

**RELATIONSHIP BETWEEN REALIZATION OF RIGHT TO ADEQUATE FOOD
AND FOOD SECURITY: A study among pastoral and small farm holder households**

**A Thesis submitted to the Board of Graduate Studies in partial fulfilment of the
requirements for the award of the Degree of Doctor of Philosophy in Nutritional
Sciences, Egerton University**

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DECLARATION AND RECOMMENDATION

DECLARATION

I *Stellamaris Muthoka* declare that this is my original work and that it has not been presented in this or any other form for an award of a degree or diploma in this or any other university.

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TABLE OF CONTENTS

Declaration and recommendation.....	II
Acknowledgement.....	III
Table of contents	IV
Acronyms and abbreviations.....	IX
Operational definitions	XI
Abstract.....	XIV
CHAPTER ONE	
Realization of the right to adequate food and its influence on food security	1
CHAPTER TWO	
Innovative methodology for measuring realization of the right to adequate food at household level	62
CHAPTER THREE	
Perception of right to adequate food among pastoral and small farm holding households	90
CHAPTER FOUR	
Duty bearer’s challenges in realization of the right to adequate food among pastoral and small farm holder households.....	116
CHAPTER FIVE	
Maternal right to adequate food and its influence on attainment of the right to food of the child	154
CHAPTER SIX	
Realization of the right to adequate food and its influence on household food security among pastoral and small farm holder households.....	185
Appendices	
Appendix 1: Research instruments.....	226
Appendix 2: Standardization of household measures	241
Appendix 3: Consumer units.....	243
Appendix 4: Glossary	244

List of Tables

Table 2.1: Household right to adequate food questionnaire	74
Table 2.2: Validation of the right to adequate food tool as a measure of realization of right to adequate food among the study groups	77
Table 2.3: Comparison Community Right to Adequate Food Index (CRTAFI) among the study groups by seasonality	79
Table 2.4: Duty bearers and respective indicators for measuring progressive realization of right to food.....	79
Table 3.1: General characteristics of the study households	101
Table 3.2: Perception of the human right and right to adequate food among the study groups (combined)	102
Table 3.3: Lexicon on human rights and the right to adequate food among the study groups	104
Table 3.4: Comparison of perceptions of right to adequate food among the pastoral and farming households	106
Table 3.5: Identified duty bearers' roles and responsibilities among the study group.....	108
Table 4.1: Factors linked with violation of the right to food among the study groups	132
Table 4.2: Methods of seeking redress against violated / abused rights among the study groups	134
Table. 4. 3: Coping strategies to violation or abuse of the right to food	135
Table. 4.4. Duty bearers' challenges in realization of the right to adequate food and food security.....	136
Table 5.1: General maternal characteristics of female heads of household within the study groups	164
Table 5.2: Maternal perception on right to food with respect to breastfeeding	165

Table 5.3: Spearman’s correlation on perception of realization of the right to food critical of the child (breast feeding)	166
Table 5.4: Maternal characteristics and breastfeeding practices.....	170
Table 6.1: General characteristics of the study groups.....	200
Table.6.2: Household socio-economic characteristics among the study groups.....	202
Table 6.3: Realization of rights among study households during the dry season (March-June)	204
Table. 6.4: Realization of right to adequate food among study households during wet season (August-November).....	205
Table 6.5: Mean household energy intakes during dry and wet seasons among the study groups	206
Table 6.6. Mean household energy intake adequacy among the study groups during dry and wet seasons.....	207
Table. 6.7: Household distribution with respect to energy adequacy	207
Table 6.8: Mean household food insecurity access score among the study groups during both wet and dry seasons	208
Table 6.9: Mean dietary diversity score among the study groups for both dry and wet harvest seasons	209
Table. 6.10: Multiple regression on right to adequate food on food security (dry season) as measured by Household Food Diversity Score among the study groups	212
Table 6.10b: Multiple regression on right to adequate food on food security (dry season) as measured by Household Food Insecurity Access Score among the study groups	212
Table 6.10c: Multiple regression on right to adequate food on food security (dry season) as measured by Household Energy Intake among the study groups	213
Table .6.11a: Multiple regression on right to adequate food on food security (wet season) as measured by Household Food Diversity Score among the study groups	214

Table 6.11b: Multiple regression on right to adequate food on food security (wet season) as measured by Household food insecurity access score among the study groups.	214
Table 6.11c: Multiple regression on right to adequate food on food security (wet season) as measured by Household energy intake among the study groups	215
Table 6.12: Regression analysis on awareness of right to food and food security as measured by Household food insecurity access score	216
Table 6.13: Regression analysis on awareness of right to food and food security as measured by Dietary diversity score	216

List of Figures

Figure1.1: Conceptual framework on relationship of Rights to Adequate Food and Food Security	26
Figure1.2: Map of Kenya showing location of Kajiado and Bahati Districts.....	31
Figure 2.1. Comparison of household right to adequate food index among the study groups .	78
Figure 2.2: Pathways between relationship of Primary and Secondary duty bearers in the progressive realization of the right to adequate food and in attainment of food security	83
Figure 2.3: Schematic representation of the relationship between progressive realization of human rights and Maslow basic need theory.....	85
Figure 3.1: Procedures in 5 step multi-stage sampling.....	99
Figure 3.2: Pattern of rights as described by the communities	108
Figure 4.1: Manifestation of abuse of the right to adequate food among the study groups ...	133
Figure.6.1: Schematic representation of 5 step multi-stage sampling.....	197
Figure. 6.2. Number of meals consumed by the study households during dry and wet seasons on weekdays.....	210
Figure 6.3: Number of meals consumed by the study households over the weekends during both dry and wet seasons	211

ACRONYMS AND ABBREVIATIONS

Acronyms/Abbreviations	Full names
ACC	Administrative Committee on Co-ordination
AIDS	Acquired Immune Deficiency Syndrome
ASAL	Arid and Semi-Arid Lands
CBS	Central Bureau of Statistics
CCF	Christian Child Fund
CEDAW	Convention on Elimination of Discrimination Against Women
CESCR	Convention on Economic, Social and Cultural Rights
CDC	Centre of Disease Control
CRC	Convention on the Right of the Child
CRTAFI	Community Right to Adequate Food Index
DALY's	Disability Adjusted Live Years
DB	Duty Bearer
DFID	Department for International Development
DHS	Demographic Health Survey
FANTA	Food and Nutrition Technical Assistance
FAO	Food and Agriculture Organization
FEWSNET	Famine Early Warning System Network
FGD	Focus Group Discussion
FIAN	Food First Information and Action Network
FIDA	Federation of Women Lawyers
GDP	Gross Domestic Product
GOK	Government of Kenya
GHI	Global Hunger Index
GHI-P	Global Hunger Index score
HDDS	Household Dietary Diversity Score
HFIAS	Household Food Insecurity Access Scale
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
HPI	Human Poverty Index
HRBA	Human Rights Based Approach
HRTAFI	Household Right to Adequate Food Index
IASC	Inter Agency Standing Committee
ICESCR	International Convention on Economic, Social and Cultural Rights
ICN	International Conference on Nutrition
ICRW	International Centre of Research for Women
IDPs	Internally Displaced Persons
IDRC	International Development and Research Council
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
ILO	International Labour Organization
ILRI	International Livestock Research Institute
IMF	International Monetary Fund
INFDC	International Nutrition Foundation for Developing Countries
IPAR	Institute of Policy Analysis and Research
IRIN	Integrated Regional Information Networks

Acronyms/Abbreviations	Full names
KARI	Kenya Agricultural Research Institute
KDHS	Kenya Demographic Health Survey
KEMRI	Kenya Medical Research Institute
KHRC	Kenya Human Rights Commission
KNHRC	Kenya National Human Rights Commission
KLR	Kenya Law Report
LDCs	Least Developed Countries
LUCID	Land Use Change Impact Dynamics
MDGs	Millennium Development Goals
MOARD	Ministry of Agriculture and Rural Development
MOH	Ministry of Health
MOLFD	Ministry of Livestock and Fisheries Development
MOPH	Ministry of Public Health
NACC	National AIDs Control Council
NASCOP	National AIDs and Sexually transmitted diseases Control Programme
NGO	Non Governmental Organization
NPHLS	National Public Health Laboratory Services
PRA	Participatory Rapid Appraisal
SAPs	Structural Adjusted Programmes
SCN	Sub Committee on Nutrition
SPSS	Statistical Package for Social Sciences
UDHR	Universal Declaration of Human Rights
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNFPA	United Nations Population Fund
UNHCHR	United Nations Higher Commission on Human Rights
UNICEF	United Nations Children's Fund
UON	University of Nairobi
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization

OPERATIONAL DEFINITIONS

Claimants: refers to those who depend on the state, community or household heads to be free from hunger, malnutrition and poverty. They are also referred to as right holders or claim holders. In the study the term claimant will interchangeably be used with right holder.

Disability adjusted live years: refers to the sum of years of potential life lost due to permanent mortality and the years of productive life lost due to disability.

Duty bearers: refers to those obligated to uphold rights (usually states or governments, household heads, individuals - able adults) and have the responsibility, authority and resources of satisfying the claims to right holders. In this study duty bearers will include individual (able adults) and household heads, at the household level. They are ideally expected to provide for themselves and their families. At the community level, duty bearers include community institutions and other change agents who are expected to provide support and facilitate realization of factors or entitlements that influence food security. Lastly, at the national level, the state is a duty bearer whose responsibility is to fulfil, by creating an enabling environment to facilitate the capacities of individuals and communities to take action themselves; the mandate to provide for all. This is especially the case during times of crisis that are justified through direct provision of food, which is also adequate, to affected populations.

Entitlement: refers to sets of income, assets, commodities and human capacities and skills which households establish control over and which secure their livelihoods.

Food insecurity: refers to deprivation of food due to lack of opportunity to produce food, insufficient income to purchase the food needed and inability to work at all. In the study, it will refer to a situation when the households have limited access to productive and inadequate assets to ensure adequate food to meet body requirements for all household members. Food insecurity in the study also refers to inability to work at all.

Household: refers to an economic and social unit composed of members, who may or may not be related, but pool their resources for their sustenance and usually shared meals together for at least 3 days to 12 months prior to the survey.

Human right: refers to the ability of all to access and control their entitlements and assets to ensure adequate food, clothing and housing and improved living conditions.

Hunger: refers to a condition where an individual or household is not able to have three meals in a day over a long time with inadequate intakes to meet daily requirements of energy and protein. It is usually a recurrent and involuntary lack of access to food.

Justiciability or right to food: refers to procedures or mechanisms put in place to ensure justice is upheld in realization of the right to adequate food in case of violations, abuse or denial of rights to a claimant and can be presented to court of law.

Livelihood stability: refers to the household's ability to employ buffer mechanisms to ensure household food security irrespective of harsh conditions.

Malnutrition: refers to a condition which results from either excessive or insufficient nutrient intake resulting in impaired growth and body function. That condition due to excessive intake is referred to as over-nutrition and that due to inadequate intake is referred to as under-nutrition.

Obligations: refers to the duties duty bearers have with respect to the right to food. These are categorised into three parameters; 'to respect', 'to protect', 'to fulfil (facilitate and provide)'.

Respect - this obligation requires the state and/or duty bearers to refrain from interfering directly or indirectly with the enjoyment of the right. This includes freedom from all forms of discrimination, right to access to basic services, right to be free and enjoy without state interference, right to equity of treatment especially allocation of resources and access to credit, right to participate and right of organization. In the study it will refer to the right to be free and to enjoy basic services, discrimination, and equal treatment without interference to ensure realization of the right to food.

Protect - This obligation requires the state and or duty bearers to take measures that prevent third parties from interfering with the enjoyment of the right. This includes prevention of violation of the Convention of Economic, Social and Cultural Rights (CESCR) by the State or third party and access to legal remedies without partiality in cases of violation of the right by

other duty bearers. In the study this obligation will refer to prevention of third party interference with enjoyment of the right through social, cultural or gender, biases or discrimination.

Fulfil - (facilitate) - This obligation requires the state or duty bearers to adopt appropriate legislative, administrative, budgetary, judiciary, promotional and other measures towards the realization of the right to food. This includes equitable distribution of resources, provision of public services and ensuring its access. In the study, it will refer to availability of public services and their accessibility to all and equitable resource allocation.

Fulfil (provide) - This obligation requires the state or duty bearers to directly provide assistance or services for the realization of the right at a time of emergency. This will include relief aid during emergency and rehabilitation support.

Progressive realization of right to adequate food: refers to the continuous improvement in realization of the right to adequate food by households through reduced human suffering by hunger, under-nutrition and poverty through enhanced entitlement, capacity and empowerment to take charge of their food needs.

Realization of the right to adequate food: refers to the degree households have control over their entitlements (human and non-human) towards attainment of adequate food for household members at all times.

Right to adequate food: Refers to the right to have regular, permanent and free access either directly or by means of financial purchases to qualitative and quantitative adequate and sufficient food with respect to the cultural traditions of the people to which consumers belong and which ensure physical and mental individual and collective fulfilling and dignified life free of fear. In the study it will be used interchangeably with right to food.

Violation of Rights: refers to the state's inability to uphold rights to claimants. In this study, it refers to duty bearer's inability to uphold rights and is used synonymously with denial or abuse of rights.

ABSTRACT

The Universal Declaration of Human Rights and International Convention on Economic and Social Cultural Rights underpin freedom from hunger and dignified lives for all. The study aimed at developing an innovative methodology for assessment of realization of the right to adequate food at household level and its validation; investigation of realization of the right to adequate food and its influence on food security, perception of rights to adequate food among pastoral and small farm holder households and duty bearer challenges in their realization of their obligation towards attainment of realization of right to adequate food. The study developed the right to adequate food tool based on the rights obligation parameters 'to respect', 'to protect' and 'to fulfil'. Validation of methodology was achieved through a comparative cross-sectional survey among 249 pastoral and farming households. Data was collected using a general household questionnaire, rights to adequate food questionnaire, perception of right to adequate food questionnaire, 24 hour food recall, food frequency questionnaire, household food insecurity access scale and focus group discussions. Quantitative data was analysed using SPSS version 16 software. Qualitative data was analyzed based on thematic content analysis. A 34 item rating tool was developed, able to assess realization level of right to adequate food at household level and also articulate aspects of knowledge, entitlement, capacity, capability, empowerment and decision making. Household Right to Adequate Food Index (HRTAFI) was computed as a measure of level of realization of the right at household level. The farming community had better level of realization of both the right to adequate food and household food security compared to the pastoral community ($p < 0.01$). The pastoral group had higher realization of the obligation parameter of fulfilment ($p < 0.01$) compared to the farming group. Female headed households had better realization of the right to food ($p < 0.05$) although they experience more violation with respect to the obligation parameter of protection ($p < 0.05$). Both communities experienced violation of the right with respect to the protection parameter. Realization of the right to adequate food correlated positively with education, health and gainful occupation ($p < 0.01$). The pastoral community however had better annual income ($p < 0.01$) compared to the farming counterparts. Both communities had a reasonable understanding of human rights; however, the practice was contextual. Retrenchment was perceived as an opportunity to enhance livelihoods among the study group ($p < 0.05$). Causes of violation of the right included unstable livelihoods, high food price hikes, marital conflict, civil unrest, and changing climatic conditions. Manifestation and mechanisms of redress varied among the study groups and by gender. Primary duty bearer's challenges included livelihood stability and changing policies. However, secondary duty bearer's support was crucial in fostering primary duty bearer's realization of the right. Single mothers had more challenges in meeting their obligations of right to adequate food for the infant. Perception of breast feeding was contextual and varied along gender lines. The pastoral community significantly breast fed the boy child longer ($p < 0.05$). Realization of the right to adequate food increased with awareness on human rights accounting for 5% variation and varied with seasonality. It accounted for 4-14% variation in food security during wet season compared to 5-8% during the dry season. Realization of right to adequate food enhances food security. Meeting primary duty bearer needs is fundamental in capacitating them to realize their obligations in realization of the right

to adequate food. Perceptions of human rights are not new among communities and are consistent with conventional definition of human rights, however practice is contextual. Violations of rights are based on both human and non-human factors. Realization of the right to adequate food is influenced by realization other rights such as education, health and work. The developed HRTAFI can be used as an alternative measure of food security at household level.

CHAPTER ONE

REALIZATION OF THE RIGHT TO ADEQUATE FOOD AND ITS INFLUENCE ON FOOD SECURITY

GENERAL INTRODUCTION

This chapter gives the general overview of the thesis. It expounds on the main concepts addressed in this study and also links the different chapters of this thesis which address the different study objectives set out. It also expounds on the rationale of the study and hypotheses being considered in the study. It discusses the conceptual framework and study methodology used. It also outlines the various chapters that make up the thesis in line with the objectives they address.

1.1 BACKGROUND INFORMATION

The global food insecurity is a reality and a growing concern to all, with an increasing global population of those undernourished, hungry and poor over the last three decades. Food insecurity which has been manifested as undernutrition, hunger, starvation and poverty, increased from 740 million persons in 1980's to 840 million in 1990's and to a staggering 930 million in 2009 (FAO, 2009). Worsening food insecurity has continued despite concerted efforts to increase agricultural production and strategies to improve economic growth globally. Both economic development and increased food production are not sufficient to ensure food and nutrition security since they do not adequately address the issues of access, entitlement and control of resources adequately. Good health and adequate nutrition are some of the most powerful tools in addressing poverty and ensuring wholesome development in any country, thus the need to address issues of food and nutrition security.

A high rising number of populations are undernourished. This implies that they are hungry, starving and poor, a manifestation of food insecurity which depicts violation of human rights and denial of basic entitlements, especially the right to adequate food. Human rights of these people

are violated as they are not able to enjoy lives free from hunger and with dignity. Both the Universal Declaration of Human Rights (UDHR) in Article, 25 and the International Convention of Economic, Social and Cultural Rights (ICESCR) Article, 11 (SCN, 2005) demand that all human beings be free from want and hunger. The right to adequate food not only entails the availability of food, its accessibility to all at all times, but also the capacity for one to utilize their entitlements and/or resource base to realize daily food needs. These are in terms of balanced diets, adequate to meet their body needs or requirements for a healthy life.

Households derive food entitlements from their own production, productive capacities, income, gathering of wild foods from forests during lean times, hunting, community support and owned investment assets. Thus, households that lack entitlement and ability to produce food are likely to be food insecure. Food insecure households also tend to have more human rights abuse. The right to adequate food and gender discrimination especially among women are most violated. The realization of the right can only be achieved if households are empowered to utilize their entitlements or livelihood assets (human such as capabilities, skills, knowledge and non-human e.g. land) to attain food availability and accessibility. These when operationalized within an enabling environment and under defined policies and/or laws and regulations with consideration of the vulnerability shocks can then be translated into desirable livelihood outcomes such as well-being, and improved food and nutrition security.

Much of the work towards progressive realization of the right to food has been on defining the rights to adequate food, operationalization of the obligations for member States and developing strategies for monitoring progressive realization of the right. These have mainly focused on the National level with the household level still not catered for. However, the human rights based approach is now being advocated in development programming. Focus on rights issues is based on the quality of protection one has against the occurrence of malnutrition and food insecurity. Thus the household is considered the best level for this study to investigate the right to food and its influence to food security. This is through developing a protocol of measuring realization of

right to food at household level, understanding household perception of right to adequate food and identification of policy gaps.

1.1.2. Statement of the Problem

Despite efforts to improve food security through improved agricultural productivity and economic growth, malnutrition and hunger, which are manifestations of food insecurity, still pervade and have continued to grow in numbers over the last three decades. The populations experiencing undernutrition, hunger and poverty have risen from 740 million in 1980's to 930 million in 2009 (CBS, 2008; DFID, 2002; FAO, 2002a, 2009, Kunnemann and Epal-Ratjen, 2004; Smith and Haddad, 2000; UNDP, 2000, 2006; FIAN, 2009; Hospes and Meulen, 2009). There is need therefore to increase focus on human rights based approaches in programmes to promote food security.

Human rights especially the right to adequate food are not yet well articulated in the development agenda, especially its relationship to food security. Methodologies to gather relevant data and its analysis are still inadequate. There is therefore a need to determine the influence of rights to adequate food on food security within the defined context of knowledge, awareness and capacity to realize the right. There is need also to develop a methodology suitable and relevant at household level for collecting and analysing data on household realization of the right to adequate food. Therefore, the current study was aimed at developing and validating the methodology for assessment of household realization of right to adequate food as well as applying the developed methodology to investigate how realization of right to adequate food influences household food security.

Human rights based approaches are currently being advocated in development programs especially food security. However, not much has been reported due to limitations in articulation of these approaches as opposed to basic needs approaches that have been in operation over the last four decades. The need to understand the household's perception of human rights and rights

to adequate food and challenges duty bearers encounter in realization of the right is important for successful planning and implementation of the human rights based approach programs.

Although Member States have signed the treaty on ICESCR and the Bill of Human Rights, not all Member States have domesticated it into their respective country constitutions. This then means that policies that would enhance realization of the right to food cannot be formulated on the human rights agenda; and if any are developed, they are formulated and integrated into policies in other relevant line ministries. This may imply that set out goals on the progressive realization of the right to food may not be attained. There is need, therefore, to advocate and lobby for the domestication of the right to food into the Member State Constitution.

1.1.3 Purpose of the Study

The study aimed at developing an investigation methodology for assessment of realization of the right to food at the household level. The methodology was also to validate it and apply it to establish its relationship with food security. The study also aimed at understanding household perception of right to adequate food and challenges encountered in realization of right to adequate food. The information generated to will be used to inform policy makers and hence support decision making aimed at policy formulation that will improve national food security.

1.1.4.1 Hypothesis

Hypothesis made in the study were that:

1. Households with better awareness of right to adequate food have better food security.

$$H_0 \neq 0$$

2. Progressive realization of the right to adequate food does not vary with seasonality.

$$H_0 = 0$$

1.1.4.2 Objectives of the Study

The overall objective of the study was to investigate the realization of rights to adequate food and its influence on household food security.

Specific objectives were to:

1. Develop an innovative methodology for assessment and for monitoring realization of the right to adequate food among pastoral and small-farm holder households.
2. Investigate the perception of pastoral and small farm holder households on human rights and the right to adequate food.
3. Identify duty bearer's challenges in the realization of the right to food and coping strategies at the household level among the study groups.
4. Determine the right to adequate food as a measure indicator to food security.

1.1.4.3 Research Questions

The research questions considered in the study were:

1. How is the right to adequate food measured at household level?
2. What do the pastoral and small farm holder households perceive as the right to adequate food?
3. How do household heads perceptions of right to adequate food influence household food security?
4. What challenges do duty bearer's encounter in realization of the right to adequate food and what coping responses are adopted to enhance food security at household level?
5. How does the realization of the right to food influence food security?

1.1.5 Scope

The study was limited to pastoral and small-farm holder households. To test for the validation and applicability of the developed methodology, communities that rely on different livelihood systems were selected. These included pastoralist and small farm holders. The selected areas experience malnutrition and hunger which are manifestations of food insecurity (CBS et al,

2003; UNICEF/MOH/UON, 2001). Sajiloni Location, Kajiado District represented the pastoral community whereas Chania Sub-location, Bahati Location, Nakuru North District represented the farming community. The study investigated realization of rights to adequate food; by assessment of levels of the obligation parameters of ‘respect’, ‘protection’ and ‘fulfilment’ attained; and its influence to household food security. The study sampling unit was the household.

1.1.6 Justification

The right to adequate food remains one of the most cited in solemn declarations of political intent and one of the most neglected and violated in practice, globally (ACC/SCN, 2000; SCN 2005). Increasingly, the global population that is undernourished, hungry and poor has over the decades continued despite global and national level efforts to address food insecurity and is an indication of violations of human rights, especially the right to adequate food (FAO, 2001; Kunnemann and Epal-Ratjen, 2004; Sen and Dreze, 2002). Thus the gains in economic development are drained into losses through increased healthcare costs from increased disease burden, loss of lives and increased mental impairment and reduced productivity due to increased levels of malnutrition.

Recent works on the rights to adequate food internationally and regionally have focused mainly on the realization of the right in the context of national food security with a focus on development of a monitoring tool. In countries where the ICESCR has been ratified, the States have mainly practiced the right obligation parameter of “provision” towards the realization of the right to adequate food within their constitution (Jonsson, 2003; FAO, 2004b; 2004d). The focus is the provision of food during emergencies. There is need to develop a methodology which can be applied to assess attainment levels of human rights obligation parameters of “respect”, “protection” and “fulfilment” at household level. This will give an insight on household perception of human right and rights to adequate food as well as challenges that household’s encounter towards attainment of right to adequate food and food security.

The national level studies in Brazil focused on the national institutional capacity in realization of the right to adequate food (FAO, 2004a), whereas the Indian case study (FAO, 2004c) focused on right to adequate food realization among vulnerable groups, castes and people living with HIV/AIDS. A study conducted in Uganda in 2004, though not initially on realization of right to adequate food, revealed that the human rights approach was essential in the achievement of rights to adequate food and food security (FAO, 2004e). These studies have not developed a methodology that can be used to assess realization of right to adequate food at household level thus the need for this study to develop one.

Member State implementation of the right to adequate food at national level does not always imply household food security since these are at times localized areas with unmet needs where majority of households and individual suffer from chronic or transitory food insecurity (Sen and Dreze, 2002; Klennert, 2005). There is need in the study to assess the level of realization of the right to adequate food at household level to give a better indication of rights attainment.

Despite advocacy towards adoption of Human Rights Based Approaches (HRBAs) in development programmes, of which food security is one, many Member States are yet to domesticate the ICESCR into their country constitutions. This then limits the implementation of the HRBA since there is no supporting policy. Thus, these States are unable to fast track rights issues into the development agenda. There is need therefore to identify policy considerations that can inform policy makers and that will support decision making towards policy formulation with regard to addressing food insecurity.

1.1.7 Significance of the Study

Establishing the influence of the right to food on food security will generate new knowledge in addressing food security issues that will support the economic growth and increased agricultural production in attaining food and nutrition security. Developed methodology will be able to

measure realization of right to adequate food at household level and can still be used to monitor progressive realization of right to adequate food over time for both the household and the individual level.

The identification of food insecurity and vulnerability and its impact on the populations' nutrition situation and manifestation among the vulnerable groups is important to the country policy formulators. At the community level, the results of the study aimed at generating new information on the geographical dispersion on realization of the right to adequate food among populations and groups of different livelihood systems. Thus, this provides an insight into social-cultural dimensions of food insecurity and vulnerability; food availability and accessibility and their implications to rights to food but also how they are likely to influence projected development. The communities may also be sensitized on human rights and on their rights to adequate food issues and its subsequent influence on household food security. This provides them an opportunity as claimants to understand their roles and responsibilities in enjoyment of the right enhance their capacities in realization of the right to adequate food as well as to demand enforcement of rights to adequate food from duty-bearers.

The identification of a comprehensive and congruent right to adequate food indicators that measure food insecurity and vulnerability is important. It is expected that the developed rights indicators or indices will be able to convey to policy makers and other stakeholder the status and essential aspects of food insecurity, vulnerability and realization levels of rights to adequate food. Information and awareness generated on the rights to adequate food issues may be used in policy formulation and development planning. Information on household perception of rights to adequate food could also give guidance in developing relevant HRBA programmes at community level.

At the national level, it is expected that the government will recognize the right to adequate food as a development priority. This will facilitate incorporation of policies, strategies and interventions to enforce achievements of right to adequate food into the mainstream development

plans. The right to adequate food serves as a means in attainment and also towards realization of the six millennium goals that are nutrition related. The results can also be used by NGOs to integrate the right to adequate food in their intervention programmes and mobilize lobby groups towards domestication of the rights to adequate food into the national constitution. Researchers will use generated information on the right to adequate food to serve as a basis from which other research work can be done undertaken.

1.2 LITERATURE REVIEW

1.2.1 Introduction

This chapter presents concepts developed during previous work done aimed at the realization of the right to food at regional and international levels as a means of achieving food security. It also reviews theories of development, human rights approaches and its links to food security and sustainable livelihoods on which the conceptual framework was based. Missing gaps in knowledge with respect to right to adequate food are highlighted. This is aimed to facilitate the realization of the purpose of the study: development of an innovative methodology for assessment, evaluation and its application on right to adequate food to determine realization of right to adequate food, and its influence on food security at household level among pastoral and farming communities in Kenya.

1.2.2 Role of Nutrition in National Development

Development priorities usually focus on poverty alleviation and economic productivity over nutrition (Benson, Palmer and Johnson-Welch, 2003). In developing countries, especially in the Sub-Saharan Africa and South Eastern Asia where undernutrition levels are highest, much emphasis has been placed on improving education and health (WFP/IFPRI/CONCERN, 2007). Development planners and policy makers assume that nutrition will take care of itself once the economy is stable (Kent 1994; Shiva-Kumar, 2004; UNCHRC, 2002). Increasing food production, nutrition promotion, feeding programmes and other conventional approaches have

played important roles in reducing and/or ending hunger in the world. Despite these efforts, food insecurity still remains a challenge. Sen and Dreze (2002), argue that hunger is primarily due to a failure of entitlement or rights violation rather than inadequate agricultural productivity or population growth. Perhaps, as suggested by Kent (1997), it would be useful to work more directly with the social, legal and political tools of entitlements, rights responsibilities and accountability to realize food security, alleviate hunger, poverty and malnutrition.

Nutrition as explained in the conceptual framework of malnutrition by the United Nations Children Fund (UNICEF), (1999) is an outcome of complex biological and societal processes of basic determinants, underlying determinants and immediate causes. Basic determinants include policies and resource distributions and political ideological structures. Underlying determinants include access to adequate household food security, maternal and child care, health and environmental sanitation; whereas immediate causes consist of adequacy of dietary intake and good health or absence of disease. The development and interaction of these complex factors explain the existing availability and control of resources, which in turn explain the fulfilment of necessary conditions of food, care and health for optimum nutrition (Gibson, 2005; Klennert, 2005).

Inadequate nutrition manifests in different types of malnutrition, including protein energy malnutrition, specific micro-nutrient deficiencies such as Vitamin A, Iodine, Vitamin D and, Iron. The Micronutrient deficiencies also referred to as 'silent hunger' since they are not obvious except during severe deficiency levels or extreme stressful conditions. They are often missed out in the early stages of deficiency during care and by the time they are diagnosed the physiological damage is high (ACC/SCN, 2000; Gibson, 2005; Lantham, 1997; MOPH, 2008). Malnutrition however, is not only caused by inadequate dietary intake but also combined synergism of ill health and inadequate or improper care and sanitation (Kent, 1994; 1997; Lantham, 1997; SCN, 2005). Malnutrition constrains people's ability to fulfil their potential. Hungry and undernourished people have less energy to undertake work and have less concentration in their work. Diet related chronic diseases take highly experienced individuals out of the workforce and

resources from primary health services. Thus, adequate nutrition is a major and primary component of development. Therefore, it is expected that improved nutritional status will lead to improved ability to secure rewarding and sustainable livelihoods and development (Eide, 1999, Klennert, 2005).

Measurement of success in national development cannot be equated to advancement of nutrition since the objectives and indicators used are different. For example, improved income, productivity and reduced hunger are indicators for development whereas; malnutrition rates are used for nutrition. However, they share common indirect indicators of infant mortality rate, child malnutrition especially underweight and proportion of adult caloric intake. The use of child nutrition well-being as an indicator in the Millennium Development Goals (MDG's) of poverty and hunger reduction further links nutrition to developments (Klennert, 2004; SCN, 2004). Other nutrition related indicators currently being used as a measure of the reduction of poverty and hunger reduction include, proportion of adult consuming adequate calories, proportion of households having at least two balanced meals daily, proportion of people exposed to public information, nutrition and safety education (Beeckman, 2005; SCN, 2004).

The Global Hunger Index has also been used as an indicator in determination of food insecurity status. This index is composed of nutrition indicators of proportion undernourished, proportion of children malnourished and child mortality rate. The index score of GHI, that is GHI-P, is used to measure countries' progress in attainment of the Millennium Development Goals (WFP/IFPRI/CONCERN, 2007). The Human Poverty Index (HPI) which seeks to measure poverty beyond income comprises of indicators of illiteracy, child malnutrition, early death, poor health care and access to safe water. It is a measure of lack of capabilities, freedom and personal security and inability to participate in community life. The HPI ratio to income poverty measured by GDP gives an indication of degree of equality in access to health, water, services and nutritional status. A lower HPI compared to GDP implies growing inequalities in access to basic needs (UNDP, 2006). The Human Development Index (HDI) measures average achievement in basic human development. It is a single composite index that comprises of longevity, education

attainment and a decent standard of living (UNDP, 2006). As a measure, it enables evaluation of progress in human capabilities over time and across countries in the region. The use of nutrition indicators to measure development progress and level of food security strengthens the nutrition development link.

The MDGs offer a framework for development based on principles of equity, empowerment, participation and accountability. This advances development work beyond meeting immediate community needs to recognizing basic human rights and having those rights respected and protected (UNDP, 2006; UNFPA, 2009; UNHCHR, 2008). Essentially, the MDGs can be equated to the goals while human rights serve as strategies towards attainment of the goals (Beeckman, 2005, UNDP, 2006).

1.2.3 Human Development Approach

Human development approach is people centred and focuses on improved wellbeing of people not only as a means but as beneficiaries of development goals. The role of people in development has been extensively debated in the philosophy and political science over the last several years (Jonsson, 2003). There have been major development paradigms in the post-world war periods. The first was after the First World War, during the early years of industrial development which emphasised on economic growth. The second one came after the Second World War with the adoption of the universal declaration of human rights in 1948. This one introduced a human wellbeing or social face into development, often formulated in terms of basic needs and was referred to as the human development approach. However, by 1970's, when it was clear that economic growth did not necessarily benefit the poorest, then redistribution of resources with growth strategy was introduced (Haddad et al, 2003; Jonsson, 2001; 2003; Smith and Haddad, 2000).

In the mid 1980's, the International Monetary Fund (IMF) launched Structural Adjustment Programmes (SAP's) which aimed to stabilize country economies by reducing budget and trade

deficits, cutting public expenditure, reducing wages while raising interest rates all in order to restore external balances and economic growth. This impacted negatively to the vast majority of the poor populations, denying them basic needs initially intended for them. This then led to an overall increase in the cost of living making the poor more food insecure. UNICEF campaign for adjustment with a human face in 1987 criticized the SAPs and focused on development as people centred. This approach focused on empowering the poor to meet their basic needs leading to the current development paradigm of the concept of human rights based approach in development.

1.2.4 Livelihood, right to adequate food and food security

Households have several possible sources of entitlement which range from income, wages, inherited assets and other owned productive assets which constitute their livelihood. The livelihood systems are maintained by a range of on farm and/or non-farm activities (WFP, 1998). These together provide a variety of purchasing strategies for food and cash which can either be actual available food or converted to cash and then translated into other food and non-food needs, thus enhancing access to food. Among the pastoral community they mainly rely on animal and animal products sale whereas the farmers mainly rely on crop production and sale.

Livelihoods contribute directly to household food security. Among rural pastoral and small farm holder households food security is often dynamic and influenced by a range of factors. These include illness or disease which affects productive capacities, availability of earning opportunities, income or wage variability's, changes in climatic conditions and emergencies. Households must adapt to their changing world which they are often unprepared for (UNDP, 1994).

Since household needs vary from time to time, the households must make a balance between the food and non-food needs in terms of resource allocation. Meeting the balance of needs depends on their entitlement, capacities to transform entitlements to meet needs, control and decision making capabilities available to them (Sen, 1999). The ability to balance the food and non-food

needs thus imply the concept of stable livelihood and sustainable food security. Households with stable livelihoods are therefore more likely to realize the right to adequate food and food security.

Livelihoods systems in co-operate both short and long term perspectives thus imply a concept of sustainable food security. Where 'sustainable' means availability of buffer during harsh times or to sudden shocks to ensure a reasonable standard of living at all times (Kunnenmann and Epal-Ratjen, 2004; WFP, 1998). Overall, the risks of unstable livelihood determine degree of household vulnerability to income, health, food and nutrition security. It implies greater share of entitlement allocated to these needs hence household becomes more food insecure (Sen, 1999).

Households that experience recurrent shocks to livelihood systems are more vulnerable to food security and coping strategies are a series of decisions and actions which result into trade-offs between current and future consumption. The range of coping and adaptive strategies is large and differs contextually. Progressive realization of rights is therefore achieved when there are structures in place that are able to facilitate households to enhance their capacities to translate their entitlements to meet desired livelihood outcomes as well as mitigate shocks during vulnerable periods. The absence of such enabling environment thus constitutes violation of rights and denial of basic entitlement by secondary duty bearers (Kunnenmann and Epal-Ratjen, 2004).

1.2.5 Human Development and Human Rights Based Approach

The basic need approach has been used widely in development (Beeckman, 2005) in alleviation of poverty and addressing food security issues. In this approach, the beneficiaries are defined and their needs identified and interventions put in place by the state (ACC/SCN, 2000; Jonsson, 2003). The approach has created a dependency syndrome causing clients to assume that it is their right to be 'provided' for by the duty-bearers or government of the day. Neither do the beneficiaries have an active role to ensure their needs are met, nor are the duty bearers or government of the day obliged to meet the needs. There is need therefore for communities to be

sensitized to be more proactive on realization of rights to adequate food at household and individual level.

