when the situation is very bad. The children and women eat cactus fruits (see Plate 4.5 below) and this is good because it adds them blood...cactus was introduced here by ACTED...when we were doing food for work. We encourage children to eat cactus because it is nutritious but it is very hard to prepare...you use special leaves to pluck it and remove its thorns before you can eat it. Most families just have one meal a day and you will see that most women are brewing and selling busaa and changaa (alcohol)...they use a portion of the cereals provided as food aid for alcohol preparation. The maiywa (dregs) (See plate 4.6 below with permission) from busaa are also eaten by the brewer after selling the alcohol.



Plate 4.5: Ripe cactus fruit on cactus plant (*Photo by G. Ocarl on 3rd April, 2012*)



Plate 4.6: A lady demonstrates how to eat maiywa (dregs) (Photo by N. Chochoi on 29th March, 2012)

Livestock raiding and criminality: John provided a bold statement that the Pokot sometimes go to "borrow" livestock from their neighbours as a way of coping with famine. However, Greiner (2013) differs with the views of this respondent to some degree as far as livestock raids are

concerned. According to him, although this violence increasingly involves brutal and reckless murder, acts of "ethnic cleansing", criminal marketing chains, and highway banditry, as well as ordinary petty theft, it is commonly lumped together and labeled as "cattle rustling" or "cattle raiding". This tends to encourage the association of more recent violence with timeless, traditional and ritualized acts of raiding, portraying it as something cultural and thus intrinsic to these societies. Increasingly also, cattle raiding is framed in green security debates and portrayed as an almost inevitable reaction to climate change. Both approaches depoliticize raiding and tend to ignore important changes within pastoral communities and how they relate to political developments in Kenya at large (Greiner, 2013:2).

Nevertheless, there is no clear cut demarcation between violence that is planned as acts of "ethnic cleansing" or criminal marketing chains and the traditional and ritualized acts of raiding by the Pokot. This has been brought about by the availability of guns that have steadily replaced the traditional weaponry like bows and arrows, spears and clubs during livestock raiding expeditions.

Businesses and entrepreneurship: There are those who engage in businesses as well like John and his family. John and his family make and sell samosas as a coping mechanism. This spirit was replicated by a cross-section of respondents who owned small shops, selling water, firewood, making and selling arrowheads, and the like.

Value addition: The Pokot women have also learned value addition on the maize flour they receive as food aid from World vision, ACK, and the government. They are turning maize flour into *busaa* and or *changaa* to earn more money to sustain their families. The newly introduced cactus fruits are also eaten by the people as a way of adding value to their nutritional statuses.

One-meal-a-day: Eating one meal a day is another coping mechanism put in place. This mechanism works for grownups. The children are safer especially due to school feeding programmes where children are fed in schools and parents do not have to worry about their children.

Diversification of foodstuffs: The Pokot have developed a quick adaptation to eating other foodstuffs in the wild that were previously frowned upon like baboons, vegetables such as *kisocho (managu, osuga)* and *kiptanya* (pig weed, mchicha).

4.1.2 The Attitude and Practice of the Pokot towards their own Food Sovereignty

The results on the effects of Food aid on the attitude and practice of the people of East Pokot towards their own Food Sovereignty were as follows:

It was important to get the information on the last time that the people received Food Aid in East Pokot as at the time of this study so as to establish whether such a phenomenon was still in existence (see *Figure 4.12* below).

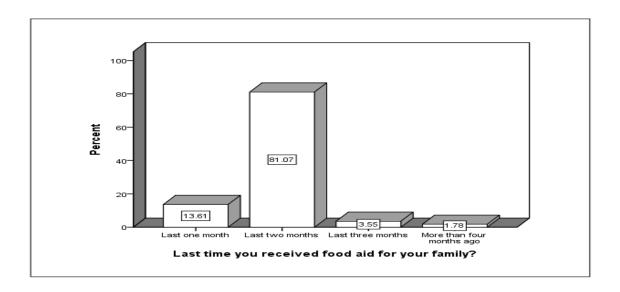


Figure 4.12: The last time Food Aid was received as at the time of the study

As at the time of the data collection, the majority of the respondents (81 per cent) indicated that they had received food aid within the last two (2) months and 14 percent had received food aid in the last one month. About 4 per cent said they had received food aid in the last three months and only 1 percent had not received food aid within the last six (6) months. The differences in the timing could be attributed to memory or maybe because some missed out during the distribution. There was less than one per cent who said they had not received food aid in the last one year because they had produced enough cereals in their farms located far away from East Pokot.

Providers of Food Aid in East Pokot: Figure 4.13 below shows the main providers of Food Aid in East Pokot. According to the findings, there were three major providers of food aid as shown below.

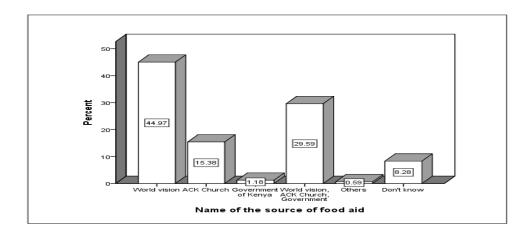


Figure 4.13: The reported main providers of Food Aid in East Pokot

These were World vision (45 per cent), ACK Church (15 per cent), and the government of Kenya (one per cent) and combination of a number of providers were about 30 per cent according to the respondents. There were also those who talked of the Catholic Diocese of Nakuru and are indicated as others above. There were some providers in the past that had moved on to other regions of Kenya according to the respondents.

Main Forms of food aid received (*Figure 4.14 below*): There were different forms of Food Aid that the residents were provided with.

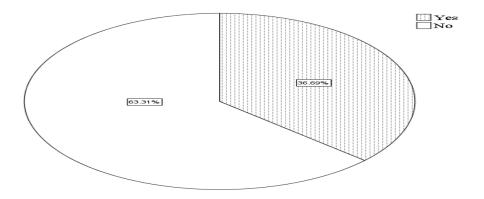


Figure 4.14: Reported other forms of assistance besides Food Aid

The results showed that the majority of the respondents (63 percent) were not receiving any other assistance apart from the food aid in form of cereals and other edibles like cooking fat and food supplements. The food supplements were being provided through the Nginyang health

centre in Mondi town. Only 37 per cent of the respondents received other forms of assistance besides food aid. Especially those who received Food Aid from the ACK Church (see Figure 4.14). However, there were other forms of assistance received by the respondents. These included clothing, and blankets.

Food-for-work in East Pokot: The study sought to find out the existence of Food Aid in other forms such as Food-for-work, food-for-asset and the like (see *Figure 4.15* below).

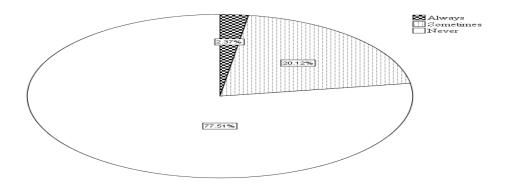


Figure 4.5: Do you work before being given Food Aid?

The study found out that the Pokot in many occasions (78 percent) never worked before they were given Food Aid as shown in *Figure 4.15* above. Those who responded with sometimes stated that the government demanded that they build gabions before they received Food aid in the past. The status as at the time of the study was that there was no food-for-work and this could explain why food aid was very popular since it was coming absolutely for free.

Continuity of food-for-work initiated projects: It was necessary to find out whether the projects initiated through food-for-work were owned by the people or they saw such projects as Food-for-work providers. When asked whether they could build gabions on their farms and roadsides without food aid the majority, 74 per cent of the respondents (represented by Not Applicable), said that they do not work at that moment and thus were not able to answer whether they could continue or not with such projects. About 21 percent said they could not work on such projects without food aid while five (5) per cent would still work even without food aid. This shows that even if food for work was to be introduced as means of implementation of development projects in the district say construction of water dams, gabions and the like, such projects would face sustainability challenges and stood high chances of stalling immediately

Food Aid was stopped. This confirms that the people did not understand the significance of the gabions especially in soil conservation and the value of work for self-improvement and common good.

School feeding programmes in East Pokot: School feeding programmes were alive and active in East Pokot (see *Figure 16 below*).

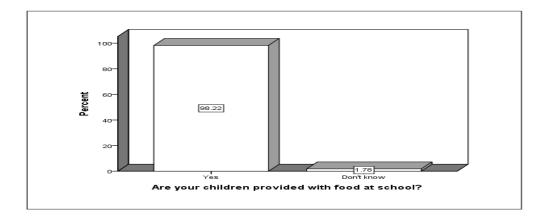


Figure 4.16: Prevalence of school feeding programme in East Pokot

The majority, 98 percent of the respondents confirmed that children received food in schools. The remaining two (2) percent were not aware that the children received food at school though they stated that they do give their children or grandchildren plates to go to school with. The school feeding programme was found out to be very strong in East Pokot and the very young (under five years of age) children were getting food supplements in schools and the health centre of Mondi town whenever they were taken to the health centre. The children above five were free to buy the fortified snacks from the health centre at subsidized rates. This was another form of food aid that takes care of the children while at school and at home. According to the respondents it was very good because the parents do not have to worry about food preparation for their children and the children also do not miss schools. This phenomenon good as it may be leaves out questions of sustainability and food sovereignty of the families from where the children come.

The kind of food provided in schools: What exactly do children feed on at school? (See *Figure 4.17* below)

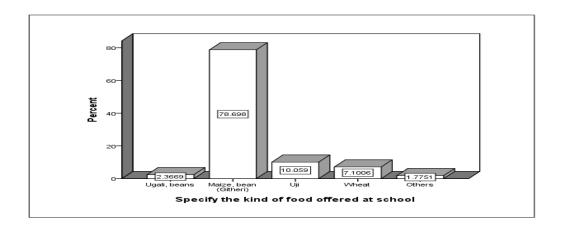


Figure 4.17: The kind of food provided to the children in schools

Predominantly, maize and beans boiled together (*githeri*) is the most popular food provided to children in schools (about 79 per cent). Ten (10) percent talked of porridge or *uji*. Seven percent wheat and only two (2) per cent said that children were eating ugali and beans. This school feeding programme according to the respondents was good for keeping the children in school.

Change in lives due to Food Aid: The respondents were almost unanimous (97 per cent or 164 out of 169) that the provision of food aid had changed their lives and only three (3) per cent objected to this. The explanations given on how food aid had changed the people's livelihoods was diverse (see *Table 4.7 below*).

About 75 per cent said that the provision of food aid had improved their health, had increased the fertility of the women, and there were no reported deaths as a result of famine and drought. About twelve per cent of the respondents said that food aid provision had improved their savings in terms of animals and income. They explained that they were not selling their livestock to buy food and any amount of money they received was being taken to savings. Seven (7) per cent of the respondents said that food aid had enabled the children to go to school because there is food at school. Some children just go to school to eat and in the process find themselves attending classes. There was a two (2) per cent who said that the impact of food aid was not being as good since these days the food aid was little and a bit irregularly brought.