Human development approaches based on the basic needs approaches, were primarily on social and economic development as an outcome of development efforts and less concerned with the quality of processes through which the outcomes were achieved. The human rights approach on the other hand focus on the simultaneous achievement of desirable outcomes and ethically acceptable processes. The human rights approach differs from both the human development and basic needs approaches in that it focuses on the entitlements to certain standards for all people. It focuses on accountability and identifies those responsible for human rights realization with the aim of strengthening capacities to meet their responsibilities. That is, the duty-bearers (States and Individuals) and claim-holders (also referred to as claimants or right holders (individuals and populations)). It recognizes that beneficiaries are right-holders and establishes duties and obligations to those whom a claim can be held (Beeckman, 2005; Jonsson, 2003; SCN, 2004,). Therefore, human development is necessary but not sufficient a condition for achieving human rights.

Human rights are laws, customs and practises that have evolved over centuries to protect general populations' from the oppressive political elite (Jonsson, 2003). They aim at freeing human beings to enjoy their freedom from fear and want. These rights are necessary for people to live with dignity, to fulfil their potential and to satisfy the physical, spiritual, emotional and intellectual needs. The right to adequate food is one of the human rights enshrined in the Universal Declaration of Human rights of 1948 (SCN, 2005) and calls for equal opportunity for all to have access to adequate food and health. The ratification of the CESCRC by the member countries obligates the state or country to facilitate individual efforts to meet their food needs (UNHCHR, 2008). This can be achieved through creation of an enabling economic, social and political environment. Hence people will achieve food security and reduce and/or prevent malnutrition, hunger and poverty. Only when individuals do not have the capacities to meet their needs due to natural disasters such as floods, droughts, famine does the right imply that the state

physically provide food (IASC, 2006; Kunnemann and Epal-Ratjen, 2004; Per Pinstrup et al, 1995; SCN, 2005).

Human rights are grounded on human needs fundamental for existence and include food, shelter, clothing, emotional and economic ability to participate in discussions that affect them and to live in dignity (Beeckman, 2005; Kunnemann and Epal-Ratjen, 2004). Human rights based approaches express deep ethical and moral values and have entitlements unlike the basic need approach (ACC/SCN, 2000). They provide a mechanism for the vulnerable and those deprived to secure basic living standards in the society (Beeckman, 2005; FAO, 2002; Shiva-Kumar, 2004) without being dependant on the benevolence of the rich and powerful. Rights also pertain to relationships between individuals and government, providing individuals with legitimate claims against their government and obligations to the government to refrain from being oppressive, to protect people from oppression and ensure basic living standards. They also provide a redress mechanism for legal claim and enforcement through the judicial system, and other non-legal systems such as treaty bodies, ombudsmen, parliamentary process, human rights impact assessment or watchdogs for human rights abuse (Shiva-Kumar, 2004; UNHCHR, 2002). The international Human Rights Treaties adopted so far are seven, and the countries that have ratified these treaties are bound to uphold their respective obligations.

Human rights are important in this era of economic liberation especially where it is believed that liberation and open markets exorably lead to greater economic efficiency and human welfare. However, without clear emphasis on human rights, human suffering may continue manifesting as poverty, food insecurity and poor health status (ACC/SCN, 1999).

1.2.6 Right to Adequate Food as a Fundamental Human Right

Work towards implementation and operationalization of the right to adequate food (or right to food) has been a long journey since the Universal Declaration of Human Rights of 1948. It mainly targeted reduction of levels of undernutrition globally. The right to food concept is

enshrined in Article 25 that asserts ‘that everyone has a right to a standard of living adequate for health and well being of himself and his family, including food, clothing, housing and a continuous improvement of living conditions’ (ACC/SCN, 2000; Kent, 1994; SCN, 2005). In 1963, the United Nations declared ‘freedom from hunger as a fundamental right’. However, the definition of ‘freedom from hunger’ was not elaborated (Kent 1994). The ICESCR, where the right to adequate food are enshrined, were adopted by the United Nations General Assembly in 1966.

In 1974, Rome World Food Conference noted rising undernutrition, hunger and malnutrition levels globally. It was estimated that 740 million people were undernourished then. The conference issued the Universal Declaration on Eradication of Hunger and Malnutrition and prompted enforcement of the ICESCR in 1976. In the ‘80s, it became evident that development efforts in both economic growth and increased food productivity were neither translating into reduction of populations that were undernourished, nor to reduction in levels of poverty, hunger, and malnutrition. This brought about the adoption of the human approach in development (Jonsson, 2003). In 1991, the United Nations proposed the Right to Food and at the 1992 International Conference on Nutrition (ICN) and 1996 the World Food Conference tried to operationalize the right to food. In 2001, the United Nations linked nutrition as a measure of human and social development thus linking development to the primary determinants of nutritional status. It also linked nutrition as an outcome as well as a determinant of development.

The World Food Summit (2002) reinvigorated strategies to achieve the goal of halving the number of undernourished by 2015 thus prompting the concept of the right to adequate food as a way of empowering those who were food insecure and making them capable of demanding responsible action from their governments towards realizing food security goals (FAO, 2002; SCN, 2005). The adoption of the Voluntary Guidelines by FAO in 2004 marked a major breakthrough in the support of progressive realization of the obligations on the right to adequate food by state parties in the context of national food security (SCN, 2005). Although the right to adequate food has been recognized for long, little has been done to actualize it, since, no

frameworks presently exist (Shiva-Kumar, 2004). The increasing levels of under nutrition, malnutrition, hunger, food insecurity and human suffering over the years, threaten to undo the gains of development thus calling for a human rights approach towards food and nutrition security (FAO 2001; Kunnemann and Epal-Ratjen, 2004; Shiva-Kumar, 2004).

Realization of the right to adequate food can be achieved by first addressing issues of deprivation and the relationships between subjects with claims or rights or objects with duties and obligations. The subjects with claims are referred to as claimants or right holders while the objects with duties are the duty bearers (IFPRI-ACC/SCN, 2000; Kunnemann and Epal-Ratjen, 2004; UNHCHR, 2002). Secondly it requires integration of other rights or covenants since all human rights are interdependent. Realization of the right to adequate food entails the enjoyment of the right to health, education and work as constituted in the CESC (1966) Part 3, Article 11. Other human rights instruments that articulate the right to adequate food include Convention on the Elimination of all forms of Discrimination Against Women (CEDAW, 1979 Article 10(h), 11(f), 12(1), 12.2, 14(b),(g) (ACC/SCN, 1999; SCN, 2005) which emphasises on access to health services including those related to family planning, provision of appropriate reproductive health and nutrition care during pregnancy and the Convention on the Right of the Child (CRC, 1989) Article 6:1; 24:1,2 and 27 (SCN, 2005).

The indivisibility of the human rights is such that the realization of one right influences realization of other rights. For example, realization of the right to food is influenced by the realization of the right to work and health, since when hungry one cannot work effectively and their health is compromised reducing their productivity. Realization of the right to adequate food in this study is the desired outcome, and is referred to as a constitutive right; where as those other rights that facilitate or influence its realization are referred to as instrumental rights. Thus enjoyment of the right to adequate food can only be realized in conjunction with enjoyment of other rights. The domestication of the right to adequate food in the country's constitution will also facilitate realization of the right through appropriate policy formulation and implementation within relevant line ministries.

1.2.7 Progressive realization of rights

Realization of right to adequate food is a dynamic process towards attainment of the highest standard of living within the available entitlement and capacities of a household. Ensuring its full enjoyment at all times implies that realization of the right is progressive. Progressive realization of the right to adequate food can then be attained when there are well laid structures and strategies that support its realization. This not only includes household entitlement, but also support from other duty bearers, legislative and regulatory processes that help households translate their entitlement into desired livelihood outcomes.

Progressive realization of the right to adequate food is therefore achieved when undernourished populations are capacitated to have and access food to meet their daily requirements based on their entitlement, freedom from hunger and living dignified lives. Progressive realization of rights can therefore be equated to the gradual advancement in attainment of rights beyond a minimum requirement. In the human rights approach, the attainment of the millennium development goals serves as the basic, minimum bench marks in rights realization (Beeckman, 2005). Progressive realization of rights thus implies not only the gradual process in attainment of the MDG's but going beyond it towards self actualization.

1.2.8 Operationalization of the Right to Food towards attainment of Food Security

Realization of the right to adequate food not only ensures food for everyone at the moment but should also be embedded in a system that ensures continuity of supply to ensure food security (FAO, 2004a; 2004e; Jonsson, 2003;). An integrated approach to human rights argues that the continued enjoyment of the right also depends on the political climate of the specific country, the country priorities and ratification of the right into the country's constitution (Eide, 1999; Jonsson, 2003; Klennert 2005).

Several countries have articulated nutrition rights into some form in their laws. Cuba's constitution assures that "no child be left without schooling, food and clothing". The Italian, Spanish and Greek constitution assure "right to health". Countries, such as The Netherlands and Spain have the right referred in other parts of the constitution such as the right to social security and interpreted as implying nutrition rights (Hospes and Muelen, 2009). In other cases, however, the assurances are vague lacking distinct elaborations with respect to right to food and thus lacking legal enforcement (Kent, 1994 and 1999).

In the Kenyan situation, the Constitution currently articulates the Economic and Social Cultural Rights under the rights of fundamental freedoms in the Bill of Rights, Article 43 (c) (GOK, 2010). It however requires domestication into National Act or Policy framework relevant to the ESCR to be operational. The Child Act of 1991 does articulate the right of food, though not actually stated but implied in child health, survival and development, Article 4 and 9 (KLR, 2009).

1.2.9 Gaps in Knowledge

Current existing gaps therefore include, missing information on the extent of realization of human rights especially the right to adequate food at the household level; progressive realization of the right to adequate food and its implementation as it affects food security within the country and at household level; the need to strengthen advocacy campaigns on nutrition issues; inclusion of nutrition focus in national poverty reduction programmes and national development, and implementation of country's nutrition policy guidelines that will address nutrition concerns and the 'right to adequate food' towards improved national food security.

Most countries, despite signing the ICESCR treaty have not domesticated it into their constitution or law or as an Act, hence the human right is non-binding, meaning that implementation is not enforced (Kent, 1994; SCN, 2005; Shiva-Kumar, 2004; UNHCHR, 2002.

This implies that there is no clear recourse in law for individuals whose rights to adequate food are not fulfilled.

Realization of the right to adequate food convention would require member states to cap entitlements by clearly defining the criteria of those eligible for what entitlement and specify the eligible population groups and age limits. In the ICESCR, state obligations that previously lacked specificity on the state obligations and were difficult to implement have been more clearly defined by the adoption of the Voluntary guidelines (FAO, 2004; SCN, 2005).

In most developing countries, nutrition policies are either not in existence or still in their infancy stage (Benson, et al., 2003; IFPRI, 2004a). Development and implementation of the policy is mainly constrained by several factors: First, nutrition has no domain in the central government. In most developing countries, nutrition is a section within the sectors of health, education and agriculture (Benson, et al., 2003). Nutrition is thus seen as the 'responsibility of all, but the obligation of none'. Government allocations when made are first used for the mainstream ministry activities such as agriculture, health and education, leaving little or no funding for nutrition activities. Most nutrition programmes, within countries and internationally, are operationally surviving through donor funding but have been provided as a matter of charity, not entitlement. Hence, there has not been any legal recourse for those who fail to receive service. The right has not been effectively implemented (Kent, 1997; Kunnemann and Epal-Ratjen, 2004).

The lack of knowledge of the significant costs incurred, (both actual and opportunity costs), through inadequate nutrition or lack of food, are not obvious to policy makers and the wider community (Benson, et al., 2003; Kracht, 2003). The adoption of Food and Nutrition Policy in the 1995 Constitution of Uganda, which protects and promotes fundamental and other human rights and freedoms has realized major efforts in reducing food insecurity and poverty alleviation. However, it should be noted that the constitution does not recognize adequate food as a justiciable right (IFPRI, 2004b). The human rights approach was only used in its implementation (Kracht, 2003).

According to Oxfam (2009), in many countries, there is little realization among planners and policy makers that improved nutrition, which at times is an outcome of improved economic performance, is also an important determinant of the same. This results into less recognition of nutrition issues and willingness at national and local levels to commit resources towards nutrition issues. However, nutrition rights should not be seen as alternatives to other means of alleviating malnutrition, rather, they should be viewed in the light of the human rights based approach that complements and reinforces existing programmes thus making it cost effective in enhancing food and nutrition security (Kent, 1994; Klennert, 2005; Shiva-Kumar, 2004). Capping of the rights can therefore enhance political will towards realization of the right and enhancement of food security (Kent, 1994).

International trade policies are usually not in favour of developing countries due to the high tariffs that are imposed on export foods and their specifications (FIAN, 2008). Instead, they create greater marginalization and inequality (Ziegler, 2004). The developing countries are disadvantaged as most of their export commodities are in the raw state whereas imports are processed goods and cost more. Other expenses incurred include spoilage of products that are not processed or consumed locally such as pyrethrum and flowers. These losses then lead to food insecurity both at national and household level (Robinson & De Rosa, 1995). Multi-national investments in developing countries with displacement of populations have impacted negatively on the respect and protection of the right to food (FIAN, 2008).

The current emerging civil society concept is of 'food sovereignty' as an alternative model for agriculture and agricultural trade. It is a concept that focuses on trade as a means to an end and not an end in itself. As such, it gives primacy to food security and the right to food for the poorest rather than to export oriented industrial agriculture. To date, agricultural trade is far from being free or fair (Ziegler, 2004). Many developing countries are becoming dependent on food imports and are subjected to unfair competition from developed country's products sold at prices below the cost of production. This displaces local food production of basic foodstuffs and

farming livelihoods on those countries. This directly impacts on the realization of the rights to food (Department for International Development - DFID, 2002).

1.2.10 Conceptual Framework

Households are endowed with resources and assets constituting their entitlement which they use to meet their basic needs such as food, shelter, education, and clothing among others. When the resource base is ample, some of the resources are converted into new assets or investment which the family can fall back to at a future time or at lean times. However, the use and control of these resources and assets vary depending on a number of factors. These include, empowerment to use the resources, control of the resources, socio-political and cultural rights realized or denied and policies or regulations that govern the use of the resources towards a sustainable enabling environment.

The use and control of the household resources is manifested in the degree of livelihood outcomes and more so in the household food security level. Constrained use and control of household resources due to denial of rights may therefore mean limited access to basic needs, food education and clothing. When the demand for the resource is high, such as food or during lean times, then violation of rights are experienced. The most vulnerable population groups such as children, women, the elderly and those without other means or resources outside the home suffer most. The rights most violated include the right to adequate food, rights to education, child abuse and rights against discrimination. A study in 2006 by Ochola and Wamukuru, (2006) indicated that households that were resource poor and food insecure experienced higher levels of rights violation.

Harnessing of household resources can be enhanced through direct policy formulation which influences the realization of rights and their implementation in an enabling environment. These empower the right holders towards realizing their livelihood goals such as food security and wellbeing as well as investments for the future. Institutions and processes such as change agents, and government ministries play a great role in facilitation of policy formulation and

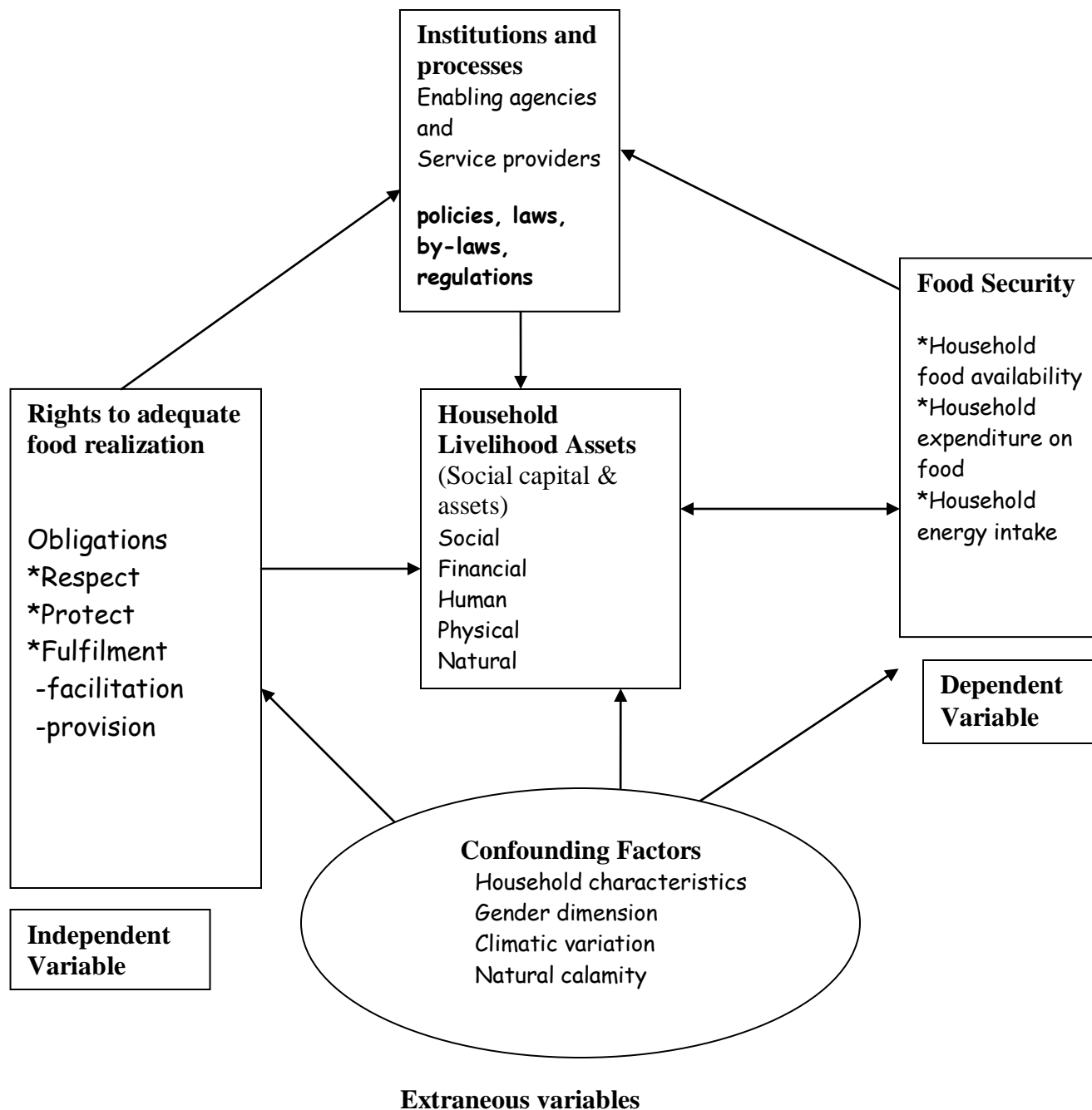
implementation towards realization of rights. However, political will is a strong determinant of the progressive realization of the rights and can be manifested at the household level. Also well laid down implementation, monitoring and evaluation processes are necessary for the progressive realization of rights, otherwise it may lead to more rights violation especially against the most vulnerable with limited or denied entitlement.

When household resources and assets are utilized positively, food security is enhanced at both the household and community levels. Institutions working with the community are able to get feedback on interventions in place toward realization of rights and their outcomes and/or impact to the community. These can then be used to influence policy formulation or review towards progressive realization of rights. The household members and community at large also get empowered and increase the demand for rights realization. This sets in a cyclic process of policy review, formulation and implementations that are sensitive to community needs.

Progressive realization of rights however can only be realized in an enabling environment. When the environment is stable and suitable, such as good climatic conditions and average household sizes that are manageable, then food security and wellbeing are realized with an increase in household assets through investment and wealth creation for the future. Also, households experience less violation of rights. On the other hand, when times are hard and household resources are limited or constrained, households are impacted negatively through decline of entitlement, loss of resources or wealth base, increased food insecurity and more violation of rights and gender discrimination. Large household sizes can also impact on households positively or negatively. For example, large household sizes where the dependants are many with a limited resource base, then strive for the fittest ensues. This is manifested in food insecurity at the household level, inadequate and poor quality food intake, violation of rights to adequate food, gender discrimination and destruction or loss of available resources. Small household sizes in a well resource-endowed household experience less both food insecurity and violation of rights to food. Socio-cultural factors such as food taboos and restrictions may influence

realization of rights to adequate food and therefore influence household food security level with or without gender inclination.

The conceptual framework of the study integrates these relationships as shown in Figure 1.1. It is based on the sustainable livelihood concept which surfaced in the Brundtland Report (*Our Common Future*) of the world commission on environment and development in 1987. It provides a holistic cross-sectional approach to problem definition and analysis as well as evaluation of programmes and policies (DFID, 2001; Solesbury, 2003). The approach focuses on people and the household as the centre of the development process and improved livelihoods as outcomes. It draws attention to core influences and processes and emphasizes the multiple interactions between the various factors which affect livelihood outcomes (DFID, 1999; Klennert, 2005).



(Adapted from an alternative Sustainable livelihoods framework, IFAD, 2005; Toufique, 2001)

Figure 1.1: Conceptual framework on relationship of Rights to Adequate Food and Food Security

1.2.11 Definition and Measurements of Variables

In the current study, the independent variable was the realization of right to adequate food. It was measured by the right indicators to respect', 'to protect' and 'to fulfil'. They assessed the attainment level of right to adequate food as measured by obligations parameters of 'to respect', 'to protect' and 'to fulfil' through progressive realization of adequate food and other related rights such as education, health services, health and nutrition education, property rights and safe environment (Jonsson, 2003). The household indicators were then converted into a household right to adequate food index (HRTAFI) as a measure of overall realization level of rights. The mean HRTAFI was converted to an index Community Right to adequate food Index (CRTAFI) which was used for comparative analysis

On the other hand, the dependent variable in the study was household food security. It constituted of household food availability and access to food. Composite indicators were used; food availability was measured by caloric intake of the household using consumer units per day to allow calculations of average household energy intakes and household energy adequacy as well as food consumption patterns. These data were derived from the 24 hour food recall and the household food frequency questionnaire respectively. Food accessibility in the household was measured by using monthly expenditure on food, household food diversity score and access to food as measured by the household food insecurity access score (Coates, Swindale and Bilinsky, 2006). Food utilization focused on health and health care services, its accessibility, food preparations and processing.

Extraneous variables considered in the study included, household size, composition and sex of household head, gender dimensions, climatic variation and natural calamity. Household composition was accounted for during the collection of the 24 hour food recall. The gender dimension was measured by eliciting information on practices that limit or grant access to food for various gender groups. Such practices include cultural, food norms and taboos that influence food intake for either children and pregnant mothers or special characteristics and rights

accorded to them. This information and that on perception to rights to food were collected in the general questionnaire. Climatic variation and natural calamity were measured from the repeated measurements during both the dry season or lean times and the wet season. More information was enlisted from the focus group discussions on experiences during both the wet and dry seasons and coping strategies adopted by the households and community at such times to ensure food security.

1.3 METHODOLOGY

1.3.1. Introduction

This chapter presents the study design and how data was collected. It includes the research design, study population, sample size determination and sampling procedures, data collection tools and procedures undertaken, validity and reliability measures as well as analytical techniques.

1.3.2. Research Design

The study involved development of an innovative methodological tool for measuring realization of right to adequate food at household level which was then tested among two different communities engaged in different livelihood systems. Selected livelihoods included pastoralism and small scale farming. It was intended to assess the universal application of the methodology among the different communities of the different livelihoods systems. The study investigated the realization of rights to food among pastoralists and farming communities. The comparative cross sectional survey design was selected and was repeated twice at both the dry and wet seasons in both study groups. This was to determine variability of realization of right to adequate food by seasonality. The survey intended to establish baseline data on current realization of rights to adequate food and food security status among the study groups. It also aimed at generating information on community perception of right to adequate food as well as to identify challenges experienced by duty bearers in realization of the right to food and food security. The two-time approach to data collection aimed at investigating whether levels of realization of right to

adequate food are influenced by seasonality. It also addressed the one time data collection weakness normally associated with this type of survey (Gibson, 1990; 2005).

1.3.3 Study Location

The study was carried out in Kenya where food insecurity is of national concern with a HPI of 37% in 2005 rising from 36.7% in 2004, implying worsening food security situation (UNDP, 2006b). It also ranks 43rd in the world hunger index (WFP/IFRPI/CONCERN, 2006). In Kenya, food insecurity is experienced especially among populations in the Arid and Semi Arid Lands (ASALs) and within the lake regions such as Lakes Turkana, Baringo, Bogoria, Naivasha and Victoria (FEWSNET, 2006 and 2007; UNDP, 2007). In the ASAL regions, most affected are the pastoral communities and the farming communities within the marginal areas (Adongo et al, 2004, Fratkin, 2003; Fujita et al, 2004; ILRI, 2006; IRIN, 2009; Ntiati, 2002; UNDP, 2006; 2007). These areas comprise of a fragile and harsh environment that experiences long dry spells which usually dry up the grazing pasture and browse leading to reduced animal body weight and finally loss of livestock. Short torrential rains experienced are infrequent and inadequate to support agricultural production. Around the lake regions, most affected are the low lying grounds that experience flooding, drought, loss of grazing pasture and high cost of inputs. Both the ASALs and the lake regions as a whole have high poverty prevalence, where 60-80 % of the population live below the poverty line (CBS *et al.*, 2003; Ntiati, 2002).

The farming community also do experience food insecurity despite being within the high ecological zones that are suitable for agricultural productivity. Food insecurity is usually related to inaccessibility of food rather than food availability, poor infrastructure and access to market, high cost of input, poor soil fertility and or intra household food distribution (Clover 2003; Kabubo-Mwariara *et al.*, 2006; Kigutha, 1995; Muyanga *et al.*, 2004; UNDP, 2006). Malnutrition which is a manifestation of food insecurity and a violation of peoples entitlement to food is evident in both the farming and pastoral communities (CBS *et al.*, 2003, Kabubo-Mwariara, 2008).

The study was undertaken in the Rift Valley region of the country. The province has a HPI of 0.528 and is the 3rd food secure region in the country (UNDP, 2006). The province is large and transverses ASAL and high potential zones (Rift Valley highlands). The choice of both pastoral and farming communities was to gain an in-depth understanding on contextual issues that influence realization of the right to adequate food and food security from a livelihood perspective. It is evident that both groups experience food insecurities and under nutrition despite their geographical locations of either ASAL or high potential zone. The Choice of Kajiado was to capture a community that was predominantly pastoral. Other regions in the northern part of the province were not considered as they were experiencing post Election conflict of 2007 hence not suitable for research as it would introduce bias. Nakuru North was selected as it was within the high potential region. The alternative choice Molo was not suitable as it was also affected by the 2007 post election conflict.

1.3.3.1 Study Sites

The study sites, Kajiado and Nakuru North Districts are as shown in Figure 1.2. The two districts represented the different community groups in the study who also relied on different livelihoods system; pastoralism and small scale farming respectively. Kajiado District is located at the southern tip of the Rift Valley Province. It borders the Republic of Tanzania to the South West and Loitokitok District to the South East, Machakos to the East, Nairobi to the North East, Kiambu to the North and Narok District to the West. It is situated between longitudes 36°S' and 36°47' East; Latitudes 1°10' and 3° 10'S. Kajiado district covers an area of 15,015 square kilometres and is varied in altitude which determines the climate of the regions in the district. The district has variable rainfall patterns, short rains fall between October and December while the long rains fall between March and May. The high altitude areas have an average rainfall of 1250mm compared to the low altitude areas 500mm (MOLFD, 2008). Population density in the district is sparse at 18 persons per square kilometre with higher population concentrations around the main towns.



Figure1.2: Map of Kenya showing location of Kajiado and Bahati Districts

The main economic activity is pastoralism. Sajiloni and Impiro Sub-locations of Sajiloni Location, Kajiado Central Division, Kajiado District where the study was conducted falls within the low altitude areas of the district and experience variable rainfall patterns from season to season (GOK, 1997a). The district has a HPI of 0.528 versus a GDP of 0.120.

Nakuru North District is situated in central Rift Valley Province. It is a new District having been carved off the larger Nakuru District in 2007. It is situated between longitudes 36°S' and 36°60 East; Latitudes 0°0' N and 1° 16'60 S. The district borders Laikipia District to the North, Nyandarua and Naivasha Districts to the South East, Nakuru Central District to the South and Baringo District to the West. It has coverage of 964 square kilometres. It is within the high altitude zone of central Rift Valley with low altitude regions to the West and South. The rainfall pattern varies with altitude and physical features (escarpment, lakes and mountains) Annual average rainfall is 1270mm in the areas 2400m above sea level. Long rains fall between March and June and the short rains fall in September to October. The district has a population estimate of 260,000 and 45,354 households with a population density of 223 per square kilometre (GOK,

1997b). Main economic activity is farming mainly by small scale farmers. Chania Sub-location of Bahati Location, Bahati Division represented the farming community. The HPI of the region is 0.61 and with a GDP of 1.55 (UNDP, 2006). This implies worsening human poverty situation in the region.

1.3.3.2 Selection of Study Sites

Selection of the study site was based on ecological zoning and their relative food availability. Sajiloni and Impiro Sub-locations are within the arid and semi arid ecological zone and the main livelihood stems from pasture rearing (GOK, 1997a). Crop production is practised but at a very small scale and usually not reliable. Chania Sub-location is within the high potential ecological zones bordering Bahati Forest and a high agricultural productive area. The main livelihood stems from farming (GOK, 1997b).

Kajiado District

Kajiado Central division is inhabited mainly by the Maasai community although in Kajiado town, mixtures of other ethnic groups are evident, these being the Kambas, Kikuyus, Cushites and Arabs who are mainly traders. The average household size is 6. The community is predominantly male dominated. Sajiloni and Impiro Sub-locations are in Sajiloni Location, Kajiado Central Division and have a population of 5642 and 1087 households (GOK, 2008). The Kajiado Central Division is bordered by Isinya Division to the North, Ngong division to the west, Mashuru division to the East and Namanga division to the South. Both Isinya and Ngong are within the outskirts of Nairobi City. Mashuru is a mining town and along the Nairobi Mombasa highway. Namanga on the other hand is at the Kenya Tanzania border. The study area, Sajiloni location is situated 15 kilometres from the main Kajiado town centre.

Nakuru North District

Chania Sub-location is in Bahati Location, Bahati Division. The top part of the sub-location borders Bahati forest. Chania sub-location is bordered by Mbogoine Division to the North, Laikipia District to the North East, Nyandarua to the North East and Eastern side, Nakuru

Central to the South and Baringo District to the West. The climatic conditions are strongly influenced by the altitude and the physical features (lakes, escarpment and the mountains). It is situated 18 kilometres from the nearest main town Nakuru. The main ethnic group living in Chania sub-location is the Kikuyu. They rely on rain-fed agriculture for both cash crop and subsistence farming for their livelihood (GOK, 1997b).

The different communities from the different eco-zones rely on different livelihoods systems. The different strategies adopted by the respective community to ensure food security will also influence realization of the right to adequate food. This will be dictated by the livelihood sources and entitlement available to them, capability to transform these entitlements to meet basic needs and the control over resource allocation.

1.3.4 Study Population

The population in Chania comprises of mainly small scale farmers who market their food produce at the nearest town centre, Nakuru and who also serve the western region of the country in vegetable trade. Chania has a population of 6157 comprised from 1127 households. The pastoral populations are mainly pastoralists and they rely mainly on sale of livestock and livestock products. Some of them also engage in subsistence farming but at a very small scale. Most of their trade targets Nairobi city and the surrounding environment. Sajiloni Location has a population of 2827 comprised from 609 households.

1.3.4.1 Target Population

The study included selected households in the study areas from both pastoral and farming communities; the household was the sampling unit, from which the sampling frame was based. The inclusion/exclusion criteria depended on the nature of household. In homesteads where several households lived together and shared meals together, the main household or that of the eldest woman was selected and the total number of those who ate their meals there was considered. If a household was independent and made up of the nuclear family members then it

was selected and members in it considered. The target population comprised of 609, and 1127 households in Sajiloni, and Chania respectively (CBS, 2001) in line with the respective population densities.

1.3.5 Sample Size Determination

A total of 249 households were included in the study. The calculated expected sample size of 248 was determined based on proportion of food insecure population recommended by Fujita *et al.*, (2004) and formula for sample size determination of Gibson and Ferguson, (1999), Jekel *et al.*, (2001) and Magnani (1991), using power effect of 80% at a significant level of 0.05.

Where sample size:

$$n = 2 \times [(Z\alpha + Z\beta)^2 (P_1 (1-P_1) + P_2 (1-P_2) / (P_1 - P_2)^2]$$

Where $(Z\alpha + Z\beta)$ = power level (80%) and significant level 0.05

P_1 = proportion of population with inadequate energy intake 0.40

P_2 = expected change 0.20

n = sample size

$$\text{Where } n = [(1.645 + 0.840)^2 \times (0.4 (0.6) + (0.2 (0.8)) / (0.2)^2]$$

Thus calculated $n = 123.5$, approximately 124 households per site.

1.3.6 Sampling Procedure

Sampling was done using a 5 step multi- stage sampling. First was selection of the districts for the survey within the Rift Valley Province. This was done purposively to identify a farming and pastoral community these being Nakuru North District and Kajiado District respectively. Secondly, in each district a location was purposively selected. In Kajiado, Kajiado Central Division was selected as it was the division out of the other five divisions in the district, not exposed to the city, industrial (mining) or country boundary influence, which may have biased

the study. Sajiloni Location was selected as it is predominantly nomadic. In Nakuru North District, Bahati Location of Bahati Division was selected.

The third step involved selection of Sub-locations. Due to the low population density in Sajiloni location, two adjacent sub-locations were selected, these being Sajiloni and Impiro to accommodate a representative sampling frame from which to select the required sample size of households. Chania sub-location was selected in Bahati since it is most productive in terms of agricultural potential. The fourth step included random selection of the households through cluster sampling in which the clusters were represented by villages in each sub-location. Lastly, proportionate sampling was calculated to identify the actual number of representative households to be selected per cluster and survey households to be selected randomly. A sampling interval (SI) in each cluster was then calculated using the formula,

$$SI = \{ \text{estimated number of households} / \text{number of households to be sampled} \}$$

The first household was selected as a number between 1 and the obtained SI, thereafter every SIth household was selected. In case of no response, the next house was chosen as a replacement. The calculated SI value for both Bahati and Kajiado was eight (8). Hence every eighth household was selected in each cluster or village.

1.3.7 Instrumentation

Different data collection tools were used to collect data. These included a semi-structured questionnaire, a repeated 24-hour food recall, household dietary diversity and food frequency questionnaires, household food insecurity access scale, focus group discussion, and key informant interviews. Combination of both qualitative and quantitative data collection methods were used to reduce chances of bias related to individual instruments and to give a more comprehensive understanding of the study (International Development Research Council (IDRC), 2007; Jonsson, 2001; 2003).

1.3.7.1 Semi-structured questionnaire

A general household questionnaire was administered to the female or male head of household (Appendix 1). Information to be gathered included, general household demographic and social characteristics, food production practices, monthly income expenditure on food, household day and weekly food frequency and diversity, household food availability and coping responses to food insecurity. Also included in the general household questionnaire were the assessment of level of realization of rights to adequate food, and household perception of rights to adequate food. The questionnaire on the right to adequate food assessed levels of attainment of right to adequate food as measured by the obligation parameters; ‘to respect’, ‘to protect’ and to fulfil’, as they affect food accessibility, availability, utilization, health care and sanitation (Jonsson, 2001; 2003). The household perception of rights to adequate food investigated perceived knowledge and understanding of concepts of right to food in their respective socio-cultural settings. The questions generated were based on the convention definition of rights to adequate food and were to be administered both at the household level and the focus group discussions.

1.3.7.2 Dietary assessment methods

Repeated 24 hour food recall

This is a quantitative dietary assessment tool used to estimate usual intakes of populations. It is an inexpensive, easy and quick method to use in surveys with low respondent burden in terms of time spent thus compliance is high and so is its coverage. However, it is limited if only a single recall is done as it may not be reflective of usual intake. The respondent also has to have a good memory thus the method is not suitable for use to both the elderly and children (Gibson, 1990 and 2005; Gibson and Ferguson, 1999). The 24 hour food recall was conducted twice in the same households but at different times. A typical normal working day was selected and another at the weekend. This was to highlight food intake variations within the households. The questionnaire was administered to the female head of household or person in-charge of food preparation.

Household dietary diversity score questionnaire (HDDS)

The Household dietary diversity questionnaire adopted and modified from Food and Nutrition Technical Assistance (FANTA) was used to determine the different foods that were usually eaten by the household. It is a better tool in assessment of household food frequency and diversity than a food frequency questionnaire (Swindale and Bilinsky, 2005). The household dietary diversity questionnaire listed 15 food groups from which the household dietary diversity score was calculated. Foods in the food groups were contextualized to reflect foods available in the local settings in Kenya. The generated household dietary diversity score was also one of the key outcome reference. The score was then used as a proxy indicator of food groups consumed over a reference period. It assumes the more diversified a diet is, the better the nutritional wellbeing and the more food secure a household is. At other times, it also serves as a proxy indicator of the household economic level (Swindale and Bilinsky, 2005). It is advantaged in that it is easy to administer with low response burden since it is not intrusive and burdensome. The tool was administered twice at both dry and wet season and helped capture seasonal variation in food diversification and give an insight of how seasonality affects the right to adequate food. It is however, limited in that inclusion of foods consumed out of the household would lead to overestimate of household dietary diversity (Swindale and Bilinsky, 2005).

Household food insecurity access scale (HFIAS)

The Household Food Insecurity Access Scale (HFIAS) questionnaire used was adopted and modified from both HFIAS developed by FANTA (Coates, Swindale and Bilinsky, 2006) and household food insecurity questionnaire by Lorenzana and Sanjur (1999). It was used to collect data on household food insecurity. The questionnaire elicited both quantitative and qualitative data on the food insecurity situation at the household level. The qualitative data collected was used to verify the answers given or provide more understanding of the situation or phenomena.

1.3.7.3 Secondary data on review of policy papers

Secondary data consisted of critical review of national development documents such as the District Development Plan 2002-2008, Poverty Reduction Strategic Paper; Economic Development plans, policy documents and the Chapters of the Laws of Kenya that address human rights issues. These included current development policies, the implementation of activities as well as the challenges and constraints on implementation towards realization of rights to adequate food. Data collected was expected to realise information on intervention that has been in place towards realization of rights to adequate food, their implementation and evaluation (if any) and how this has been used in policy formulation towards progressive realization of rights to adequate food.

The use of documented data as a data collection method is inexpensive because data already exists and is documented. It also allows for examination of trends over time. It is limited in that sourcing of the data may not be as easy as different data sets are at different places and are maintained differently; information may not always be complete and precise enough or too disorganised. Access to some record may be limited due to sensitivity of information and may require a permit (IDRC, 2007). Document data was useful during data analysis as it gave comparison of events verses policy requirements.

1.3.7.4 Focus group discussions

This is a qualitative data collection methodology used in social science since 1930 (International Nutrition Foundation for Developing Countries (INFDC), 1993). It is a component of rapid appraisal participatory procedures (INFDC, 1993; King and Burgess, 1998, PRA 2000). It entails conversation guided interviews facilitated by the researcher and observation for non verbal cues. The method enables rapid information collection among selected communities or groups of population with particular characteristics and especially where little is known or written on the issue. It also provides baseline information for further research and provides a better understanding on ideas, behaviours, practices, knowledge and beliefs of the particular population groups (IDRC, 2007; Jonsson, 2003; Participatory Rural Appraisal (PRA), 2000).

Most of the qualitative data collection was held in open community fora (*barazas*) where the following data was gathered: perception of rights to adequate food, household resource access and control analysis, gender disparities in rights to adequate food, food availability and coping responses to food insecurity and social economic criteria of households as perceived by the community. Data on household resource access and control analysis was also collected to gather comparison and capture any unique gender relationships within the community with respect to food security and rights to adequate food (Ministry of Agriculture and rural Development (MOARD, 2000). Focus group discussions for men and women were separately held. In each site there were a total of two women focus group discussions and two men focus group discussion. The total FGDs per site were eight.

Separate FGD's for men and women were preferred as allowed better voicing of women issues than in combined groups (Ndambuki, 2010). Among the Maasai, traditional culture does not allow the women to freely participate in mixed settings (Mpoke and Johnson, 1993). Thus standard of men only and women only FGDs were held in all study sites. The FGDs in each site were located at different zones of the study area to allow better participation of the research participants. This meant that they did not have to cover long distances to the meeting venue.

Discussions in the focus groups included generation of information on gender disparities in human rights, perceptions of right to adequate food, local terminologies (lexicon) on right to adequate food, food insecurity vulnerability and community responses at times of stress with respect to right to adequate food. The discussions were carried out after all the household interviews had been conducted. This gave in-depth information on some of the unclear issues raised during the household interviews as well as verifying information collected.

1.3.7.5 Key informant interviews

This is another method of qualitative data collection that provided further insights to unique issues arising from the focus group discussions and the general household questionnaire. As a method it also gives verification to qualitative data already collected (IDRC, 2007; MOARD,

2000; PRA, 2000). Key informants were interviewed using a guiding checklist of unique issues arising from previous data collection. Members interviewed included the civil servant in-charge of gender and development, Agriculture and livestock department (3), community leaders (3), Non-governmental organization officers (3), church leaders (2), women group leaders (2), health personnel (1) and school teachers (1). The different key informants were able to give unique insights of the community perception of rights to adequate food as perceived from their interactions with the community. Information gathered included community settings, cultural and social perceptions of rights to adequate food, insights to intra-household food distribution with respect to age, sex and physiological status.

Groups or organizations dealing with advocacy and human rights issues were interviewed in both sites. The groups were selected from the list given by the personnel in the Ministry of Social Services. In Kajiado, only three groups were listed. These included affiliates of Christian Child Fund (CCF), World Vision and Ministry of Social Services, Gender and Culture. Issues discussed included, objectives and activities of the group/ organization, how issues of rights violation are reported, documentation and resolution, within the community context and judiciary.

1.3.8 Validity and Reliability

This section addresses how measures of accuracy and precision of data collection were achieved. It examines the validity and reliability of the survey instruments as was determined in the study.

1.3.8.1 Validity

Dietary assessment

Validity is important in the design of nutritional assessment since it describes the adequacy with which any measurement or index reflects the nutrition parameter of interest (Gibson, 1990; 2005; Klaver *et al.*, 1988). In this study, dietary data was assessed using the 24 hour food recall which measured (estimated) the actual or usual intakes of the household. To cater for the daily

variations within the household, repeated 24 hour food recall was conducted and the average used for analysis (Carter *et al.*, 1981; Gibson, 2005; Krantzler *et al.*, 1982). In practice, since it is difficult to measure absolute validity of dietary data, Gibson (2005) suggests an approach which measures “Relative Validity”. In this approach the test dietary method is evaluated against another ‘reference’ method. In this study, the weighted dietary record was conducted in selected households in both study sites which was then compared to the 24 hour recall.

HFIAS questionnaire was validated and reliability established using the FANTA guidelines where a two stage validation process was used. First, a review of the questionnaire with a few key informants was done to ensure that the food insecurity questions were understood. This was followed by rephrasing of certain terms to fit cultural differences based on the HFIAS guidelines. Secondly, refinement of the questionnaire for reliability involved administering of the questionnaire to 8 – 10 individuals representative of the study population, but not part of the study to explore understanding of the questions and meaning (Coates, Swindale and Bilinsky, 2006).

Household perception to rights to food and Rights to food questionnaires

Validity was measured by selection of items for which the mean scores of the population group were compared to the total scores of undeveloped scale. The higher the mean difference, the more definitely item selection for the scale (Dawis, 1987).

General questionnaire

Validity of the general questionnaire was measured for by establishing the relationship between scores on the test and those other parts of the questionnaire. A highly positive association of the scores of different items of the test signify validity (Coolican, 1994). This allowed testing for logical analysis of content and empirical analysis. A questionnaire translated into the Maasai language was also developed to check for variation compared to the Swahili translated questionnaire. This was done since the principle researcher did not understand the Maasai language and had to rely on the research assistants.

1.3.8.2 Reliability

Precision is a function of measurement errors and uncertainties resulting from true variations in measurement. Reliability for household questionnaire was measured by Cronbach alpha procedure (Bland and Douglas, 1997; Tommiska, et al., 2002) after pre-testing of the questionnaire in Kihingo and Ildalmat representing farming and pastoral communities, respectively (see section 1.3.9). These sites were 30km and 11 km away respectively from the study areas, avoiding any bias. A reliability coefficient of 0.7 and above is recommended by Kathuri and Pals (1993) and Tommiska et al., (2002) for satisfactory internal consistency.

For dietary data, variations or error in measurements from actual nutrient intakes were checked by repeated food recalls over a seven day interval. Despite control of measurements, uncertainty in the estimation of usual intakes remain (Gibson, 2005), therefore, only an estimate in precision were made. True variability arises because dietary intakes differ among individuals and within households over time (Gibson, 1990; 2005). Analyses of variance in inter- and intra- group variations was used to account for differences during interpretation of dietary data. Repeated 24 hour food recall improves provision of intake variations (Beaton et al., 1997, Gibson, 1990; Sempos et al., 1985). Statistical assessments were done using paired t-test to assess agreement between nutrient intakes on a household basis.

The questionnaire on household perception of rights to food and rights was administered to respondents and checked for ranking order in the same way as immediate retest. The variability in total individual score gave an error of variance. Recommended variance ranges of up to 0.7 and above as suggested by Kathuri and Pals (1993) and Tommiska *et al.*, (2002), an indication of internal consistency.

1.3.8.3 Quality assurance

The questionnaire was translated into the Maasai language since the researcher was not conversant with the language. Repeated questionnaire interviews were then conducted in three of

the households previously interviewed to check on the consistency of the information from the respondent.

Weighted food method was conducted during the study at selected households in both study sites to check on the variability of the estimated household food intakes and a 24 hour food recall conducted the next day. The two were then compared. Constant monitoring of the data collection process was undertaken by the researcher. These included household interviews, 24 hour food recalls and weekly meetings with the research assistants so as to review the completely filled questionnaires as well as the process. In Kajiado, an interpreter accompanied the researcher and assisted in clarifying issues not well understood.

1.3.9 Pre-test and Data Collection

1.3.9.1 Pre-testing phase

Prior to actual data collection, a pre-testing phase at Kihingo sub-location in Njoro Location, Njoro District for the farming community and Oloyiankalani sub-location, Ildamat Location, Kajiado Central Division was conducted. The pre-test in both study sites lasted two weeks. This process assisted to further refine the household questionnaires and testing of other measurement techniques as well as their appropriateness in practice.

1.3.9.2 Training of field assistants

Training of field assistants was conducted on the use and administration of the research instruments prior to the actual data collection. Field assistants were selected from the respective locations of study districts in the survey. Selection was through an interview for those who met the minimum requirements of; 12 years of schooling (O' level education) and with a basic training in participatory methodologies. Research assistants were selected from young men and women identified at the community baraza and with consensus from the community members. They were competent and fluent in the local language as well as in English and Kiswahili. The training phase covered two weeks and was conducted by the Principle researcher to ensure familiarity with the research tools for five days in-house and while training for their application in the field situation lasted another five days. This entailed establishing rapport and team

building, training on understanding and the use of the research instruments, household definition and identification, sampling, recording of responses, conducting questionnaire interviews, and estimating dietary intakes in volumes and weights using common household utensils and calibrated cylinders. Special training was given to those who assisted in recording of focus group discussions and key informant interview proceedings. Adjustments of the tools following the pre-test were done as well and coding of the questionnaires in readiness for the actual data collection. Translation of the final questionnaires into the Kiswahili language was done to standardize the interview process in both sites. The researcher and the research assistants administered the questionnaires and recorded responses given by the respondents.

1.3.9.3 Exercise and flow of activity

Primary data consisted of both quantitative and qualitative data and was conducted in five phases: Household interviews, Community focus group discussions, 24- hour food recall, household food insecurity assessment and key informants' interviews. Household questionnaires were administered to the female and/or male head of selected households. This exercise was estimated to take 15 days per site. Community discussions took two weeks. At this time some rapport and trust building had been established between the research team and the community. 24 hour food recall questionnaire were administered to the female head of household or whoever was in charge of food preparation in the household. The exercise also covered 15 days per site. Secondary data was collected throughout the study period.

1.3.9.4 Ethical considerations

Prior to actual data collection, the proposal was submitted to the Board of Post Graduate Studies who gave consent for the field work. A research permit was then obtained from the Ministry of Education, Science and Technology. Prior to data collection, courtesy calls were made to the respective District Commissioner, District Officer, District Agricultural Officer and the local administration as per the requirement of the research permit. During the entire study, confidentiality of respondents' comments as relates to human rights issues and their opinion(s) on what needs to be done was maintained. Cultural values to particular foods and practices were

respected. Participating households were also required to sign a consent form as a sign of their willingness to participate in the study. Prior to the start of the field surveys, consent was sought at the community fora (*baraza*) during the introductory meetings to the community. In participatory approaches as emphasised in PRA, (2000), the importance of the researcher being formally introduced to the general community during the *baraza* cannot be overlooked. It offers an opportunity for the purpose of the study and usefulness of the information generated to be explained and clarified to the wider community in order to gain their trust, confidence and consent.

1.3.10 Data Analysis

The general population characteristics were obtained through simple descriptive statistics. Standardization of the household measures was developed for the conversion of household measures measured in volume, and other containers used in grams. Energy intakes were computed from the various foods based on the Kenyan Food composition Tables (Sehmi, 1993). Mean household energy intakes in study populations were also computed. Gender contributions to food security were analyzed and descriptive statistics recorded. Inferential statistics (correlations and regressions) were computed to establish the relationships between levels of attainment of rights to adequate food and food security. Statistical tests were measured at a power level of 80% and a significance level of $p= 0.05$.

Comparative analysis (chi-square and t-tests) of realization of rights to adequate food, and food security were done among the study groups. Chi-square tests were done on discrete data and to test differences among the study groups. Statistical difference was noted at $p<0.05$ and $p<0.01$. Ratings, grading and qualitative analysis which previously have not been used in analysis of human rights based approaches (Jonsson, 2003) were also used in this study. From the ratings, the individual household scores for each rights obligation parameter were calculated and levels of realization determined based on the set cut-off points and these were categorized appropriately.

A household food insecurity access score variable was computed for each household by summing up the coded frequencies of experience for each question. The household score ranged from a minimum of 0 points to maximum of 30 points. The level of household food insecurity increased with the score. Household scores were classified based on criteria adopted from Coates et al., (2005) and criteria developed by the community. Households were then categorized as either food secure; moderately food insecure or food insecure.

Questionnaires were used to gather the general socio-economic and demographic information and data on the contribution of gender to food security from which general community description were generated. Qualitative data such as household resource access and control, policy considerations and perceptions of food secure households were generated through rapid rural appraisals, focus group discussions and key informant interviews. Rating scores of the household were determined using a leikert scale (Beurdern, et al., 2004; Dawis, 1987; Tommiska et al., 2002) using a 5 point rating scale.

Realization of rights to adequate food was assessed using a leikert scale for the different obligatory parameters to respect, to protect and to fulfil which comprised of aspects of provision and facilitation. A leikert scale of a multiple factor of one was used to score each parameter from which household right to adequate food index and subsequent community right to adequate food index were computed. For each of the parameters measured, the households were categorized into either of the three categories: violation of rights, moderate violation of rights or low or no violation of rights.

A Household Right to Food Index (HRTFI) was computed by summation of the scores of all obligation parameters of respect, protection and fulfilment. The HRTFI of each household within each study site was calculated to give the Community Right to Food Index (CRTFI), which was used for the inferential statistics in comparative analysis. Perception to rights to adequate food was analysed by computing the scores attained per household and classified as either, low,

average or high. Data was analyzed using Statistical Program for Social Sciences (SPSS), and NUTRI-SURVEY software for analysis of dietary data.

1.3.11 Outline of the Thesis

This study presents results of the study on the right to adequate food and its influence on food security among pastoral and small farm holder households. The chapters are written as articles to be published in relevant International Journals. Chapter 2 addresses the first objective of the study and focuses on the development of an innovative methodology for assessment of progressive realization of the right to adequate food at household level. Chapter 3 describes the perception of pastoral and small farm holder households on human rights and the right to adequate food. It addresses objective 2 of the study. Challenges experienced in realization of the right to adequate food, Objective 3 is addressed in both Chapters 4 and 5. These focus on the duty-bearer's challenges towards realization of the right to food, and the realization of maternal right to adequate food and its influence on attainment of right to food of the child respectively. Chapter 6 addresses the right to adequate food as a measure to household food security thus addressing Objective 4.

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CHAPTER TWO

INNOVATIVE METHODOLOGY FOR MEASURING REALIZATION OF THE RIGHT TO ADEQUATE FOOD AT HOUSEHOLD LEVEL

ABSTRACT

The shift in socio-economic development paradigm hypothesizes that realization of the right to adequate food is core in attainment of household food security. The last two decades have seen accelerated efforts in implementation of the right to adequate food by Member States. However, little or no focus has been made to measure realization of the right to adequate food at household level. The study intended to develop an innovative methodology to assess realization of right to adequate food and its validation in a community setting. The developed methodology was based on the rights obligation parameters of ‘to respect’, ‘to protect’, and ‘to fulfil’. Each obligation parameter measured, knowledge, capacities, entitlement, empowerment and decision making aspects of rights. A 34 item rating tool was developed. Computed scores for each obligation parameter were categorized into three levels of realization; violated rights, moderate violation and low or no violation. Household right to adequate food index was computed from the obligation parameter indicators. Validation of the tool was through a comparative cross section survey among 249 pastoral and small farm holder households. Reliability coefficients of 0.72, 0.83 and 0.69 were obtained for the obligation parameters ‘to respect’, ‘to protect’, and ‘to fulfil’ respectively. Validation of the tool indicated that overall farming community significantly enjoyed better realization of the right to adequate food compared to the pastoral group ($p < 0.01$). However, obligation parameter of ‘to fulfil’ was significantly realized by the pastoral community ($p < 0.05$). Both groups had considerable violation of the obligation parameter ‘to protect’. The developed methodology was able to assess household realization of the right to adequate food. The findings also indicated that the methodology was sensitive to ecological and cultural differences.

2.1 INTRODUCTION

This chapter hypothesizes that the progressive realization of human right to adequate food is ‘core’ in attainment of household food security inspite of economic and agricultural production growth. Studies have shown that both economic and increased agricultural productivity have fallen short of ensuring attainment of household food security as they do not always address the issues of entitlement and capacity to access food either by production or purchase. The last three

decades have witnessed increased population numbers being food insecure as manifested by hunger, malnutrition (undernutrition) and poverty globally. In 1976, it was estimated that global undernutrition was 740 million rising to 840 million in the 1990's and by 2009 the level was estimated at 930 million.

The Human Rights movement started after the World War II with a people centred focus. The Universal Declaration of Human Rights (UDHR) of 1948, by the United Nations marked the global shift of ensuring human rights for all (ACC/SCN, 1999; SCN, 2005). The right to adequate food is one of the fundamental human rights enshrined in the Universal Declaration of Human Rights (UDHR) of 'freedom from hunger'. It is also enshrined in the International Convention of Economic, Social and Cultural Rights (ICESCR) of 1966 (SCN, 2005). Countries that signed the treaty, also referred to as member states are therefore obligated to ensure that citizens in their countries have adequate food at all times through realization of right's obligations of respect, protection and fulfilment (either through facilitation or by provision).

Progressive realization of the right to adequate food has gained momentum over the last 20 years with accelerated efforts towards its implementation by member States being seen after 1989. This was when the United Nation Council mandated member states to take up their obligations in enhancing progressive realization of the right in their respective countries. Obstacles that initially were encountered by members States in implementation of the right to adequate food were deemed to be as a result of unclear definition of the content on the right to food. This was overcome by the breakthrough of the Voluntary Guidelines by FAO in 2004 (FAO, 2004; 2005). These guidelines serve as a guide on the implementation of the right and have made it easier and more feasible for member States to implement the right to adequate food in the context of National food security.

A shift in the social economic development paradigm has seen more advocacy for the adoption of (HRBA) in programmes addressing food insecurity. Studies on implementation of the right to food have been reported in some of the countries that have ratified and domesticated the

ICESCR into their constitution. These, include Canada, India, South Africa, Brazil and Uganda. Wide review of literature indicates that studies have focused on the National level. However, they have not developed any methodology that can assess the right to adequate food at the household level.

Reports on studies to measure realization of the right to food and food security at the household level, are almost nonexistent. To the best of my knowledge no methodology has been innovated that can be used across communities that measures progressive realization of the rights to food as an indicator of food security at the household level. Household food security is a crucial component in the attainment of National Food Security and thus there is need to have a method of assessing household realization to right to adequate food. The study intended to develop a methodology that could measure realization of the right to food at household level and validate it as an indicator of food security among the different communities of varying livelihoods. Indicators of progressive realization were also identified among the identified duty bearers within the study communities.

2.1.2 Statement of the Problem

Measurement of food security level by assessment of food availability and accessibility alone are not adequate in ensuring realization of the right to food and food security. Other factors such as entitlement, empowerment, and capacities to produce and access food are crucial towards progressive realization of the right to food and food security. Hence, the need for a methodology that incorporates these in its assessment.

Interventions adopted at national level are still based on the basic needs approach rather than the human rights based approaches. These interventions do not empower the communities to take charge of their own entitlement towards food security at their household levels. There is need therefore to sensitize all intervention stakeholders of the development paradigm shift to the human rights perspective and develop methodology to assess realization of rights from the

household level. The methodology should be such that data generated can be aggregated to the national level and as well as measure the food security level

2.1.3 Purpose of the Study

The study aimed to develop a methodology for assessment of realization of the right to adequate food at household level as a measure of food security. It also intended to identify duty bearers' indicators that can be used to measure realization of rights to adequate food and household food security.

2.1.4 Objectives

The overall objective of the study was to develop an innovative methodology for assessment of the realization of the right to adequate food that can be used as an indicator for food security at household level. To achieve these, the following specific objectives were set.

Specific objectives were to:

1. Develop a methodology that can be used to measure realization of right to adequate food at household level.
2. Validate the developed right to adequate food tool as a measure of household realization of right to adequate food among communities of different livelihood types to test universal applicability of the tool.
3. Determine indicators that can be used to measure realization of the rights to adequate food among different duty bearers

2.1.5 Research questions

The research questions considered in this study were:

1. What methodology can be used to assess realization of rights to adequate food?
2. Can the developed tool be validated as a universal tool?

3. What indicators of duty bearers can be used in assessment of realization of the right to adequate food at household level?

2.1.6 Justification

Over the last two decades reports on studies on the right to adequate food have focused on implementation of the right by member states (FAO, 2004; 2004a; 2004c;. 2005; 2009a). These studies have mainly been focused on the national level. However, no study has yet developed a methodology for assessing realization of the right to adequate food at household level.

2.1.7 Significance of the study

Measurement of level of realization of the right to adequate food at household level will provide the household rights situation and will help in planning HRBA interventions which will address the gaps. It will also help in measurement of progressive realization of the right to adequate food over time and can also be used as a monitoring tool. At the household level, information generated by the tool will help create a basis for awareness and capacity enhancement that the change agents can use to enhance sensitization of the community in general on human rights approaches. Researchers can use the developed tool for other related rights based studies. Identification of duty bearer's indicators will assist to know the scope of capacities and capabilities of enhancement required to facilitate realization of the right to adequate food as well as in planning HRBA interventions.

2.2 LITERATURE REVIEW

UNICEF has been in the fore front of developing the human rights based approaches towards the realization of the right to food and health care in an effort to address food security issues. Work by Jonsson (2003) helped define the use of HRBAs to development planning. Many have adopted the approach especially towards developing methodology for monitoring realization of the right to food at national level. Studies by Oxfam on implementation of HRBAs indicate that

most have been based on the basic needs approach and not on human rights approach (Oxfam, 2007).

Access to food is a valid indicator in measurement of household food security (Klennert, 2004, Coates et al., 2006) whereas; the Household Food Insecurity Access Score (HFIAS) (Coates et al., 2006) has been useful in identifying needy households. It however does not capture entitlement to household resources which influence control and decision making capacities that eventually translate into dietary intake adequacy. These factors are not captured yet they affect realization of the right to adequate food.

Engsveen (2005) designed a methodology that combined instruments that included development of indicators that could measure performance and capacities of duty bearers based on the obligatory parameters at the individual, community and state level. The methodology was able to highlight roles and capacity analysis of duty bearers and identify challenges that hinder them from non-compliance to their obligations; however it did not measure realization of the right to adequate food at household level.

Most studies have been carried out at national level and have focused on implementing and monitoring national level progressive realization of the right to adequate food based on the Voluntary Guidelines on the right to adequate food by FAO (SCN, 2005). The Voluntary Guidelines, though instrumental in facilitating implementation of the right to adequate food, does not measure realization levels of the right to adequate food.

In contemporary cognitive anthropology, several methods have been used to produce ethnographic data in aid of advancing new theoretical knowledge. While modern methodologies have become more elaborate and sophisticated they have remained anchored in the premises of the early feature model. Feature models refer to a broad analytic concept that developed in the 1950's and 1960's. Feature models are not only concerned with how people organize information

but also what the organization means in terms of mental information processing (D'Andrade, 1995)

Cognitive anthropologists stress systematic data collection and analysis in addressing issues of reliability and validity and, consequently, rely heavily on structured interviewing and statistical analyses (Weller and Romney, 1988). Thus preference of quantitative data. On the other hand, perceptions are qualitative in nature. They can be translated into quantitative set of data for ease of analysis. One of the techniques used in translating qualitative data into quantitative set of data and analysis is the ordering technique. It is based on the cultural model (Shore, 1994) that tries to understand sets of assumptions and understanding as perceived by members of society and how these assumptions govern human behaviour. Ordering of these perceptions either in a rating or ranking along a conceptual scale is an appropriate approach.

According to Maxwell and Bart (1995) measuring qualitative data into scores or ranks depends on the end purpose of the data use. Although scores are numerically meaningful in giving distance measure between preferences, they also provide a ranking order of preferences. Ranking represents an order of perception according to importance of the particular issues under consideration but without numerical significance. Both ranking and scoring have been used to convert qualitative data into quantitative data for meaningful generation of information.

With the shift in socio-economic development paradigm to the human rights approach, there is need to develop methodologies that can articulate both qualitative and quantitative aspects of assessment of attainment of human rights realization. In human rights based approaches, ratings, grading and qualitative analysis have not been used (Jonsson, 2003). This study aims at using these techniques in the development of the methodology.

2.2.2 Gap in Knowledge

In order to understand the effect of the right to food on food security at household level, there is need to design a methodology that can measure realization of the right to adequate food at the household level as well as household food security. Measurement of the realization level needs to articulate aspects of knowledge, entitlement, capacity, skills, empowerment and decision making. These aspects have not all been considered in most of the methodologies that have been used. There is also need to develop indicators that are relevant and which can be aggregated to give relevant information on the progressive realization of the right to adequate food at household level and food security.

2.3 METHODOLOGY

This section details the process of development of an innovative methodology that has been used in the present study to assess realization of the right to food at household level. It also details the validation study of the methodology among rural households.

2.3.1 Development of the Household Right to Adequate Food Questionnaire

The right to adequate food methodology was developed based on the obligation parameters of ‘respect’, ‘protect’ and ‘fulfilment’. Items were developed on each criterion that measured scope of knowledge, entitlement, capacity or skill, empowerment and decision making attributes of each parameter, as they affect realization of the right to adequate food

The questionnaire was intended to measure realization of rights to adequate food through assessment of the rights obligations parameters of ‘respect’, ‘protection’ and ‘fulfilment’ at household level. The questions were developed in the form of statements that reflected the three obligation parameters of, ‘to Respect’, ‘to protect and ‘to fulfil’. Each of the statement was then rated on a five point rating scale. The rating scale included, measures of ‘Strongly disagree’, ‘Disagree’, ‘Do not know’, ‘Agree’ and ‘Strongly agree’. The tool was then pre-tested among

similar comparable communities to those used in the validation study and improved before adoption for use. The statements or measurement scales, focused on the capacities, authority, decision making capability, access and availability of households to be food secure. It also looked at the institutional capacities and structures that would influence household access to the right to adequate food.

2.3.2 Study Design

The study design was a cross-sectional survey which was conducted over two seasons, the wet and dry seasons. Seasonality was considered so as to measure whether there was temporal variation on the application of the methodology in measurement of progressive realization of the right to adequate food with subsequent changes in levels of food security as a result of changing seasons. A comparative community study was undertaken to measure whether there was variation on application of the tool among communities within different geo-spatial, ecological and socio-economic livelihoods.

2.3.3 Study Population

A farming and pastoral community were selected. Bahati was selected as representative of the farming community and Kajiado for the pastoral community. Both of these communities are within the Rift Valley Province of Kenya. The main source of livelihood among the farming community was predominantly of small scale farming whereas among the pastoral community they were predominantly pastoralist.

2.3.4 Selection of Study Sites and Sampling Procedures

Upon modification of the developed right to adequate food instrument, validation of the tool was then carried out among the rural small-farm holders in the farming and pastoral communities identified in section 2.3.3. Selection of the study communities was based on ecological zoning,

socio-economic livelihood and the relative food availability. This was intended to measure whether there would be a difference in the application of the tool given geographical and seasonality variations. Bahati and Kajiado districts were then selected to represent the farming (high-potential ecological zone) and pastoral (arid-semi arid zone) communities respectively.

Sampling was through a 5-step multi-stage sampling method. This involved the district, division, location, sub-location and finally at the household levels. Proportionate random sampling method was used to select participation households. A total of 249 households were selected comprising of 114 farming and 135 pastoral small-farm holding households.

2.3.5 Data Collection Procedures

The developed household right to adequate food questionnaire was first pre-tested among rural communities similar to the study groups and improvements on the tool done. Participating households in the pre-testing phase included Ildamat sub-location Kajiado Central division and Kihingo in Njoro division representing the pastoral and farming communities respectively. Pre-testing was intended to measure relevance, comprehension and applicability of the tool among the study communities. It was also used to determine progressive realization of rights at the household level.

The validation of the right to adequate food methodology developed was then tested among the study groups. The right to adequate food questionnaire was administered to selected household respondents and the realization level of the right assessed. Comparative realization of the right to adequate food was then analyzed from the score attained by the respective households.

Focus group discussions were then held with both study sites. Two for women and two for men in each site. A total of eight FGDs were held overall. The FGDs were separate for both men and women. Each focus group was composed of about 10-12 community representatives. Discussions focused on establishing community identification of duty bearers involved in the

realization of the right to adequate food at the household level and identification of duty bearers' indicators that reflect realization of right to adequate food

2.3.6 Data Analysis

Data was analyzed using the Statistical Programme for Social Sciences version 16 for Windows. Test for reliability of the developed data collection instrument (right to adequate food questionnaire) was done using cronbach alpha for test on internal consistency. Realization of rights to adequate food was assessed using a likert scale for the different obligatory parameters 'to respect', 'to protect' and 'to fulfil'. The parameter 'to fulfil' comprised aspects of both provision and facilitation. A likert scale of a multiple factor of one was used to score each parameter from which household right to adequate food index (HRTAFI) and subsequent community right to adequate food index (CRTAFI) were then computed. Seven scales (item 1-7 of the instrument) represented the scale measurement for the obligation of 'respect', nine scales (item 8-16 of the instrument) represented 'protection' and eighteen scales (item 17-34 of the instrument) represented 'fulfilment' both as facilitation and provision. The household realization of right to food for obligation parameters 'to respect', 'to protection' and 'to fulfil' were then computed and a score developed for each. These were then categorized into the different categories of 'violated rights', 'moderately violated' and 'low or no violation' of the right.

Computation of household rights to food index

The rating score for obligation of respect ranged from 0-35, with computed household score categorised using equidistant scale as shown below

0-11- violation of rights

12-23- moderate violation of rights

24-35- low or no violation of rights

For obligation of protection the scale ranged from 0-45, with computed household score categorised using equidistant scale as shown below

- 0-15 - violation of rights
- 16-30 - moderate violation of rights
- 31-45 - low or no violation of rights

For fulfilment of rights to adequate food, scores ranged from 0-90 points, with computed household score categorised using equidistant scale as shown below.

- 0-30 - violation of rights
- 31-60- moderate violation of rights
- 61-90 -low or no violation of rights

A household index was then computed by summation of the scores of all the obligations. Household scores ranged from 34 -170, with computed household index categorised using equidistant scale as shown below.

- < 79 -violation of rights
- 80-125- moderate violation of rights
- > 125- low or no violation of rights.

The mean of the household indices was then calculated to give the community index, which was then used for the inferential statistics.

The scores on the different rights obligation parameters were determined from the likert scale as marked by the respondents on each item of the tool. The rating score ranged from one to five (1-5) for the scales ‘Strongly disagrees, Disagree, Do not know, Agree and Strongly agree’. The household score for each obligation parameter of respect, protection and fulfillment was then recorded. Summation of all the obligation parameter scores then gave each household its Household Right to Adequate Food Index (HRTAFI).

The general population characteristics were obtained through simple descriptive statistics. Comparative analysis of realization of rights to adequate food, food security and other factors

that influence household characteristics was done among the study groups using the correlations of t-test and chi-square. Statistical associations to determine relationship between the progressive realization of the right to adequate food and food security at household level were also done.

2.4 RESULTS

2.4.1 Designing the methodology

2.4.1.1 Development of the rights to adequate food questionnaires

The right to adequate food questionnaire was developed with 34 items based on the obligation parameter criteria of respect, protection and fulfilment. In each criterion, items developed were to elicit aspects of knowledge, capacity, entitlement, empowerment and decision making that influence realization of the right to adequate food. The scope of the obligation parameters is unique compared to other tools used to measure food security as they do not include these factors that influence realization of rights. The items in each criterion also indicated indicators that were either direct, indirect or enabling factors. The questionnaire items are as indicated in Table 2.1

Table 2.1: Household right to adequate food questionnaire

S/n		Statements
1	Respect	Always have enough food to eat
2		Always have free choice of food types to eat
3		Have special food for the vulnerable and sickly
4		Always able to purchase food items you want for the family
5		Always able to grow food crops you desire /want
6		Able to purchase farm inputs freely
7		Do not require approval from other family members to plant certain food crops
8	Protect	Always able to achieve equitable food distribution within the household
9		Children's food is usually special from the family foods
10		Pregnant and lactating mothers have no food restrictions on certain foods
11		All family members eat at the same time and together
12		Some cultural taboos are attached to certain foods
13		Able to make equal decision with spouse on the use of family

S/n		Statements
		resources
14		Have a stable livelihood (constant and reliable source of income)
15		Able to afford health care for the family
16		Have access to health care
17	Fulfill (provision and facilitation)	Aware of importance of iron and folic acid supplementation to pregnant mothers
18		Mothers follow the routine immunization schedule for their children
19		Always receive nutrition and health care information from the health facility and other sources
20		Receive nutrition and health care information always without having to request for it
21		Able to get support care at home from other family members when unwell and ill at home
22		Health centre within reasonable distance (5 km)
23		Have access to nutrition education and health information on child care and family from the health centre
24		Rely on both modern and traditional knowledge of health and child care practices
25		Receive extension services regularly
26		Attend freely and actively participate in field demonstrations, training and workshops
27		Do not rely on spouse only to bring food home for the family
28		Eat certain food types despite cultural restrictions
29		Do not require consent to grow certain foods and prepare land
30		Do not always purchase farm inputs through loans
31		Children eat first before the adults in the family
32		Have access to loan facility
33		Do not rely on food aid all round the year
34		Receive food aid only during emergency

2.4.1.2. Development of the rating scores

The items in the developed tool were rated on a five point leikert scale as a measure of realization of right to food for the obligation parameters ‘to respect’, ‘to protect’ and ‘to fulfill’. The rating scale consisted of ‘Strongly disagree’, ‘Disagree’, ‘Do not know’, ‘Agree’ and ‘Strongly agree’. The items were structured such that the rating level of ‘strongly agreed’ was in

congruence with higher awareness of the right to adequate food whereas 'strongly disagree' reflected least awareness or denial of the rights. The rating scores were: 1= Strongly disagree, 2= Disagree, 3= Do not know, 4= Agree and 5= Strongly agree. The rating scores were recorded as per the respondent's response to each statement. Each response was marked on the corresponding rating scale given.

2.4.1.3 Development of the household rights index

The household right index was categorized into the three obligation parameters of respect, protection and fulfilment. Each parameter criteria was then tallied for the rating scores attained and this gave the level of realization of right to adequate food respectively. Summation of the household obligation parameter indicators generated the HRTAFI. The mean HRTAFI in the community was given by the Community Right to Adequate Food Index (CRTAFI) which was used in the comparison of means analysis among the study groups

2.4.2 Reliability test of the developed methodology.

The test for reliability on the rating scores for the realization of rights to adequate food obligation parameters of respect, protection and fulfilment was tested using cronbach alpha in the SPSS version 16 software. Reliability co-efficient values for obligation parameters 'to respect', 'to protect' and 'to fulfil' were $\alpha = 0.72, 0.83$ and 0.69 respectively. On average, having a cronbach alpha value >0.70 is recommended for internal consistency of instrument (Bland and Douglas, 1997); Kathuri and Pals, (1993); Tommiska *et al.*, (2002); Lorenzana and Sanjur, 1998).

2.4.3 Validation of developed Right to adequate food tool

Validation of the right to adequate food questionnaire was tested among two rural communities of different livelihood types, pastoral and farming. The main aim was to ascertain the tool applicability as a measure of realization on the right to adequate food and also to compare tool applicability at different geospatial, socio-economic and seasonal variation. Comparative

analysis in realization of the right to adequate food within the study groups is shown in Table 2.2.

Table 2.2: Validation of the right to adequate food tool as a measure of realization of right to adequate food among the study groups

Obligation Parameter	Level of realization of right	Farming (n=114) %	Pastoral (n=135) %	Chi-square value (χ^2)	P-value
Respect	Violation of rights	7.9	8.8	16.394	0.002**
	Moderate violation of rights	65.8	88.0		
	Low or no violation of rights	26.3	7.4		
Protect	Violation of rights	0.00	0.7	2.981	0.490 (ns)
	Moderate violation of rights	71.9	79.3		
	Low or no violation of rights	28.1	20.00		
Fulfill	Violation of rights	0	2.2	18.553	0.001**
	Moderate violation of rights	.7	64.4		
	Low or no violation of rights	12.3	33.3		

** Significance level at $p < 0.01$; ns= not significant.

The pastoral community indicated more enjoyment of the right to fulfilment compared to the farming counterparts. This was significantly different ($p < 0.01$). This implies that the pastoral community had more access to services rendered to them by change agents and the state towards realization of the right to food. These included education, awareness creation and loan facilities. They also received food relief from the government during emergency times; usually arising from drought compared to their farming counterparts. The farming community on the other hand significantly enjoyed the right to respect more ($p < 0.01$).