Table 4.8: Changes experienced by the respondents due to food aid

Type of change	Frequency	Percentage
1) Improved health, high fertility, no deaths	126	75
2) Children are going to school	12	7
3) Improved savings: Livestock and Income	20	12
4) Reduced crimes like raids	3	2
5) Others	4	2
6) These days it is little and irregular	4	2
Total	169	100

Source: Field data

These benefits of food aid as romantic as they sounded were not sustainable and were like a house with no foundation and built on sand- cannot withstand the test of time. Donor fatigue can bring the good things tumbling down in a matter of days.

Feelings about Food Aid (Figure 20 below): The study was also to get the feelings of the people and what they thought of food that was being brought in from outside their District (Table 4.8 below)

Table 4.9: How the respondents felt about food aid

Feelings	Frequency	Percentage
Good	117	69
Sad	43	26
Nothing	9	5
Total	169	100

Source: Field data

Feelings of the respondents about the fact that food comes from far away was varied with the majority (69 percent) of the respondents felt good that food was coming from far away to East Pokot. About 26 percent felt sad about this phenomenon and only five (5) percent stated that they felt nothing, meaning to them it does not matter provided there was food. To this group even the

question itself was hard to understand and somehow unnecessary since according to them, their feelings do not count but what matters was that there was food.

Asked about why they felt like that, the answers were as varied as the respondents themselves (see Figure 4.18 below).

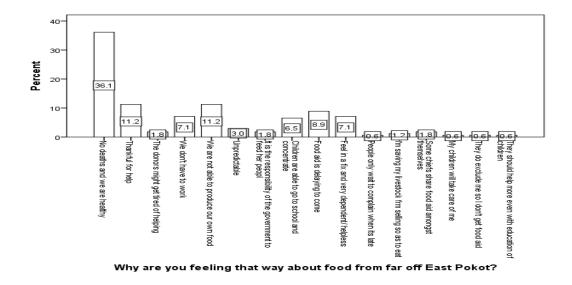


Figure 4.18: Respondents' feelings about food coming from far away to them

What the Pokot people feel about food aid in East Pokot: Most of those who felt good, (36 percent did so because there were no deaths and people were healthy. Eleven (11) percent was just thankful. There were those who said that they were feeling good because they do not have to work but they were eating well (seven per cent). Another 11 per cent were feeling good because they were not able to produce their own food but they were eating. They felt good because their children were going to school and were able to concentrate because of school feeding programmes. However, another seven (7) per cent felt bad because they were in a fix, dependent and helpless. Another 9 per cent felt bad because food was delays in coming. One (1) per cent) were feeling good because they were saving their animals and money due to food aid.

There were also those who were feeling sad (29 per cent) because food aid was unpredictable when it will come, it delays in coming, they felt very dependent and helpless, some local chiefs were just sharing the food aid amongst themselves and their friends thus making some members of the community feel excluded.

Nevertheless, there were a few (five per cent) respondents who stated that they felt nothing about food aid because they felt that it was the responsibility of the government to feed her people. In this category there were those who said that their children were capable of taking care of them and also those who felt that the food aid alone was not enough but should be increased and those bringing Food Aid should also include education for the children in East Pokot.

Food sovereignty of East Pokot: Since it was the people of East Pokot that ultimately would determine their own Food Sovereignty, it was imperative to find out what the people believed about their own Food Sovereignty (see *Figure 4.19* below).

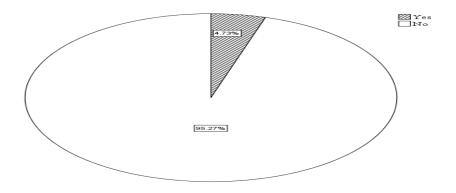


Figure 4.19: Can East Pokot be Food Sovereign from January to December without Food Aid?

The majority (95 per cent) of the respondents felt that East Pokot District was unable to be food sovereign. Only five (5) per cent said that it could be food sovereign through irrigation. The majority could not even imagine East Pokot life without food aid and they were passionate that for people to live in East Pokot there must be food aid. This is a clear example of how perennial provision of food aid to the people has affected the way they view themselves and their environment. For a change in this kind of attitude to be experienced there must be a paradigm shift and re-socialization of the people about their own food sovereignty potentials/capacities. Such a paradigm shift is also possible through, say, capacity building, training and support.

Reasons given why East Pokot could not be food sovereign: *Figure 20* below shows that 40 per cent of the respondents said that climatic conditions do not favour them to do any kind of farming. About 29 per cent said that there was no land for farming. Twenty one (21) per cent insisted that Food aid was the only way to ensure availability of food/life in East Pokot. Four (4) per cent of the respondents indicated that irrigation was the only thing that could make them food

sovereign and before that was done; East Pokot could not be food sovereign. Another four (4) per cent were of the view that the district could not be food sovereign because most people were too poor to be on their own without Food aid. Some two (2) per cent felt that creation of employment opportunities would ensure food sovereignty in East Pokot (*Figure 4.20*).

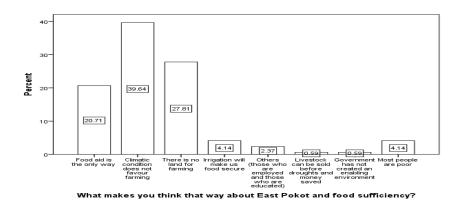


Figure 4.20: Reported reasons why East Pokot Cannot be Food Sovereign

Whereas all these views were valid to some extent, most of them were more or less justification for continued dependency on food aid. The District was very much capable of food sovereignty given the potential of livestock production and the alluvial soils along the river banks of river Nginyang and her tributaries.

Some personal initiatives towards Food Sovereignty: In the face of so much apparent impossibilities according to the respondents, the study dug deeper into finding out whether there was anything that the respondents could do at personal level for Food Sovereignty.

Sixty (60) percent of the respondents said that they believed that they could do something to ensure that their family had something to eat. Forty percent were of the view that there was nothing they could do about their food situation. The 40 per cent stated that both climatic and land situation could not allow them do anything even if they wanted to thus food aid had to be enhanced and made more regular.

The options in East Pokot towards food Sovereignty: What options were available in East Pokot for Food Sovereignty? (See *Figure 4.21* below)

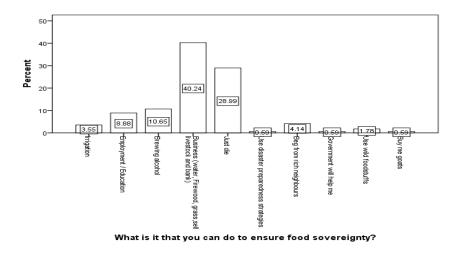


Figure 4.21: The reported options to ensure Food Sovereignty in East Pokot

The majority of the respondents (40 percent) were ready to get involved in businesses such as buying and selling firewood, grass and livestock. A further 10 percent were involved in brewing and selling of alcohol. The results show that over 50 percent were willing to do businesses to ensure food sovereignty since brewing and selling of alcoholic drinks was also part of doing business. However, there was the 29 percent who said that they could not do anything on their own to ensure food sovereignty and would just wait to die when the food aid was stopped. The group that was closely related to those who would just wait to die was the four (4) percent who said that they would beg from their neighbours. Nevertheless, there was another four (4) percent who said that they were ready to do some farming through irrigation when the government could support them in such and endeavour.

To ensure food sovereignty in East Pokot these percentages inform the type of interventions that could resonate well with the people's natural tendencies that they could be willing to support and succeed in. A business support system when put into position in East Pokot could receive more support than any other venture.

Future Food situation in East Pokot as seen by the people themselves (*Table 4.9*): In light of the proceedings, the study set to find out what the future holds according to the respondents. Their spontaneous answers were recorded as tabulated below in Table 4.9.

Table 4.10: Description of the future food situation in East Pokot:

Description	Frequency	Percentage
Very bright	2	1
Bright	25	15
Bad	5	3
Very bad	74	44
Unknown	63	37
Total	169	100

Source: Field data

The majority (44 percent) of the respondents in East Pokot described their future food situation as very bad. There was a further 37 percent who described their food situation as unknown. However, there were the 1 percent optimists who described the food situation as very bright and another 15 per cent who described it as bright. The interesting finding was that of those who talked of bright future food situation qualified their statement by stating that if the World vision and the Churches would continue with the good work of providing food aid. So the future was bright very bright or bright as long as food aid was maintained and more prompt. However, they took issue with one NGO, which they described as corrupt and mean and if that NGO was to be the one providing food aid then the situation would be very bad. From the results, an aggregate of 81 percent of the respondents expressed a food situation of extreme vulnerability of the people of East Pokot as far as food sovereignty is concerned by describing it as either "very bad" or "bad".

The relevance of Pokot traditional coping mechanisms during famine today was investigated.

The majority (67 percent) of the respondents were of the view that the Pokot traditional coping mechanisms could not be used in the contemporary lifestyle as they were obsolete. The other 33 percent said that some aspects of the traditional coping mechanisms could still be used since anyone who discards tradition was a slave. This gave the impression that some were saying that it was possible to use some aspects of traditional coping mechanisms today out of loyalty to their tradition than out of conviction that it could still work.

Some of the Pokot traditional coping mechanisms still relevant today (Figure 4.22 below):

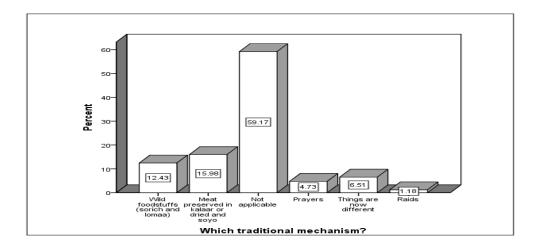


Figure 4.22: Reported traditional coping mechanisms still useful today

Of those who said that the East Pokot traditional coping mechanisms could still be used, the majority (16 per cent) said that meat preservation in *Kalaar* and preservation of milk in form of *soyo* could still be used. They said that *soyo* is not only nutritive but is capable of being used even after two years without going stale. There was another 12 percent who said that the use of wild foodstuffs (*Sorich* and *loma*) was capable of ensuring food sovereignty. Five (5) percent insisted that prayers by the Pokot elders as was being used in the past could still be used to ensure food sovereignty. They said that when the elders purified themselves and prayed, God was capable of bringing enough rains and all the Pokot woes would end. However, fifty nine (59) percent strictly said that the traditional Pokot coping mechanisms could not work in the contemporary East Pokot life (shown as Not Applicable in *Figure 4.25*. This group was almost similar to the group that was of the view that food aid as the only way out thus less progressive.

These results provide a possible way of ensuring food sovereignty by incorporating the indigenous knowledge especially the use of *Sorich*, *cactus fruits*, the preparation of *soyo* and preservation of meat into *Kalaar*, as a way of improving the food situation in East Pokot. These possibilities may have to be revisited in the light of new technologies and infrastructure for improvement. As they said these, their response to stoppage of food aid supply was very unequivocal as shown in Figure 4.23.

The attitude of the respondents towards food aid versus empowerment (*Figure 4.23* below): The respondents had very different responses as far as empowerment to produce own food was concerned.

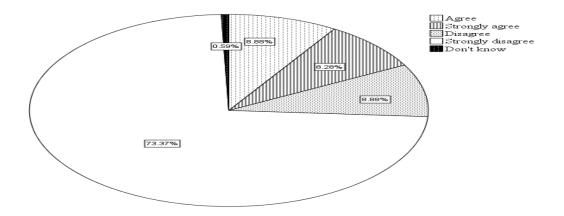


Figure 4.23: Food Aid should be stopped and the people helped to start producing their own food

The responses received when the people were asked about food aid being stopped and the people helped to produce their own food were mixed. The majority of the respondents (73 percent) strongly disagreed with the stoppage of food aid provision and the people helped to start producing their own food. Their contention was that by so doing was sure death to the people of East Pokot. They could not imagine East Pokot without food aid. Nine (9) percent disagreed stating that there was not much that could be done as far as food production was concerned in East Pokot. Another nine (9) percent agreed that food aid should be stopped and people encouraged in producing and consuming their own foodstuffs through irrigation and businesses. There was 8 percent who strongly agreed and a final 1 percent who did not know whether the food aid should be stopped or continued. These results confirmed that provision of food aid has affected the majority of the people's attitude towards their own ability to produce and ensure food sovereignty in East Pokot.

Inferential Statistical Analysis for Objective Two

The second objective of this study was to examine the effects of Food Aid on the attitude and practice of the people of East Pokot towards their own Food Sovereignty.

The effects of food aid on the attitude and practice of the people of East Pokot on their food sovereignty was defined in terms of what the people owned, their feelings about the food aid, their own assessment of their current and future food situation, the regularity with which they received food aid and their own views on the food for work projects. The attitude was measured by responses to stoppage of food aid and being assisted to produce and consume their own food. This was categorized in terms of those who agreed, agreed strongly, disagreed, strongly disagreed, those who did not know.

Data on this objective was analysed under the research question: "What effects does Food Aid have on the attitude and practice of the people of East Pokot district towards their own Food Sovereignty?" The results are summarized in *Table 4.10* below.

The data was analysed using chi square to examine the effects of food aid on the attitude and practice of the people of East Pokot on their own food sovereignty. A Cross tabulation of the question "Food aid should be stopped and people helped to produce their own food" and the question "Can East Pokot be food sufficient from within from January to December without food aid?" were considered for analysis.

Table 4.11:Chi-Square Test for Food Sovereignty

Chi-Square Tests

Explanation	Value	Df	Asymp.Sig
			(2-Tailed)
Pearson Chi Square	10.424a	4	0.034
Likelihood ratio	6.922	4	0.140
Linear-by-linear Association	4.701	1	0.030
N of valid cases	169		

Source: Field data

a. 5 Cells (50%) have expected count less than 5.

The minimum expected count is 0.05.

The Pearson Chi-Square was calculated as 10.424 which were found to be significant statistically at 0.05 degree of freedom. This chi square test was testing the relationship between attitude of the people towards stoppage of food aid as an independent entity and food sovereignty

of the Pokot. This significant relationship indicates that the two are not independent, that is, according to the respondents it is not possible to stop food aid when food sufficiency is not assured. Thus it could be concluded authoritatively that the provision of food aid in East Pokot has affected the people's attitude towards their own ability to produce sufficient food for themselves. We can therefore answer our research question under this objective that: Yes. Food Aid has a debilitating negative effect on the attitude and practice of the people of East Pokot district towards their own food Sovereignty. The study thus states that direct provision of food aid should be gradually stopped and the people of East Pokot helped to produce their own food from within from January to December every year using appropriate schemes. Nevertheless, stopping provision of food aid for the sake of stopping before putting practical food production measures and capacity building would be tantamount to committing a crime against humanity on the people so affected.

The Objective of this second section of Chapter four was to examine the effects of Food Aid on the attitude and practice of the people of East Pokot towards their own Food Sovereignty. Data analysis and interpretation of the interview and focus group discussions responses from the respondents revealed that prolonged provision of food aid negatively affected the people's attitude and practice towards their own Food Sovereignty. This finding is in agreement with Davey (2010:318) who states that attitudes are thought to develop through mere exposure. "Mere exposure effects" argues that people develop more positive feelings about objects or people the more they are exposed to us- the more we see something, the more we seem to like it.

For instance one 37 year old lady when asked what she could do as a person to ensure her family produces and consumes own food she said:

Not much. I am disabled by the environmental situation. It is impossible to do anything here. There is no rain. There are no goats and left on our own we will surely die. It is even hard for the government or NGOs to come up with ways of helping people to produce their own food. The population is also high. The most we can do is building a storage house then when the government and NGOs provide food aid we just put inside the storage house for future use. There is enough food (aid) at the moment and we are very thankful.

She indeed sees herself as disabled and is of the view that it is impossible to do anything by herself concluding that there is enough food aid. This view point is buttressed on the Rational Choice Theory that sees actors being purposive or as having intentionality- actors have ends or

goals toward which their actions are aimed. By seeing impossibilities and thinking of building stores for the food aid received the person believes that this will convince donors to continue providing food aid, which they do not have to work for. However goats and camels were thriving in Mondi division (*see plate 4.7 below*).



Plate 4.7: Camels foraging in Mondi Division (Photo by G. Ocarl on 29th March, 2012)

However there were some people especially in Nginyang who had farms and there were those who were tilling their farms as data collection was going on. This showed that there is capacity for East Pokot to be food sovereign with some infrastructural input in agriculture.

One respondent when asked about what he was able to do by himself to ensure that his family has enough food said:

East Pokot is not a hopeless district full of guns and violence as portrayed in the radio and newspapers. Since you came here have you seen guns everywhere? We only need irrigation project here and we will produce enough maize, pumpkins, and water melons here that can feed even the whole country. I do some farming of maize when it rains but the harvest is normally little (See **Plates 4.8** and **4.9** below). I cannot rely on it so I still have to receive food aid. When the rains come we normally even harvest some *kiptanya* (or *amaranthus blitum* L.) for food here. Another thing that the government can do for us is to provide us with money instead of maize, beans and rice. If I get money I can start my own business of livestock or kiosk and be on my own.

The attitude of this respondent were held by the minority but it gives the illustration that people will choose their activities and behaviour as rational beings. The impression of the researcher was that the farms in Nginyang were fertile and short rain crops could do well there.

This was also confirmed by a few respondents who were already doing some farming and had granaries as shown below (**Plate 4.9**).



Plate 4.8: Land preparation for planting at Donyasas (Photo by G. Ocarl on 21st April, 2012)



Plate 4.9: Some of the granaries at Donyasas, Nginyang Division (*Photo by G. Ocarl on 21st April, 2012*)

4.1.3 The Pokot perception of environmental changes, access to and use of wild food

Global warming and general environmental changes have had great effect on the food situation all over the world and more so in East Pokot. This study found out the following results as far as the people's perception of the environmental changes with regard to access to and use of wild food in East Pokot District are concerned:

Environmental changes in East Pokot in the past 20 years (Figure 4.24) were confirmed as shown below.

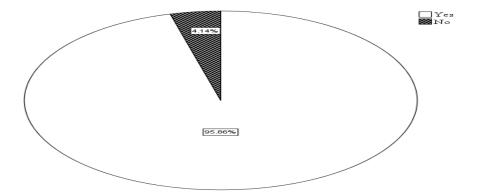


Figure 4.24: Respondents' perception about environmental changes in E. Pokot in the past 20 years

Ninety six (96) percent of the respondents affirmed that there have been environmental changes in East Pokot in the past twenty years. The reasons that showed them that there had been these changes were diverse as indicated in the *Table 11* below.

Table 4.12: Signs of environmental changes according to respondents

Sign of changes	Frequency	Percentage
There is soil erosion	53	32
Deforestation/Desertification	107	63
Others(children are in school)	9	5
Total	169	100

Source: Field data

The respondents by majority (63 per cent) stated that the most conspicuous signs of environmental changes in East Pokot were the expansion of the desert conditions at the rate of 1 km per year according to one respondent (local chief) coupled with unconstrained cutting down of the available trees to make charcoal. There were 32 per cent who cited soil erosion as the sign of environmental changes where they mentioned the big gullies and diversion of river Nginyang tributaries due to soil erosion and the relocation of Nginyang primary school due to expansion of the River Nginyang banks. Five (5) per cent said that children were in school because there were no livestock they could look after at home and that there was food (school feeding programmes) in schools and no food at home. Indeed there were several significant signs of environmental changes including exposed roots of trees in East Pokot.

Types of wild foodstuffs used in East Pokot in recent past as at the time of the study were minimal as explained hereunder. The majority of the respondents, 51 percent had used wild foodstuffs and 49 percent had not used any. Those who confirmed that they had used wild foodstuffs, the majority (82/83) used wild fruits while 1/83 used wild animals. These results show that 99 percent used wild fruits especially *Sorich* and *loma* but only one (1) percent used wild animals. This could be attributed to the lack of animals in the wild. A walk across the district revealed that there were no wild animals that could be seen. The data collection team was not able to see even one wild animal for almost a month of data collection time in East Pokot.

However, there were the 86 respondents who said that they had not used wild foodstuffs in the last three months. This group stated that they were using the Food Aid that they had received thus no need to use wild foodstuffs that were cumbersome to prepare before eating.

Why some respondents did not use any wild foodstuffs (*Table 4.12*). It was important to find out the reasons behind the people's reluctance to use wild foods and the findings were as shown below.

Table 4.13: Reasons why respondents did not use wild foodstuffs in the recent past

Reasons for not using wild foodstuffs	Frequency	Percent
There is enough food aid	65	38.5
Produced enough on my own	3	1.8
Others	20	11.8
Not applicable	80	47.3
There is no enough water for preparing sorich	1	.6
Total	169	100.0

Source: Field data

The majority (39 per cent) of those who had not used wild foodstuffs did so because there was enough food aid at that point in time. Twelve (12) per cent gave other hindrances to their use wild foodstuffs as age and health conditions among other reasons. The "Not Applicable" or 47 per cent in the *Table 4.12* above refers to those who confessed that they had not used some wild foodstuffs similar to the two (2) per cent who said they had produced enough on their own.

General factors that influence usage of wild foodstuffs in East Pokot (Figure 4.25):

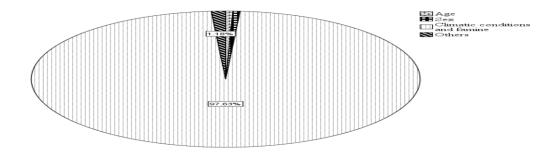


Figure 4.25: What influences the use of wild foodstuffs in East Pokot District

However, in the long term, *Figure 4.25* above shows that climatic condition and famine are the main causes (97 percent) of usage of wild foodstuffs in East Pokot. Others, one percent each included age, sex, and cultural attachments to *Sorich* as the food for the Pokot during droughts, and medicinal qualities of wild foodstuffs. However, it was the resilience of the wild foodstuffs that make them readily available for use during harsh climatic conditions.

Can usage of wild foodstuffs reduce famine in East Pokot? This study found out that as much as the Pokot were using wild foodstuffs, there was mixed reaction as to whether wild foodstuffs could be used to mitigate famine in East Pokot (*Figure 4.26*).