The household right to adequate food index (HRTAFI) among the study groups showed significant difference at $p < 0.01$ ($\chi^2 = 18.914$; $p = 0.001$). The farming households indicated

enjoying more realization of the right to adequate food overall compared to the pastoral counterparts as in Figure 2.1.

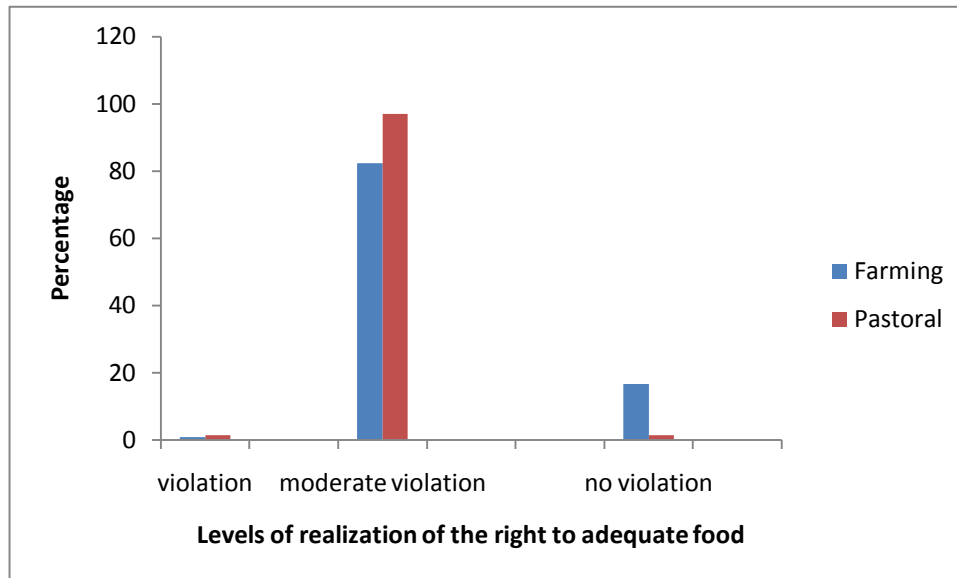


Figure 2.1. Comparison of household right to adequate food index among the study groups

The mean of the household's right to adequate food in each study group was computed to generate the Community Right to Adequate Food Index (CRTAFI). Comparison of the CRTAFI for the different seasons was then analyzed to assess whether there were variations with realization of right to adequate food. The CRTAFI showed significant difference ($p < 0.01$ and $P < 0.05$) within the study groups and with seasonality as shown in Table 2.3. The CRTAFI for farming group was 109.20 ($s\delta 15.64$) and 109.69 ($s\delta 10.70$) for both dry and wet seasons respectively. Among the pastoral group CRTAFI for both the dry and wet seasons were 102.88($s\delta 10.05$) and 104.06 ($s\delta 8.54$) respectively.

Table 2.3: Comparison Community Right to Adequate Food Index (CRTAFI) among the study groups by seasonality

Seasonality	N	F value	Significance
Dry (March-June) [#]	249 [#]	16.041	0.000**
Wet (August-November) ^{\$}	183 ^{\$}	4.433	0.037*

Significance level *=(p<0.05); ** p=(p<0.01), # Farming n=113, pastoral n=135; \$ Farming n=71, pastoral n=112

2.4.4 Duty bearer's indicators for measuring progressive realization of rights to food

Focus group discussions on duty bearers and the respective indicators that indicate progressive realization of the right to food are as show in the table below.

Table 2.4: Duty bearers and respective indicators for measuring progressive realization of right to food

Duty Bearers	Direct indicator	Indirect indicator	Enabling environment
Parents	Well fed educated, clean children Ability to provide basic needs for family	Hardworking	Steady livelihood Ability to create job opportunities for growing children eg. Inheritance
Family	Good management of family resources	Level of assistance to needy families Level of family participation in family food production and work	Peaceful home Strong family unit/ co-operation
Community	Support given to needy families Level of employment opportunities generated	Number of operational services /facilities Level of extension outreach	Strong organizational capability Degree of co-operation among members
Institutions	<ul style="list-style-type: none"> • Quality of service delivery • Level of assistance during needy times • Ability to respond to emergency 	<ul style="list-style-type: none"> • Level of contribution to local community development • Provision of extension outreach/ services 	Degree of impartiality

Duty Bearers	Direct indicator	Indirect indicator	Enabling environment
State	<ul style="list-style-type: none"> • Ability to protect people (level of national security) • Level of response to emergency • Level and quality of service delivery 	<ul style="list-style-type: none"> • Good governance • Level of support for extension programmes on going • Ability to provide loans to farmers 	<ul style="list-style-type: none"> • Ability to control food prices during price hikes • Price control mechanisms implementation

2.5 DISCUSSIONS

The reliability co-efficient test indicated that the instrument items were able to measure realization of rights to food obligation parameters ‘to respect’, ‘to protect’ and ‘to fulfil’. The household right to adequate food questionnaire was able to measure progressive realization of the right to food. The ability to have and access food, decision capability and free choice of food, and ability to have special food for those vulnerable such as the sick or pregnant mothers within the household accounted for 89% of the variation for the obligation parameter of respect. As such it is expected that during times when there is scarcity of food within households, then more violation of the right to food is experienced. This implies survival for the fittest during hard times.

Community comparison in application of the tool indicated that the tool was sensitive to ecological, seasonal and social economic and cultural differences. The farming community expressed significant difference on respect to food compared to the pastoral counterparts. They exhibited less violation of the right to food (Table 2.2). This may probably be explained by the continuous availability of food all round the year among the farming community unlike the pastoral community who at certain times of the year have to rely on relief food. The limited availability of food may also influence access to other household resources and entitlement, thus affecting the obligation parameter of ‘respect’ in the realization of the right to food.

In the absence of any form of social protection during prolonged periods of food shortage, the households are forced to sell off their assets and other resource base in order to sustain themselves. This depletes their resource base and endowment and they are not able to adequately meet their livelihood needs.

Both groups expressed moderate violation of the right to food with respect to the obligation parameter 'to protect'. The existing cultural norms and values within each study community may have contributed to this. Cultural norms and values define the use, allocation, control, decision making capabilities and access of the different household resource base and entitlements. From the community perspective, they may neither not be seen nor perceived as violations of rights but as a cultural way of life.

The obligation parameter 'to fulfil' which reflected provision at times of emergency and facilitation of households in the realization of right to food showed a significant difference among the two study communities. The pastoral community enjoyed the obligation parameter of fulfilment more than the farming communities both during the dry and wet seasons.

The farming community on the other hand expressed higher violation/abuse of the right compared to the pastoral community. This may indicate more restriction on the use, access and control of services aimed at enhancing the realization of the right to food. Ideally, the control of the obligation parameter 'to fulfil' is not in the hands of the claimants but on the duty bearers. Most claimants are either not aware of their rights and/or are not sensitized enough to demand for the same rights. This means that although the services are provided, they may not be functional, or the delivery process may be poor or that the service providers are not efficient. It may also be that the clients are not utilizing the services appropriately. Likewise, since most government activities already in existence were established using the needs based approach, then most claimants cannot make demands for improvements unless they have been sensitized and empowered to take up the collective responsibilities to demand for their rights.

Through the focus group discussions, the communities identified the different duty bearers and indicators that could be used to measure their progressive realization of the right to food. Duty bearers identified included the parents as the primary to the household whereas family, community groups, local institutions and the state were mentioned as the other secondary duty bearers. Although parents were identified as the primary duty bearers, the community pointed out that their ability to meet their duties and responsibilities depended upon availability of an enabling environment where the other secondary duty bearers also played their roles. This was seen in terms of policy implementation and favourable regulatory mechanisms that promote stable livelihoods. The lack of control by claimants over the secondary duty bearers reflects gaps in progressive realization of the right to adequate food.

Duty bearer's indicators, as defined by the study groups in realization of the right to food, identified levels of capacities and capabilities that foster realization of the right to adequate food. These included: stable livelihoods, education levels, resource base, unity, access to other food related services (health care, access to farm loans and extension services), well established institutional structures, policy implementation and good governance. This might imply that that realization of the right to food is a function of the indicators. This can be realised as:

$$\mathbf{HRTAF = \int [(Entitlement, Capacity, Capability and Decision Making) + (family unity+Health+Education)+(Institutional +State Support)] = Household food and nutrition security (HFNS)}$$

Where : Entitlement, Capacity, Capability, and Decision making + family unity+Health+Education are functions of the primary duty bearer (1° DB)

and Entitlement, Capacity, Capability, and Decision making are a function of Stable livelihood.

Institutional +State Support are functions of secondary duty bearers (2° DB) and include (enabling environment, good governance and policy implementation).

The model can be schematically represented as in figure 2.2.

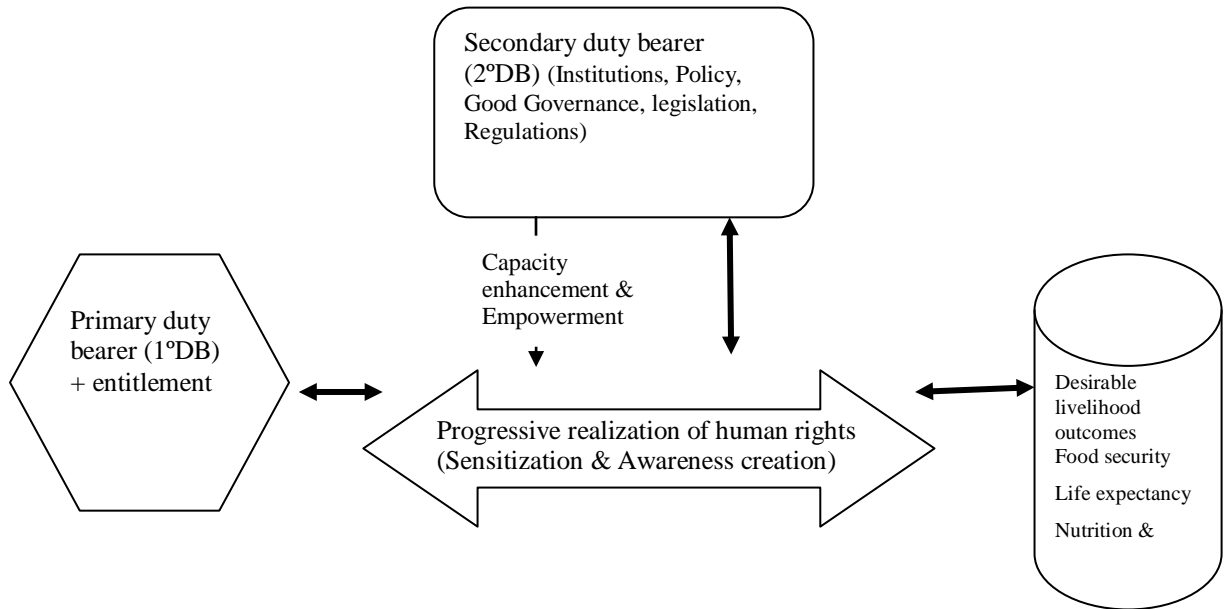


Figure 2.2: Pathways between relationship of Primary and Secondary duty bearers in the progressive realization of the right to adequate food and in attainment of food security

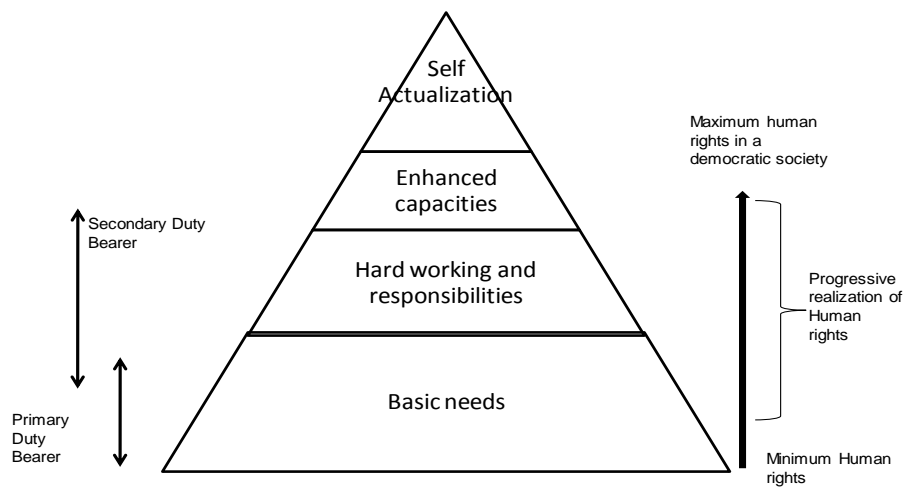
Progressive realization of human rights is a dynamic process and attainment of the minimal standards as postulated in the MDGs is not the end as in MDG 1 that addresses alleviation of poverty and hunger. One of its measurement indicators is the proportion of population with caloric intake less than 2100 Kilocalories. This does not imply that people maintain the 2100

calories. More can be consumed if the body requirement so deems depending on a person's daily activity and nutritional status.

Strive to achieve self actualization is desired in a true democratic society or space. Demands for livelihood outcomes are bound to vary with progressive realization of human rights towards a dignified life free from want and hunger. The oscillations in progressive realization of rights depend on the efforts of both primary and secondary duty bearers in the realization of the same. That is, efforts that increase realization of rights enhance livelihood outcomes whereas increase in denial of rights impedes positive achievements of livelihood outcomes. A break in this cycle either through poor policies, poor governance, and lack of both capability and empowerment then derails progressive realization of rights through direct violation/ abuse and by omission. Where the primary duty bearer defines the levels of actualization and desired output with consideration that it does not violate the rights of others and where the secondary duty bearer's unwillingness to achieve realization of the right increases violation of the rights to the right holders.

A comparison of the progressive realization of human rights with Maslow's basic needs theory is represented in figure 2.3. Thus from the model, realization of rights are crucial in attainment of basic rights as portrayed by the Maslow's basic need pyramid (Wahba and Bridgewell, 1976). The 1st level of the pyramid represents basic needs. These are defined as food, health, shelter, education and are the primacy of human life. These are however attained when human beings have capacities and capabilities to utilize and control their entitlement, and resource base to meet their needs. Once not empowered to use their entitlement either by restrictions or deprivation, then their needs are not meet. This then signifies violation of their rights. Human rights advocate for basic minimum requirements in the different conventions as set out in the MDG's (Beeckman, 2005) and these should not be seen as the maximum rights enjoyed in a democratic society.

The attainment of the 2nd and 3rd levels of the Maslow's basic need pyramid can be equated to progressive realization of human rights beyond the bare minimum with enhanced capability and capacities. Attainment of the 4th level of the Maslow's pyramid of self actualization can be considered as achievements of human rights in a democratic society. The concept of rights is thus superimposed on the Maslow's pyramid as depicted in the schematic representation in Figure 2.3:



Source: adopted from Wahba and Bridgewell (1976).

Figure 2.3: Schematic representation of the relationship between progressive realization of human rights and Maslow basic need theory

CONCLUSIONS

The right to adequate food tool was able to measure realization of right to food with respect to rights obligation parameters of respect and protection. It showed significant association with food security parameters of household food diversity, household food insecurity access scale and household energy intake. As such, the obligation parameters can be used as a measure of food

security. The right to adequate food index developed is a measure of food security. The developed tool was also sensitive to seasonal, geographical and socio-cultural aspects. This is a measure of sensitivity of the tool and its universal applicability among groups of different socio-economic livelihoods.

Cultural norms are a contributing factor to slow realization of the rights to food. Both the primary and secondary duty bearers have a role to play in the progressive realization of the right to food as a state obligation only. Enhancing capabilities of the primary duty bearers is fundamental in fostering desirable change towards realization of the right. Locally identified indicators can then be contextualized and used to measure duty bearer's performance in the progressive realization of rights. Meeting basic needs is just the minimum requirement of the human rights. Fostering progressive realization of rights is important in the attainment of human rights in a democratic space and enhancing food security both at the household level and globally.

Key Findings

1. The developed methodology was able to assess realization of the right the adequate food at household level. It was able to articulate aspects of knowledge, entitlement, capacity, capability, empowerment and decision making in its assessment.
2. The small farm holder households had better overall realization of the right to adequate food compared to the pastoral household.
3. Both the pastoral and small farm holder households experienced considerable violation of the obligation parameters 'to Protect'. This implies that they experienced violation with respect to resource entitlement, utilization and control.
4. The pastoral households rely on 'provisions' from change agent to realize their right to adequate food. This implies that they are not fully empowered to utilize their entitlement to attain enjoyment of the right.

RECOMMENDATION

1. Since the methodology is original, there is need for further research on the modelling of the methodology.
2. There is need to have programs in place that can build the capacities of pastoral households to achieve realization of the right to adequate food and attain freedom from want and enjoy dignified lives.

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CHAPTER THREE

PERCEPTION OF RIGHT TO ADEQUATE FOOD AMONG PASTORAL AND SMALL FARM HOLDING HOUSEHOLDS

ABSTRACT

Human rights concepts are a major focus in the current human development era. With the shift in socio-economic development paradigm towards the human rights approach, progressive realization of the right to adequate food is being advocated through implementation of human rights based approaches to alleviate growing a global population of undernutrition, hunger and poverty. These manifest as violation of rights and denial of basic entitlements. Limited focus has however been made in understanding household perception of the right and its contribution in implementation of interventions using human rights based approaches. The study aimed at understanding household perception of right to adequate food and identifying duty bearers and claimants, their roles and responsibilities at household level. A comparative cross sectional survey was conducted among 249 pastoral and farming households. Data was generated using a perception of right to adequate food questionnaire and focus group discussion. All study households perceived that all had a right to adequate food. Both study groups had a fair perception of the rights. The focus group discussions revealed that concepts of human rights were not entirely new and were consistent with conventional definition of human rights. A lexicon on human rights for both community groups was developed. There was significance difference in perceptions of cultural and enabling factors among the study groups ($p < 0.05$). Household head characteristics such as educational level, marital status, sex, religion and age influenced perception of the right. Primary and secondary duty bearers were identified as well as their respective roles and responsibilities. Their patterns of rights were also defined. The realization of right to adequate food was achieved through combined support of primary and secondary duty bearers.

3.1 INTRODUCTION

Human rights concepts are a major focus in the current human development era. They not only are people centred but also promote self-expression and democracy. They identify both the right holders or claimants and duty bearers with their corresponding roles and responsibilities as outlined in the Universal Declaration of Human Rights (UDHR) and International Convention of Economic and Social Cultural Rights (ICESCR) (ACC/SCN, 1999; SCN, 2005). The evolving

concepts of human rights have their basis on norms and morals traditionally upheld to ensure justice for all. The universality of the human rights concepts, thus try to harmonize cross-cultural norms and values towards enhancing global protection from social injustice and discrimination. Increase in poverty, hunger and malnutrition globally after the Second World War have prompted concerted efforts towards implementation and realization of human rights and the right to adequate food. The estimated population undernourished, and living with hunger by 2009 was 930 million, a rise from 740 million in 1970's. The rise in the impoverished population has continued to escalate despite interventions being put in place to address global food insecurity. The right to adequate food is a fundamental right and is enshrined in both the UDHR and ICESCR (SCN, 2005). It postulates that all human beings have a right to adequate food, freedom from hunger and a dignified life. The continuing human suffering of poverty, hunger and malnutrition depicts violations of rights and a denial of basic entitlements.

Most efforts to implement the realization of the rights to adequate food have been slow with progress being realized after the 1986 World Food Summit (Rome). This was supported by the UN demand in 1989 that all members States start implementation of the right to adequate food. Implementation efforts by member states have been at the national level and have focused on specific vulnerable groups such as children and HIV positive groups. With the current shift in the socio-economic development paradigm, the implementation at the grass root level is advocating human rights based approaches (HRBAs). The HRBAs are not quite well understood by all, especially the articulation of the shift in the development process from the needs based approach to the human rights based approach. This then calls for the need to investigate community perception to human rights as a whole and especially the right to food.

Perception studies are best studied using cognitive anthropology approaches (Strauss and Quinn, 1994). They focus on the study of the relation between human culture and human thought, how people understand and organize the material objects, events, and experiences that make up their world as the people they study perceive it. The findings will assist improving interventions based

on human rights approaches as they become more relevant to the members of society and towards realization of human rights.

3.1.2 Problem Statement

The right to food is a fundamental human right and is enshrined in the Bill of Rights under both the Universal Declaration of Human Rights and the ICESCR (FAO, 2001; SCN, 2005; Shiva-Kumar, 2004). Adoption and implementation by the Member States of the human rights, especially the right to adequate food, has been very slow (FIAN, 2008; Kent, 1994; Hospes and Meulen, 2009). Intervention programmes put in place to address food insecurity through increased economic growth and increased agricultural food production have failed to address global food insecurity. Instead, the numbers of impoverished, hungry and malnourished populations have been increasing in the last three decades (FAO, 2009). The adoption of HRBAs has not been well articulated (FIAN, 2008; Hospes and Meulen; Oxfam, 2007) and there is need to understand the community perception to human rights and rights to food This will assist the participation of the community in implementation of appropriate intervention programs targeting the household level that can allow for realization of the right to food and at the same time improve food security level.

3.1.3 Purpose of the Study

The study therefore investigated the perception of human rights and the right to adequate food among pastoral and small farm holding households.

3.1.4 Objectives

The overall study objective was to investigate pastoral and small farm holding households' perceptions to human rights and the right to food so as to inform policy on appropriate implementation of HRBA programmes in addressing food security issues.

The specific objectives were to:

1. Investigate the perception and definition of human rights at household level among the study groups.
2. Investigate the perception of right to food in the cultural context among the study groups.
3. Identify duty bearers and claimants in the right to adequate food at household level as perceived by study households.

3.1.5 Research questions

1. What is the perception of human rights among the pastoral and farming communities?
2. How do the study groups define human rights?
3. How do the pastoral and farming communities perceive the right to adequate food within their cultural context?
4. Who are the duty bearers and claimants (right holders) at the household level?

3.1.6 Justification

After the Second World War, the human centred approach was adopted to reduce human suffering and undernutrition (Jonsson, 2003). However, being based on a needs approach, it still did not enable the recipients to take charge of their entitlement to ensure that they were food secure and free from want. Instead, their dependency on the government and change agents grew with an increase in as the population of those who were food insecure (Kunnenmann and Epal-Ratjen, 2004; Beeckman, 2005, DFID, 2002; FAO, 2002a). The shift in socio-economic development paradigm towards the human rights approach is less understood and HRBA interventions being developed are still based on the needs approach (Oxfam, 2007). Thus there is

need to understand perception of human rights by communities if the HRBA interventions are to succeed

3.1.7 Significance of the study

Understanding the community perceptions to human rights and the right to adequate food would assist in identification of community capacities that would guide three key aspects: successful implementation of Human Rights Based Programmes (HRBPs), inform policy makers and support decision making in policy formulation towards enhancement of realization of the right to food and food security.

3.2 LITERATURE REVIEW

The section gives a review on previous work done on the perception studies. It highlights the underlying concepts and identifies the gaps in knowledge.

3.2.1. The concept of Perception

Perceptions are cognitive processes, which are expressed both internally and externally. Cognitive anthropology posits that each culture orders events, material life and ideas to its own criteria. The fundamental aim of cognitive anthropology is to reliably represent the logical systems of thought of other people according to criteria, which can be discovered and replicated through analysis. This then affects peoples understanding of the environment around them and influences human behaviour and is referred to as ‘perception’.

New ethnographic approaches consider qualitative data into methodologies that create knowledge (D’Andrade, 1995). Through systematic data collection coupled with ordered and consensus techniques, these methodologies use a pattern of agreement to make inferences on people’s knowledge. The process allows the respondents’ to define of aspects under study such

as perceptions and define them into categories as well as use terminologies in their own languages. Thus, generating a wealth of insights and information on the subject of study (Weller and Romney, 1988).

3.2.2 Concept of Human Rights

All societies have ethical standards, i.e. norms and beliefs that define what is right and wrong as well as what is permissible and non permissible. These moral standards are established by people and vary over time and societies (Jonsson, 2003; Naim and Deng, 1990). They are therefore societal constructs made by people and for people. They reflect values shared among people. Earlier philosophers began to defend the existence of shared values as ‘natural rights’ which were viewed universally but more often than not excluded women and children (Mutua, 2002; Naim and Deng, 1990).

The promotion of these ‘natural rights’ was aimed at protecting all people from exploitation and dominance by Kings, Emperors, and State oppression. To safe guard these values or norms, they were coded or institutionalized into documents dating as far back as the 18th century, a case in point being the examples of the American Declaration of independence in 1776. Another is the French revolution declaration of the rights of man and rights of Citizens of 1789 (Jonsson, 2003). Thus the perceived human needs were translated into claims and demands for human dignity and raised conscientization of self- expression values that transform modernization into a process of human development, giving rise to a new type of humanistic society that is increasingly ‘people centred’ (Inglehart and Welzel, 2005).

As pointed out by Edwards (2000), when studying of human development in the cultural and historical context, it is necessary to consider cultural imprints in the context of socialization. The reason for this is that rapid social changes stimulate changes in social values, norms morals and practices (Preis, 1996; Weisner and Abbott, 1997). These social changes also have important

consequences on the way societies are governed; promote gender equality, democratic freedoms and good governance (Inglehart and Welzel, 2005).

Concepts of culture and relevance to human rights have been greatly researched since the Second World War and the United Nations Declaration of Human Rights. Much discourse has been put forward on cultural relativism with regard to the international human rights concept and its notion of universality (Naim and Deng, 1990; Preis, 1996; Mutua, 2002). Divergent thoughts have been put forward by some who support the notion whereas others question the relativism especially with respect to western and non-western culture. As argued by Turner (1993), the analysis of human rights presents a problem for sociology in which cultural relativism and fact value distinctions have a classical tradition of the natural law basis for the rights discourse. It critiques the ideas of universality of rights. Turner (1997) argues that from a sociological perspective, rights are social claims for institutional protection and further adds that it is from the collective plight of others that moral communities are created supporting the institution of rights. However, rights should not only be seen as claims but should articulate duties, obligations and responsibilities of both parties.

Anthropologists on the other hand, postulate that the concept of universality of human rights may not be compatible with that of cultural relativism, but it does pose special universal attributes of humanity on general principles of rights and justice. The anthropologist advocacy has also in defence of human difference provided an important lead in the formulation of universal rights to difference (Ibhawoh, 2000). Therefore it provided knowledge of universal attributes of humanity with ethical and moral implications that have helped define human rights concepts (Turner, 1997). Nonetheless, the universality of the human right has been strengthened by the rapid globalization and rise in ethnic and identity politics and modernization (Turner 1993; Turner; 1997; Seda and Diviale, 2001).over cultural beliefs and traditions on which perceptions are embedded.

3.2.3 Right to Food at Global and National Level

Some governments and the elite from developing countries maintain that the current international human rights standards are not binding on them. They argue that human rights standards are conceived and largely formulated by western countries, and that they also reflect cultural values and morals which are foreign to non-western traditions and therefore not relevant to non-western countries. However, these arguments have been used explicitly and implicitly to justify the most blatant human rights violations, that cannot be defended on any moral ground (Naim and Deng, 1990; Mutua, 2002). Interplay between local and international global standards of human rights is a dynamic process of give and take, ideally through persuasion and co-operation rather than coercion. The universal standards reflect the collective conscience and political will/choice of the international community. Overall, despite the differences with regard to content of human rights standards, the belief that every person is entitled, by virtue of being human, to claim for freedom and justice, is founded on fundamental values that are shared by all communities. (Naim and Deng, 1990; Mutua, 2002).

Misconception ideas on human rights arise because of the cultures which do not conceptualize or articulate the values underlying these rights and apply them to all human beings on an equal basis. Exposure of discrimination is often seen as the only way to establish legitimacy and universality of human rights within these cultures (Naim and Deng, 1990).

3.2.4 Gaps in Knowledge

Enshrining rights in International Conventions and claiming them in daily life are two different things since people ordinarily live and interrelate in communities as defined by spatial location, culture, power structures, ecosystem and similar factors (Jonsson, 2003; Hospes and Meulen, 2009). Articulation of the community perception to human rights and the right to adequate food are crucial in the harmonization of the universal human rights standards and the cultural values towards successful implementation and realization of rights at the national level. Since community perceptions to human rights and rights to adequate food are not well understood

(Oxfam, 2007), was part of the motivation to undertake the current study. Results of the study can then inform policy towards implementation of HRBA programmes for food security and towards realization of human rights and the right to food. Generated information will also form a foundation on awareness and sensitization packages on the right to adequate food and capacity building of the different stakeholders, both right holders and duty bearers.

3.3. METHODOLOGY

This section gives a description of the study design, study population, different tools used to collect data and the data collection procedures undertaken and data analysis.

3.3.1 Study Design

A comparative cross sectional survey was conducted among pastoral and small-farm holding rural households to document to enhance the understanding of their perception of human rights and the right to adequate food. The study was conducted once.

3.3.2 Study Population

In order to comprehend small-farm holding households perceptions on the right to food and food security, two communities were selected with varying socio-economic, livelihoods, geo-spatial and ecological zoning. Farming and pastoral communities within the Rift Valley Province of Kenya were then selected. Bahati and Kajiado Divisions were selected for the respective study sites. The communities living predominantly within these areas are the Agikuyu and the Maasai respectively.

3.3.3 Sampling and Sample Population

A total of 249 households were sampled, identified through a five step multistage sampling, then proportionate sampling within clusters and systematic random sampling. The Multi-stage sampling started by selection of the districts in the province, then to divisions, locations and sub-locations and lastly to households as indicated in Figure 3.1. Sampling among the two communities, included proportionate sampling at the selected sub-locations followed by systematic random selection of the study households. One hundred and fourteen (114) households were from the farming community, Chania whereas one hundred and five (135) were pastoral households, Sajiloni.

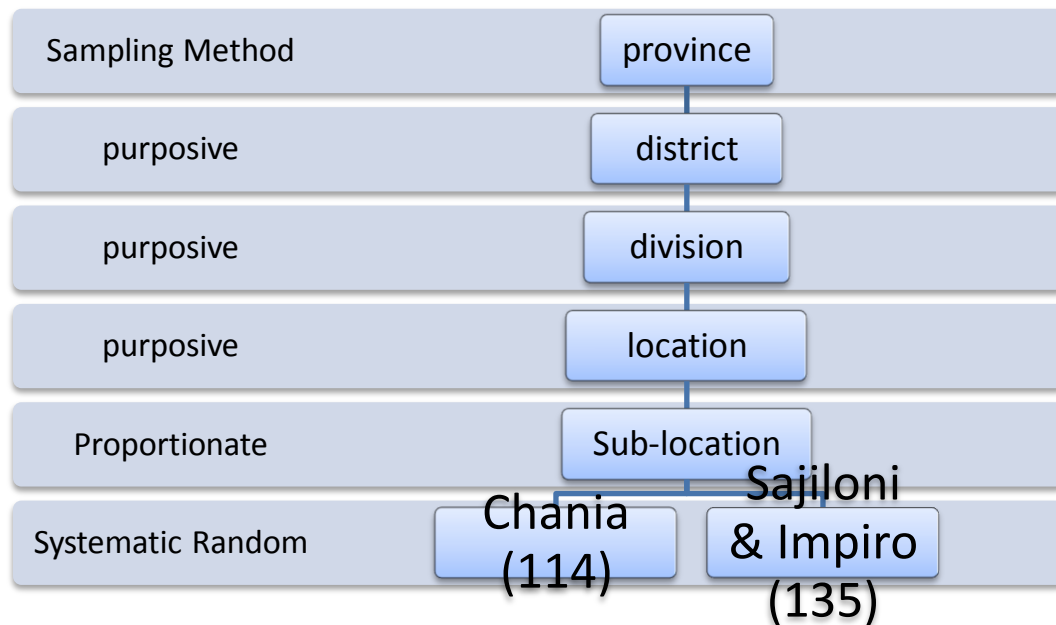


Figure 3.1: Procedures in 5 step multi-stage sampling

3.3.4 Data collection procedures

Data was collected using a structured Perception of Right to Adequate Food questionnaire (Appendix 1). The questionnaire was made up of 18 statements which measured the different

obligation parameters ‘to respect’, ‘to protect’ and ‘to fulfil’. The respondents were required to respond on a three rating scale either ‘Agreed’, ‘Disagreed’ or ‘Did not know’. The measurement scale was measured on a likert scale of a multiple of one. The household perception score was then calculated by summation of the scores. Overall total scores ranged from 18-54 points. Equidistance categories of three were then determined to represent ‘high perception’, ‘moderate perception’ and ‘low perception’. The lower the total scores the higher the perception or awareness to human rights and the right to adequate food.

Further in-depth discussions were done in the form of focus group discussions with both men and women groups to give more insights on the perception aspects of right to adequate food. Two FGDs for the women and two for the men were conducted in each site. Overall, a total of eight (8) FGDs were held. Each had a participation of between 10 to 12 members. The discussions also helped clarify the community perception of the different duty bearers, claimants, their roles and responsibilities.

Quantitative data was analyzed using the Statistical Package for Social Sciences (SPSS) software version 16 and explored for meaning. Qualitative analysis of data generated from the FGDs involved categorization into thematic issues on human rights and rights to food. Inferential analysis was done using chi-square, spearman’s rho and correlations to measure comparison of perceptions among the study groups, and associations with other parameters. Statistical significance level was measured at power level of 80% and at p value of 0.05 in all the statistical tests to determine significance difference between the study groups.

3.4 RESULTS

The section details the analysis process on the generated data so as to give information for interpretation. Both descriptive and inferential statistics were explored. Qualitative data was analyzed to generate descriptive information. The quantitative data depending on its type was

analyzed accordingly and interpretation made respectively. Analyzed data was also summarized in different forms of presentation.

3.4.1 General characteristics of the study groups

Data generated on the general household characteristic was analyzed and summarized as shown in Table 3.1. The presented results are of the combined groups. Demographic aspects where there was a significant difference between the groups are indicated with an asterisk which is also indicative of the level of significance difference.

Table 3.1: General characteristics of the study households

Parameter	n	Frequency (%)
Total study population	249	
Group		
Farmers	114	45.8
Pastoralist	135	54.2
Respondent sex**		
Male	58	23.3
Female	191	76.7
Occupation		
Farming	147	59.0
Business	62	24.6
Housewife	24	9.6
Employed	9	3.6
Casual work	8	3.2
Respondent education level**		
None	101	40.6
Primary	106	42.6
Secondary	32	12.8
College/ tertiary	8	3.2
Adult education	2	0.8
Marital status		
Married	211	84.8
Single	16	6.4
Separated/divorced	9	3.6
Widowed	13	5.2
Religion		
Christian	246	98.8
Muslim	2	0.8

Parameter	n	Frequency (%)
Total study population	249	
Traditionalist	1	0.4
Household size Category**		
1-4 persons (small)	68	27.4
5-8 persons (medium)	154	61.8
9-20 persons (large)	27	10.8

*and **. Significant difference at $p < 0.05$ and $p < 0.01$ respectively among the study group.

The study group's representation had more female household heads compared to male. This difference was statistically significant at $p < 0.01$ ($\chi^2 = 14.372$, $p = 0.001$). The small farm holder heads of households had more years in schooling and attained a higher education level compared to their pastoral counterparts ($\chi^2 = 92.610$, $p = 0.000$, $p < 0.01$). Statistical significant difference was indicated for household size ($\chi^2 = 27.592$, $p = 0.000$; $p < 0.01$) with the pastoral households having smaller household sizes. The association of study group and respondent change as measured by spearman's correlations showed that the pastoral household heads were significantly younger compared to the farming community ($\rho = 0.303$, $p = 0.000$, $p < 0.01$)

3.4.2 Perception of Human Rights and Right to Adequate Food at Household Level

Data generated from the pastoral and small farm holder households on perception of human rights and rights to adequate food are presented in Table 3.2. It indicates perception as analyzed from the combined group.

Table 3.2: Perception of the human right and right to adequate food among the study groups (combined)

Statement	Agree (%)	Disagree (%)
All have a right to food	96.8	3.2
Food quantity is most important	33.7	66.3
Have food taboos for pregnant mothers**	50.6	49.4
Have food taboos for lactating mothers	33.3	66.7

Statement	Agree (%)	Disagree (%)
Have food taboos for boys*	27.3	72.7
Have food taboos for girls	22.5	78.5
Food restrictions lead to food insecurity	37.8	62.2
All Able adults must work*	86.7	13.3
Government must provide**	31.7	68.3
Unemployment no reason for food insecurity	68.7	31.3
No land not reason enough for food insecurity	61.6	38.4
Stable livelihood important*	86.7	13.3
Retrenchment a cause of food insecurity	65.1	34.9
Retrenchment provides new opportunities for livelihoods**	66.3	33.7
Men only provide for their households*	16.5	83.5
Health is a must to achieve right to food *	81.1	18.9
Women owning property will enhance food security	47	53
Exclusive breastfeeding a must for children less than 6 months old	55.4	44.6

*, ** indication of significant difference among the study groups at P<0.05 and P<0.01 respectively

Chi-square test was used to measure differences in perception of right to adequate food among the pastoral and farming communities. Statistical significance difference between study groups was measured at p-value of 0.05. Both the pastoralists and farmers perceived that all persons had a right to adequate food. Two-thirds (66.3%) of all respondents also perceived quality of food consumed to be more important than the quantity consumed. Cultural factors such as food taboos for both boys and pregnant women were significantly different between the study groups at p< 0.01 ($\chi^2 = 9.909$, p=0.007; $\chi^2 = 22.039$; p=0.000 respectively). Significant difference was also indicated by the perception that all able adults must work; ($\chi^2 = 6.978$, p=0.031, p<0.050) government must provide food; ($\chi^2 = 24.808$, p=0.000, p<0.01), retrenchment as a new opportunity for livelihoods; ($\chi^2 = 6.858$, p=0.032, p<0.05), men are sole providers for their households ($\chi^2 = 14.428$, p=0.001, p<0.01) and that health is a must in attainment of the right to

food ($\chi^2 = 12.728$, $p = 0.002$, $p < 0.01$). About half of the respondents (47%) perceived that women owning property would enhance household food security. Breast milk is the first food for all infants and exclusive breastfeeding the right to all infants. It was however noted that only 55% of the respondents perceived this practice feasible.