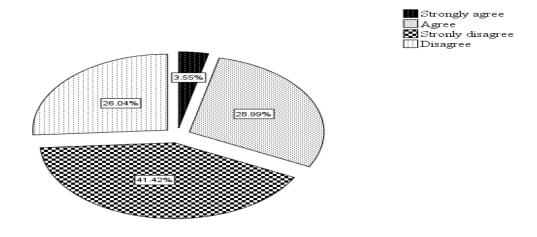


Figure 4.26: Do you agree that wild foodstuffs can reduce famine in East Pokot District

The majority (41 percent strongly disagreed and 26 percent disagreed giving a total of 67 percent who disagreed with the notion that wild foodstuffs could reduce famine in the district. However, 29 percent agreed that wild foodstuffs could reduce famine with about four (4) percent strongly agreeing that wild foodstuffs could reduce famine giving a total of 33 percent agreeing that wild foodstuffs could reduce famine in East Pokot. See *Figure 4.26* above.

Are there some wild foods that existed but are now rare? This study aimed at finding out whether there were some wild foods that existed in the past but were not available in the contemporary East Pokot. *Figure 4.27* shows the findings as relayed by the respondents.

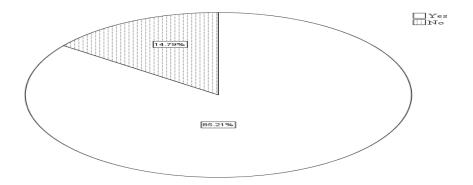


Figure 4.27: Are there wild foodstuffs that existed in the past but are rare or extinct currently?

The results showed that majority of the respondents (85 percent) confirmed that there were some wild foodstuffs that existed in the past but are currently rare or rather extinct due to environmental changes especially desertification in East Pokot (See *Figure 4.27*above). There was however some 15 per cent who said there was no difference- this group stated that they were not aware or that they have not been keen to identify any changes.

Changes in wild foodstuffs due to environmental changes: *Figure 4.28 and Table 4.13* below show some of the wild foods that were there in the past but are now rare or nonexistent as perceived by the respondents.

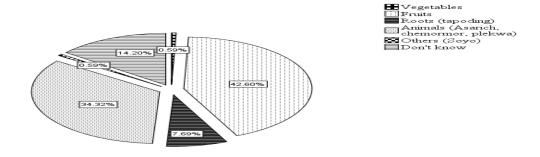


Figure 4.28: Types of wild foodstuffs that are currently rare in East Pokot

According to the respondents, the majority (43 percent) stated that wild fruits were the most affected by the environmental changes. For instance, what they called *sesoy* (umbrella thorn) and *kelion* (arrow poison plant) no longer existed and that Sorich are now taking longer to flower; Followed by wild animals like *asarich*, *chemormor*- zebra and plekwa- gazelles at 34 percent.

A small percentage (14 percent) could not identify any but were aware that there were some wild foodstuffs that no longer existed but were available in the past. The people reported that due to environmental changes and famine they are now eating some animals that were never eaten such as baboons, hyenas, and even leopards. According to the respondents, zebras were a delicacy among the Pokot especially during drought and famine but they are currently (as at the time of the study) rare to come by.

Table 4.14: The currently rare (extinct) Wild foodstuffs and the new arrivals in the wild

Type of wild foodstuff		Existed in the past	Type of wild foodstuff	Latest Arrivals	
	Frequency	Percentage		Frequency	Percentage
Vegetables	1	1	Vegetables	13	8
Fruits (Kelion,sesoy)	72	43	Fruits (Cactus, Prosopis)	47	28
Roots(Tapoding)	13	8	Roots	1	1
Animals (zebras, gazelles)) 58	34	Animals (Camels)	6	4
Others(Soyo)	1	1	Others	-	-
Don't know	24	14	Don't know	24	14
Not Applicable	-	-	Not Applicable	78	46
Total	169	100		169	100

Source: Field data

New arrival Wild foodstuffs in East Pokot: The results showed that there were some wild foodstuffs that were not there but due to environmental changes came into being (see *Figure 4.29 below*) and *Table 4.12 above*:

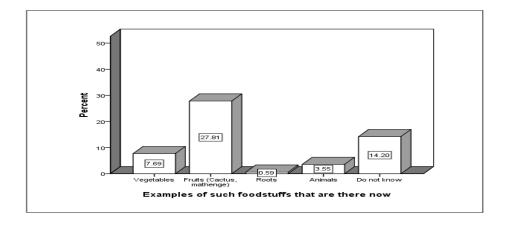


Figure 4.29: Reported new arrival wild foodstuffs that currently exist but never were in the past

Sixty one (61) percent could not remember any but there were 39 percent who confirmed that there were some new wild foodstuffs that have sprouted in the recent past. The examples given were as shown in the *Figure 4.29* above such as Cactus and *Prosopis fujiflora* (Mathenge) whose fruits are edible and liked by children and women. This group also included camels, though domestic, as example of animals that originally did not exist in East Pokot but were introduced from the Turkana neighbours. There was 46 percent who said they could not remember at the time of the interview.

How environmental changes have influenced the type of food consumed in East Pokot: The environmental changes have influenced the food Pokot eat as shown in *Figure 4.30* below.

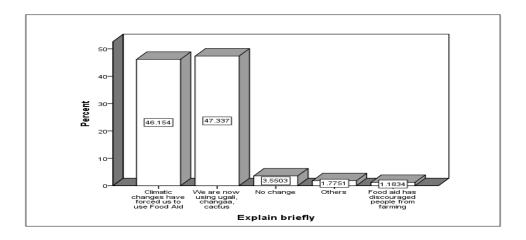


Figure 4.30: How environmental changes have influenced eating habits in East Pokot

The majority (47 percent) said that it has forced them to use ugali, *changaa*(local alcoholic drink) and cactus for food. There was a further 46 percent who said they were forced to depend on food aid due to climatic changes. *Changaa* was seen by the respondents as something that was previously not used by the Pokot but came as a result of environmental changes. Ugali came as a result of food aid cereals. The respondents also said that cactus was brought by an NGO called ACTED as an environmental conservation plant. The same was said of *prosopis fujiflora* that was introduced by the government of Kenya as a desert plant that was to improve the semi-desert climatic condition there. One (1) percent) blamed food aid provision for discouraging the Pokot from carrying out farming. These newly introduced wild foodstuffs have highly brought a

lifeline to the members of the Pokot community. The respondents were categorical that cactus was a very nutritious fruit that has iron and improves the general health of children and women.

Can you eat wild foodstuffs when you have plenty of other options? It was interesting to find out whether the people would still take wild foodstuffs even when there were other options in plenty and no famine either. The findings were as shown in *Figure 4.31* below.

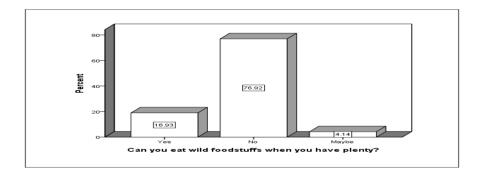


Figure 4.31: Can you eat wild foodstuffs when you have plenty of other options?

The majority (77 percent) of the respondents said that they could not eat wild foodstuffs when they had plenty of other foodstuffs such as meat, milk, cereals and the like. About 19 percent confirmed that they could definitely use wild foodstuffs even when there were other options and 4 percent were indifferent to the use of wild foodstuffs as shown in *Figure 4.31* above.

The respondents had diverse reasons as to why they were willing to use wild foodstuffs even when there were other options as shown in *Table 4.14* below.

Table 4.15: Reasons why the respondents use wild foodstuffs sometimes against their wish

Reason	Frequency	Percentage
It is our culture	15	9
Food aid is available thus there is no hunger	51	30
It is hard work to prepare/ It is not sweet	65	39
It is medicinal	9	5
When food aid delays	14	8
Only uncivilized people use wild food	1	1
Wild food make me sick when I eat	2	1
Age does not allow (palatability)	12	7
Total	169	100

Source: Field data

There were those who use wild foodstuffs just because it was their cultural heritage (9 per cent). Other reported reasons ranged from the medicinal value of the wild foodstuffs (5 percent), and hunger (30 per cent). However, the majority (39 per cent) reported that they would not use wild foods because they were hard to prepare and not sweet. While others had age related reasons (7 per cent). There were those who believed that wild foodstuffs were for the uncivilised (1 percent).

The study took interest into finding out according to the Pokot culture, whether there were restrictions on what people eat and when they eat. The findings were as shown *Figure 4.32 below*:

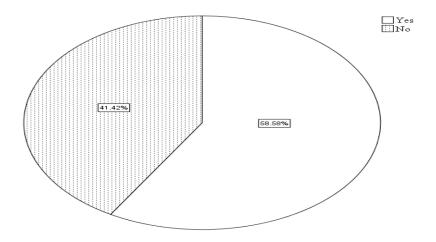


Figure 4.32: Are there restrictions on particular foodstuffs eaten by specific individuals?

The majority (59) of the respondents confirmed that there were some foodstuffs eaten by specific people and not others. The rest (41 percent) were of the view that there were no restrictions on food usage according to their knowledge.

Reasons why the Pokot have restrictions on wild foodstuffs eaten: *Table 4.15* below shows the reasons why there were some restrictions on the kind of foodstuffs that the Pokot were allowed to eat at any given time.

Table 4.16: Reasons for the restrictions on the wild foodstuffs eaten by the Pokot

Reason	Frequency	Percentage
People are free to eat any of the foods (Not Applicable)	75	44
Pregnant women are not to eat some (e.g. deer-mutuken)	30	18
Sorich is bitter for children to eat	37	22
Fetish/gods (e.g. Kaptoyi clan do not eat wild hare)	13	8
Others	14	8
Total	169	100

Source: Field data

The majority (44 percent) reported that there were no restrictions and people were free to use any of the wild foodstuffs at will and as they get access to. Some 22 percent of the respondents said that though there were no cultural restrictions, some wild foodstuffs were too bitter for children thus unpalatable (for instance *sorich*). Eighteen (18) percent said that pregnant women were not allowed culturally to eat or even meet with on the way some wild animals because of association with bad omen (for instance *kanyau* or hyena). Hyenas were never eaten unless there was extreme famine. The most interesting restriction was given by about 8 percent who said that each clan were associated with a particular animal as their god and the members of a particular clan cannot eat the animal they were associated with. For instance, the Kaptoyi clan of Nginyang Division never eats hare in the wild because hare is their totem or fetish of worship as a clan.

Current environmental Conservation efforts in East Pokot (*Figure 4.33below*): It was important to find out what the people themselves were ready to do as a way of environmental conservation and to reduce deforestation and massive soil erosion according to the respondents. The findings were as shown below in *Figure 4.33*.