3.4.3. What are Human Rights?

The focus group focused on identifying what the term human rights meant for the communities. Data gathered were then put in identified common themes for interpretation and information generation. Human rights were perceived to be God given and that each person has their own rights. The FGD's also identified that there were different types of rights such as right of the child, right to be educated, right to food. They mentioned that all rights were important in ensuring that one met basic needs. They identified that rights were enforced by law and allowed one to seek redress when their rights were violated. They mentioned that rights tried to reduce discrimination.

3.4.4 Perception of human rights at household level and its lexicon

Focus group discussions on human rights and the right to adequate food revealed that the human rights concept was not entirely new, and they had specific names in their mother tongue that described rights concepts. These are indicated in the Table. 3 3.

Table 3.3: Lexicon on human rights and the right to adequate food among the study groups

Word	Maasai	Kikuyu
Human rights	Esipata	Kihoto kia umundu/ kihoto kia uuma wa mundu
Duty bearers	Larishak	Aruiriri ihoto cia u mundu/ Arugamiriri a ihoto cia u mudu
Right holder/ claimant	Olopeny espiata	Athingati aihoto cia umundu

Respect of rights	Aanyitu sipat	Gũũtia ihoto
Fulfillment of rights	Oolomituu oo sipata/ Eramarara/ Aitabaya (Enkitabayaroto)	Kuhingia ihoto
‘To provide’	Aitoti esipata	Kuumithirira kihoto/ gukinyirithia ihoto/ kuhangira ihoto
Protect rights	Eramatata oo sipat	Kũgitira ihoto
Abuse of rights	Enkinyela oo sipat	Kuuna ihoto (not intentionally)
Violation of rights	Alnyol esipata	Kunyarara ihoto
Obligations	Erashe	Gwika ũria kwagiriire (within a defined context)
Right to food	Esipata endaa	Kihoto kia irio

3.4.5 Perception of Right to Food in the Cultural Context

Both communities had a fair perception on the right to adequate food. About ninety nine percent (98.8%) of the households were in the average perception category. The mean score for community perception was 26.96. There was no significant difference between the perceptions of both groups. A Chi-square test to compare differences in perceptions was done on the perception to right to adequate food and the following factors showed significant differences among the study groups (Table 3. 4).

The perceptions among the pastoral community that indicated significant difference compared to the farming counterparts included perception on food taboos among pregnant mothers ($p<0.001$), food taboos among the boy child ($p<0.05$), the government must always provide food ($p<0.001$), men are sole providers of food for their households ($p<0.05$), and that women owning property would greatly enhance household food security and realization of the right to food ($p<0.05$).

The farming community on the other hand had higher perception compared to their pastoral counterparts in the following aspects with significant difference. Perception that all able adults must work ($p<0.05$), stable livelihood is important for realization of the right to adequate food ($p<0.05$), retrenchment offers new opportunities for other livelihoods and food security ($p<0.05$), and that health is a must for realization of the right to adequate food ($p<0.05$).

Table 3.4: Comparison of perceptions of right to adequate food among the pastoral and farming households

Perception of right to adequate food	Score	Farmer (%)	Pastoral (%)	Chi-Square (χ^2)	Significance p-value
Food taboos among pregnant women	Agree	40 (35.1)	86 (63.7)	22.884	0.000**
	Disagree	74 (64.9)	49 (36.3)		
Food taboos among boy child	Agree	24 (21.0)	44 (32.6)	9.933	0.007**
	Disagree	90 (79.0)	91 (67.4)		
All able adults must work	Agree	106 (93.0)	110 (81.5)	7.112	0.031*
	Disagree	8 (7.0)	25 (18.5)		
Government must provide	Agree	19 (16.7)	60 (44.4)	25.242	0.000**
	Disagree	95 (83.3)	75 (55.6)		
Stable livelihood is important	Agree	107 (93.9)	109 (80.7)	9.968	0.007**
	Disagree	7 (6.1)	26 (19.3)		
Retrenchment offers new opportunity for food security	Agree	85 (74.6)	80 (59.3)	7.089	0.032*
	Disagree	29 (25.4)	55 (40.7)		
Men only are sole providers	Agree	8 (7.0)	33 (24.4)	14.620	0.001**
	Disagree	106 (93.0)	102 (75.6)		
Health is a must	Agree	103 (90.4)	99 (73.3)	12.935	0.002**
	Disagree	11 (9.6)	36 (26.7)		
Women should own property	Agree	43 (37.7)	74 (54.8)	10.095	0.008**
	Disagree	71 (62.3)	61 (45.2)		

** and * statistical significance difference at $p < 0.01$ and $p < 0.05$ respectively.

Correlation analysis of association between demographic factors and perception of human rights and the right to adequate food indicated that respondents' characteristics such as education, marital status, sex of respondent and age influenced perception of the right to adequate food. Increased years of schooling and higher education level seemed to influence perception that health is a must towards realization of the right to food ($r = 0.155$, $p = 0.014$, $p < 0.05$). Female heads of households who were not married, perceived food taboos for the pregnant woman compared to their married counterparts. The difference was significantly different at ($r = 0.128$, $p = 0.043$, $p < 0.05$). Most of the women especially in the pastoral community perceived that the government had an obligation to provide food always to the communities compared to their male

counterparts ($r = 0.175$, $p = 0.006$, $p < 0.01$). This finding confirms the disjunct between the communities' understanding of HRBAs and needs based approaches. The younger community members perceived retrenchment as an opportunity for new livelihood sources towards enhancing household food security ($r = 0.220$, $p = 0.000$, $p < 0.01$).

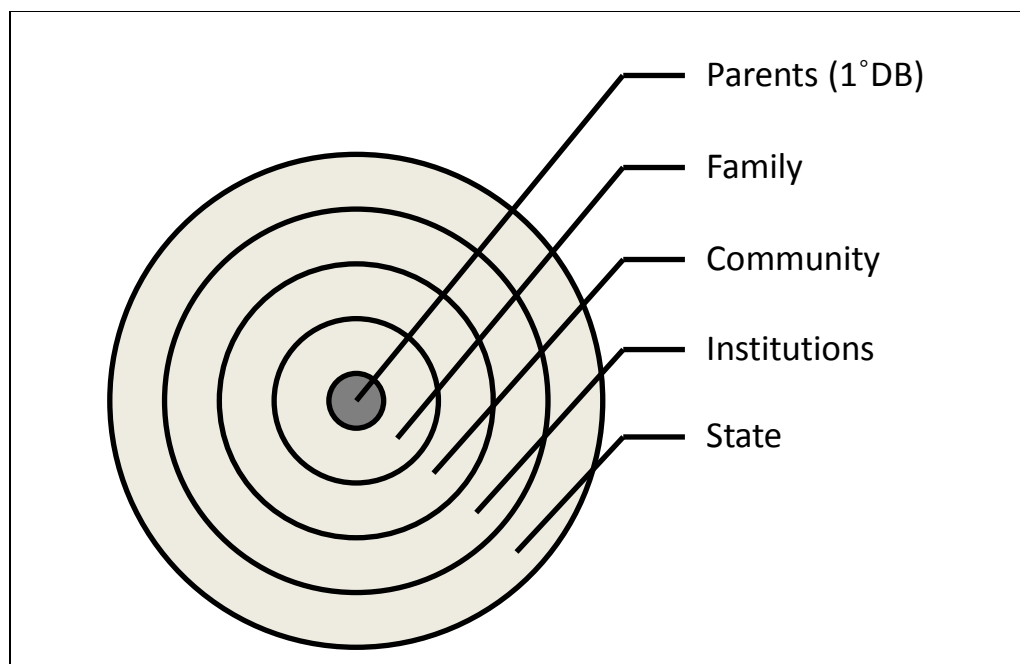
Measurement of association of the different factors with perceptions of right to adequate food was analyzed using spearman's rho. Results indicated that those who perceived that only food amount (quantity) as a right to food also strongly upheld cultural food taboos among the boy child. Among the pastoral group, perceptions of food taboos among pregnant women were also associated with food taboos for lactating mothers, food taboos for both boy and girl child, the belief that the government must always provide food and that women ought to own property.

Perception that cultural food taboos influenced food security was strongly associated with the perception that men must provide among the farming community. Perception that men must work was associated with perception of stable livelihoods as being important in the realization of the right to food, retrenchment contributed to food insecurity, and opened opportunities for new livelihoods for food security, the perception that men alone were not the sole providers for food for the family and that women's ownership of property would improve food security. Focus group discussions with the women elicited that the boy child tended to be breastfed longer than the girl child. They also reported that a very small number of them managed to breastfeed exclusively.

3.4.6 Duty bearers and claimants in the right to adequate food at household level

The focus discussion groups identified the following as duty bearers at different levels.

Parents, Family, Community leaders, Institutions and the State. Their relationships are presented in Figure 3.2.



NB: 1°DB refers to primary duty bearer; the rest are secondary duty bearers (2° DB)

Figure 3.2: Pattern of rights as described by the communities

The community indicated that the secondary duty bearers had a strong influence on the primary duty bearer's performance in the realization of the right to food.

3.4.7 Duty Bearer's Roles and Responsibilities

The roles and responsibilities of each duty bearer were discussed during focus group discussions as indicated in Table 3.5.

Table 3.5: Identified duty bearers' roles and responsibilities among the study group

Duty Bearer	Responsibility/roles
Men	<ul style="list-style-type: none"> • Provide protection for the household • Work in order to provide basic needs for the household • Ensure adequate food available at home

Duty Bearer	Responsibility/roles
Women	<ul style="list-style-type: none"> • Responsible over the domestic chores • Take up casual work to provide for the family • Protect the family resource • Nurture children and family
Family	<ul style="list-style-type: none"> • Assist needy in the family • Assist in family farming • Provision of financial and social support • Provide family guidance and counselling • Assist in conflict resolution
Community	<ul style="list-style-type: none"> • Provide guidance, counselling and role modelling • Assist needy community members • Mobilize communities to form groups for development activities • Establish welfare groups for social support • Linking needy people to relevant organizations for assistance • Ensure rights for all are upheld • Ensure peaceful environments
Institutions (NGO's, Government agencies)	<ul style="list-style-type: none"> • Provision of extension services • Implementation of government policies • Assist in development projects • Provide education to community members (non-formal) • Provision of development loans • Provision of food in times of drought or emergency • Creation of employment opportunities
State	<ul style="list-style-type: none"> • Provide security for all • Ensure food security at all times • Provide opportunity for loans • Provide food during emergency • Provision of enabling environment for job creation • Policy formulation and implementation especially food security • Food price control • Ensure seed and fertilizer quality • Stabilize farm inputs/ farm produce prices. • Ensure access to services such as health • Uphold rights for all

The head of household was identified as the primary duty bearer. Claimants at the household level included the nuclear family and other members residing in the household. At family level, claimants consisted of the extended family while at the community level, they consisted of

community members. At the institutional level, community who are served by the institutions or within the coverage area of the institution made up the claimants. For the state, all the citizens are claimants.

3.5. DISCUSSIONS

Both the Pastoral and farming communities had a fair knowledge or perception on human rights as conventionally defined. Most perceived the concept that rights are unique and integral to all human beings. The communities defined human rights as ‘God given’ and that each person has their own rights’. This is in line with the concept of inalienability of human rights. The communities defined the right holders and claimants as shown in Fig. 3.2. They also attempted to give the pattern which outlines primary duty bearers and secondary duty bearers and their relationships in ensuring the duty bearers meet their roles and obligations and responsibilities of the right. They also perceived the, legality and justiciability of human rights towards seeking redress.

The concepts and principles of human rights are thus embedded in the study group cultures and are also influenced by the different cultural norms and values which are acceptable within the respective communities. For example, among the pastoral community, the cultural perception of survival of the male child which is also deemed instrumental for the continuation of the generations is also reflected within the food taboos related to feeding during pregnancy and feeding of the boy child. Dietary restrictions during pregnancy are aimed at ensuring that child birth is easy since the baby will not be ‘too big’, hence higher chances of live births with reduced complications. However, once the baby is born the mother is then well fed to ensure adequate breast milk production for the infant, which ensures growth and development of the child and its survival. Discussions from the focus groups with the women indicated that the boy child was exclusively breastfed longer compared to the girl child. Thus feeding practices varied with sex of the child. As such, unintentionally, some cultural practices and values may promote discrimination along gender lines.

The farming community on the other hand, where the survival chances for the children was not threatened as in the pastoral community, did not exhibit food taboos or restrictions along gender lines, except for a small section of the farming community that were members of a religious sects (*A'korino*). The sect culture is ingrained mainly in their religious norms, values and perceptions and they practiced food restrictions on consumption of meat and animal products. The pastoral community largely had integrated their cultural way of life with the modern way of living but still upheld and practiced a lot of their cultural norms and values.

The farming community which has for many years lived with other ethnic communities as a result of out- migration from their ancestral land to other regions has over time developed their culture into a more conventional way of living towards western way of life with very few cultural norms currently practiced. As such, their perceptions of human rights are more conventional. Examples, among the Agikuyu and most of the African communities (e.g. Zulu of South Africa) traditionally allowed men to be polygamous and this was not perceived as a violation of rights, so long as the man was able to provide for both homes in terms of food, shelter, protection and provision of other basic needs. However, with changing ways of living, changing socio-cultural values and norms, and religion, polygamy now is to some extent perceived as a violation of rights to the first family. This is especially when the initial family is abandoned in favour of the latter ones. This then causes a lot of harm to the integrity of the homes (Koome, 2003).

3.6 CONCLUSION

The study indicated that both the study communities have a fair perception of human rights despite their differing cultural and traditional values. The concept of human rights is not entirely new within the communities as usually perceived, but is embedded into cultural norms and values of the community. Cultural values and norms per se greatly influence community

perceptions of human rights and especially the right to food and are a strong determinant of both the violation and realization of the rights.

Key findings

1. Both the pastoral and small farm holder households have some understanding on human rights which are articulated in their culture
2. Perceptions of human rights and the right to adequate food differ between the two study groups.
3. Some violations to right to adequate food are perceived as a normal way of life and therefore right holders do not claim for redress.
4. Retrenchment from formal service was also perceived as an opportunity to enhance livelihoods among some study households.

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CHAPTER FOUR
DUTY BEARER’S CHALLENGES IN REALIZATION OF THE RIGHT TO
ADEQUATE FOOD AMONG PASTORAL AND SMALL FARM HOLDER
HOUSEHOLDS

ABSTRACT

Global undernutrition and poverty continue to rise despite concerted efforts to improve food security and manifested as hunger, starvation and malnutrition. It depicts violation and denial of fundamental rights and basic entitlements. Duty bearers are obligated to ensure progressive realization of human rights through respect, protection and fulfilment of the right to ensure right holders are free from hunger and live with dignity. The study aimed at identifying duty bearers’ challenges in realization of right to adequate food and attainment of food security at the household level. This was done through investigation of causes, manifestation of violations, community coping responses and justice mechanisms for redress. A cross sectional survey was conducted among 249 pastoral and farming households. A 5-step Multi-stage and systematic random sampling was used to select study households. A general household questionnaire and focus group discussions were used to collect data. Quantitative data was analyzed using SPSS version 16. Qualitative data was analyzed on thematic issues generated. Primary duty bearers identified were household head and/or spouses. Secondary duty bearers include family head of external family, community leaders, institutions and the State. Causes of violation or denial of the right to adequate food included marital conflict, unemployment, unstable livelihood, lazy household heads and high food prices. Violations were manifested through denial of food, female spouse sent away from matrimonial home, male spouse absconding family and older men being abandoned by family. The main primary duty bearer’s challenges were unstable livelihood (60.3%), low incomes (88.3%), cultural restrictions (37.8%) and small farm holdings (61.1%). Secondary duty bearers’ challenges included limited resources to support the needy, poor infrastructure, extension services, governance and corruption. Other challenges included failure of State to mandate food and input price controls and lack of enforcement on policy guidelines implementation. Justice mechanisms for redress varied among study groups. The pastoral community preferred traditional redress mechanisms. Farmers preferred either local administration mediation or the courts.

4.1 INTRODUCTION

Global undernutrition has seen an alarming rise in the past three decades, with a staggering over 1 billion persons from 740 million persons (FAO, 2009a). This is of major concern since the affected population consists of one sixth of the world population. This implies that the affected population for one reason or another are food insecure. Food insecurity is usually manifested in the forms of hunger, poverty and malnutrition. They are neither free from hunger, nor do they live dignified lives. This is a violation of human rights and denial of a basic entitlement. The magnitude of this violation is unacceptable in a world where global food production exceeds population requirements and an ever increasing economic growth.

Food insecurity is defined as a situation where individual or people do not have adequate physical, social or economic access to food to meet their daily body requirements. Population that are hungry, undernourished and starving can be said to be food insecure as they have no means of access to food. This can either be through limited access to productive resources, entitlement, civil conflict, poor governance or limited capacities to access or produce food.

Being food insecure implies that one has to rely on others for the provision of food and can therefore be said that they are “not free from hunger neither do they live a dignified life”. Thus they have their human rights violated and more so their right to adequate food. Ordinarily, households derive their food entitlement from own production, productive capacities and income. However, both increase in food productivity and increased economic growth have failed to ensure food and nutrition security.

The link between human rights to development was established by the United Nations in 1948 after the Second World War in the Universal Declaration of Human Rights (UDHR), Article 25, to address food security. Later in 1966, the declaration of the right to food as a fundamental human right was enshrined in the International Convention of Economic, Social and Cultural Rights (ICESCR) Article 11; General Comment 12 (SCN, 2005). Despite signing the UDHR and ICESCR treaty, population of those food insecure regionally and globally have continued to

grow decade after another. Most affected include small farm holder households and those in marginal and arid regions in the developing countries. Sub-Sahara Africa has the highest proportion of hungry and undernourished population (FAO, 2008). This has continued despite the interventions put in place to alleviate hunger, poverty and undernutrition. Most interventions have been based on the basic needs approach rather than the human rights based approaches. It is implicit that denied access to food is critical in the realization of food security at household level. This study therefore intended to investigate challenges small holder households experience with respect to realization of right to adequate food and food security.

4.1.2 Statement of the Problem

Global undernutrition, hunger and poverty still continue to rise over the years despite concerted efforts to improve food security (FAO, 2008; 2009a; FIAN, 2008; Kunnenmann and Epal-Ratjen). The pastoral small farm holder households are most hit and most vulnerable (FAO, 2008; 2009a; 2009b; Kunnenmann and Epal-Ratjen, 2005, Mukherjee, 2008). They however are the greatest contributors of national food reserves (FAO, 2008, FIAN, 2009). There is need therefore to investigate and understand the challenges duty bearers encounter in their quest for household food security, within the context of human rights.

4.1.3 Purpose of Study

The study intended to understand and identify the duty bearer's challenges of pastoral and small farm holder households encountered in progressive realization of the right to adequate food, food security and coping responses adopted at times of violation of the right to food. The study also intended to investigate how the small holder households ensure justiciability of rights towards alleviating food insecurity and realization of the right to adequate food.

4.1.4 Objective

The overall objective of the study was to identify duty bearer's challenges in realization of the right to adequate food so as to inform policy towards attainment of the right to adequate food for all.

Specific objectives were to investigate:

1. The causes and manifestation of violation of the right to food among pastoral small farm holder households.
2. The coping responses communities adopt at times of violation of the right to adequate food.
3. How justiciability of the right to adequate food is achieved among the pastoral and small farm holder households.

4.1.5 Research questions

1. How is violation or abuse of rights to adequate food manifested among the study groups?
2. What coping responses to food insecurity are adopted by the communities to enhance realization of right to adequate food?
3. How is justiciability of the right to adequate food achieved among pastoral and small farm holder households?

4.1.6 Justification

Globally pastoral and small farm holder households are major contributors to national agricultural food reserves especially in developing countries. They however are most affected by food insecurity which manifests as undernutrition, hunger and poverty (FAO, 2008; 2009a; FIAN, 2009). Growing levels of the global population of the hungry, undernourished and poor is at an alarming rate and is not acceptable (Hospes and Meulen, 2009; FAO, 2009a; FAO, 2009b). There is need to strengthen realization of human rights and the right to adequate food towards realization of population free from hunger and want, with enjoyment of dignified lives.

The fact that member states sign the ICESCR treaty does not imply that households will be food secure. There is need to address factors that constraint access to food at the household level within the human rights context (Söllner, 2006; FAO, 2009b; FIAN, 2008; Mukherjee, 2008). Increased food insecurity, hunger and undernutrition are evident signs of denied entitlement and a violation of the right to adequate food. The right to adequate food is recognized in various instruments of International Law and several national constitutions, it however cannot generally be argues that there exists a judicial culture of the recognition regarding the justiciability of the Economic and Social Cultural Right. Also the degree of enforcement is not high (FIAN, 2008; Hospes and Meulen, 2009; Söllner, 2006). For the right to adequate food to be fully realized, violations of the right must be subject to the judicial challenge and the effectiveness of the legal system guaranteed (FAO, 2009b; Söllner, 2006). The study therefore aimed at investigating challenges duty bearers experience and which in turn impede realization of the right to adequate food and food security at household level.

Understanding duty bearers' challenges with respect to realization of the right to adequate food helps to design human rights based programmes which address key factors that address rights issues towards mitigating food insecurity more responsively. Understanding the challenges helps to identify areas to strengthen and modify in the programme design. It guides on policy formulation that target to improve pastoral and small farm holder household capacities to access to productive resources towards realization of the right to food and food security.

4.1.7 Significance of the Study

At community level, information generated will provide insights to social dimensions of food insecurity and vulnerabilities and capacities that influence the realization of the right to food and food security. Identified challenges that both primary and secondary duty bearers experience will inform and assist in the design of the relevant HRBA programme interventions targeting enhanced food security. It will also guide on secondary duty bearers' (stakeholders) roles and responsibilities in the overall programmes targeting hunger, poverty and undernutrition.

Identified challenges will form a basis of sensitization and awareness programmes towards addressing food insecurity from a human rights perspective.

At the national level, identification of challenges experienced in the realization of right to adequate food and its impact to population nutrition situation and manifestation to vulnerable groups is important for national policy. Policy concerns identified will serve as a guide to decision makers and serve as evidence for policy formulation.

Non Governmental organizations can use the results to integrate identified challenges in their intervention programmes, mobilize lobby groups towards domestication of the right to adequate food into the national constitution. Researchers can use results of this study as baseline information for other related research work.

4.2. LITERATURE REVIEW

This section consists of review of previous work done in understanding duty bearer challenges within the human rights concept. It also identifies gaps in knowledge in the areas of study.

4.2.1 Global food insecurity

Global food insecurity, which manifests as hunger, malnutrition and poverty, has continued to rise in the past three decades. In 1970, at the time of the enforcement of ICESCR as a human right treaty, there was an estimate of 740 million persons undernourished (FAO, 2008). The numbers increased to 840 million in 1992, to 934 million in 2007 and to over one billion in 2009 (Felner, 2008; FAO, 2008; 2009a; 2009b; Hospes and Meulen, 2009). Main determinants of food insecurity are poverty and lack of access to food (Zeigler, 2003a). The global food price has also had its share in escalating the proportions of population undernourished contributing an estimated 75 million people (FAO, 2008).

The highest proportion of populations undernourished in the world has been reported in Sub-Saharan Africa, followed by South Asia (FAO, 2008; Kunnenmann and Epal-Ratjen, 2005). FAO, (2008) reported an estimate of overall undernutrition in developing countries as at 843 million, of whom 212 million are in Sub-Saharan Africa. Most vulnerable are those in the rural areas (80%), and female-headed households (FAO, 2008, 2009a; 2009b, Kunnenman and Epal-Ratjen, 2005; Mukherjee, 2008). This is aggravated by landlessness, high rate of unemployment, under employment and lack of access to both health services and education contribute to the poor access to food which puts them at a high risk of malnutrition and food insecurity (FAO, 2009b, Klennert, 2005).

4.2.2 Human rights and food security

Global efforts since the Second World War targeted eradicating hunger and guaranteeing world food security, these activities were not taken within the framework of human rights principles but the needs based approach. In 1996 World Food Summit reaffirmed the right to food as a human right and for the first time world hunger was seen as a legal problem (Söllner, 2006; FAO, 2009b). Today, the strive to ensure that every person enjoys adequate food is therefore not only seen as a moral imperative and an investment with enormous economic returns, but also as the realization of a basic human right.

The right to adequate food is a fundamental right enshrined in the ICESCR, which was adopted by the United Nations General Assembly in 1966 and entered into force in 1976 (SCN, 2004; FAO, 2009b). International law recognizes the right of everyone to adequate food and the fundamental right to be free from hunger, which is of crucial importance for the enjoyment of all human rights.

The right to adequate nutrition is realized when every man, woman and child, alone or in community with others, have the physical and economic access at all times to adequate food or means for its procurement (UNHCHR,1999: para. 1).

The right to adequate food is therefore a fundamental a human right indispensable for survival (FAO, 2001).

Whereas the concept of freedom from hunger requires the state to provide food to those who are unable to meet their food needs for reasons beyond their control (such as age, disability, economic downturn, famine, disaster or discrimination), the right to food requires a progressive improvement of living conditions that will result in regular and equal access to resources and opportunities so that every individual is enabled to provide for his/her own needs.

In normal circumstances, the majority of persons realize their right to food primarily through their own means – by producing food or by procuring it. The ability to realize the right to adequate food however depends on access to land, water and other productive resources in addition to access to paid employment or other means of procurement (e.g. social security). In fact, widespread hunger and undernutrition in many countries of the world are not a question of the availability of food but are related to inequities in the distribution of resources and people's physical or economic access to food (FAO, 2009b; Kunnenman and Epal-Ratjen, 2005; Mukherjee, 2008). According to Zigler,(2003a; 2003b), reducing hunger does not mean increasing the production of food but rather finding ways of increasing access to resources for the poor.

Discrimination is most often at the root of such inequities (FAO, 2009b). Exercise of the right can be affected negatively by problems in production, distribution, pricing and information, as well as by lack of access to land and productive resources (FIAN, 2009; Mukherjee, 2008; Schutter, 2005; Zeigler, 2003a,). Discriminatory practices by the state or non-state actors, through lack of, or insufficient, health care, education, inadequate sanitary systems, general poverty, climatic changes and natural or human-induced catastrophes also impede realization of the right to food (FAO, 2009b; FIAN, 2009). Any one or more of these may affect an individual's ability to access food or may cause malnutrition and hunger and thus infringe on an individual's right to food.

The right to food is thus multidimensional and complex, and is interwoven with other human rights; the capacity of a person to exercise this right freely depends on the proper functioning of

many different institutions and actors, both governmental and non-governmental. However, the right to adequate food is much broader as it implies the existence of such an economic, political and social environment that will allow people to achieve food security by their own means (Jonsson, 2003; FAO, 2009b). In most sub-Saharan African countries, the issue of human right to food and nutrition has not received much attention that will create a meaningful impact in the continent. The increasing trend in stunting and underweight children over the years is an indication that the war in poor nutrition status is still far from being won (FAO, 2008; Kunnenmann and Epal-Ratjen, 2005).

Gender discrimination is not spared. Where the human right to food is violated or threatened, women and girls are often specifically or more severely affected (FIDA, 2008). Limited access to and control over resources, lower salaries, insecure and unstable labour conditions, gender biased labour markets, discrimination in laws, regulations and programmes, limited enjoyment of the right to education, inadequate public health care, imposed early marriage and pregnancy, and exclusion from decision making processes impair the right to adequate food for women throughout the world. In addition, intra household food discrimination prevails in many regions of the world (FIAN, 2009).

The recognition of the right to food as part of an adequate standard of living and a fundamental right to be free from hunger acknowledges that hunger and malnutrition are caused not just by a lack of available food, but also and above all by poverty, income disparities and lack of access to health care, education, clean water and sanitary living conditions (Jonsson, 2003; SCN, 2004; Shiva-Kumar, 2002; Kunnenmann and Epal-Ratjen, 2005). It also points to the strong links between the right to food and other human rights (SCN, 2004; Shiva-Kumar, 2002; Beeckman, 2003). The practical implications of this perspective are substantial.

4.2.3 Human rights instruments

Basic principles of human rights are that they are interdependent and indivisible. It also follows that the realization of one requires the realization of other human rights (Beeckman, 2003; FAO, 2009; SCN, 2004; Shiva-Kumar, 2004). Existing human rights instruments, which a majority of nations have signed, place emphasis on access to land and other natural resources as a prerequisite to achieving the right to food. The Convention on Elimination of Discrimination Against Women (CEDAW) refers to the nutrition dimension of the right to food of women and to their equal access to land, credit, income and social security or safety nets, as essential elements for the full realization of the right to food. Action of CEDAW to promote the realization of the right to food of women at national level and in the international community is very relevant towards alleviation of continued hunger and undernutrition among women and the world as a whole (FIAN, 2009).

The Convention on the Rights of Children also addresses the right to food of the child towards enhancing nutrition and health well being of the child and mother. Other international instruments relevant to the right to food include, Convention on the Status of Refugees of 1951, Convention on the Rights of Persons with Disabilities of 2008 and Convention of 1949 of Protection of Civilian Persons at time of War (FAO, 2009b).

4.2.4 Human rights and development

A shift in the development paradigm based on the socioeconomic changes in development advocate for the use of the Human Rights Based Approach (HRBA) in the current development process. The push has been since the declaration of the right to food as a fundamental right and subsequently as a legal concern. Although the 1996 World Food Summit, Rome, provided the break through, interventions carried out did not have a human rights framework (FAO, 2009a; Oxfam, 2007). Many interventions continued based on the basic needs approach. This however, increased levels of dependency and passivity especially in the developing countries. This has instead led to increased corruption and indebtedness in the poor countries (Söllner, 2006).

The HRBA gives conventional development a new perspective. The programmes and policies gain the stronger character of rights, needy persons become right holders, and benevolent states become guarantors of these rights or duty bearers. The charitable organizations on the other hand advance to be advocates of human rights. The approach also gives development policy a framework from which the legal aspect is based in line with the International Law and serves to promote human dignity (FAO, 2009b; Söllner, 2006).

4.2.5 Operationalization of Right to Food towards attainment of Food security

Realization of the right to adequate food not only ensures food for everyone at the moment but should also be embedded in a system that ensures continuity of supply to ensure food security (FAO, 2004a; 2004e; Jonsson, 2003;). An integrated approach to human rights argues that the continued enjoyment of the right also depends on the political climate of the specific country, the country priorities and ratification of the right into the country's constitution (Eide, 1999; Jonsson, 2003; Klennert 2005).

Limitations in the application of the HRBA have been indicated as not all practitioners are well versed with the HRBA. Additionally, the International Law (ICESCR) has not been signed by some countries (FAO, 2009b; Söllner, 2006). Integration of the HRBA into all levels of development co-operation has also been impeded by the inadequacy of translation of the rights law into reality and contextualizing it to the household level. The Voluntary Guidelines on the right to adequate food (FAO, 2005) have to a great extent made it easier for member states to implement the right.

4.2.6 Coping Strategies

People adopt coping strategies in response to different risks or shocks to their livelihoods. They consist of a series of decisions and actions that result in the trade-offs between the current and the future use of resources for worst times (UNDP, 1994). The range of coping and adaptive

strategies is large and differs contextually (WFP, 1998). Deteriorations in poor households' access to food can occur as a result of natural, market, policy and socially induced shocks. Coping strategies which at times are considered as livelihood strategies are often employed to mitigate the effects of not having enough food to meet the household needs. For example, when the households cannot access farming inputs to improve their productivity, they may opt to use traditional indigenous methods to grow subsistence crops and to deal with pests or they may only use manure to plant instead of fertilizer. When fertilizer prices are unaffordable due to high prices, then they may plant only a section of the farm. Hence overall, food production may be inadequate to meet the household needs that last to the next season.

Some of coping strategies are positive, while others in the long term may have detrimental effects. For example, when off- farm employment for women is available, it may raise extra income for the family and may improve household food expenditure. However, if it reduces the caring capacities of mothers to their children and family, it may lead to increased malnutrition among the children. Coping strategies for many poor people are negative (WFP, 1998). These include severe reduction in food consumed, selling of productive assets and reducing expenditure on basic services such as health and education.

Recurrent shocks to livelihood systems make it more difficult for the poor and those marginalized to develop sustainable livelihoods as they are structurally vulnerable (WFP, 1998). As such vulnerability makes them adopt strategies that at times further increase their risks to greater shocks instead of making them food secure as expected. For example, those living in fragile or marginal ecological zones are often forced to farm increasingly marginal lands to improve food production to meet their food needs and in their search for fuel needs. In the process, they contribute to deforestation and desertification which worsens their food security situation.

Sustained improvements for household food security are likely to depend on actions at national, local and household level and the capacity building of the poor in improving their own lives

(Lantham, 1997). Each state has the responsibility to respect, protect and fulfil human rights especially the right to adequate food. The importance of acknowledging and supporting the capacity of vulnerable groups to cope with distress conditions should not be understated. An understanding of coping strategies can be very helpful to those involved in designing the various components of intervention programs (UNDP, 1994).

4.2.7 Justiciability of Right to Food

A human right has three components, the basic human standard, the corresponding state obligation and some form of redress for violations or abuse, normally through the judicial system (Kunnenmann and Epal-Ratjen, 2005). Thus for the right to adequate food to be realized, violations of rights must be subject to judicial challenge and the effectiveness of the legal system guaranteed. However, although member states have signed the ICESCR treaty, and some adopted it into their national constitutions, it cannot be generally agreed that there exists a judicial culture of recognition regarding the justiciability of the Economic Social and Cultural Right (ESCR) and neither is its degree of enforceability high (FIAN, 2008).

Justiciability of the right to food especially remains an unexplored area (FIAN, 2008). Challenges to justiciability to right to adequate food include, the reluctance of courts to recognize the direct application of the ICESCR despite there being although constitutional provisions in the General Comments, No. 3, 9 and 12 of the UN Committee on ESCR (UNHCHR,1999). The failure of member states to domesticate the ratified treaty into national constitutions is a major handicap (Hospes and Muelen, 2009). In some developing countries, the existing judicial mechanisms are often not accessible or effective in protecting the right to food (Söllner, 2006). Most victims and their lawyers are not aware of the right to adequate food as a human right, and thus, they either do not present the cases of violation before court or these are misrepresented (FIAN, 2008, Hospes and Meulen, 2009; Söllner, 2006). Cultural norms that also encourage violation are also not seen as violations or abuse but are often considered as a way of life by the right holders who therefore do not seek redress (FIDA 2009; Mutua, 2002).

Justiciability of the right to adequate food would greatly enhance realization of the right as the legal system which allows access to a complaints mechanism is essential for accountability. In this way, the duty bearers, state or government, household heads at household level, can be held accountable for their actions and/or omissions.

4.2.8 Gaps in Knowledge

Lack of knowledge of the significant costs incurred, (both actual and opportunity costs), through inadequate nutrition or lack of food, are not obvious to policy makers and the wider community (Benson, et al., 2003; Kracht, 2003). Justiciability of the right to adequate food still remains an unexplored area. Understanding duty bearer's challenges among pastoral and small farm holder households and other secondary duty bearers with respect to realization of the right to adequate food and food security, their coping strategies and justiciability will give an insight on how HRBA programmes can be designed and improved to ensure that households are food secure, free from hunger and living with dignity.

4.3 METHODOLOGY

This section details how the study was conducted. It describes the study design, the study population and how they were selected. It also outlines the instruments used to generate data and how that data was analyzed.

4.3.1 Study Design

A cross sectional study was conducted among the small-holder households within different livelihood systems (farming and pastoral) to investigate challenges experienced by duty bearers in realization of the right to food and food security.

4.3.2 Study Population

The study was carried out in Kenya, a country where food insecurity is of national concern. Two population groups with varied livelihood systems were selected. Both population groups experience food insecurity and especially the smallholder households (Adongo et al, 2004, Clover 2003; Fratkin, 1999; Fujita et al, 2004; ILRI, 2006; IRIN, 2009; Kabubo-Mwariara *et al.*, 2006; Kigutha, 1995; Muyanga et al., 2004; Ntiati, 2002; UNDP, 2006; UNDP, 2007). One of the study groups was selected from the Arid and Semi Arid Lands (ASALs) and the other from the highlands areas. Both study groups are different in terms of their livelihood sources. Malnutrition which is a manifestation of food insecurity and a violation of people's entitlement to food is evident in both the farming and pastoral communities (CBS *et al.*, 2003, Kabubo-Mwariara, 2008).