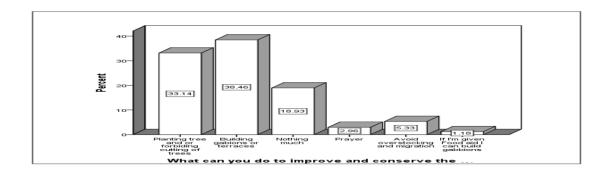


Figure 4.33: Reported possible actions to improve and conserve the environment in East Pokot

The majority (39 percent) of the respondents said that they could improve and conserve the environment through building of gabions. Thirty three (33) percent of the respondents indicated that they could improve and conserve their environment through planting of trees and using the cultural belief that restricts cutting of trees especially within and around homesteads. About 19 percent of the respondents had nothing to do with environmental conservation and said there was nothing that could be done about the environment in East Pokot. Three (3) percent said only prayers of the Pokot Elders could conserve the environment. Five percent said migration to better lands with animals will conserve the environment by leaving the degraded places to recover as they moved to other places.

Traditional environmental conservation techniques of the Pokot: *Table 4.16 below* shows how the respondents said they traditionally conserved their environment.

Table 4.17: How the Pokot people traditionally conserved their environment

Reason	Frequency	Percentage
Migration / Destocking	25	15
Seasonal Elders' decrees about movements from highlands/low lands	99	59
Building gabions / Terraces (Momonyoko)	21	12
There was not in the past	10	6
Prayer	5	3
Use of Taboos (it was forbidden to cut down some types of trees in		
specific areas like in homesteads)	9	5
Total	169	100

Source: Field data

The majority (59 percent) indicated that in East Pokot environmental conservation was done traditionally through elders' decree for people to move to lowlands during rainy season and only graze on the highlands during drought. The elders' decrees were reinforced by young men (kangen) who kept vigil around the highlands and any trespasser was heavily fined in terms of livestock and one bull had to be given by the trespasser to the young men to slaughter and eat as they continued guarding the pastures. Fifteen (15 percent) said that the Pokot migrated as a way of conserving their environment. Twelve (12) percent said they constructed Momonyoko (Pokot corrupted Kiswahili term for gabions) to conserve their lands from soil erosion. There were six (6) percent who said that the Pokot had no traditional ways of conserving their environment whilst three (3) percent mentioned prayers by elders at river banks. There was five (5) percent who said that the Pokot traditionally used taboos and belief systems to control the use of the environmental resources. For instance, it is forbidden to cut down trees within the homesteads. The Pokot adhere to totemism where various wild animals are known to be clan totems, never to be killed by members of that particular clan to which it is a totem. These beliefs reduce the rates of consumption and eventual depletion of such animals.

Inferential Statistical analysis for Objective Three

Statistical analysis of the people's perception of the environmental changes with regard to their access to and use of wild foodstuffs in East Pokot district

The third objective of this study was to determine the people's perception of the environmental changes with regard to their access to and use of wild food in East Pokot district. To achieve this objective heads of households and other resource persons from Mondi and Nginyang divisions of East Pokot District were asked to react to several statements intended to describe the environmental changes and how these changes had influenced the access to and use of wild foods both vegetative and animals.

The environmental changes was defined in terms of the people's experiences and perceptions of the changes, the kinds of wild foods that were there in the past but were no longer in existence, the wild foodstuffs that were not there but have come into existence currently, the type of foods that people were using in the past and the types that they are using now and how environmental changes have influenced all these.

Data on this objective three of the study was analysed under the research question, "How do the people of East Pokot district perceive environmental changes and how these changes have impacted their access to and use of wild food?" Some of the results were summarized in the following *Table 4.17*.

The cross-tabulation of the question "Do you think environmental changes have occurred in East Pokot in the past two decades?" And the question "Have you used wild food in the past three months?" and the results were as given in the *Table 4.17*. Table *4.18* below shows the results of Chi-Square test.

Table 4.18: Have environmental changes occurred in E. Pokot in the past decades? & Have you used wild foods?

		Have you used wild food in the past three months?		Total
		YES	NO	
Ye	S	80	82	162
Do you think environmental changes have occurred in East	Count			
Pokot in the past two decades?	% within Do you think environmental changes have occurred in East Pokot in the past two decades?	49.4%	50.6%	100.0%
	% within Have you used wild food in the past three months?	96.4%	95.3%	95.9%
	% of Total	47.3%	48.5%	95.9%
No	•	3	4	7
	Count % within Do you think environmental changes have occurred in E. Pokot in past two decades?	42.9%	57.1%	100.0%
	% within Have you used wild food in the past three months?	3.6%	4.7%	4.1%
	% of Total	1.8%	2.4%	4.1%
Total		83	86	169
	Count % within Do you think environmental changes have occurred in E.Pokot in past two decades?	49.1%	50.9%	100.0%
	% within Have you used wild food in the past three months?	100.0%	100.0%	100.0%
	% of Total	49.1%	50.9%	100.0%

Source: Field data

The above Table 4.17 shows the detailed calculations of the cross-tabulation of environmental changes and the use of wild fruits in East Pokot District as was done by the SPSS. The data was analysed using Chi-Square Tests and the results were as given in the *Table 4.18* below.

Table 4.19: Chi-Square Tests-Environmental changes versus access to and usage of wild foods

			Asymp.Si	g Exact Sig.	
	Value	df	(2-sided)	(2-sided)	Exact Sig. (1-Sided)
Pearson Chi-Square	.114 ^b	1	.735		
Continuity Correction ^a	.000	1	1.000		
Likelihood Ratio	.115	1	.735		
Fisher's Exact Test				1.000	.520
Linear-by-linear Association	n.114	1	.736		
N of valid cases	169				

Source: Field data

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.44

The Pearson Chi-Square Test of .114 was calculated which was insignificant statistically. Thus we conclude that there is no correlation between the environmental changes being experienced in East Pokot and the motivation amongst the people to use wild foodstuffs. The Pearson chi square test in this case was testing the relationship between environmental changes and the independent use of wild fruits. The absence of relationship between the two variables shows that environmental changes do not influence the use of wild fruits and vice versa thus the use of wild fruits is not a factor of environmental conditions or changes.

It was unexpected that there would be no relationship between the environmental changes being experienced in East Pokot and the use of wild foodstuffs. Nevertheless, it is possible that even though environmental changes have occurred in East Pokot and the situation has worsened, the people themselves have also changed in terms of their attitudes, tastes and preferences. This change in taste and preferences can be attributed to their use of Food aid, which is more palatable and more convenient to prepare. For instance to prepare a Sorich meal they need 12 hours to prepare one meal while they need only 30 minutes to prepare a maize meal for the whole family.

This third section of the study had the objective to determine the people's perception of the environmental changes with regard to their access to and use of wild food in East Pokot district. Data analysis and interpretation of interview and focus group discussions revealed that the Pokot perceive that major environmental changes have occurred within their community with great implications in the people's lives.

For instance, a 70 year old man had this to say during the interview:

In the past rain was available in plenty. *Mali* (livestock) was plentiful and elders used to pray on mountain tops and by the river sides for the rains whenever it delayed. People have changed these days and things have also changed such that we do not have goats anymore; we are now eating these *takataka* (Swahili for rubbish) from the shops.

This elder was obviously not impressed by eating "rubbish from the shops" [sic]. By this he explained he meant ugali, rice, cooking fat and the like. He was longing for the good old times when the livestock was plentiful and there were enough food to eat. What was not clear was why the current crop of elders like him no longer pray and get heard by the gods and the rainfall comes. My curiosity as to why gods do not answer the prayers was answered by a younger man from Donyasas:

The sun has come down these days. Elders used to be called upon to slaughter cows and offer sacrifices and pray to god. But the current elders have engaged in local brew drinking and forgotten their roles and even if they prayed god would not hear their prayers. They just sit in *kwokwo* (*see plate 4.13*) drinking alcohol. The elders of old knew even how to study grass and take remedial measures to save lives of the Pokot. Look at this river Lonyangiro (tributary of river Nginyang), it has changed direction- it used to flow eastward but now it is flowing northwards. The river used to be where there are farms now but it is no longer there. See the dryness is too much yet *Sorich* are not producing any more as they used to when drought came in this land. There are also very big gullies here. Our greatest problem here according to me is soil erosion. If you can bring us anybody to help us control soil erosion then you will have really helped us. In the olden days the elders used to control grazing areas. During rainy season grazing on the highlands was forbidden and anybody who contravened the elders' decree was fined livestock. Highlands were only used after exhausting grass or pasture from the plains. The government also encouraged people to build *Momonyoko* (term used by the Pokot for gabions) through food for work projects not anymore.

The changes in the environmental conditions have made the people to change their lifestyles as well. For instance, those who live at Donyasas where the river tributary reportedly changed its course leaving behind fertile alluvial soils were doing some farming of maize, pumpkins and

water melons during the rainy seasons at small scale. Since building *Momonyoko* (see plate 4.11) is a very hard work according to the respondents, they were apparently not keen on such constructions instead they use twigs to control erosion as seen on *Plate 4.10* below. Erosion was widespread in the entire district (see plate 4.12). As was indicated above, the coming in of cactus plants in the past decade in this area added another wild fruit- cactus in the menu of the people of east Pokot District. The report also revealed that the use of maize, rice, beans and *bagasi* (wheat) by the Pokot was more environmentally determined than a rational choice at the beginning. Some positive attitudes towards these cereals that are now observable was brought about as a result of "mere exposure effects" as explained by Davey (2010) on attitude development. The people were exposed to the cereals as an alternative food especially during famines and due to constant usage the people have developed strong affinity to this alternative food as well.

In the following chapter a summary of the study has been given, conclusions made and the recommendations of this study offered based on the results that have been discussed in this chapter four.



Plate 4.10: Soil erosion gullies at Donyasas village, Nginyang with twigs to control it (Photo by G. Ocarl on 21st April 2012)



Plate 4.11: Momonyoko (Gabion) at Karwen village, near Chemolingot (Photo by G. Ocarl on 6th April 2012)



Plate 4.12: Environmental degradation in Mondi shown by roots of trees exposed (Photo by N. Chochoi on 29th March 2012)



Plate 4.13: Kwokwo (meeting of elders) under trees during focus group discussions at Donyasas in Nginyang Division (Photo by J. Akiru on 21st April 2012)

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarises the study and concludes with some recommendations. Kombo and Tromp (2011:134) state that an effective summary is based on the results of the study, it is brief, all statements are concise and pinpoint to the contributions the researcher has made and all statements are factual. The conclusion section should be very brief, about one page and recommendations are a researcher's suggestions about how his/her work can be improved, and also based on study findings, point out whether there are areas that deserve further investigation.

5.1 SUMMARY

This study investigated the Effects of Food Aid on Food Sovereignty of the Pokot of East Pokot District, Baringo County, Kenya. It was intended to find out whether prolonged usage of Food Aid in its various forms had any effect on people's ability to cope with and sustainably produce and consume their own foodstuffs using the resources that they have within their locality.

The study was carried out in the two administrative divisions of Mondi and Nginyang, which were randomly selected from the five Divisions of East Pokot district. The data in this study was collected during the months of March and April and a bit of May 2012. A total of 169 adults, both men and women, were interviewed using semi-structured interview schedules, and focus group discussions administered by the researcher with the help of three interpreters. The data was analysed using both descriptive (thematic) analysis and SPSS specifically Chi-Square tests and bivariate analyses.

From the findings of the study, the following emerged as the main effects of food aid on the people's food sovereignty in East Pokot presented objective by objective. The specific objectives of the study were first, to establish the traditional coping mechanisms of the people of East Pokot during famine before the advent of Food Aid, which was pegged from 1950s for ease of memory. First reports of Food aid in the area is documented as early as 1919. Second, to examine the effects of Food Aid on the attitude and practice of the people of East Pokot towards their own Food Sovereignty and finally was to determine the people's perception of the environmental changes with regard to their access to and use of wild food in East Pokot district. The findings

showed that when food aid is supplied to the people specifically in East Pokot, their traditional coping mechanisms were undermined in the long run and the people lose interest in and start viewing their own well tested traditional coping mechanisms as archaic and uncivilized. The people slowly develop self-defeating attitudes and practices towards their on food sovereignty efforts. Indeed this study found out that Food Aid has adverse debilitating effects on the people's food Sovereignty in East Pokot District as revealed in some of the major findings of the study as highlighted below:

Under specific objective one, the majority (65 per cent) of the respondents' livelihood was based on what was called, in this research, "first line livestock" (goats, sheep, cattle and chicken) according to question 8 of the instrument. This concept of "first line livestock" was coined by the researcher to identify the types of animals that were there in every homestead, whether rich or poor. Only 14 percent had the "second line livestock" that included camels and donkeys on top of the first line livestock ("second line livestock" emerged to be a preserve of the rich and powerful). This notion of camels being for the rich may need to be demystified since; Holtzman (1995:58) confirms that "an increased reliance on camels could also yield benefits, as camels are more resistant than cattle to drought and diseases." There were a further 21 percent of the respondents who totally had no livestock at all- to a Pokot that is more than abject poverty.

Other sources of livelihood included selling firewood, grass and or brewing and selling of illicit brews. Sixty (60) per cent of the respondents believed that there was something that could be done to alleviate famine related suffering. Question 30 showed that the majority (44 per cent) reported that food aid provision was the only thing that could alleviate famine because there was nothing much they could do as individuals. A fair percentage (23 percent) believed that they could do some farming through irrigation if the government initiated such a project in East Pokot. Fourteen (14) per cent said they would do business to sustain their families. (Five (5) percent said prayers to God and begging was the only way while some 6 per cent talked of looking for employment opportunities elsewhere. In their response to question 55, the majority (67 per cent) believed that the Pokot traditional coping mechanisms during famine could not work in their contemporary lifestyle but 33 per cent believed otherwise.

According to the second objective of the study the following major findings came up:

When the respondents were asked question 48, on how they felt about food coming to them from outside the district, the majority (69 per cent) felt good, 26 percent stated that they felt bad while there was five 5 per cent who said that they felt nothing about it. The majority of those who said that they felt good explained that they felt so because there were no deaths and the people were healthy and really did not care wherefrom the food comes. There was one (1) percent who even saw this as a very good way of saving their livestock. Those who were sad had varied explanations ranging from not being able to produce their own food, feeling helpless, to delays in food aid frequency. The majority (95 per cent) when responding to question 50 indicated that East Pokot could not be food sufficient from within from January to December without food aid provision. Only five 5 per cent believed that East Pokot could be food sovereign from within. This finding was corroborated by the reaction to question 57, where the majority (74 per cent) stated that they strongly disagreed with the thinking that Food aid should be stopped and the people helped to produce their own food. Nine (9) percent stated that they disagreed. However, eight (8) per cent strongly agreed with such arrangement and another 9 per cent agreed with it. The respondents stated by a majority (92 per cent) that there were no other forms of food aid such as food for work, food for asset and the like in East Pokot as at the time of the study. There was only food aid that was distributed to the people free of charge as at the time of data collection.

Under specific objective three, according to the reaction of the respondents to question 60, the majority (96 per cent) of the respondents stated that great environmental changes have occurred in East Pokot since the *el nino* rains of 1998. But 4 per cent said that there was no change in the environment. By a majority (98 per cent), they stated that it was the climatic conditions and the concomitant famine that make them use wild foodstuffs in East Pokot. There was one (1) per cent who said that age influences the usage of wild foodstuffs and another 1 percent said sex of the person also influences the usage or non-usage of wild foodstuffs. Interestingly in reaction to question 66, by a majority (41 per cent), the respondents strongly disagreed that wild foods could reduce famine in East Pokot and only four (4) per cent strongly agreed that wild foods could reduce famine. Twenty six (26) percent disagreed and 29 per cent agreed that wild foods could reduce famine. An aggregate of 67 per cent disagreed at different degrees compared to an aggregate of 33 per cent who agreed that wild foods could reduce famine in East Pokot.

Further findings revealed that there were some fruits and animals that had gone extinct or had become very rare in East Pokot due to environmental changes. Conversely, there were fruits that had come into existence that were not there in the past. On reacting to question 67 that asked whether there were wild foodstuffs that were now extinct yet were there in the past, by majority (85 per cent), the respondents affirmed that there were both animals and fruits that were extinct while 15 per cent said there was none. The reaction to question 70 revealed that there were also some new wild foods that also came as a result of environmental changes. The greatest percentage (28 percent) of the respondents mentioned cactus fruits and the fruits from prosopis fujiflora as the new wild fruit entrants into the food chain of the inhabitants of East Pokot. The respondents indicated that cactus fruits were very sweet and liked by children and the parents "encourage the children to eat it because it adds the children blood". Children also eat ripe prosopis beans. However, Fellows (2012:147) in a field report paints a glamorous picture that "underutilized prosopis fujiflora trees, which are widely regarded as invasive weeds that should be eradicated, but which could provide nutritious food to improve food security in famine-prone areas...there are a variety of uses for flour made from prosopis beans: a molasses like syrup for sweet drinks, a gum that is similar to gum Arabic, and traditional medicinal uses for all parts of the tree."

Camels, though domesticated, were also named as a new entrant into East Pokot. This was corroborated by Mureithi and Opiyo (2010) who state that the Pokot are traditional cattle owners who have increasingly adopted camel keeping in recent years. Some eight (8) percent talked of vegetables while some 14 per cent did not know of any.

There is perennial state of high vulnerability in East Pokot District. Vulnerability brought about by both climatic and human activities leading to low productivity of food locally in East Pokot district with more emphasis put on food security through importation. It was clear from the findings that there was less attention given to productivity from within using locally available resources such as fertile alluvial soils, a favourable climate for goat and camel production and even value addition to the *sorich*, *loma*, the abundant cactus fruits and *prosopis fujiflora* pods around there. As such, there was need to determine the effects of all forms of Food Aid on the food sovereignty of the people of East Pokot district and the possibility of a paradigm shift from food security using food importation to community empowerment initiatives for enhancement of

local productivity. Hence, this study was focusing on some of the dynamics inherent in food aid distribution to a people with a view to understand, strengthen and promote food sovereignty of the people of East Pokot district.

The study established that there were many traditional coping mechanisms of the people of East Pokot during famine before the advent of Food Aid. For instance, the elders were highly respected and they controlled the usage of pastureland to ensure sustainable supply. During rains the plains were used while the highlands and riverbanks were used only during drought; meat was dried in sun and kept as nyirinyiri; meat was boiled in its own fat and kept in lockable metal cans called Kalaar(Plate 3) above; Milk (of goats) was left to turn sour and herbal preservatives added to it to make it thick and durable in the form of soyo that could remain fresh even for two years and just a cupful was enough to feed the whole family the whole day according to the respondents; there were cattle raiding expeditions by the young men to the neighbourhoods (this is different from cattle rustling that is more brutal and leaves behind a trail of fatalities); there were the begging from the Marakwet neighbours especially by Pokot women; there is the use of one meal a day to cut down on the quantity of food consumed; migration to more favourable lands; and keeping of more goats instead of cattle because cattle are more vulnerable to the vicissitudes of climate; the people of East Pokot also adopted camel keeping from the neighbouring Turkana as a coping mechanism among others. The general attitude amongst the respondents was that East Pokot District could not be food sovereign currently and must just depend on food aid. There was a chronic feeling of helplessness and despondency among the people.

The findings further showed that the people perceived that the environmental changes especially desertification and soil erosion have affected their access to and use of wild foodstuffs. It was evident that Sorich is now not ripening at the right time that can save people's lives during famine, the flash floods have increased and soil erosion was at catastrophic levels. One school (Nginyang primary school) had to be moved from the previous location to the current place near Police station because river Nginyang was eating into the school compound yet it was previously far off but the river was widening its bank slowly and steadily. There is a bridge near Mondi trading centre that was once the main link between Nginyang and Chemolingot but has

been left in the middle of the cactus thicket for young men and women to rest on whiling their time and lives away since river Nginyang shifted its course towards the school.

Prolonged provision of food aid to the Pokot was found to have affected their attitude and practices towards their own food sovereignty. There was a widespread feeling of helplessness and inability to think on how to fend for the individuals. The expectation amongst the majority of the people was that food aid is the only option given the climatic condition there. And the respondents even attributed their use of wild foodstuffs to changes in the environmental conditions especially drought that comes with famine and a lot of human and animal suffering. However, inferential analysis of this relationship showed no significant correlation between the environmental changes and the attitudes of the respondents' on the use of wild foodstuffs possibly because the people have also changed as the environmental condition changed.

5.2 CONCLUSIONS

5.2.1 Empirical Conclusions

This study had broadly set out to examine the effects of food aid on Food sovereignty of the Pokot people of East Pokot District, Baringo County, Kenya. In view of the findings presented in chapter four above, empirically the study concludes in general that food aid affects people's food sovereignty negatively. Though food aid has existed in one form or another in human society since antiquity, it was found out that frequent protracted provision of food aid undermines the people's food sovereignty and marshals them to overreliance on the Food Aid provisions.

Specifically, as a result of protracted provision of food aid in East Pokot the people's traditional coping mechanisms that were used before the advent of food aid such as elders' decrees on pasturelands, boiling and storing meat in *Kalaar*, or drying of meat into *nyirinyiri*, use of sour milk in the form of *soyo* and even the use of wild foodstuffs like *Sorich* and *loma* among others were no longer as popular nor perceived by the people as relevant in the current society. Such a situation has not only left the people very vulnerable to the vicissitudes of the environmental conditions but also with no well tested capacity of resilience after the collapse of their livelihood systems due to drought.

This study also examined the effects of food aid on the attitude and practice of the people of East Pokot district towards their own food sovereignty. Given the findings presented in chapter four above, the study concludes that Food aid has negatively affected the attitude and practice of the people concerning their own food sovereignty potentials such that the overwhelming majority of the people believe that East Pokot district cannot be food sufficient without food aid. Food aid as good and lifesaving as it is has affected the people's attitude towards their own ability to produce their own food as evidenced by the number of people who strongly opposed the stopping of food aid and helping the people to be self-reliant using local resources that could ensure food sovereignty.