4.3.3 Sampling Procedure and Sample Determination

Sampling was done using a 5 step multi- stage sampling. First was selection of the province. Rift Valley was chosen. The districts for the survey were then selected within the Rift Valley Province. Selection of the districts was in consideration of the different livelihood systems of the community groups. Thus purposive selection of a farming and pastoral community was done. Nakuru North District and Kajiado District respectively were selected to represent the farming and pastoral groups. Thirdly, in each district, a division was purposively selected. In Kajiado, Kajiado Central Division was selected and Bahati Division in Nakuru North district. Fourthly, the location selected was Sajiloni Location as it is predominantly nomadic. In Nakuru North District, Bahati Location was selected being the location on the highest ecological zone and with a high small farm holding population. The fifth step included Sub-location selection. Sub-locations Sajiloni and Impiro were selected due to the low population density among the pastoral community whereas Chania sub-location was selected to represent the farming community. A proportionate sample size was then calculated to give proportionate representativeness. This was followed by systematic random sampling of study households from the villages in the sub

location. A sampling interval of 8 was computed for both areas. A total of 249 households were selected to participate in the study.

4.3.4 Data Collection

Data was collected using a rating questionnaire and a question guide during the Focus Group Discussions. Both were aimed at eliciting information on duty bearers' challenges towards realization of rights to adequate food and food security. In each site, both men and women FGDs were held. In each site two male FGD and two female FGD were conducted. A total of eight FGDs were held. The focus group discussions consisted of about 10-12 people, mainly leaders. These were selected from the different sub-groups within the community for representativeness.

4.3.5 Data Collection Procedures

Pretesting of the rating questionnaire and focus group discussion checklist was done prior to undertaking the study. Kihingo in Njoro District and Ildalmat in Kajiado represented the study groups, farming and pastoral respectively. The general questionnaire was administered first followed by the focus group discussions on a later date.

4.3.6 Data Analysis

Data generated from the rating questionnaire and the focus group discussion was then analysed. Quantitative data was generated from the rating questionnaire whereas qualitative data was mainly generated during the FGDs. The qualitative data was analysed using thematic content analysis. Thus descriptive analysis was done. Analysis of ratings from qualitative data was analysed and descriptive information generated.

4.4 RESULTS

This section gives the analysis of the data collected from the focus group discussions from both study groups. Data generated was then categorized into thematic issues.

4.4.1 Causes of Violation of the Right to Adequate Food

From the FGDs, the factors indicated in Table 4.1 were identified as those that lead to violation of the right to adequate food at the household level.

Table 4.1: Factors linked with violation of the right to food among the study groups

Pastoralists	Farmers
Severe drought and loss of livestock	Civil wars- ethnic clashes
When they have no stable livelihood or employment	Low produce prices compare to high input costs , unemployment
High cost of education	Theft of food from farms
Laziness (among men and young boys)	Laziness (among men and young boys)
Marital conflict between spouses	Marital conflict between spouse
High food prices	High food prices

The causes of violation of the right to adequate food varied among the study groups. The cross cutting issues reported were livelihood instability, marital conflict between spouses, laziness among men and young boys, high food prices and unemployment. Specific causes of violation among pastoralist were severe drought and loss of livelihood and the high cost of education. Among the farmers, civil wars, theft of food in the farms and low profit margins from their produce were associated to violation of rights to food.

Among the pastoralists, the women in the FGDs reported that the value of the girl-child education was still generally low in the community although the administration was working hard to ensure that all school-aged children (both sexes) go to school. The women reported that at times they were forced to engage in income generating activities to raise fees to educate their

girl children. The high dropout rate for girls in school was being curbed by having boarding schools for the girls.

4.4.2 How Abuse of the Right to Food is manifested among the Communities

The different communities had different ways in which violations to the right of food were manifested. Figure 4.1 indicates manifestation of violations of the right to food among the study groups.

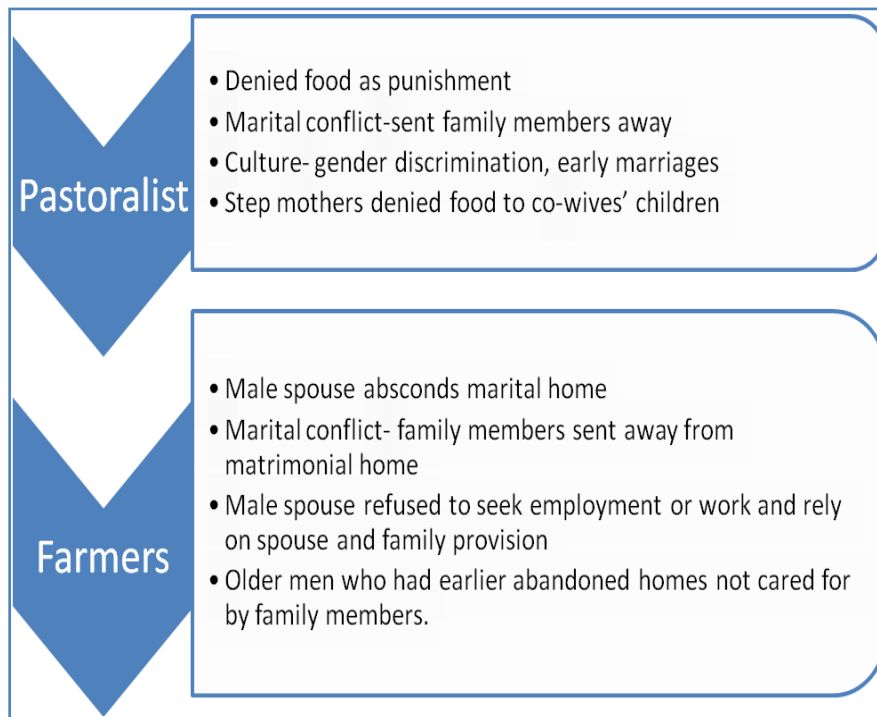


Figure 4.1: Manifestation of abuse of the right to adequate food among the study groups

4.4.3 Methods of Seeking Redress

In both groups, legal action was not the first course of action. The reliance on the traditional judiciary mechanisms was preferred. The methods of seeking redress are shown in Table 4.2.

Table 4.2: Methods of seeking redress against violated / abused rights among the study groups

<p>Pastoralist Male violator</p> <p>Female violator</p>	<ul style="list-style-type: none"> • Seek involvement of family members, particularly the brothers of the woman, family elders or close friends. • In extreme cases, involve local administration and law enforcement. • Consult with the parents of the woman. They were then requested to discipline her or re-train her, if the complaint was on capability skills.
<p>Farmers Male violator</p> <p>Female violator</p>	<ul style="list-style-type: none"> • Patience and perseverance, hide in the church, in extreme cases, involve the chief • Many chased away from their matrimonial homes

Among the pastoralists, the established traditional justice system is better structured unlike in the farming community. There were established reporting channels that right holders used to report cases of right violation or abuse. Once the case was handed over to the elders, they then would give the appropriate guidance on justice. Several warnings were issued to the duty bearer (usually the male spouse) and separation at times could be granted if necessary and compensation awarded. When the violating or abusive duty bearer did not heed but instead threatened to sell household resources and entitlement, the elders took legal action in collaboration with the local administration and the law enforcement to protect family assets and wealth.

4.4.4 Coping responses / strategies to violation of the right to food

The coping strategies among the smallholder households in response to violation of the right to adequate food are indicated in the Table. 4.3

Table. 4. 3: Coping strategies to violation or abuse of the right to food

Men	Women
<ul style="list-style-type: none"> • Marry again • Look for casual labour to sustain themselves 	<ul style="list-style-type: none"> • Perseverance and patience among the women • Some women seek employment or start own businesses to fend for the family when men abscond, seeking assistance from family members. • Some hide in the church (more involved with church activities) • Separation in marriage or divorce • Employed women favoured over housewives by in-laws, since the extended family see them as a financial asset or resource due to their income. Try to counsel couple • Children from homes where the fathers abscond, later in life when they are grown up and have their own livelihoods take greater care of their mothers and sideline their fathers.

4.4.5 Duty Bearers’ Challenges in Realization of the Right to Food

Different duty bearers’ challenges were identified during the focus group discussions as perceived by the study groups. They identified both the primary duty bearer at the local household level and the secondary duty bearers from the community and at the national level that affect their realization of the right. They also identified some of the factors that constrain them or challenges they encountered with respect to realization of the right to food. This is presented in Table 4.4.

Analysis of ratings on challenges of the primary duty bearers indicated that 88.3% of the households agreed that able adults in the household must work to ensure food security is achieved. However, 60.3% of the study households did not have stable livelihoods. Only 24.5% of the households could afford to purchase farm inputs freely whereas 85.9% of them could only afford to purchase by loan. Households that did not have access to loans were 86.3%.

Table. 4.4. Duty bearers' challenges in realization of the right to adequate food and food security

Duty Bearer	Challenges/ constraints faced
Men and Women (parents)	<ul style="list-style-type: none"> • Unemployment or lack of jobs • Low incomes from livelihood sources • Illnesses • Poor business performance • Unfavourable climate • Drunkenness • Small farm holdings
Family	<ul style="list-style-type: none"> • Lack of unity • Unemployment for some family members • Unfavourable climate • Some stay too far away
Community	<ul style="list-style-type: none"> • Limited external support • Limited resources to support livelihoods • Lack of unity • Lack of transparency in some groups • Conflict among members
Institutions (NGO's, Government agencies)	<ul style="list-style-type: none"> • Lack of unity among the staff • Poor communication • Corruption among officers • Shortage of funds for extension services • Poor infrastructure e.g. roads, water distribution, which impede service delivery • Extension service not tailored to meet customer and market demands • Partiality in service delivery
State	<ul style="list-style-type: none"> • Corruption • Internal conflict & power strife • Poor communications and transportation infrastructure • Government laxity and exploitation of natural resources Leading to poverty • Inflation • Failure to mandate food and farm inputs price control e.g. fertilizer

Most households (83.5%) agreed that the role of provision at the household rested with both parents. However, 70.7% of the households relied on their spouses to provide food to the family and only 47% agreed that women could own property. Stable livelihood was thought to be important in the progressive realization of the right to food in 86.7 % of the households. Although retrenchment was thought to influence food insecurity by 65.1% of the households in the short-term, it was seen as a new opportunity to another form of livelihood that could positively improve household food security. Neither was the lack of land nor unemployment seen as a reason to be food insecure among 61.1 % and 68.7% of the pastoral and farming households respectively. About thirty eight per cent (37.8%) believed that their cultural restrictions on foods influenced household food security. Religious restrictions to eating certain food were noted in 64.7% of the households. Only 39.7% of the households relied on food aid to meet their food needs.

Access to health care was perceived as a must for realization of the right to food among 81.8% of the households. Households that were able to access health care were 44.5% whereas those that could afford health care were 41.3%. Majority of the respondents (58.2%) were residing within 5 kms form the health centre. About seventy two percent (71.9%) of the households received family support when the household head fell ill.

4.5. DISCUSSIONS

4.5.1 Causes of Violation of the Right to Food

Both human and non-human factors were reported to influence violation of the right to food. Some of the commonly identified causes of violation of the right to adequate food cited included marital conflicts between the spouses, unstable livelihoods, civil wars, high food prices and climatic changes. Marital conflict was identified as a cause of violation, since a home without harmony was deemed to have a lot of misunderstandings, discrimination and actual physical violence. The situation made it possible for violation of other rights besides the right to food as the children and women in most circumstances were chased from their homes and deprived of

shelter, food, clothing and other basic needs. Unstable livelihoods imply that households do not have enough to meet basic needs. This then introduces strive and struggling for the little that is available and accessible, thus the weaker ones are denied their fair chance. The households are also not able to buffer themselves from sudden shocks that may affect their homes thus making them vulnerable to food insecurity. Marital conflicts not only destroy enabling environments in realization of rights but also deny rights to claimants through unrealized obligations by the primary duty bearers.

Among the farming community Civil wars too were identified to cause destruction to the already established livelihoods. This was more evident due to the effects of the 2007 post election violence. Livelihoods were destroyed since the strife was accompanied by destruction of the assets, food stocks and loss of lives. The loss of the bread winner has a great impact to the household food security. Much suffering and deformation may result to people thus reducing their productive capacities. Recovery is usually very slow after the civil war and is dependent on the governance of the day. Civil wars limit enabling capacities of duty bearers whereas destruction of livelihoods leaves both claimants and duty bearers unprotected and thus unable to realize their rights.

High food prices were reported to affect realization of the right to food by limiting access to food in the households. High food prices imply that less food than what is required is purchased and available for consumption. Dietary adequacy is therefore not met and if the condition continues for long, malnutrition and other nutrient deficiency symptoms are likely to be evident. When food prices are high, unscrupulous trade cannot be ruled and this may influence both the quality and safety of the food. Changing policies such as free market may also influence production levels of certain foods. For example during times of scarcity this may cause food price hikes. Coping responses of skipped meals, reduced servings and staying hungry are commonly practiced in the homes. These may in the long run have negative impacts to their nutritional status. The households are therefore not able to realize their right to adequate food. The lack of government control of major food prices in the market and uncontrolled unscrupulous trade is a

violation of the right to food especially for the poor. Supporting findings by (KHRC, 2006) indicate that inability to enjoy right to adequate food not only arises from climatic changes but are also attributed to the manner in which the food produced reaches the market and its price.

Climatic conditions were also reported to influence realization of right to food especially severe drought, famine and floods. Prolonged drought and famine drain the household entitlement and savings. When either the floods or complete failure of crop occurs, they lose the little they had and they are no longer able to realize the right to food. Instead they end up in emergencies calling for food aid. The struggle for food that accompanies food shortage means that those who are not strong are denied their right to food. Limited and lack of mitigation strategies by secondary duty bearers during high vulnerable times increase violation of rights and denial of basic entitlements. The failure by secondary duty bearers to ensure existing structures to buffer extreme shocks increases the number of households that are food insecure and the population that is undernourished.

The lack of a stable livelihood, under employment and unemployment means that households cannot be assured of the food security on a daily basis. It is made worse when able adults are lazy and do not want to work to fend for themselves and their families. This contributes to theft of food in the farms thus denying others their right to food. General security is also affected and productive capacities limited as it is likely lead to migration to other places if general insecurity persists. Changing employment policies such as retrenchment as one of the SAP strategies in the late '80's were perceived to have both positive and negative effects to household entitlement and food security. To some, it was perceived to have made the households more food insecure, while to others it gave the household and opportunity to explore other livelihood options hence improved their household entitlement and food security towards realization of the right to food.

4.5.2 Manifestation of Abuse or Violation of Rights to Adequate Food

One form of violation or abuse of the right to food reported was denial of food as a punishment for having done something wrong. It is common among households that experienced marital conflicts. Often it involved one spouse (often the women) being sent away by her husband and another woman brought to the home. The children of the previous wife are mistreated and denial of food a common practice. In households where the mother and the children were sent away from their home, they were not assured of food and other daily basic needs where they ran for safety. Even when they were assured of shelter in the meantime, food adequacy was not assured. As such, marital conflict has a bearing on household entitlement, resource control and decision making, and is most likely to increase abuse and violation of rights.

At times, the male household head would abandon the household, leaving the rest of the family to struggle to meet their basic needs. The household heads did not meet their obligations to their family which is a violation of their rights. At other times the male household heads would refuse to seek employment and rely on the spouse to fend for them and the family. At times when food is scarce, many were reported to be violent and might even sell household property to get some income. It was also reported that some of the cultural practices also contributed to the violations as most of the fault was seen to be with the women and there was little hearing offered to the women. This then makes the violation or abuse more common and at times is perceived as a way of life, implying that thus justice denied. Supporting findings in Uganda (Rugadaya, 2003) showed women's rights violation in situations of abandonment thus impacting negatively on realization of right to adequate food.

Cultural practices that encourage discrimination along gender lines were also reported as contributors to violation of the right to food. Among the pastoral community, gender discrimination was rife, especially with respect to resource control and ownership. Low value for the girl-child was common especially among the pastoral community where the mother's would at times be forced to engage in income generating activities in order to ensure their girls go to school. This indicates a coping strategy by mothers to ensure girl-child survival within a

challenging societal environment. The realization of the right to education does influence the realization of the right to adequate food. Early girl-child marriages were instead preferred to education by the men as the bride price was a source of wealth for the household. This implies a cultural value trade off between entitlement and the perceived value of education of the girl-child based on cultural practices. Thus denied right to education directly or indirectly affects the right to food. Currently there is a concerted effort in the community by the administration to ensure all school going children go to school. The intervention of the government as a secondary duty bearer is aimed at reducing violation of rights and discrimination against the girl-child.

4.5.3 Means of Seeking Redress

Among both study groups, traditional methods of seeking redress for abuse or violation of rights were preferred and used rather than the existing judicial, legal mechanisms. There were distinct different mechanisms employed with respect to the gender of the abuser in both communities. Among the Pastoral community, when the abuser was a man, the family or spouse reported to the clan elders and family members for intervention. Whereas when the abuser was a woman, the woman was sent to her parents and consultations were later held with her parents. Partiality on gender bias in the redress mechanism is thus deemed as a violation of the right of the claimant.

Among the pastoral community, when the male head of household absconds, and tries to sell the family assets and livestock, the family reports to the elders and chief of the area who counsel the man. If he does not obey, they then institute a cultural judiciary mechanism that is integrated with the current national judiciary system. The man is flogged in the presence of his family and the elders through the chief and the police who put a seal over the household's possessions and warnings to all livestock markets prohibiting purchase of the household's livestock. Otherwise the buyer will lose their money when the property is repossessed. This protects family assets and ensures that the family is capable of taking care of itself. Supportive work by KNHRC, (2006), indicate that among vulnerable groups realization of the right to adequate food is limited by

weak accountability and complaint mechanisms and redress mechanisms which are usually contextual.

Among the farming community, when the abuser was a man, there was little respite afforded from reporting an errant husband to his family and at times assistance could be sought from the local administrator the '*Chief*'. Most family members opted to be patient and persevere. When the abuser was a woman, she was usually, more often than not, chased away from her marital home. In extreme cases of abuse, the local administration and law enforcement were involved in both communities. However, legal judiciary mechanisms for the enforcement of the right to adequate food may not be in practice in the countries that have ratified ESCR and are yet to domesticate it into their national constitution such as in Kenya. Thus an alternative legal instrument has to be sought to effectively address violation of the right to food such as the discrimination law, violation by physical harm or neglect of children which are articulated in the property rights law, CRC and CEDAW (Mbote, 2003) which are within the constitutional framework but not as ECSR which is still lacking in the constitutional framework.

4.5.4 Coping Strategies

Different coping strategies are adopted by the right holders or claimants when their right to adequate food is violated or abused. Some are more reserved and persevere; for others, the spouses have no choice other than to engage in some form of income generating activity or seek casual labour to sustain the family. Among the farming community most of the abandoned spouses do not seek assistance from the family of the husband (spouse) since the family more often than not are partial to their son's irresponsible behaviour and also tend to blame the wife for negligence. Some of the women get involved in church activities as a way to reduce the stress. Others opt for separation in their marriage and they live separate lives. For children whose fathers abandon them, some, later on in life when they are able to fend for themselves take great care of their mothers but ignore or sideline their fathers. At times the coping responses adopted may have negative consequences worsening the food security situation and impeding progressive

realization of the right to adequate food. Family unity and existing social safety nets are important in mitigating shocks related to food insecurity and realization of the right to adequate food.

4.5.5 Duty Bearer's Challenges in Realization of the Right to Adequate Food

Duty bearers identified to have a direct and or indirect influence to the household with respect to the realization of right to adequate food included household head and spouse (parents), external family, community leaders, Institutions (both governmental and non-governmental) and the State. During the FGDs, the different challenges experienced by each duty bearer in their role of realization of the right to adequate food were discussed.

Low income, under employment and unemployment were noted to reduce the capacity of smallholder households to sufficiently provide for their families and meet their basic needs of which food security is one. Poor resource base and lack of access to productive inputs such as lack of access to land, loans and limited technical skills and know-how, further reduced their capacities to progressively realize the right to food. Current and ever changing policies were also indicated to influence realization of rights to adequate food such as retrenchment from service, free market policy and land reforms, which directly or indirectly affect access to and, availability for resources to the people and livelihoods stability.

Illnesses were also noted to reduce human capability in productivity. The majority of the respondents expressed knowledge that access to health also impacted on the realization of the right to food. However, less than half of the respondents (44.5%) could access health services and afford it (41.7%). Poor health reduces human productivity and instead consumes the households' resources, especially in management of chronic diseases. The situation is made worse when households lack productive assets that can buffer or cushion the shock. This leads to adoption of negative coping strategies such as inadequate meals in quality and quantity or

skipped meals that in the long run lead to malnutrition and hunger, which are manifestation of food insecurity and denied entitlements to basic needs.

Family unity was also indicated as a factor in the progressive realization of the right to adequate food at the household level. Family unity, which was expressed as unity within the extended family, drew social support and was critical in resource control and management. It explains the benefits of social safety nets that culturally cushioned adverse shocks within the families from food security. This implies that the breaking of social safety nets may also contribute to increased marital conflicts at the household level and consequent reduction in realization of the right to food.

At the community level, the obligation to fulfil especially “to provide” seemed to ensure adequate checks and balances within the community. This was through identification of the needy households and identification of supportive mechanisms or programmes from which the needy could benefit from. However, most of these programmes adopted a basic needs approach which tends to make the recipients dependent. The human rights report of 2006 (KHRC, 2006b) indicated increase in child mortality as a reflection of low State commitment to ensuring access to food for all especially in the northern region of the country and in regions where there was great reliance on food relief. HRBAs programmes aim to ensure enhanced capability and decision making capacities towards utilization of available resources and entitlement to be able to meet ones needs.

At the institutional level, challenges experienced included extension services not tailored to meet customer needs and market demand, shortage of funds for extension services and lack of unity among staff members. Poor infrastructure such as roads, water services and distribution were noted to impede service delivery and realization of the right to adequate food. Poor infrastructure, service delivery, lack of unimplemented policies, poor working environments and for the change agent staff indirectly affect the households’ capacity to realize the right to adequate food. Good policies frameworks require that policies address the needs of the

community and the nation as a whole and that the implementing agencies are given enough resources in order to enable them to access resources that facilitate them meet their goals.

At the State level, governance was indicated as a requirement of ensuring the right to food. Good governance addresses corruption and also ensures accountability. Good governance is also sensitive to the global crisis that affects the majority of the needy people by ensuring that policies are in place to address the crisis in a manner that reduces human suffering. Corruption and poor governance among the secondary duty bearers directly or indirectly hinder household access to entitlement, productive resources and management of the same resources and service provision to the needy community. Policy implication to natural resource management and control influenced food insecurity. High food production inputs costs and hiked food prices increased food insecurity with reduced food production levels. Majority of the households did not have access to loan facilities which implies that their capacities to effectively engage in food production both economically and physically are limited. Political power, strife and civil conflict especially among the farming community were reported as key factors in destruction of existing structures, increase human suffering and destruction of food reserves and entitlement. This has the effect of weakening the already marginalized communities and needy households, reducing the capacities to realize the right to food and to lead a dignified life.

Ensuring available food alone is not therefore adequate to realize the right to adequate food (KNHRC, 2006). It calls for a streamlined supply of strategies, agricultural practices, extension services and price control of the main staple food, basic agricultural inputs and reforms in the relevant sector ministries with formulation of relevant policies.

4.6 CONCLUSIONS

The study has indicated that cultural, social, economic and political factors contribute violation of the right to adequate food at all levels of duty bearers. These factors too contribute to the progressive realization of the right to food. Realization of the right to adequate food is

interdependent on the realization of other related rights such as access to land, health, education and work.

Violations of the right to adequate food, its manifestation and coping strategies are varied and contextual. At household level, traditional redress mechanisms are more preferred to the legal system in seeking redress; however they are biased along gender lines. Legal judiciary mechanisms specific to the right to adequate food are lacking the specific national act or policy in the ratified ICESCR treaty which has recently been domesticated into the country's constitution (Kenya). The domestication of the ICESCR is expected to give the right to adequate food the policy framework for its justiciability. It provides an implementation framework for HRBA programmes to alleviate food insecurity within a human rights framework.

Political will and good governance are important in mitigating pastoral and small farm holder households' challenges towards ensuring food security, especially to ensure success in the implementation of HRBAs and formulation of relevant policies that target improving access to resources at household level.

Key Findings

1. Violation of the right to adequate food was based on both human and non-human factors and denial of one right affects realization of other rights.
2. Unstable livelihoods, high food price hikes, marital conflict, civil unrest and changing climatic conditions were identified as factors leading to violation of right to adequate food.
3. Manifestation and mechanisms for redress on violations of right to adequate food varied among the study groups along gender.
4. Duty bearer challenges in realization of the right to adequate food included unstable livelihood capacity enhancement, changing policies such as retrenchment on employment, free market and land reforms which directly or indirectly affect access to productive resources in enhancing entitlement.

4.7 RECOMMENDATIONS

1. There is need to advocate and lobby for the domestication of the ICESCR into a national act or policy in order to have the policy framework from which relevant policies can be developed that address improving realization of right to adequate food and enhancement of household food security among smallholders; enhance justiciability of the right to food and implementation of the HRBA programmes.
2. Most of the programmes targeted to address food insecurity have not been implemented within the human rights framework. It is therefore necessary to initiate HRBA programmes that also articulate in their design both the primary and duty bearer's challenges for relevance in its applicability and outcomes.
3. There is need to enhance all stakeholders' capacities within the human rights framework and education in the roles and responsibilities of each duty bearer or stakeholder.

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CHAPTER FIVE

MATERNAL RIGHT TO ADEQUATE FOOD AND ITS INFLUENCE ON ATTAINMENT OF THE RIGHT TO FOOD OF THE CHILD

ABSTRACT

Breast milk is ideally the first food for a child and breastfeeding the right to adequate food for the infant. Mothers are primary duty bearers in the realization of the right to adequate food for infants and have to balance their reproductive and productive roles. Despite its known contribution to child survival and well being of the child, exclusive breastfeeding practice in Kenya and globally remains at sub-optimal levels. The study intended to investigate maternal factors related to right to food that influence exclusive breastfeeding. A cross sectional survey was conducted among 114 pastoral and 77 farming women. Households were selected by systematic random sampling. Data collection tools included the perception of rights to adequate food questionnaire, the right to food questionnaire, and Focus Group Discussions (FGDs). Pastoral women comprised 59.8% of the women. Fifty four (54%) percent of the women had at least primary level education with the farming group significantly more educated ($p < 0.01$). Perception on exclusive breastfeeding up to six months of age was agreeable among 44.6% of all the women though not significantly different. Most mothers did not perceive exclusive breastfeeding till 6 months feasible. Major challenges reported affecting exclusive breastfeeding practice (time spent and care given to child), were marital status, source of livelihood, family support to lactating mothers, and economic resource base of the family and that of the mother as well as traditional practices with respect to child feeding. Meeting the maternal material needs was deemed crucial in effective realization of the right to food of the child. Denial of maternal rights to food, work, health and education had a direct link with the care-giving practices of the mother and child well-being.

5.1. INTRODUCTION

Exclusive breast feeding is ideally the first child food and to be breast fed is the right to food for the infant child. Breast milk is the only food provided at once as a complete food which ensures growth and health of the child and where care is the mode of delivery. Optimum breastfeeding therefore, contributes to the realization of infants and young children's right to adequate food (CRC, Art. 24.2(c); ICESCR, Art. 11.1) and the highest attainable health standard (CRC, Art. 24.1, ICESCR, Art. 12.1; SCN, 2004, 2005; WHO, 2002). However, despite its known

contribution to both child survival and well being, its practice in Kenya as in many parts of the world still remains at sub optimal levels (UNICEF, 2008). National exclusive breastfeeding rates up to six months of age in Kenya stands at 13% (KNBC et al, 2009) compared to the Global rate of 38%. Although both are sub-optimal, Kenya falls way below in exclusive breastfeeding practice.

The right to food is a fundamental human right as stated in the UN Universal Declaration of 1949 “Freedom from Hunger”. The right to adequate food is also enshrined in the 1966 International Convention of Economic and Social Cultural Rights (ICESCR) and defined in the General Comment 12 (SCN, 2005). All human rights confer duties and responsibilities to those who are identified as duty bearers, based on human rights norms. Duty bearers are identified at different levels from the State, to community, to household and lastly to the individual. The signed treaty on international human rights conventions obligates the State to ensure respect, protection and promotion towards realization of the right to its citizens.

Human rights norms recognize the different duty bearers and confer duties to responsibilities with respect to the right in question. For breastfeeding, the human rights norms are specified in the Global Strategy on Infant and Young Child Feeding (Evgesveen, 2005). The strategy spells out the specific obligations and responsibilities of a range of actors in the society who influence breastfeeding practices. Mothers are the primary duty bearers in the realization of the right to food for the born child. This is also stated in the CRC, and articulated in the Child Act, 1991 of Kenya Law (KLR, 2009). The ability of the mother to breastfeed effectively however does not rest on the mother alone but is also influenced by other non-direct factors. Other identified duty bearers include; the father, the family support networks, the community and the state.

5.1.2 Statement of the Problem

A mother is the primary duty bearer to infants and young children in ensuring children’s right to food (Engesveen, 2005). The mothers are at most times faced with the responsibilities of both

productive and reproductive roles. They have to balance the two, and depending on the environment, economic and socio-cultural settings, they may have to make tradeoffs in the mother/ care-giver responsibilities (Yimyam, et al., 1999a, 1999b; Rasheed, 2007). This at times leads to the non-normative feeding practices compared to the normative ones (exclusive breastfeeding for the first six months of life), which impacts negatively, on the child outcomes (Artemis, 1984; CBS et al., 2003; KNBC et al 2009). Meeting the maternal material needs and support during pregnancy and lactation are crucial in enhancing optimal exclusive breastfeeding practices. The study intended to investigate maternal realization of their right to food and how it influenced attainment of the right to food of the infants as measured by exclusive breastfeeding and care practices.

5.1.3 Purpose of the Study

Breast milk is ideally the first food to infants which is meant to be breastfed exclusively as the right to food for the baby. The mother is usually the primary duty bearer to the new-born child with the responsibility of ensuring realization of the right to the child. The study intended to investigate maternal factors related to her realization of the right to adequate food and how that influences attainment of the right to food of the child, with the baby being a non-language claimant.

5.1.4 Objectives

The overall objective was to understand challenges encountered by mothers as duty bearers to their infants in ensuring attainment of the right to food for the child.

Study objectives were to:

1. Determine women's perception of the right to adequate food with respect to exclusive breastfeeding among pastoral and small farm holder households.
2. Identify maternal challenges and constraints experienced as duty bearers towards attainment of the right to food for the child.

5.1.5 Research Questions

1. What is farming and pastoralist women's perception of the right to adequate food for the child?
2. What challenges and constraints do these women encounter as duty bearers towards attainment of the right to adequate food for their infants?
3. Does the realization of the right to adequate food for the mother contribute to their realization of the right to adequate food for the infants?

5.1.6 Limitation of the study

The study used a qualitative approach in understanding the limitations primary duty bearers encountered in attainment of their obligation in realization of the right to adequate food of the child.

5.1.7 Justification

Global exclusive breastfeeding rates are sub-optimal despite breast milk being the first food of the infant (UNICEF, 2008). Maternal knowledge on breastfeeding is adequate yet sub-optimal in practice (KNBS, 2009). There is therefore a need to understand from the human rights perspective challenges primary duty bearers experience that contribute to the low levels of realization of the right to adequate food of the child.

5.1.8 Significance of the study

Understanding constraints that mothers as primary duty bearers experience will enable development of HRBA interventions which will incorporate maternal issues within the rights perspectives. Policy gaps identified will inform and assist decision makers in decision making and formulation of policies that will address the raised concerns. Nationally, addressing the gaps identified will improve the nutrition and well being of the children and mothers and by implication reduce child morbidity, mortality and the burden of disease. This will contribute

towards addressing the Millennium Development Goals. For mothers, addressing the constraints will create new opportunities to meet their obligations and enhance their capacities as duty bearers towards progressive realization of the right to adequate food.

5.2. LITERATURE REVIEW

This section contains a review of work done so far in the area of maternal right to adequate food and the right to food for the child. It also identifies gaps which the study tries to address.

5.2.1 Global Breastfeeding Practices

Breastfeeding has been shown in both developing and developed countries to improve the health of infants and their mothers, making it the optimal method of infant nutrition (Palda, et al., 2004; Kramer et al, 2001, CGHBC, 2002). Maternal and child undernutrition is highly prevalent in low-income and middle-income countries, resulting in substantial increases in mortality and overall disease burden. Sub-optimum breastfeeding is estimated to be responsible for 1.4 million child deaths and 44 million Disability Adjusted Live Years (10% of DALYs in children younger than 5 years) (Black et al, 2008). Nutrition-related factors account for about 35% of child deaths and 11% of the total global disease burden (Black et al, 2008). Breastfeeding practices among mothers have been shown to be influenced by a number of factors. These factors include; health care service delivery (WHO, 1998; Taveras et al., 2003; Septiari et al., 2006), perception of adequacy of breast milk (Arora et al, 2000; Wambach and Cohen, 2009; Rasheed, 2007), work load (Lanting, 2005; Pechlivani et al, 2005; Yimyam, 1999a, 1999b; Chatterj & Frick, 2005), father's perception (Februhartanty et al, 2007) and social support networks (Lawrence et al, 2005; Bar-Yam and Darby, 1997; Green, 1999). Breastfeeding practices are also influenced by prevailing culture and norms among the family members, peers, and society (Abada et al., 2001; Septiari et al., 2006).

5.2.2 Current Breastfeeding Status in the Country

Kenya's current rate of exclusive breastfeeding up to 6 months of age is low at 13% and is varied among the different communities (CBS et al, 2003; KNBS et al, 2009; UNICEF, 2008). There has been decline in exclusive breastfeeding generally (Nondo, 1993) with the rural levels being better than those of the urban. The current exclusive breastfeeding rate is much lower compared to the global rates of 38% (UNICEF, 2008). However, the average prevalence of breast feeding period up to 24 months of age stands at 57% which is slightly higher than the global level of 50%. Breastfeeding and complementary feeding are practiced by 84% of the lactating mothers and is much higher in comparison to the global prevalence of 55%. However, this does not mean that under-five child malnutrition is low, since stunting, wasting and underweight prevalence are 30%, 6% and 16% respectively against the global levels of 28%, 11% and 25% respectively.

Cultural influence also impacts on the breastfeeding patterns. Strong grandmother influence and pre-lacteal feeding are common among some communities in the country such as the pastoralists and this compromises exclusive breastfeeding (CBS et al., 2003, KNBS, 2009; Sellen, 2001; Grey, 1990). Thus, maternal authority and/or decision making capability to exclusive breastfeeding may be limited despite knowledge acquisition of the mother.

5.2.3 Nutrition and Health Benefits of Exclusive Breastfeeding

Nutrition and health benefits cannot be over emphasized (Kelleher and Duggan, 1999; Booth, 2001; WHO, 1998, 1999; 2002). Growing evidence has shown that adequate nutrition during infancy and early childhood is fundamental to the development of each child's full human potential (Morterrel et al, 1994). Inadequate nutrition during infancy and the first two years of life results in stunting which is very difficult to reverse and increases risks of non-communicable lifestyle diseases later in life (SCN, 2005; America Academy of Peadriatics, 1997; Kelleher and Duggan, 1999; Hylander et al., 1998, Wright et al., 1998; Wang and Wu, 1996). Systematic review of the evidence by Kramer and Kakuma, (2002) on optimal duration for exclusive breastfeeding and anthropological studies by Dewey et al., (2001) and Sellen (2007) showed that

six months was an optimal time that also confers several benefits on the infant and the mother. Benefits of exclusive breastfeeding for six months include, protection against infant gastrointestinal infections (Kramer et al, 2001), mother and child bonding (Britton and Britton, 2008; Bandyopadhyay, 2009) and enhancement of motor development (Dewey, 2001). A prolonged duration of lactation also accelerates amenorrhea and weight loss (Dewey, et al, 2001; Dewey et al, 1993). However, although weight loss is desirable for overweight mothers (Lawrence, 1989, Grey et al, 1990), it is not advantageous to underweight mothers. Thus, underweight mothers need also to focus on their diet during the lactation period.

Despite the demonstrated benefits of breastfeeding, breastfeeding prevalence and duration in many countries are still lower than the international recommendation of exclusive breastfeeding for the first six months of life (WHO, 2002) thus, a violation of the right to food for the child. Findings of the KDHS 2008/9 indicate only 13% of the infants are exclusively breastfed for six months (KNBC et. al., 2009). This indicates gaps in maternal capacities to realize the right to food for the infants. An understanding of this phenomenon especially from the mother's perspective would help reverse the trend

5.2.4 Human Rights and Breastfeeding

Women are the primary duty bearers to the child in realizing the right to food, growth and development (SCN, 2005), and therefore have the responsibility to offer optimum nutrition to their babies through breastfeeding. They also have a right to work and therefore are entitled to gainful employment. For many mothers, employment is essential to the economic survival of their families (Lanting et al., 2001). Mothers have both reproductive and productive roles. As such, balancing the reproductive and productive roles is complex and sometimes creates conflict. Rasheed (2007) and Yimyam et al., (1999a) reported that the conflicts between the maternal roles are intensified by the rapid development and social change.

Where mothers are the sole breadwinners in their homes, the challenges of meeting these roles are a reality and the conflicts between the two more evident. Over time, in a bid to cope with both roles, mothers have had to make trade-offs (Bai et al, 2008). The Ecological theory (Rasheed, 2007) and the Evolutionary theory (Sellen, 2007) both try to provide insights into the deviation from the optimal practice in infant feeding as indicated in epidemiological and clinical evidence to contemporary or sub-optimal practices that include shortened exclusive breastfeeding time, early complementary feeding and changing child care patterns.