Finally, the people's perception of environmental changes with regard to access to and use of wild food in East Pokot District was almost unanimous that changes in environmental conditions have occurred and made them not to access the wild fruits and animals as in the past. Soil erosion is threatening the people's livelihoods through gullies, pastureland/farmland degradation, and destruction of building grounds. The majority of the Pokot in East Pokot District were observably hostages of harsh environmental changes and the concomitant attitudinally learnt helplessness. However there was no significant correlation (chi-square test of .114) between environmental changes and the use or consumption of wild foodstuffs by the people attesting to the social cultural changes that have occurred in tandem with the environmental changes. These changes could be attributed to the exposure of the people to food aid and related conveniences like ease of acquisition and minimal food preparation time as compared to wild foodstuffs.

5.2.2 Theoretical Conclusion

Finally it is clear from the above empirical conclusions that the Rational Choice Theory also known as Rational Action Theory (RAT) holds true. That is, human beings with rational choices and abilities choose what they feel maximizes their utility through least effort with "the law of large numbers" ensuring that it is the rational tendency that dominates. The adverse effects of Food aid on Food Sovereignty potentials in East Pokot District of Baringo County is in agreement with the tenets and the spirit of Rational Choice Theory. The mere exposure effect of the protracted food aid provision has also made some social cultural changes among some Pokot thus making them view wild foodstuffs' consumption as irrelevant to the modern East Pokot.

5.3 RECOMMENDATIONS

5.3.1 Recommendations for policy and practice

One, that the NGOs, County and National governments of Kenya consider the rocky sides of the district like most parts of Mondi Division as sources of the best quality meat production for the nation. Thus any support to those areas be in form of livestock especially goats and a "one camel per household" basis through a revolving fund system, where the people get camels on loans and repay live female calves, which are passed on to others in need. With time the entire area will be self-sustaining with the hardy animals most suited for ASALs and also valued by the Pokot people culturally. This would be according to the respondents' food preference.

Two, that the Baringo County government expands the livestock market and the local people be trained on the importance of selling out their livestock when the drought sets in and purchase grains for use during famine and banking the rest of the money and using the saved money to restock when the climatic condition improves. This will provide a greater and better safety net and sustain the people during droughts ensuring the people's resilience is guaranteed.

Three, that the NGOs, government, and Civil Society Organizations have to prioritize value addition on goat and camel milk into *soyo* especially during the rainy season when there is plenty of milk in readiness for usage during the drought and famine times. The goats also should be upgraded by cross breeding through artificial insemination to ensure increased milk production for sufficient *soyo* manufacturing. This is because *soyo* is culturally acceptable and also much more durable than fresh milk according to the findings.

Four, that the NGOs and County government that provide Food aid diversify the forms of food aid from direct cereals provision to self-sustaining programmes such as irrigation projects within the alluvial soil plains of river Nginyang and its tributaries using borehole water and water dams. This will not only provide food and employment opportunities to the local people but will also control soil erosion, which is acute in that area as found out in this study.

Five, that the National government Social support systems be established especially for the aged and vulnerable people so that the governments of Kenya may channel funds into that region in order to boost the people's purchasing power hence spurring up economic activities within the

district. Such a system would create an enabling environment for the establishment of many other small scale businesses with a greater multiplier effect in the district and her neighbours.

Six, that the NGOs and the governments encourage the people of East Pokot to domesticate cactus and *prosopis fujiflora* as commercial crops in the region - for jam and animal feed processing plants' establishment respectively. Cactus fruits can be used for the manufacturing of jam for local and export markets while prosopis should be used for the manufacturing of animal feeds for livestock. This should be coupled with deliberate measures taken to domesticate other wild foodstuffs such as *sorich* and *loma* for nutritional and environmental needs.

Seven, that the Indigenous trees be planted by the Pokot with empowerment from the existing NGOs and government of Kenya/ government of Baringo County to conserve the environment in East Pokot District. Among the indigenous trees to be planted should include *Sorich*, *loma*, *cactus*, and *prosopis fujiflora* plants. These will not only provide shades but also provide food during famine (56% were willing to use wild foodstuffs), not forgetting the medicinal values of these indigenous trees. These trees when planted within homesteads will enjoy protection by the cultural belief system that trees within homesteads are not to be cut down for whatever reason.

Eight, that the County government initiates a protracted environmental awareness and rehabilitation campaigns in East Pokot District with immediate effect to curb the massive degradation of the environment witnessed in the District.

Nine, that the Baringo County government establish desertification study centre at Nginyang to study the environmental changes, possible mitigation measures and the pauperization of the Pokot people due to environmental changes.

5.3.2 Recommendations for further research

First, that a participatory research methodology on resource mobilisation and prioritisation of the felt needs of the people of East Pokot be carried out so as to effectively address the emerging issues and comprehensively address the food sovereignty situation in the district. This study can be carried out by universities and other stakeholders.

Secondly, that a study be carried out on value addition and economic viability of commercial production of wild foods such as cactus fruits and the possibility of manufacture of cactus jam for both local and international markets.

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APPENDICES

APPENDIX 1: INTERVIEW SCHEDULE

I. COPING MECHANISMS OF THE POKOT BEFORE FOOD AID REGIME:

Section One: (To find out the general coping mechanisms (indigenous knowledge) amongst the people of East Pokot before the advent of Food Aid by NGOs and the Government)

Family profile and Preliminaries				
The name of the respondent				
1) (a) Sex: Male Female	_			
2) (b). Age				
3) (c). Marital status: Married	_, Single,	Widowed	, Others	
4). (a). Do you have a shamba? Yes	s, No			
5) (b). If Yes how many acres?				
6) (c). How regularly do you cultiva	ate in a Year? One	e year, Twice	a year, N	lever, Other
7) Who owns the land in East Poko	t? Community	Private Individu	ıals, Goverı	nment Others
8). Do you have Cattle, Sheep (honey), Others (specify)		_, Camels,	Donkeys	, Chicken, Bees
9). (a). Do you have any other source	ces of income? Ye	es, No		
10) (b). Please specify in what form	n? Gifts	_, Businesses	, Others	S
11) (c) Briefly explain				
12) What was the staple food for a and especially around the time of <i>A Mzungu</i> rule?	• •	•	•	•
Ugali Meat Mil	k Bloo	d Fish	Othe	rs

16) (a). Can you remember any time when there has been plenty of food in East Pokot? Yes No 17) (b) If yes, around when was this?	13) (a) Has the staple food changed today? Yes No
East	14) (b) If Yes, please explain briefly
17) (b) If yes, around when was this?	15) Please kindly explain how the staple food was being preserved so as to avert famine in Pokot East
18) (c). If yes, how did you handle the plentiful food? Sold some Kept into barns Shared with neighbors Married another wife(s) 19) Please describe the food situation before food aid regime in Pokot land? 20) What can you as a person do if the supply of Food Aid stopped today? Migrate to another place, Look for wild foodstuffs, Others (specify) 21) What can you do now as a person, which was being done in the past that can ensure that you have enough food all year around? 22) (a). In the olden days, was there a way the Pokot would detect looming famine and avert it? Yes_ No_ 23). Please explain briefly 24) Before the coming of food aid, how were people surviving during famine and drought? Eat wild foods Migrate where?, Others 25) (a) Given an opportunity to choose among foodstuffs to use as food aid, kindly list the following	16) (a). Can you remember any time when there has been plenty of food in East Pokot? Yes No
Sold some Kept into barns Shared with neighbors Married another wife(s) 19) Please describe the food situation before food aid regime in Pokot land? 20) What can you as a person do if the supply of Food Aid stopped today? Migrate to another place , Look for wild foodstuffs , Others (specify) 21) What can you do now as a person, which was being done in the past that can ensure that you have enough food all year around? 22) (a). In the olden days, was there a way the Pokot would detect looming famine and avert it? Yes_ No_ 23). Please explain briefly 24) Before the coming of food aid, how were people surviving during famine and drought? Eat wild foods Migrate where? , Others 25) (a) Given an opportunity to choose among foodstuffs to use as food aid, kindly list the following	17) (b) If yes, around when was this?
19) Please describe the food situation before food aid regime in Pokot land?	18) (c). If yes, how did you handle the plentiful food?
20) What can you as a person do if the supply of Food Aid stopped today? Migrate to another place	Sold some Kept into barns Shared with neighbors Married another wife(s)
Migrate to another place	19) Please describe the food situation before food aid regime in Pokot land?
Others (specify)	20) What can you as a person do if the supply of Food Aid stopped today?
21) What can you do now as a person, which was being done in the past that can ensure that you have enough food all year around?	Migrate to another place, Look for wild foodstuffs,
enough food all year around?	Others (specify)
23). Please explain briefly	21) What can you do now as a person, which was being done in the past that can ensure that you have enough food all year around?
24) Before the coming of food aid, how were people surviving during famine and drought? Eat wild foods Migrate where?, Others 25) (a) Given an opportunity to choose among foodstuffs to use as food aid, kindly list the following	22) (a). In the olden days, was there a way the Pokot would detect looming famine and avert it? Yes_ No_
Eat wild foodsMigrate where?, Others 25) (a) Given an opportunity to choose among foodstuffs to use as food aid, kindly list the following	23). Please explain briefly
25) (a) Given an opportunity to choose among foodstuffs to use as food aid, kindly list the following	24) Before the coming of food aid, how were people surviving during famine and drought?
	Eat wild foods Migrate where?, Others
Maiza Sarahum Millat Coata Coura Comala Shara	
Maize, Sorghum, Millet, Goats, Cows, Camels, SheepWild fruits, Wild meat, Blood, Other	

26) In the past two weeks, your main source of food has been?
Ugali, Uji, Meat, Rice, Beans, Milk, Wild fruits, Wild tubers, HoneyOthers
Section two: (The indigenous knowledge mentioned under section one that are still existing and being
applied to date)
27) According to your understanding of the past, what kept famine away in East Pokot?
28) Are these practices still in use amongst the Pokot? Yes No Please explain
29) In your view, is there anything that when done even now can encourage your family to produce and
use your own foodstuffs? (a) Yes No
30) (b). Explain briefly:
31) When food is little in a family, put in sequence of 1 to 4 who eats first till the last person to eat:
Men, Women, Children, Youth
32) (a). Are there special foodstuffs that are only eaten during famine/drought? Yes No
33). (b) If yes, give examples
34) Are they still being eaten? (a). Yes, No
35) (b) Explain your answer
36) (a) What are the current coping mechanisms (safety-nets) in place to mitigate the effect of famine in
East Pokot?
37) (b) In your opinion, what one thing can change the food situation in East Pokot when done by the
government, churches and other partners?

II. EFFECT OF FOOD AID ON PEOPLE'S ATTITUDE TOWARDS FOOD SOVEREIGNTY

38) When is the last time you ever received food aid in any form for your family?