Findings by Engesveen, (2005) on realization of the right of the child to be breast fed, indicated the need to undertake a capacity analysis to gather insights as to why the duty bearers fail to meet their obligations. She argues that understanding maternal challenges in terms of authority, motivation, resources, economy, decision making capacities and communication are very crucial. Most of these are usually influenced by cultural practices and socio-settings. The inability of the mothers to make first hand decisions imply limited capacities of the mothers to also exercise their rights and consequently their ability to fulfil their obligations (Februhartanty, 2007; Engesveen, 2005; Bandopadhyay, 2009). A Study by Bai et al., (2008) showed that across cultures and socio-economic groups, underlying attitudes and values in infant feeding are often concordant with optimal practices but focus more explicitly on the tradeoffs between the infant/child and maternal / care-giving needs. More often the material conditions for optimal breastfeeding and complementary feeding are missing.

Enhancing realization of the right to adequate food with respect to breastfeeding requires support to the mother from the other duty bearers. This involves the spouse and family doing the following; to build up mother's confidence in breastfeeding, be a source of emotional support, to encourage and free her from household chores. The community support networks, in creation of breastfeeding friendly communities, paid maternity leave at work and a business community that adheres to the WHO code on breastfeeding substitutes. The state, through the health sector initiatives is expected to ensure protection, promotion and support of breastfeeding through baby friendly hospital initiatives (Engesveen, 2005; Rasheed, 2007; Tan, 1983).

Findings by Rasheed, (2007), Forester et al, (2008) and Lanting, (2005) demonstrate that women face many obstacles in their efforts to maintain lactation while simultaneously undertaking paid work despite maternal knowledge on the beneficial value of exclusive breastfeeding. This implies that the ability of mothers as right holders to their infants with respect to right to food, to fulfil their obligation is not met due to unmet maternal needs. It is therefore necessary to ensure maternal capacity, resource availability and capacity development to effectively enhance exclusive breastfeeding.

5.3. METHODOLOGY

This section details the study design, the instruments of data collection and how data was analyzed towards addressing the set study objectives.

5.3.1 Study design

The survey was an exploratory cross sectional survey conducted among two sites; pastoral and farming communities in Kenya. It was a one point study that intended to investigate qualitatively how maternal realization of the right to adequate food influenced attainment of right to adequate food of their infants.

5.3.2 Study Population

The study was conducted among female household heads from both the pastoral and small scale farming communities. The pastoral community relies mainly on animal and animal products as their main source of livelihood. They live in the arid and semi-arid regions of the country. The farming community live in the highland regions of the Rift Valley and rely on small scale farming for their livelihood.

5.3.3. Sampling Procedures and Sample determination

Participating households were selected through five stage multistage sampling to identify the study site followed by proportionate sampling in the area and then systematic random sampling to identify the actual participating households. The sample size was determined using the formular by Magnani, (1991), Jekel, Katz and Elmore, (2001) and Gibson and Ferguson, (1999) using power effect of 80% at a significant level of 0.05. A sample size of 191 women was included in the study. The pastoral community comprised 59.8% of the total women in the survey while the farming community were 41.2%.

5.3.4 Data Collection

Data collection tools consisted of a perception of rights to adequate food questionnaire (Appendix 1), where the female head of household was interviewed. A rating scale was used to record the responses. The respondents answered to the administered statements with either of the responses: Agreed, Disagreed or Did not know and the responses were then recorded. This was followed by two FGDs in each site with the women to get in-depth information as regards the mother's realization of the right to food and their attainment of right to food for infants with respect to optimum breastfeeding practices.

5.3.5 Data Analysis

Data were then analyzed using Statistical Programme for Social Sciences Version 16. Descriptive data was analyzed in frequencies (percentages) while for comparative differences among the study groups were analyzed using chi square. Inferential statistical analysis was done using spearman's correlation analysis to measure any significant differences between the study groups. The statistical difference was measured at a significance level of 0.05 and at power level of 80%. Measure of association was done by chi-square test between the groups. Qualitative analysis was done based on thematic content analysis on challenges and constraints to exclusive breastfeeding.

5.4. RESULTS

This section details how the data generated was analyzed as well as the interpretation of the data to generate information towards understanding the study objectives.

5.4.1 Maternal characteristics in the study groups

Data on maternal characteristics as collected in the general household questionnaire is presented in Table 5.1. Maternal factors that indicated significant difference between the study groups were marked by an asterisk in the table.

Table 5.1: General maternal characteristics of female heads of household within the study groups

Characteristic	Combined Frequency (%)	Pastoral Frequency (%)	Farming Frequency (%)
Total N=191		59.8	40.2
Marital status			
Married	81.7	87.0	73.7
Single*	7.8	4.3	13.2
Separated / divorced	3.7	1.7	6.6
widowed	6.8	7.0	6.6
Education*			
None	45.8	64.1	18.4
Primary	41.6	25.4	65.8
Secondary	9.5	7.9	11.8
College	2.1	1.8	2.6
Adult education	1.1	0.9	1.3
Age group*			
<20	3.2	3.5	2.6
21-30	33.9	43.4	19.7
31-40	25.4	28.3	21.1
41-50	20.0	15.9	26.3
>50	17.5	5.3	12.2
Occupation*			
Farming	58.6	40.0	86.8
Employed	2.0	0.9	3.9
Casual work	4.4	3.5	5.3
Business	23	35.7	3.9
Housewife	12	12	0

*= maternal factors that had significant difference of $p < 0.001$ within the study groups using chi-square test.

The pastoral women were significantly younger compared to the women from the farming area ($p < 0.001$) ($\chi^2 = 22.924$, $p = 0.000$). Their occupations were significantly different too ($p < 0.001$) as they engaged in business or were housewives unlike the farming women who derived their main livelihood from farming ($\chi^2 = 55.771$, $p = 0.000$). The businesses the pastoral women engaged in were small trade in shops, food stuffs, clothing and handicraft. The farming women were significantly more educated in terms of number of years spent in school and levels of education attained compared to their pastoral counter-parts ($p < 0.001$) ($\chi^2 = 39.686$; $p = 0.000$). The proportion of single and separated/divorced female households was significantly higher among the farming community compared to the pastoral counterparts ($\chi^2 = 8.444$, $p = 0.038$, $p < 0.05$).

5.4.2 Perception of Right to Adequate Food with respect to Breastfeeding

Perception of right to adequate food with respect attainment of the right to adequate food as measured by exclusive breastfeeding and care practices were analyzed as shown in Table 5.2.

Comparative analysis between the study groups was done using the chi-square test and the statistically significant difference was determined at significance level of 0.05.

Table 5.2: Maternal perception on right to food with respect to breastfeeding

Parameter	Pastoral (%)	Farming (%)
Always have adequate food**	13	40**
All have a right to food	96.5	97.3
Did not perceive their livelihood as stable	65.4	59.6
Exclusive breastfeeding 6months of age	62.5	37.5

N=191. Significance * $p < 0.05$, ** $p < 0.001$ using Chi sq test

All mothers perceived that it was the right for each individual to adequate food. This correlated significantly with the perceptions of a stable livelihood ($\rho = 0.171$, $p = 0.018$, $p < 0.05$). All the respondents perceived that health is critical ($\rho = 0.189$, $p = 0.009$, $p < 0.01$) and breast feeding too ($\rho = 0.189$, $p = 0.009$, $p < 0.01$). Mothers from the farming community had better self perception on their level of household food security in terms of food availability and access compared to the pastoral community mothers. They thus reported always having adequate food. The difference in

perceived household food security among the study groups was statistically significantly different at $p < 0.001$ ($\chi^2 = 21.756$, $p = 0.000$). The female household heads also did not perceive exclusive breastfeeding up to six months old practical for most mothers in their own setting.

Spearman's correlation analysis was done on maternal perception on the right to adequate food and exclusive breastfeeding. This test was used since the data collected on respondents' perceptions was in ranked values and was thus non-parametric. The results are as presented in the Table. 5.3.

Table 5.3: Spearman's correlation on perception of realization of the right to food critical of the child (breast feeding)

	Location	Food taboos (boys)	Men only provide	Health is vital	Exclusive breast feeding
Location	1	-.211** 0.003 191	-.149* .039 191	.134 .064 191	.049 .500 191
Food taboos (boys)		1	.166* .022 191	-.111 .127 191	-.203** .005 191
Men only provide			1	-.207** .004 191	-.102 .159 191
Health a must				1	.120 .098 191
Exclusive breastfeeding					1

NB: significance difference between study groups at * $p < 0.05$; ** $p < 0.01$ respectively

Measures of association indicated that there was no significant difference among the women in the study groups on their perceptions of exclusive breastfeeding. About half of the mothers in both group perceived that they could exclusively breast feed (farming 51.3% and pastoral 58.3%). The pastoral community had food taboos especially with respect to the boy-child and this was significantly different compared to their farming counterparts ($p = 0.211$, $p = 0.003$,

$p < 0.01$). With respect to breastfeeding among the pastoral women, the boy-child was exclusively breastfeed for a longer time compared to the girl child ($p < 0.05$; $\rho = 0.140$; $p = 0.028$) and also linked to better health care. This was influenced by the food taboos which favoured the boy-child.

Generally, in both study groups, men were perceived as the main bread winners, however, the pastoral women's perception of the same was significantly different, ($p < 0.05$; $\rho = 0.039$; $p = 0.000$) compared to their farming counterparts. Female household heads who had higher perception of men only as the sole providers in the household also had lower perception of health as vital in realization of right to food. This was statistically significantly different at $p < 0.01$. ($\rho = 0.207$; $p = 0.004$).

5.4.3 Challenges and Constraints of Exclusive Breastfeeding with Respect to Right to Adequate Food

Analysis of Focus Group Discussion information indicated the following challenges and constraints that women faced as duty bearers which made it difficult for them to meet their obligations towards their infants.

5.4.3.1 Marital status

The women pointed out that most single women (Single, separated and /or widowed) and without a steady livelihood or stable resource base, were constrained with the stress of earning a living and simultaneously caring for the young child (ren). Those who were away from any family support, relied on neighbours for support during the first 3-7 days of giving birth, After which they were expected to survive on their own. Thus, when their resource reserves are depleted they have no choice but to look for casual light work to support themselves and as such do not have enough time for breastfeeding and caring for their young infant. This implies that lack of entitlement in the form of either income or productive resources is a limiting factor for duty bearers to meet their obligations.

Married mothers who were able to afford to hire a caretaker to assist them with childcare or those who were not working but also received support from family members were able to exclusively breastfeed for longer periods compared to the single counterparts. Family support was provided by, mothers -in law, grandmothers, sisters and aunties to the woman. Having a supportive husband was also mentioned to be important in providing an enabling environment that supports exclusive breastfeeding.

5.4.3.2 Right to work

From the FGDs, it was reported that job vacancies for the mothers without formal employment, who had recently delivered was usually not easy; since the women were well known in the community and many farmers knew that they could only manage light work. They therefore preferred to hire other stronger and more able workers for them. This meant that the women were not sure of a steady job that they could rely on. Search for work was difficult especially when they had to seek for work with the babies on their arms or on their backs. The standard farm wage per day (half a day - 5hours - in order to allow them time to work on their farms or at their homes) is Ksh, 100.00 (equivalent to \$1.2).

The income is usually neither enough to meet their food needs nor pay rent as well as meet other basic needs. Most of the women on full time employment either in business or formal employment had to spend considerable time away from their child than they preferred if they had to maintain their work. Formally employed mothers had to contend to a short maternity leave of 60 calendar days, however, they were advantaged in that they also earned during their maternity leave. Thus most could afford to seek alternative child care support. This was either in the form of a domestic worker or reliance on family support networks

5.4.3.3 Maternal Right to food

The level of single motherhood was significantly higher in the farming community compared to their pastoral counterparts ($p < 0.05$). Among the farming mothers, it was reported that food scarcity in the household was a common feature especially among households of single mothers.

“At times one goes to the farm with only a cup of black tea for breakfast without any accompaniment”. Without adequate food to eat as a common phenomenon, they reported that what was consumed was often not nutritionally balanced and therefore lactating mothers complained of general weakness and inability to be productive. Once at home and tired from the day’s job, they were unable to breastfeed the young infant on demand and introduced complementary feeding making the child to feed much earlier than the expected 6 months of age.

They introduced mixed feeding to the child. Cow’s milk was the preferred first complementary feed. It was combined with breastfeeding. Complementary feeding was started at times as early as three weeks old. Usually they purchased cow milk which they diluted, warmed and fed to the infant. Mostly these mothers live from hand to mouth thus they are not able to be food secure since they have limited capacities to mitigate food shocks.

On the other hand, mothers who were formally employed or housewives with good support from the spouse and the family, were reported to realize their right to food and were more likely to exclusively breastfeed compared to those of low social economic status and without social support.

5.4.3.4 Traditional practices and exclusive breastfeeding

The pastoral mothers reported pre-lacteal feeding of the new born as a common practice. Child delivery was also reported to be predominantly at home, unless the mothers developed complications. Among mothers in the farming community, no pre-lacteal feeding was reported and most deliveries were done at a health centre. As such, mothers from the farming community were able to initiate breastfeeding immediately while at the health facility and without pre-lacteal feeding unlike their pastoral counterparts. Information and knowledge on infant and young child feeding practices was mainly obtained from health providers, grandmothers, mothers-in-law and peers. The mothers also had a good knowledge on health benefits of exclusive breastfeeding for both the mother and child.

The characteristics of mothers breast feeding practices as discussed in the FGDs are as indicated in Table 5.4.

Table 5.4: Maternal characteristics and breastfeeding practices

Breast feeding practices	Characteristics of Mother	Proportion of women in the community who practice.
Exclusive breast feeding ≤1 months	Single or separated Have unstable source of livelihood Low socio-economic status No social support in caring for child Do not own any land, may have hired a small piece of land Usually food insecure	Very Few
Exclusive breastfeeding 2 - 4 months	Married Most are working women Have a relatively stable income/ livelihood Average socio-economic status Have social support in child care from the family or can afford to hire one Household food security variable.	Many
Exclusive breastfeeding 6 months	Married and/or not working Have stable livelihoods. Have social support in caring for child from spouse and other family members. Have a large farm holding. Food secure. High social –economic status	Very Few

Results indicate that married women with higher social economic status, sufficient family support in child care and food security were more likely to exclusively breastfeed for a longer period compared to the unmarried women in the lower socio-economic groupings.

5.5. DISCUSSIONS

The pastoral community had younger women married compared to their farming counterparts. Early marriages usually at the ages of about 14-20 years are common especially among the pastoral community due to cultural factors. It is even worse for those who do not attend school as they are bound to marry early. The proportion of single mothers (separated, single and widowed) was higher among the farming communities compared to the pastoral communities. Maasai traditions and culture abhor women who have children out of wedlock. It is considered a taboo and a social misfit to have a child out of wedlock. Thus most unmarried girls avoid getting pregnant prior marriage which makes it uncommon to have single mothers.

Those who are older and are widowed are allowed to remarry or remain single. Those who opt not to remarry are however given a male guardian from the late husband's family to take care of important family decisions until the eldest son in the family is mature enough to take up the household leadership and responsibility of the family. Wife inheritance is not common within the community. The guardian usually helps in catering for the orphaned children and making final decisions as pertains to their welfare. Those women who are divorced usually have a difficult time in the community and most times have to fend for themselves or rely on their brothers for support.

The education level among the farming mothers was significantly higher compared to their pastoral counterparts. This was both in terms of schooling years and level of education attained. However, despite the differences in education, the mothers' perceptions of exclusive breastfeeding were similar in that most mothers perceived that exclusive breastfeeding for up to 6 months was not attainable for various reasons and/or circumstances. This implies that education alone is not enough to enhance exclusive breast feeding but is also influenced by other supportive factors to be realized. From the group discussions, some of the factors mentioned included, having enough to eat for the mother, entitlement and caring support from the family. It was noted that single mothers who did not have a source of stable livelihood were less likely to meet their obligation in realization of the right to adequate food of the child. There was

discrimination in casual employment of mothers with infants. This practice however contravenes the labour laws, Employment Act (Cap. 226), and the ILO Equal Remuneration Convention, 1951 (No.100) which decries any form of discrimination in employment based on gender, race, enumeration and nationality (ILO, 2010).

Optimum exclusive breastfeeding is recommended for 6 months of life with continued breastfeeding for 24 months. FGDs in both study groups indicated that only very few of the mothers exclusively breastfed for just a month, while they most exclusively breastfed for about 2-4 months and then introduced mixed feeding with continued breastfeeding duration up to 18-24 months. Very few managed to maintain exclusive breastfeeding up to 6 months. The average breastfeeding duration among rural mothers in Kenya is usually 24 months (KNBS, 2009). Mothers who had a stable livelihood and had self perception of being food secure also perceived realization of the right to adequate food of the child.

Realization of the right to adequate food of the child varied along gender lines among the pastoral women unlike the farming women. The boy-child was exclusively breastfed for long compared to the girl child. This is mainly because culturally, the value for the male child is associated with male survival and continuity of the family lineage. Variations in gender differentials with respect to breastfeeding practices indicate contextual perceptions based on child survival and societal role.

Most mothers received infant and young child feeding information from health providers at the health centres during antenatal clinics, grandparents, mothers-in-law and peers. Infant and young child feeding promotions have contributed significantly to the breastfeeding knowledge of the mothers as well as the health benefits for both mother and child. However, the mothers noted that it did not embrace other maternal related challenges which also indirectly affected exclusive breastfeeding practises resulting in sub-optimal practises such as food security, right to work or entitlement and other supportive elements. This could be attributed to the sectoral management of the ministerial departments, such that they only deal with specific agendas related to their

ministries and do not cross-cut issues. For examples, pregnant mothers attending the Mother and Child Health clinics (MCH) will be taught on benefits of breastfeeding and how to practise it, but they will not be taught how to be food secure which usually falls under the docket of Ministry of Agriculture.

Sub-optimal exclusive breastfeeding practices despite knowledge may suggest weak maternal decision making and capacities due to cultural, family or socio-economic influences on child rearing. Among the single parent's category and those from the low socio-economic strata, it was evident that the productive role of the mother is more crucial for household survival and to some degree impacted on the ability of the mother to fulfil her obligations as a duty bearer to the infant. Most single mothers were fatigued and did not exclusively breastfeed as required especially if they did not have enough to eat. They instead initiated complementary feeding earlier than six months. However, among the medium and higher socio-economic groupings, working mothers tended to have better decision making capabilities on breastfeeding practices.

Both study groups reported that for mothers who were married, in stable homes with stable livelihoods, and caring spouses or family support, they were more likely to exclusively breastfeed for up to six months. In the group discussions, some of the mothers mentioned that their spouses also contributed in the decision of exclusive breastfeeding of the infant. This is indicative of positive influence or role of spouse in fostering exclusive breastfeeding.

5.6 CONCLUSIONS

Knowledge on the health benefits of optimal breastfeeding practices are well articulated by the mothers but this does not however translate to practice. The practice is influenced by numerous and complex factors, both personal as well as socio-eco-cultural. Meeting maternal needs and rights are crucial in enabling mothers meet their obligations as duty bearers in realization of the right to adequate food of the child. The mothers appreciated the infant and young child feeding promotions but noted that they did not address the complex maternal needs which also influence

optimal breastfeeding practices. As such, addressing underlying determinants of maternal under-nutrition and integrating rights based approaches that empower the women to realize their rights to food, health, education and work that have a direct impact on the mother's care-giving capacity would foster optimal breastfeeding practices.

Key Findings

1. Employment for single mothers is crucial as a form of entitlement towards progressive realization of her right to adequate food and subsequently that of the infant.
2. Meeting maternal right to adequate food and other maternal needs is fundamental to the mother's ability as a duty bearer to meet her obligation in realization of the right to adequate food of the child.
3. Mothers with support from other secondary duty bearers such as family support have better realization of their right to food and likewise that of the infant. They also are able to practise long exclusive breastfeeding periods unlike those without secondary support
4. Perception of exclusive breastfeeding is also contextual. Realization of the right to adequate food of the child is varied along gender lines among the pastoral community. The boy-child is breastfeed longer than the girl child. This discrimination is, however, not perceived as a violation of right to adequate food of the girl-child.

5.7 RECOMMENDATIONS

Current public policies do not address these obstacles effectively, which is of particular concern in today's volatile economic climate. Thus, to make progress towards realization of the right to food for children through enhancing exclusive breastfeeding, it is essential to focus on maternal needs too. There is need to enhance women's capacities in terms of economic, organizational, resource and decision making as well as those of other secondary duty bearers especially their ability to provide or utilize available resources to be able to breastfeed effectively.

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CHAPTER SIX

REALIZATION OF THE RIGHT TO ADEQUATE FOOD AND ITS INFLUENCE ON HOUSEHOLD FOOD SECURITY AMONG PASTORAL AND SMALL FARM HOLDER HOUSEHOLDS

ABSTRACT

Food security remains a global challenge with growing numbers in undernutrition, hunger and poverty which depict denied basic entitlements and violated rights. The right to food is part of an adequate standard of living and a fundamental right. Its realization assures freedom from want and dignified lives. The study investigated the right to adequate food and its influence on household food security and determined whether it could be a measure indicator of food security. It was hypothesized that households with better awareness of the right had better household food security and that the right to adequate food does not vary with seasonality. A comparative cross sectional survey was conducted among the pastoral and small farm holder households at both dry and wet seasons. A 5 step multi-stage and systematic random sampling was used to select 249 study households. Data collection tools included the right to adequate food questionnaire. Food security was measured by a household food insecurity access scale, a 24 hour food recall and a food frequency questionnaire. The farming community better realized the right to adequate food and food security compared to the pastoral counterpart ($p < 0.05$). However, annual income for the pastoralists was significantly higher than for farmers ($p < 0.05$). Household right to adequate food index indicated better realization of the right among female headed households and those with higher education level ($p < 0.01$). Households with better realization of right to adequate food had better food security ($p < 0.01$). The right to adequate food varied with seasonality with the wet season enjoying greater realization of the right. Right to adequate food accounted for a 4.2%-14.4% during the wet season versus 5%-8% variation in food security during the dry season. More awareness of the right enhances food security and rights to adequate food vary with seasonality.

6.1 INTRODUCTION

Food insecurity still remains a global challenge with the number of people suffering from hunger and poverty now exceeding one 1 billion (FAO, 2009a). This figure accounts for one-sixth of the world's population who are living undignified lives and without freedom from hunger. Widespread hunger and undernutrition in many countries of the world are not a question of the

availability of food but are related to inequities in the distribution of resources and people's physical or economic access to food. This is a manifestation of rights that are denied and violated. This is contrary to the human rights declaration of (1948). This depicts effects of longstanding under investment in food security, agriculture, and rural development that have recently been further exacerbated by food, financial and economic crises. Climate change poses additional severe risks to food security and especially in the agricultural sector affecting the overall food productivity and especially for populations in marginal and Arid and Semi Arid regions. The impact is worse especially among smallholder farmers in developing countries, notably the Least Developed Countries (LDCs), who already have vulnerable populations.

The reaffirmation of the world food summit Rome 2009 to ensure urgent national, regional and global action to fully realize the target of the first Millennium Development Goal and the 1996 World Food Summit goal, namely, to reduce respectively the proportion and the number of people who suffer from hunger and malnutrition by half by the year 2015, are both indications of the magnitude of the problem and the need to address it. The World Food Summit of 2009 reaffirmation also strengthened the 1996 World Food Security call on of the right to adequate food as a human right.

The right to adequate food is much broader and implies the existence of an economic, political and social environment that will allow people to achieve food security by their own means and not just to be fed. The recognition of the right to food as part of an adequate standard of living and a fundamental right to be free from hunger acknowledges that hunger and malnutrition are caused not just by a lack of available food, but primarily by poverty, income disparities and lack of access to health care, education, clean water and sanitary living conditions. It also points to the strong links between the right to food and other human rights.

With the shift in the socio-economic development paradigm particularly the advocacy of human rights approaches in alleviation of the increasing hunger and undernutrition it becomes imperative to investigate the influence that rights to adequate food have on food security.

6.1.2 Statement of the Problem

Human rights based approaches are currently being advocated towards addressing food insecurity issues (SCN, 2005, FAO, 2009a). This is in line with the shift in the social and economic development paradigm which focuses on human rights issues in ensuring that those deprived and wanting are able to secure food security. Globally, over the last three decades, the level of the undernourished population has been growing. Levels of undernutrition have increased from 740 million in the 1970's to 930 million in 2008 and currently over a billion in 2009 (FAO, 2008; FAO, 2009a; 2009b; FIAN, 2009; Hospes and Meulen, 2009). The rise in the impoverished population has continued to escalate despite interventions being put in place to address global food insecurity. There is need therefore to address these levels if the human rights target of freedom from hunger and dignified life are to be achieved (FAO, 2009b, FAO, 2009c). Alleviation of the existing hunger and undernutrition will go a long way in addressing the first MDG on alleviation of poverty and hunger. Growing numbers of the undernourished population has a negative impact in overall development with reduced productive capacities, increased burden of diseases and overall mortality rates (FAO, 2009a, SCN, 2005).

In most sub-Saharan African countries, the issue of the right to adequate food and nutrition has not received attention to create a meaningful impact in the continent. The increasing trend in stunting and underweight in children over the years is an indication that the war on poor nutrition status is still far from being won. The most affected are population in ASAL regions and small scale farm holders (FAO, 2005; 2009b; Kunnenmann and Epal-Ratjen, 2005).

Emphasis has been in the implementation of the right to adequate food at the national level, especially since the adoption of the Voluntary Guidelines (FAO, 2004; 2005; SCN, 2004). However, at the household level so far, progressive realization of the right to adequate food and its influence on household food security has not neither been measured nor has it been well understood. From the foregoing, the study set out to investigate the progressive realization of the right to adequate food and its influence on household food security.

6.1.3 Purpose of Study

The study aimed at investigating realization of the right to adequate food and its influence on food security among pastoral and small farm holder households. The study also was to investigate whether the developed Household Right to Adequate Food Index (HRTAFI) could be used as a measure of household food security.

6.1.4 Hypothesis

Hypothesis to be tested in this study included:

1. Households with better awareness of the right to adequate food have better food security.
($H_0 \neq 0$)
2. Realization of the right to adequate food does not vary with seasonality.
($H_0 = 0$)

6.1.5 Objective

The overall objective of the study was to determine the right to adequate food as a measure indicator for household food security

Specific objectives were to:

1. Determine realization of rights among the study households
2. Determine household food security among the study households
3. Determine influence of the right to adequate food on household food security
4. Determine whether the right to adequate food is influenced by seasonality.

6.1.6 Research questions

The research questions considered in the study were:

1. What is the status of food availability and accessibility among the pastoral and farming communities?
2. What is the average household energy intake among the pastoral and farming communities?
3. In what ways does the realization of the right to food influence food security?
4. To determine whether the realization of right to food influenced by seasonality?

6.1.7 Justification

Focus on the right to adequate food studies have been at national level on implementation of the right to adequate food. As case study of Brazil focused on the national institutional capacity in realization of the right to adequate food (FAO, 2004a), whereas a case study of India focused on right to adequate food realization among vulnerable groups i.e. castes and people living with HIV/AIDS (FAO, 2004c). These case studies however, did not focus on the household level realization of the right to adequate food and its influence on food security. As such, this study investigates the progressive realization of the right to food among pastoral and small farm holding households with varying livelihood sources.

6.1.8 Significance of the Study

At the community level, the results of the study aimed at generating new information on the geo-spatial and ecological disaggregation on progressive realization of the right to adequate food among population groups of various livelihood types. Thus providing an insight into social dimensions of food insecurity and vulnerability; food availability and accessibility and their implications to rights to food. It will also provide an insight on community patterns of rights and how they are likely to influence the projected development within a HRBA context. The communities may also be sensitized on human rights and on their right to adequate food issues and the subsequent influence on food security. This should give them an opportunity as

claimants to understand their roles and responsibilities in enjoyment of the right as well as to demand enforcement of rights to adequate food from duty-bearers.

The general view seems to support the argument that progressive realization of the right to adequate food at the community level can ensure that vulnerable groups within the community are protected following the principle of human dignity and living dignified lives free from hunger. The identification of comprehensive and congruent right to food indicators that measure food insecurity and vulnerability is important. At the household level, the information gathered will generate more awareness on right to food issues. Household heads as main household duty bearers can then understand their obligations and be aware of opportunities to improve their capacities in ensuring attainment of the right. It is expected that the rights indicators or indices developed will be able to convey to policy makers and other stakeholder the status and essential aspects of food insecurity, vulnerability and the right to adequate food. Information and awareness generated on the right to adequate food issues may be used in policy formulation and development planning. Information on household perception of right to adequate food could also give guidance in developing relevant HRBA programmes at the community level.

At the national level, the study will draw attention to the government's recognition of the right to food as a development priority. The findings of the study will form a basis for incorporating policies, strategies and interventions to enforce achievements of the right to adequate food into the mainstream development plans and also towards the realization of the six MDGs that are nutrition related. Improving the food security level in the country, through reduced hunger, malnutrition and poverty will undoubtedly have economic and social benefits to the nation.

The results of the study can also be used by NGO's to integrate the right to adequate food in their intervention programmes that may not necessarily season dependent as a means of ensuring stable entitlement within households. The NGO's can also mobilize lobby groups towards ratification and domestication of the right towards its adoption into the national constitution and relevant policy formulation. Researchers will use generated information on the right to adequate

food to serve as a basis from which other research work can be done. The researchers will also have an opportunity to validate modelling of the innovative methodology adopted in this study.

6.2 LITERATURE REVIEW

This section deals with a review of relevant literature on work done in the study area, expounds on concepts addressed in the study and identifies gaps in knowledge which the study intends to address.

6.2.1 Right to Adequate Food

The right to adequate food is a fundamental right enshrined in the International Convention on Economic, Social and Cultural Rights (ICESCR), which was adopted by the United Nations General Assembly in 1966 and entered into force in 1976 (SCN, 2004; FAO, 2009b). International law recognizes the right of everyone to adequate food and the fundamental right to be free from hunger, which is of crucial importance for the enjoyment of all human rights.

6.2.2. Right to Adequate Food and Food Security

While global efforts since the Second World War targeted eradicating hunger and guaranteeing world food security, these activities were not undertaken within the framework of human rights principles but the basic needs approach. The World Food Summit, 1996, Rome, reaffirmed the right to food as a human right. Therefore, the strive towards ensuring that every person enjoys adequate food is seen not only as a moral imperative and an investment with enormous economic returns, but also as the realization of a basic human right.

Whereas the concept of freedom from hunger requires the state to provide food to those who are unable to meet their food needs for reasons beyond their control (such as age, disability, economic downturn, famine, disaster or discrimination), the right to food requires a progressive

improvement of living conditions that will result in regular and equal access to resources and opportunities so that every individual is enabled to provide for his/her own needs.

In normal circumstances, the majority of persons realize their right to food primarily through their own means that is, by producing food or by procuring it based on their entitlement. The ability to realize the right to food thus depends on access to land, water and other productive resources in addition to access to paid employment and other means of procurement (e.g. social security). As reported by Zeigler, (2003a; 2003b) on the Special Report on the right to food, reducing hunger does not mean increasing the production of food but rather finding ways of increasing access to resources for the poor. Most violation of rights has discrimination as the root cause (Schutter, 2008). The right to food is thus multidimensional and complex, and is interwoven with other human rights. The capacity of a person to exercise this right freely depends on the proper functioning of many different institutions and actors, both governmental and non-governmental (FAO, 2009b).

In most sub-Sahara African countries, the issue of human right to food and nutrition has not received much attention that will create a meaningful impact in the continent. The increasing trend in stunting and underweight in children over the years is an indication that the war in poor nutrition status is still far from being worn. This is equally reflected in the poor statistics recorded on nutritional status of African children (FAO, 2008; Kunnenmann and Epal-Ratjen, 2005).

Gender discrimination is not spared either in the violation of the right to adequate food. Where the human right to food is violated or threatened, women and girls are often specifically or more severely affected (FIAN, 2009; FIDA, 2008). Limited access to and control over resources, lower salaries, insecure and unstable labour conditions, gender biased labour markets, discrimination in laws, regulations and programmes, limited enjoyment of the right to education, inadequate public health care, imposed early marriage and pregnancy, and exclusion from decision making processes impair the right to adequate food for women throughout the world. In

addition, intra household food discrimination prevails in many regions of the world (FIAN, 2009; FAO, 2009a). Globally, Women are responsible for more than 50 % of household production of food, but only own 2 % of the land worldwide. In Kenya, for example, 98% of the women are working fulltime in the agricultural sector, but less than 5% do own land (FAO, 2009b; FIDA, 2008). Therefore, women's lack of access to land underpins their situation of hunger. However, from the socio-cultural context, most discriminations have cultural roots, and most often than not are deemed to be the norm and not as a violation of rights (Mutua, 2002).

The use of nutrition indicators in the measurement of development is a step in placing nutrition in the development agenda. The use of child nutrition wellbeing (proportion underweight) and caloric intake adequacy are currently indicator measures of attainment of the first Millennium Development Goal, which deals with poverty and hunger eradication. The World Summit on Food Security, 2009, Rome further reaffirms the nutrition, development and human rights link as in commitment Principle 3. It states that member states will;

“Strive for a comprehensive twin-track approach to food security that consists of: 1) direct action to immediately tackle hunger for the most vulnerable and 2) medium and long-term sustainable agricultural, food security, nutrition and rural development programmes to eliminate the root causes of hunger and poverty, including through the progressive realization of the right to adequate food” (FAO, 2009a).

Multi-national support and commitment on progressive realization of right to adequate food (Principle 3:19 and 29) indicate strong commitments promotion of food security.

6.2.3 Human Rights Instruments and Right to Adequate Food

The Convention of the Right of the Child (CRC) and the Convention of Elimination of all forms of Discrimination Against Women (CEDAW) are key related human rights instruments which address the right to adequate food. Both treaties have been signed by majority of nations. CEDAW refers to the nutrition dimension of the right to food of women and to their equal access

to land, credit, income and social security, all of which are essential elements for the full realization of the right to food. The action of CEDAW to promote the realization of the right to food of women at national level and in the international community is very relevant towards alleviation of continued hunger and undernutrition among women and the world as a whole. CRC, promotes the right to adequate food by promotion of healthy well nourished children and household food security.

6.2.4 Gaps in Knowledge

Studies carried out have focused on implementation of the right to adequate food at the national level. Not much is understood at the household level with respect to rights to adequate food and food security. The study therefore, intended to establish the relationship of the right to adequate food and food security and measure applicability of the right to adequate food as a measure indicator for household food security.

6.3 METHODOLOGY

This section details how the study was undertaken. It also gives an overview of how data was collected and analysed to generate new information on the right to food and food security.

6.3.1 Study Design

The study design used was a comparative, cross sectional survey design among pastoral and farming communities which was repeated twice at both the dry and wet seasons. The survey intended to investigate influence of realization of right to adequate food on household food security among the study groups with have different livelihood systems.

6.3.2 Study Population

The study was carried out in Kenya, a country where food insecurity is of a national concern. Two population groups with varied livelihood types were selected. These were the pastoral and small farm holder households. The pastoral households were mainly pastoralists whereas the small farm households relied on small scale farming. Both population groups experience food insecurity (Adongo *et. al.*, 2004, Clover 2003; Fratkin, 2003; Fujita *et. al.*, 2004; ILRI, 2006; IRIN, 2009; Kabubo-Mwariara *et. al.*, 2006; Kigutha, 1995; Muyanga *et. al.*, 2004; Ntiati, 2002; UNDP, 2006; 2007). The pastoral group was selected from the Arid and Semi Arid Lands (ASALs) whereas the farming group was selected from the Rift Valley highlands. Both of these groups were different in terms of their livelihood systems. However, malnutrition which is a manifestation of food insecurity and a violation of peoples entitlement to food is evident in both the farming and pastoral communities (CBS *et. al.*, 2003, Kabubo-Mwariara, 2008). The selection on livelihood basis was to get further insight on whether livelihood source contributes to the realization of the right to adequate food.

6.3.3 Sampling Procedures and Sample Determination

Sampling was done using a 5 step multi- stage sampling as presented in Figure 6.1. The first step was selection of representative districts within the Rift Valley province. The second step was to select the districts. Selection of the districts was in consideration of the different livelihood systems of the community groups. Thus purposive selection of a farming and pastoral district was done. Nakuru North District and Kajiado District respectively were selected to represent the farming and pastoral groups. The third step was selection of a division, in each selected district. This was done purposively to get a pastoral and high ecological zone respectively. In Kajiado, Kajiado Central Division was selected and Bahati Division in Nakuru North district. The fourth step involved Location selection which included Sajiloni Location as it is predominantly nomadic in Kajiado District. In Nakuru North District, Bahati Location was selected, being the location on the highest ecological zone and with high small farm holding population. The fifth step involved selection of Sub-locations.

Due to the low population density in Sajiloni location, two adjacent sub-locations were selected, Sajiloni and Impiro to accommodate a representative sampling frame from which to select the required sample size of households. Chania Sub-location was selected in Bahati Location since it is most productive in terms of agricultural potential.

Proportionate sampling was calculated to identify the actual number of representative households to be selected per cluster and then survey households were selected randomly. Lastly systematic random sampling was used to select the households through cluster sampling in which the clusters were represented by villages in each sub-location. Lastly, a sampling interval (SI) in each cluster was then calculated using the formula,

$$SI = \{ \text{estimated number of households} / \text{number of households to be sampled} \}$$

The first household was selected as a number between 1 and the obtained SI, thereafter every SIth household was selected. In case of no response, the next house was chosen as a replacement. The calculated SI value for both Bahati and Kajiado was eight (8). Hence, every eighth household was selected in each cluster or village. A total number of 249 households were thus selected with 114 of the households being farmers and 135 households being pastoral. The selection procedure is indicated in figure 6.1.