Last One month, Two months, Six months, One year, Two years, Never received	·
39) If yes, the name(s) of the source (s)?,	_
40) Do you receive any other assistance from the source(s) above apart from the foodstuffs? Yes,	No_
41). If yes, state the form/type of assistance: Clothing, Livestock, Seeds, Others	
42) (a) Do you work before you can be given the food aid? Always, Sometimes, Never	
43) (b) If Always or Sometimes, when provision of food is stopped today, would you continue doi	ng the
same work? Yes No	
44) (a). Are your children provided with food at school? Yes No	
45) (b). If yes, kindly specify	
46) (a). Have you experienced any change in the way you live as a result of the coming in of food aid? Yes _,	No_
47) (b). Explain your answer briefly	
48) (a) How do you feel about the fact that food is being brought to you from outside your environm	ent?
Good, Sad, Nothing	
49) (b) What makes you feel that way? Explain briefly	
50) (a) In your opinion, is East Pokot able to produce enough food for all the people from Janu	ary to
December every year? Yes, No	
51) (b) What makes you think like that?	
52) (c) Is there anything you can do as a person to ensure that your family has enough food throughout year without depending of food aid? Yes, No	out the
53) (d) What is it that you can do (from (c) above)? Explain briefly	

54) How can you describe the future food situation of the community of East Pokot?
Very bright, Bright, Bad, Very bad, Unknown
55) (a). Can Pokot traditional coping mechanisms during droughts and famines be used today? Yes No_
56) (b)If Yes, which one?
57) Food aid should be stopped and people helped to produce and eat their own foodstuffs that they like
the way they want it. Agree Strongly agree Disagree Strongly disagree Don't know
58). (a). Currently, are there other forms of food aid such as food for work or food for assets in East Pokot? Yes_No_ 59) (b). If Yes, explain briefly
III. PERCEPTION OF THE PEOPLE ABOUT ENVIRONMENTAL CHANGES WITH REGARD TO ACCESSIBILITY AND USE OF WILD FOOD
60). (a) Do you think that environmental changes have occurred in your community in past two decades (since <i>El Nino</i> rains of 1998? Yes No
61) (b) Is there any sign (reason) for your answer in (a) above? Explain:
62) (a) Have you used any wild food within the past three months? Yes, No
63) (b) If yes, specify:,
64) (c) If No, Explain briefly the reason for your answer in (a) above:
65) What influences the use of wild foodstuffs within your community?
Social status, Age, Sex, Climatic conditions, others
66) Wild foodstuffs can help in reducing the effect of famine in East Pokot.
Strongly agree, Agree, Strongly disagree, Disagree, Don't know
67) (a) Are there some wild foodstuffs that were in existence in the past but are not there these days? Yes, No _
68) (b) Examples of such foodstuffs: Vegetables, Fruits, Roots, Animals

69) (a) Are there some wild foodstuffs that were NOT in existence in the past but are now there these
days? Yes, No
70) (b) Examples of such foodstuffs: Vegetables, Fruits, Roots, Animals
71) (a) In your opinion, has the changes in your environment/climate contributed to or influenced the type
of food you produce and eat as a family today? Yes, No
72) (b)Explain briefly:
73) (a) Can you eat wild foodstuffs when the climatic condition is good and other foodstuffs are available? Yes, No, Maybe
74) (b). Kindly explain
75) (a) Are there some wild foodstuffs that are only eaten by a particular group of people and not everyone? Yes, No
76) (b) Explain briefly:
77) In your view, what can you do to improve and conserve the environment in East Pokot?
78) Traditionally, how does a Pokot conserve the environment?

APPENDIX 2: FOCUS GROUP DISCUSSION SCHEDULE

- 1. What do you know about how life in East Pokot was as far as food was concerned, before Kenyan independence and especially around the time of *Asusu 1950-52* when the West Pokot and East Pokot united against the *Mzungu* rule?
- 2. When there was famine and there was no Food Aid, what were the Pokot doing in order to keep alive?
- 3. What strategies are being used today?
- 4. Food Aid is a very useful way of reducing hunger in East Pokot district. What are the other benefits that come with Food Aid to you as a community and as individuals?
- 5. In your view, what are the disadvantages of relying on Food Aid as a way of addressing famine in your community?
- 6. Do you think there have been some environmental changes in East Pokot district as far as you can remember in regard to:
 - (i). Type of grass growing now
 - (ii). Type of trees available now
 - (iii). Animals kept or animals in the wild
- 7. Under what conditions do people of East Pokot use wild vegetation or wild animals for food?
- 8. Do people still gather some wild food and eat whether fruits, vegetables, roots or animals here in East Pokot?

APPENDIX 3: SORICH (Boscia coriacea Pax)

Capparidaceae (Capparaceae)

Borana: qalqalq, galgacha-hareh Daasanach: dhuorich Gabra: k'alk'acca Ilchamus: sericho, serichoi (plural)

Maa: enkapalases, enkapoleses Malakote: kalaqacha Marakwet: sorikwo, sorik (plant) Mbeere: mukiare, muthiu,

kikiare, mutangira, gitangira Orma: kalkach Pokot: sorichon, sorich (plural) Rendille: lyoror, yoror Samburu:

serichoi Somali: ghalangal, degaiyare, degeiyar Swahili: mnafisi Tharaka: muthiuthiu Tugen: sirkwa Turkana:

eedung, eerdung

Description: An evergreen, much-branched, usually multi-stemmed shrub or small tree to 6 m high. BARK:

Smooth, dark grey to grey-white. LEAVES: Light green, leathery, elliptic, apex sharply pointed. FLOWERS:

Creamy green. FRUITS: Light green with a fleshy coat. Seeds enclosed in a tough white skin.

Ecology: An evergreen shrub common in all drier areas of northern Uganda, the Sudan, southern Ethiopia, Somalia

and northern Tanzania in dry bushland or Acacia-Commiphora bushland, often in rocky areas or in loose red clay or

sandy soils, 100-1,500 m. Common, e.g. in Turkana and Tsavo. Rainfall: 300-500 mm. Zone VI.

Uses: FOOD: Boiled cotyledons eaten (Pokot, Tugen, Turkana). Preparation: Fruits are pounded with a stone to

remove the green outer fleshy coat. The seeds are then boiled briefly in water to loosen the tough white outer skin

and then pressed between stones to release the green cotyledons. The skins are floated off in water and the green

cotyledons boiled. Water is changed 8-12 times. Boiled seeds may be fried. Ripe fruit may be sucked for its sweet

taste (Taita, Kamba, Tharaka, Mbeere, Daasanach).

MEDICINAL: Root decoction used for the treatment of headache (Pokot) and bark for yellow fever (Samburu);

root infusion taken for gonorrhoea (Daasanach).

OTHER: Fodder for goats, donkeys, camels and cattle, especially important during the dry season. Fruits eaten by

birds. Branches and stems used in construction (Pokot, Turkana). Shade tree, fuelwood. Stems made into blunt

arrow heads used for shooting birds (Daasanach).

COMMERCIAL: Cooked food sold in Turkana markets. Often exchanged with other foodstuffs.

Season: Fruits in February (southern Turkana) or March, October (Mtito Andei).

Management: Propagated by direct sowing at site.

Status: Common. Usually protected (Turkana).

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APPENDIX 4: LOMA (Balanites rotundifolia - Van Tiegh Blatter)

Balanitaceae

syn: B. orbicularis Sprague, B. gillettii Cuf.

Borana: baddan **Daasanach:** kuute, kuusam (plural) **Gabra:** baddana **Marakwet:** lomion, lorn (plural) **Malakote:** mubadana **Orma:** baddan **Pokot:** lomion, loma (fruit) **Rendille:** kulum **Samburu:** sarai **Somali:** kullan (Tana River) **Tugen:** tirikikwa **Turkana:** ebei

Description: A usually spiny shrub or small tree to 5 m. Crown usually open. **BARK:** Grey, corky. **SPINES:** Long, bearing leaves and flowers. **LEAVES:** Almost stalkless, divided into two almost round leaflets. **FLOWERS:** Pale green. **FRUIT:** Up to 4 cm long, ellipsoid, green with longitudinal lines, turning orange when ripe.

Ecology: Found in Kenya, e.g. along the Turkwel River, in the Kerio delta, Mutha hill and in other parts of the country in dry *Acacia-Commiphora* bushland, often in rocky areas. Often seen as the only tree on sand dunes in northern Kenya, 50-1,350 m. Rainfall: 150-400 mm. Zones VI-VII.

Uses: FOOD: The pulp of the ripe orange fruit is eaten fresh (Gabra, Boran, Somali, Turkana, Pokot, Daasanach). Cotyledons are eaten when boiled. The seed shell is removed by pounding or boiling then pounding. The cotyledons are boiled for 3-4 hours (Turkana, Marakwet, Tugen, Pokot, Daasanach) and eaten, normally with milk. The fruit pulp is made into a local brew (Turkana).

FOOD/MEDICINAL: Boiled root infusion added to children's milk as a tonic (Pokot).

MEDICINAL: Boiled root infusion used as an emetic and purgative during fever and for diarrhoea (Pokot).

OTHER: Trunk used for carving headrests (Turkana: *ekichelong*) and wooden spoons (Turkana: *ekalaboch*) (Turkana, Daasanach). Branches used for making livestock enclosures (Turkana, Daasanach). Wood used for smoking milk and blood containers (Daasanach) for flavour and to disinfect the container. Camel and goat fodder. Fuel wood.

Management: Propagation by direct sowing at the desired site is recommended.

Season: Fruits in February and August-October (southern Turkana).

Status: May be locally common.

Remarks: A very drought-resistant tree species, even more so than the desert date (*Balanites aegyptiaca*). This species, together with *Acacia tortilis* and *A. reficiens*, may be a good substitute for *Prosopis chilensis* and *P. juliflora* for reclaiming desert areas.

APPENDIX 5: Pictures of some of the most common wild fruits in East Pokot District



Loma plant with fruits at Donyasas (Photo by G. Ocarl on 21^{st} April 2012)



Loma beans ready for cooking (Photo by G. Ocarl on 30^{th} March 2012)



Pokot elder shows off a *sorich* plant (*Photo by G. Ocarl on 21*st April 2012



Sorich plant with fruits at Mondi (Photo by G. Ocarl on 21^{st} April 2012)



Sorich beans ready for cooking (30th April, 2012)

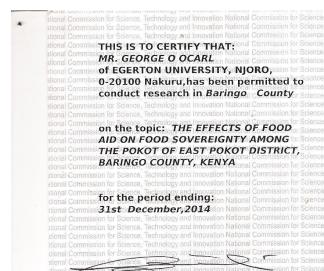


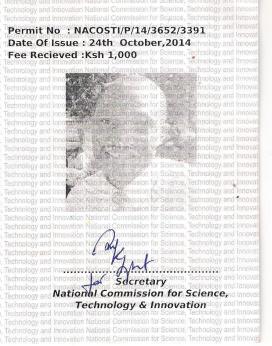
Kachilchila plant in fruition at Nginyang (Photo by G. Ocarl on 30^{th} March 2012



Chaplais plant at Mondi (Photo by G. Ocarl on 30th March 2012

APPENDIX 6: RESEARCH PERMIT





CONDITIONS

on for Sciepce Technology and Inno

Applicant's

Signature

- 1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
- 2. Government Officers will not be interviewed without prior appointment.
- 3. No questionnaire will be used unless it has been approved.
- 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
- You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