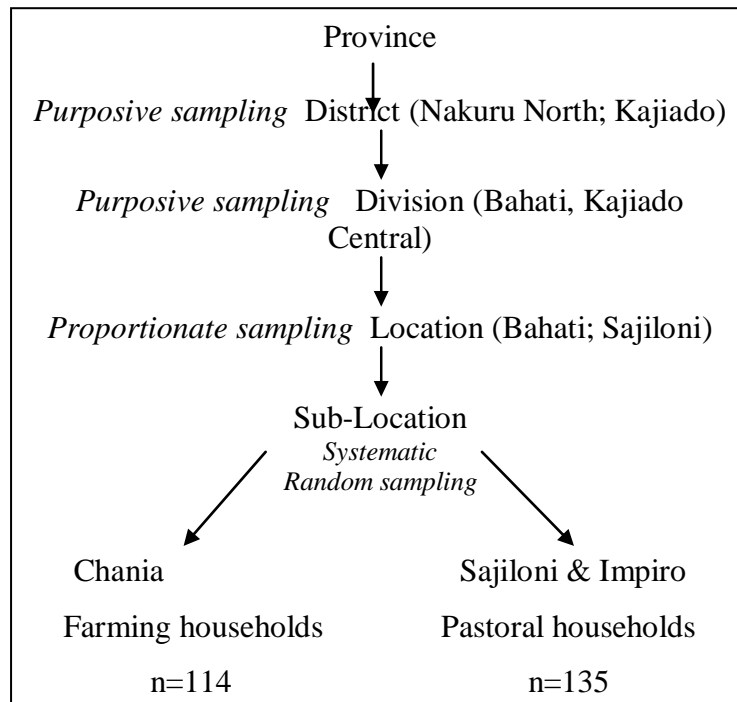


Figure.6.1: Schematic representation of 5 step multi-stage sampling

6.3.4 Data Collection Tools

Data collection tools used included a Household Right to Adequate Food questionnaire, a Household Food Insecurity Access Score questionnaire, a household perception questionnaire and a 24-hour food recall questionnaire which was administered twice to measure energy intake on a weekday and on a weekend. Focus group discussions were also held among study groups. Both men only and women only focus group discussions were conducted. In each site, two men and women FGDs were held. Representative leaders of various sub-groups were the participants. The FGDs were to give insights and confirmation of findings generated from the other research tools.

6.3.5 Data Collection Procedures

Pre-testing of the study instruments was done prior to the actual data collection. Pre-testing was conducted among community groups similar to the actual study communities and adjustments in the tools made. For the farming community, Kihingo Sub-location, Njoro District was selected whereas for the pastoral community, Ildalmat Sub-location, Kajiado District was selected. Data collection started with the general household questionnaire, followed by the 24 hour food recall and then the focus group discussions. A total of two focus group discussions were held for each group in each community making a total of 8 for the entire study. The limited number of the FGD was due to constraints involved in data transcription and analysis of interviews which is very time consuming.

6.3.6 Data Analysis

Data collected was checked for errors in entries and then analysed using Statistical Programme for Social Sciences (SPSS) Version 16 software (MS Windows). The general population characteristics were obtained through simple descriptive statistics. Standardization of the household measures for dietary intakes were developed for the conversion of household measures measured in volume, and other containers used in grams (Appendix 2). Energy intakes were computed from the various foods based on the Kenyan Food composition Tables (Sehmi, 1993). Consumer units for household energy intake requirements were also adopted from Sehmi, (1993) (Appendix 3). Data from FGDs especially from the pastoral group was transcribed and translated from Maasai to English by the research assistant, from where I was able to then generate the themes for analysis.

Inferential statistics (correlations and regressions) were computed to establish the relationships between levels of attainment of rights to adequate food and food security. Comparative analysis (chi-square and t-tests) of the realization of rights to adequate food, and food security were done among the study groups. Ratings, grading and qualitative analysis which have not been

previously used in analysis of human rights based approaches (Jonsson, 2003) were also used in this study.

The right to adequate food was measured by the obligation parameters of ‘to respect’, ‘to protect’ and ‘to fulfil’. These were then categorized into levels of realization of right then used in analysis. The household food security was measured by the following; household energy intake both during the dry and wet season, household food insecurity access score, household dietary diversity score and food consumption patterns. Comparison of realization of right to adequate food and food security at household level was done between the study groups and by seasonality.

6.4 RESULTS

This section details how data analysis of the generated data was conducted and the different analysis techniques used to generate both descriptive and inferential information. It also gives the general descriptive population characteristics of the study group.

6.4.1. General Characteristics of the Study Groups

The general descriptive characteristics of the pastoral and small farm holder households are presented in Table 6.1. The information consists of attributes of the combined study group and where there was significant difference between the groups, an asterisk is indicated.

Table 6.1: General characteristics of the study groups

Characteristics	N	Frequency (%)
Total study population	249	
Group		
Farmers	114	45.8
Pastoralist	135	54.2
Respondent's sex*		
Male	58	23.3
Female	191	76.7
Occupation		
Farming	147	59.0
Business	62	24.6
Housewife	24	9.6
Employed	9	3.6
Casual work	8	3.2
Respondent's education level*		
None	2	0.8
Adult education	106	42.6
Primary	32	12.8
Secondary	8	3.2
College/ tertiary		
Marital status		
Married	211	84.8
Single	16	6.4
Separated/divorced	9	3.6
Widowed	13	5.2
Religion		
Christian	246	98.8
Muslim	2	0.8
traditionalist	1	0.4
Household size categories*		
1-4 persons (Small)	68	27.3
5-8 persons (medium)	154	61.8
9-20 persons (Large)	27	10.8

*Significance difference at $p < 0.05$ and ** at $P < 0.01$. Chi-square test between study groups.

A test of association using Spearman's correlation indicated the following results. Male heads of household in the study group were significantly older and more educated than the female

household heads ($\rho = 0.214$, $p = 0.000$, and $\rho = 0.209$, $p = 0.001$) $p < 0.01$ respectively. Overall, the younger household heads had better education compared to older ones ($\rho = 0.137$, $p = 0.032$, $p < 0.05$). The older household heads had smaller household sizes ($\rho = 0.183$, $p = 0.004$, $p < 0.01$). Farming households had significant larger household sizes $p < 0.01$ ($\chi^2 = 27.592$, $p = 0.000$ and $\chi^2 = 30.499$, $p = 0.000$) in both seasons respectively compared to the pastoral households.

The obligation parameter right 'to respect' correlated positively with education ($\rho = 0.243$, $p = 0.000$) and occupation ($\rho = 0.190$, $p = 0.003$). The realization of the right to respect significantly increased with education level and occupation (being in formal employment e.g. teaching, civil service or engaging in business such as trade). Both associations were significantly different at $p < 0.001$. The obligation parameter of right to protection correlated negatively to female-headed households. Female-headed households had less realization of right to protection ($\rho = 0.218$, $p = 0.048$, $p < 0.05$). Realization of the obligation parameter of right to fulfilment was realized more among female headed households ($\rho = 0.170$, $p = 0.007$) and those of higher educational levels and more years in school ($\rho = 0.017$, $p = 0.007$). These associations were significant at $p < 0.01$. Female-headed households also indicated better dietary diversity scores (weekday) compared to male headed households.

The overall household right to adequate food index (HRTAFI) indicated better realization of the right to adequate food among female headed households ($r = 0.125$, $p = 0.049$, $p < 0.05$), households whose main livelihood was farming ($r = 0.144$, $p = 0.023$, $p < 0.05$) and among heads of households that had attained higher educational levels ($r = 0.218$, $p = 0.000$, $p < 0.01$). All the obligation parameters of the right to food (right to respect, protection, fulfilment and HRTAFI) had a positive association with increased ability of households to produce or have adequate food to last till the next season and food security level. Households that had adequate food to last till next season had better realization of the right to adequate food ($r = 0.356$, $p = 0.000$, $p < 0.01$). Increase in household food security level increased with realization of right to food. This was significantly different at $p < 0.01$ ($r = 0.207$, $p = 0.001$).

6.4.2 Household Socio-economic Characteristics

Data generated on the study groups on their socio-economic characteristics was analysed as presented in Table. 6.2:

Table.6.2: Household socio-economic characteristics among the study groups

Characteristics	Pastoral		Farming	
	Number	Percentage (%)	Number	Percentage (%)
Number of households	135	54.2	114	45.8
Land owned cultivated land	99	48.5	105	51.5
<1 acres	27	27.3	27	25.7
1-2 acres	66	66.7	60	57.1
>2 acres	6	6	18	17.2
Livestock				
Cows				
<10	82	71.9	56	100
10-50	29	25.4		
>50	3	2.7		
Goats				
<10	43	35.8	20	95.2
10-50	69	57.5	1	4.8
>50	8	6.7		
Sheep				
<10	47	39.2	31	96.9
10-50	62	51.7	1	4.1
>50	11	9.1		
Chicken				
<5 hens	30	44.8	21	30.4
5+	37	55.2	48	69.6
Donkey				
1-2	37	64.9		
3-5	14	24.6		
5+	6	10.5		
Income (yearly)* Ksh				

Characteristics	Pastoral		Farming	
	Number	Percentage (%)	Number	Percentage (%)
<6000	8	7.3	0	0
6,000-20,000	28	25.4	10	12
21,000-50,000	39	35.5	35	42.2
>50,000	35	31.8	38	45.8

About half (48.5% and 51.5%) of both the pastoral and farming communities respectively engaged in some form of cultivation. Majority of them, 66.7% of pastoral and 57.1% of the small farm holders cultivated acreage of 1-2 acres. The pastoralists had more cattle compared to the farmers. All farming households kept less than 10 heads of cattle. For the small ruminants, sheep and goats, the farming community still reared far less compared to their pastoral counterparts. The households that reared had less than 10 of the sheeps or goats. The only animal that the farming community reared more than the pastoralists was the chicken. Donkeys were only reared by the pastoralists.

Income for the two communities changed over time. During the dry season, the mean income among the pastoral group was significantly better compared to the farming counterpart ($r=0.391$, $p=0.000$, $p<0.01$). However, during the wet season, the farming group had a better and significant mean income ($r=0.283$, $p=0.000$, $p<0.01$). The pastoralists had their main source of income from sales of livestock with better sales being realized during the dry season. The mean income during dry season was Ksh. 82,538.00 compared to Ksh. 46,131.00 during the wet season. The farming group realized its main income from sales of food crops. The mean income during the dry season was Ksh. 27,969.00 compared to the wet season of Ksh. 73,949.00. The difference in income within the different seasons for both groups were significantly different at $p<0.01$. Overall, the pastoral group had better mean income compared to the farming group.

6.4.3. Realization of the Right to Adequate Food among the Study Groups

Comparison of progressive realization of the right to adequate food was measured by chi-square test for both seasons; dry and wet as shown in Table 6.3.

Table 6.3: Realization of rights among study households during the dry season (March-June)

Right to food obligation parameter	N		Farming	Pastoral	Chi-sq test χ^2	Significance P-value
Right to Respect	249	Violation	9	13	17.054	0.002*
		Moderate violation	75	112		
		Low/ no violation	30	10		
Right to protection	249	Violation	0	1	3.421	0.490
		Moderate violation	82	107		
		Low/ no violation	32	27		
Right to fulfilment	249	Violation	0	3	18.637	0.001*
		Moderate violation	100	87		
		Low/ no violation	14	45		
Household right to adequate food index	249	Violation	1	2	18.914	0.001*
		Moderate violation	94	131		
		Low/ no violation	19	2		

*-significance difference at $p < 0.01$

Data indicates significant change in progressive realization of right to food at the different seasons (Table 6.3 and 6.4). The farming community however, had better progressive realization of the right to food as measured by obligation parameter to ‘to respect’ and the household right to food index compared to the pastoral counterparts. This difference was significant at $p < 0.01$. The obligation parameter ‘to protect’ during the dry season was not significantly different among

the study groups, similarly the obligation parameter ‘to fulfil’ in the wet season. Obligation parameter as measured by the ‘to fulfil’ was significantly better among the pastoral group during the dry season only compared to the farming counterparts. The obligation parameter ‘to protect’ among the farming group improved during the wet season and was significantly different compared to that of the pastoral counterpart ($p < 0.01$).

Table. 6.4: Realization of right to adequate food among study households during wet season (August-November)

Right to food obligation parameter	N		Farming	Pastoral	Chi-sq test χ^2	Significance P
Right to Respect	235	Violation Moderate violation Low/ no violation	2 72 32	16 106 7	31.459	0.000*
Right to protection	239	Moderate violation Low/ no violation	82 24	125 8	14.062	0.000*
Right to fulfilment	238	Moderate violation Low/ no violation	95 11	123 9	0.968	0.325
Household right to adequate food index	234	Moderate violation Low/ no violation	94 12	127 1	12.775	0.000*

*-Significance difference at $p < 0.01$

6.4.4 Household Food Security Level among Study Groups

Household food security as a dependent variable was measured by various parameters. These included household energy intake, household food insecurity access score, household Dietary

diversity score and food consumption patterns. Energy intake was computed from 24 hour recall which was conducted twice, once during the week day and the other on a weekend. Adequacy of dietary energy intake was computed based on consumer unit requirements (Sehmi, 1993). Comparison of means was done to establish whether the differences were significant between groups and seasons. The mean household energy intake during both the lean and post-harvest season for weekday and weekend are shown in Table 6.5.

Table 6.5: Mean household energy intakes during dry and wet seasons among the study groups

Households Energy intakes	Energy intake dry season mean (SD)	Energy Intake wet season Mean (SD)
Energy Intake week day#	11198.33 (5875.48)	9925.61 (4714.23)
Farming	12598.91(7245.23)	11721.99 (5921.57)
Pastoral	9707.76 (2993.36)	8922.12 (3106.23)
Energy Intake weekend#	11385.64 (5697.71)	10273.68 (4534.14)
Farming	13103.25 (7093.2)	11877.17 (5339.99)
Pastoral	9823.51 (3372.16)	9421.92 (3286.49)

#- combined group mean

The farming households had significantly better energy intakes compared to the pastoral counter parts ($p < 0.01$). Energy intake over the weekend was also significantly higher compared to that of weekday at $p < 0.01$. Energy intake varied with seasonality with the energy intake during dry season being significantly higher than during wet season ($p < 0.01$). Adequacy of household energy intakes was computed and is indicated in Table 6.6.

Mean energy intake adequacy during the weekday was better than during the weekend. Comparison of mean adequacy indicates significant differences in dietary intake during the dry season ($p < 0.01$). The farming group showed better adequacy in energy intake. However, energy intake adequacy during the wet season was better compared to the dry period. Comparison of means in energy intake adequacy during the wet season between the study groups indicate significant differences in both weekday and weekend energy intakes at $p < 0.05$ and $p < 0.01$ respectively.

Table 6.6. Mean household energy intake adequacy among the study groups during dry and wet seasons.

Households Energy intake Adequacy	Energy intake dry season Adequacy (%) (SD)	Energy Intake wet season Adequacy (%) (SD)
Energy Intake week day#	94.21 (35.79)	103.18 (225.37)
Farming	103.55 (39.69)	133.50(377.50)
Pastoral	84.38(30.08)	78.88 (25.34)
Energy Intake weekend#	91.84 (31.97)	91.38 (36.90)
Farming	104.75(35.18)	101.45 (45.88)
Pastoral	81.19 (24.59)	84.83 (25.79)

#- combined group mean

Overall, household energy adequacy increased significantly for both study groups during the wet season compared to the dry season ($p < 0.05$) as shown in Table.6.7 However in both seasons, the proportion of households with inadequate energy intake than required were higher in farming households compared to the pastoral households (energy adequacy of $< 60\%$).

Table. 6.7: Household distribution with respect to energy adequacy

Energy intake Adequacy (%)	Farming (%)		Pastoral (%)	
	Dry season^a	Wet season	Dry season	Wet season^{bc}
Energy intake Adequacy weekday ^b				
> 80	9.9	16.3	14	23.5
60-80	19.8	13.5	33.9	33.3
< 60	70.3	70.4	52.1	43.2
Energy intake Adequacy Weekend ^{*ac}				
> 80	8.0	8.8	17.9	15.9
60-80	19.5	18.6	29.3	28.8
< 60	72.6	72.5	52.8	55.3

*- phase I: significant difference at $p < 0.05$; abc indicate those with corresponding significant differences respectively. Dry season, $n=230$; wet season, $n= 234$.

6.4.5 Household Food Insecurity Access Score

Comparison of household food insecurity access score among the pastoral and small farm holder households is presented in Table 6.8. It includes comparison by seasonality. The household food insecurity access score ranged from 0-27. The higher the score the more food insecure the household was. Mean scores for dry and wet seasons were 8.89 (7.50) and 6.77 (6.94) respectively for the combined group. Food Insecurity as measured by access to food during the dry season was significantly worse off compared to the wet season. More households were food insecure during the dry season. The farming community was significantly more food secure compared to the pastoral counterparts ($p < 0.01$).

Table 6.8: Mean household food insecurity access score among the study groups during both wet and dry seasons

Household Food Insecurity Access Score	Dry season **		Wet season*	
	Farming	Pastoral	Farming	Pastoral
N	103	135	103	135
Mean (SD)	5.29 (5.40)	11.68 (7.73)	5.69(4.57)	7.61 (8.28)

*- indicates significance difference between groups at ** $p < 0.01$ and * $p < 0.05$ respectively.

Farming households indicated better food security level compared to the pastoral households throughout both seasons ($p < 0.01$ and $p < 0.05$ respectively). From the paired mean t-test measuring seasonality variation, food security improved significantly during the wet season. ($p < 0.01$) compared to the dry season ($t = 4.152$, $df = 238$, $p = 0.000$).

6.4.6 Household Dietary Diversity Score

The food frequency questionnaire was used to gather food diversity among the study groups. Food diversity was checked for the previous day and for the last 7 days. Fifteen food diversity classes were identified (Coates et al, 2005) (Annex. 1). The scores attained ranged from 3-15 points. Mean dietary diversity scores for both seasons for the study group are shown on the Table 6.9.

Table 6.9: Mean dietary diversity score among the study groups for both dry and wet harvest seasons

Dietary Diversity Score	Dry season		Wet season	
	Farming ^a	Pastoral	Farming ^{bc}	Pastoral
Day ^{ab}	9.13 (2.14)	8.5 (2.79)	10.5(1.65)	8.73 (2.06)
Weekly ^c	10.25 (2.4)	10.79(1.9)	11.77(1.19)	10.88(.57)

*-n=240 (farming 109, pastoral 131); abc- indicate means with corresponding significant difference at p<0.05 and p<0.01.

The mean dietary diversity scores during the dry season was 8.8 (2.65) and 10.52 (2.19) for one day and the last 7 days of assessment respectively. Wet season mean scores were 9.52 (2.11) and 11.28 (1.49) respectively among the study groups. The dietary diversity score was significantly better during the wet season (p<0.01) (t=4.27, df=240, p=0.000) irrespective of either being a day's or last 7 days assessment. There was significant difference in dietary diversity scores between day's and weekly (last 7 days) intakes (p<0.01) both seasons. The weekly dietary diversity was more varied compared to a particular day's assessment.

A test of difference between the study groups on dietary diversity indicate that during the dry season, both daily and weekly dietary scores, the pastoral households had a higher proportion of households that consumed foods from less than 6 food groups than the farming households. This difference was significant at p<0.05 ($\chi^2 = 9.085$, p=0.011 and $\chi^2 = 8.798$, p=0.012) respectively.

6.4.7 Household Food Consumption Patterns

The mean number of meals taken during the wet season were 3.73 (0.827) during weekends and 3.87 (0.906) on weekdays. About a third of the study household had three or less meals in the day. Comparative food consumption pattern by season among the study groups is as shown in Figures.6.2 and 6.3. Main meals taken among the study households included breakfast, lunch and supper in both seasons. These were consumed by at least 96% of the households. The least consumed meal was the night snack. Ten and four O'clock tea were also consumed with only

about 40% of the households partaking of these meals either as mid-morning or mid-afternoon tea. The number of meals taken during the weekday were significantly more compared to weekends ($t=64.39$, $df =248$, $p<0.01$) However among the study groups during the dry season, the pastoral group consumed more meals compared to the farming group. This difference was statistically significant different for both meals consumed on weekdays and weekends ($\chi^2=11.895$, $p=0.018$, $p<0.05$ and $\chi^2=17.439$, $p=0.002$, $p<0.01$) respectively. No significant difference in number of meals consumed was indicated during the wet season. Figure 6.2 indicates food consumption during weekdays over both dry and wet seasons whereas Figure 6.3 indicates weekend consumptions over the same period.

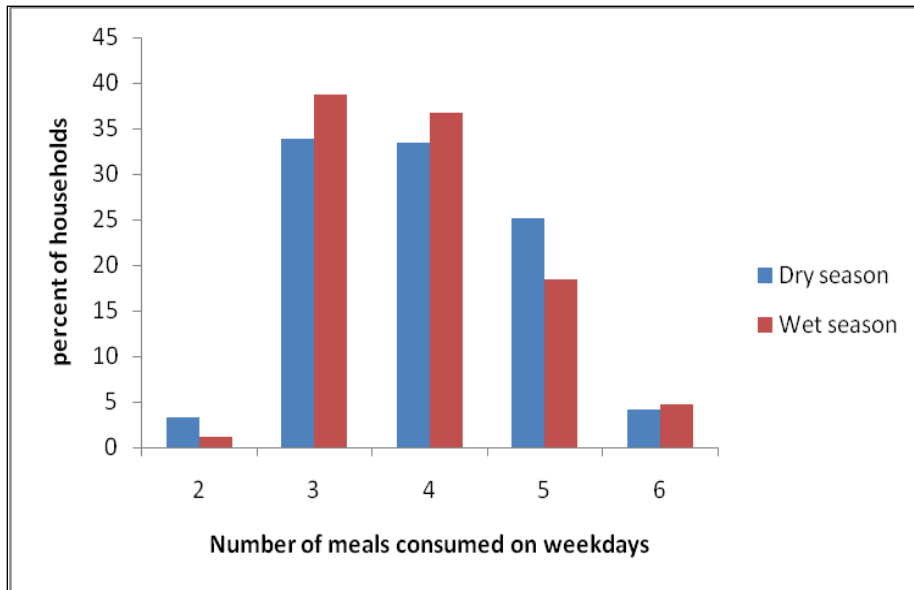


Figure. 6.2. Number of meals consumed by the study households during dry and wet seasons on weekdays

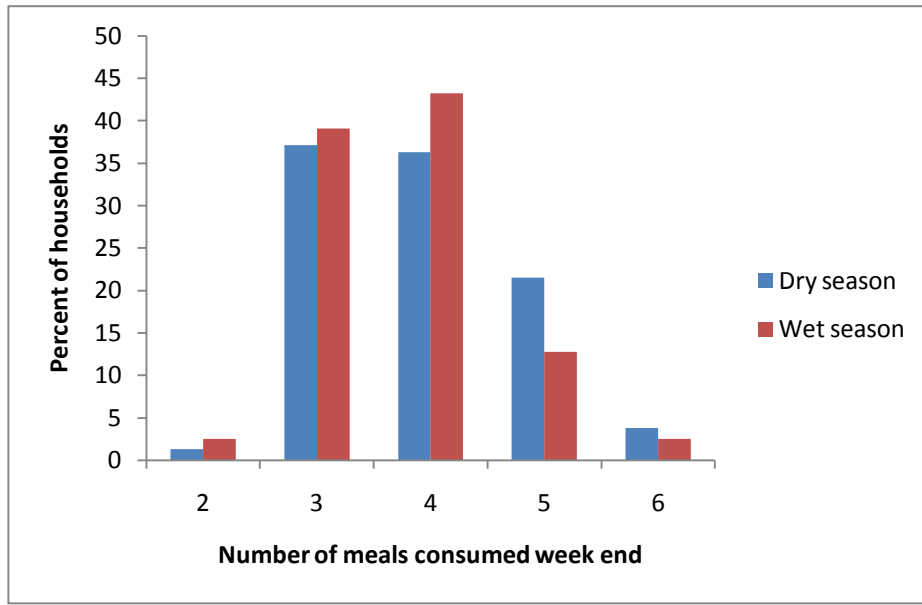


Figure 6.3: Number of meals consumed by the study households over the weekends during both dry and wet seasons

Data also indicates that weekend meals consumed were also associated with better caloric adequacy among both study groups. The chi-square test for the farming group; $\chi^2 = 25.160$, $df=4$, $p=0.000$ ($p<0.01$) and for the the pastoral group as $\chi^2=10.754$, $df=4$, $p=0.029$ ($p<0.05$) respectively.

6.4.8 Influence of Right to Adequate Food on Food Security

The relationship between right to adequate food and food security were measured using inferential statistics. Both correlation and multiple regressions were done to test for association and degree of association respectively. Right to adequate food was measured by the obligation parameters ‘to respect’, ‘to protect’, and ‘to fulfil’. The household right to adequate food index was computed from the right to adequate food obligation parameters. Food security was measured by the variables household energy intake (from 24 hour food recall), household food insecurity access score, household dietary diversity score and food consumption pattern.

Multiple regression analysis was done to measure effect of right to adequate food on food security as presented in Table 6.10 and 6.11.

Table. 6.10: Multiple regression on right to adequate food on food security (dry season) as measured by Household Food Diversity Score among the study groups

Food security Attribute	R²	B	SE	beta	t	sig	95% CI
Constant [#]	0.080	7.990	1.604		4.980	0.000**	4.829; 11.150
Right to protection [†]		-.253	0.062	-.518	-4.097	0.000**	-0.374; -0.131
Right to fulfilment [†]		-.118	0.047	-.293	-2.511	0.013*	-0.210; -0.025
HRTAFI [†]		-.139	0.033	.732	4.192	0.000**	0.074; 0.205

*- significant at p<0.05; ** significant level p<0.01

[†]- reference - violated rights to low or no violation;

#- Household Food Diversity Score (increase in score, high food security)

Table 6.10b: Multiple regression on right to adequate food on food security (dry season) as measured by Household Food Insecurity Access Score among the study groups

Food security Attribute	R²	B	SE	beta	t	Sig	95% CI
Constant [#]	0.050	17.258	4.805		3.592	0.000**	7.793; 26.722
Right to protection [†]		0.205	.182	.143	1.128	.260	-0.153;0.564
Right to fulfilment [†]		.185	.140	.156	1.324	.187	-0.090; 0.461
HRTAFI [†]		-.239	-.098	-.426	-2.432	.016*	-0.433; -0.045

*- significant at p<0.05; ** significant level p<0.01

[†]- reference - violated rights to low or no violation

#- Household Food Insecurity Access Score (increase in score, low food security)

Table 6.10c: Multiple regression on right to adequate food on food security (dry season) as measured by Household Energy Intake among the study groups

Food security Attribute	R ²	B	SE	beta	t	Sig	95% CI
Constant [#]	0.054	9558.013	3764.408		2.539	0.012*	2141.386; 16974.641
Right to protection [†]		-465.576	142.958	-.421	-3.257	.001**	-747.231; -183.921
Right to fulfilment [†]		-191.786	109.886	-.211	-1.745	.082	-408.283; 24.711
HRTAFI [†]		245.711	77.181	.572	3.184	.002**	93.65; 397.772

*- significant at p<0.05; ** significant level p<0.01

[†] - reference - violated rights to low or no violation

[#]- Household Energy Intake

The realization of the right to adequate food accounted for 8% change in household dietary diversity score, 5% variation in household food insecurity access score and 5.4% variation in household energy intake during the dry season.

6.4.9 Multiple Regressions on Right to Adequate Food on Food Security during Wet Season

The variation on influence of right to adequate food on food security during the wet season was analysed and is presented in Table 6.11. The household food security was measured by the following; the Household Dietary Diversity Score, Household Food Insecurity Access Score and Household Energy Intake.

Table .6.11a: Multiple regression on right to adequate food on food security (wet season) as measured by Household Food Diversity Score among the study groups

Food security Attribute	R²	B	SE	beta	t	sig	95% CI
Constant [#]	0.144	13.705	1.457		9.404	0.000**	10.834; 16.576
Right to protection [†]		-.239	.074	-.444	-3.234	0.001**	-0.385; -0.093
Right to fulfilment [†]		-.226	.037	-.635	-6.045	0.000**	-0.300; -0.152
HRTAFI [†]		.147	.033	.738	4.390	0.000**	0.081; 0.213

*-Significant level at p<0.05, ** p<0.01, [†]- reference - violated rights to low or no violation, #- Household Food Diversity Score

Table 6.11b: Multiple regression on right to adequate food on food security (wet season) as measured by Household food insecurity access score among the study groups.

Food security Attribute	R²	B	SE	beta	t	Sig	95% CI
Constant [#]	0.050	4.468	5.241		0.887	0.376	-.5.680; 14.972
Right to protection [†]		.305	.263	.174	1.159	.248	-0.214; 0.824
Right to fulfilment [†]		.386	.138	.321	2.790	.006	0.113; 0.654
HRTAFI [†]		-.279	.120	-.431	-2.322	.021	0.515; 0.042

*-Significant level at p<0.05, ** p<0.01

[†]- reference - violated rights to low or no violation

#- Household Food Insecurity Access Score

Table 6.11c: Multiple regression on right to adequate food on food security (wet season) as measured by Household energy intake among the study groups

Food security Attribute	R ²	B	SE	beta	t	Sig	95% CI
Constant [#]	0.042	11544.12	3335.36		3.461	0.001**	4971.349; 18116.894
Right to protection [†]		-295.255	171.449	-.254	-1.722	0.086	-633.099; 42.588
Right to fulfilment [†]		-244.765	85.964	-.321	-2.848	0.005**	-414.121; -75.405
HRTAFI [†]		200.623	77.076	0.470	2.603	0.010*	48.751; 52.494

*-Significant level at p<0.05, ** p<0.01, [†]- reference - violated rights to low or no violation, #- Household Energy Intake

During the wet season, the right to adequate food accounted for a 14.4 % in variability in the household dietary diversity score, 5% change in the household food insecurity access score and a 4.2% change in household energy intake. Overall, the contribution of the right to adequate food to household food security ranged between 4.2% and 14.4%.

6.4.10 Test for Hypothesis

To test for the two study hypothesis that households with better awareness on right to adequate food had better food security and that progressive realization of rights to adequate food did not vary with seasonality were tested.

Correlation test on better awareness of right to adequate food and increased food security was done and significant variables subjected to a regression test (Tables. 6.12 and 6.13). Analysis showed that households that had better awareness of rights to food had better food security (F=5.421, p=0.000) and household dietary diversity scores (F=12.779, p=0.000). This led to acceptance of the hypothesis.

Table 6.12: Regression analysis on awareness of right to food and food security as measured by Household food insecurity access score

Food security Attribute	R²	B	SE	beta	t	Sig	95% CI
Constant [#]		17.314	3.173		4.642	0.000	9.968;24.660
Awareness	0.021	-0.320	0.137	-0.147	-2.328	0.021*	-0.590; -0.049

*-significant level p<0.05

Household Food Insecurity Score (increase in score, low food security)

Table 6.13: Regression analysis on awareness of right to food and food security as measured by Dietary diversity score

Food security Attribute	R²	B	SE	beta	t	sig	95% CI
Constant [#]		4.365	1.25		3.493	0.001	1.903;6.827
Awareness	0.050	0.165	0.046	0.223	3.578	0.000**	0.074;0.255

**Significant level at p<0.01.

Dietary Diversity Score (high score more variety)

Analysis of progressive realization of right to adequate food and season variation was measured by paired means of the parameter household right to adequate food index (HRTAFI). Results indicate that there was significant difference (p<0.01) (t=4.119, df=233, p=0.000) with realization of right with seasonality. There was better realization of right to food during the post harvest season compared to the lean season. Thus, the hypothesis that progressive realization of the right to adequate food does not vary with seasonality was rejected.

6.5 DISCUSSIONS

Results indicate that the farming household had significantly (p<0.01) larger household sizes compared to the pastoral households. However, household size did not indicate significance with

realization of rights to adequate food neither household food adequacy. This implies that household size is not a factor in progressive realization of the right to food.

Other factors that indicated relationship with right to adequate food included education level, food production capacity, stable livelihood and gender. Household heads who had more years of school and higher educational levels were able to realize better realization of right to food compared to those without formal education or few schooling years. This can be explained by the added skills, opportunities to utilize their resources and entitlements. They may be advantaged in that they had more awareness on rights and better users of services offered that indirectly influence right to food such as health services and extension services. Households that were able to produce adequate food to last to next season had more food available and were able to realize their right to adequate food. The capacity to adequately produce means that the households not only met the inputs required (either purchased by own income or through loans) but also had the agricultural skills.

Stable livelihood was another factor that influenced realization of right to food. Occupations that guaranteed steady income enhanced realization of the right to adequate food. Stable livelihoods enable households to plan use of the available resources and in case of surplus, to invest to cushion future shocks that may be unpredictable thus being able to guarantee food security.

Gender also influenced realization of right to food. Female headed households though with overall better realization of the right to adequate food compared to male headed households, were disadvantaged in realization of right to protection. This may have been due to cultural factors that limit or influence resource use, control and entitlement based on gender lines. Most cultural norms favour males especially in issues of property ownership and control. These lead to biases on dos and don'ts for women. Denied control of use of entitlements is a violation of rights which in some cultural context may not be perceived as violation of rights but taken as the norm or a cultural way of life.

The pastoral households had higher income compared to the farming households during the lean season, though this did not imply that they had either better household food security or realization of the right to adequate food. The obligation parameter, 'to fulfil' increased with reduced household food security, which implied more dependence on external sources to mitigate food security gaps such as, food aid or receiving remittance from other family members. Ideally, households do not have much control over the obligation parameter 'to fulfil', as this is usually provided externally by other duty bearers such as the government (government sectors) or other change agent organizations to whom the right holders have no control. More so, the obligation parameter 'to fulfil' by "provision" is usually realized during times of emergencies such as severe drought, floods or disease epidemics.

Low income among the pastoralists during the wet season may have been occasioned by the prolonged drought that continued into the wet period. With no forage for the animals, animals were thin and could not sell at the most optimal market value. At the same time, most of the livestock had migrated in search of pasture elsewhere. Among the farming households, low incomes during the lean season may have been due to low sales as the households were in the recovery phase after the post election violence. Some of the households had to accommodate Internally Displaced Persons (IDPs). Low income during the post harvest season was occasioned by the high cost of farm inputs such as fertilizer which affected acreage cultivated. Fertilizer prices soared up with an increased margin of 222%, making it unaffordable to most farmers. Thus, only part of the crops were planted using fertilizer. The rainfalls were erratic and not regular which also affect crop productivity. The rising cost of food commodities in the global financial crunch also affected the overall income of the farmers.

Progressive realization of the right to adequate food among the study groups showed that the farming households had better realization of the right to food compared to the pastoral counterparts. This was as measured by the HRTAFI. The farming households also had significantly better household food security. The obligation parameters of 'to respect' and 'to

protect' indicated significantly low/less violation of rights to adequate food among the farming households($p<0.01$).

High energy intake was observed during the dry season compared to wet season among the study groups. However, during the wet season, energy intake adequacy was significantly better than the dry season. This may be accounted for by increased dietary diversity during the wet season. Low energy intake during the wet season may have been contributed by the the high prices of food, which was being experienced globally at the time of the study. This may have reduced access to food to the household. Dietary diversity increases nutrient density of meals, lowering the overall energy intake adequacy.

Among the pastoral households, low energy intake was occasioned by prolonged drought. Both groups were also affected by the global food price crunch influencing availability of food to the household. Generally, food access increased during the wet season with improved food availability in the market. This contributed to the improved dietary diversity of meals consumed. Weekly dietary diversity score was significantly higher compared to the day dietary diversity score ($p<0.01$). This indicates that the weekly dietary diversity score may be a better measure compared to the day's dietary diversity score. The right to adequate food influenced household food security to varying degree depending on the household food security proxy used. Overall, it influenced variability in household food security by a range of 4% to 14%. This variability was significant. However, it is worth noting that other factors such as the hike in food prices, cost of production and inputs do influence food security. Results also indicated that improved awareness of the right to adequate food did influence household food security positively. This implies that enhanced awareness of right to food among community groups is bound to positively improve household food security.

6.6 CONCLUSION

Factors that influenced realization of the right to adequate food included, educational level, food production capacities, stable livelihoods and gender. Household size was not a factor in the realization of the right to food. Cultural discrimination along gender lines with respect to property ownership, entitlement and control of household resources negatively affected the right obligation parameters 'to protect' for women and especially in women headed households. This constituted a violation of their right.

Income alone as a household entitlement is not an adequate factor towards ensuring either realization of the right to adequate food or food security. It however needs to be supported by other factors such as capacity, capability and empowerment to be able to translate to desirable livelihood outcomes. Access to other basic needs such as education, health and work are important in facilitating realization of the right to adequate food. The developed HRTAFI can be used to adequately measure food security levels. The right to adequate food influences variability in food security and accounts for variability of between 4%-14%. The realization of the right to adequate food was also indicated to be higher during the wet season. The weekly household dietary diversity score is a better proxy measure of food security level compared to a day's dietary diversity score.

Progressive realization of the right to adequate food influences household food security irrespective of livelihood types. The right to adequate food as a measure of food security is sensitive to seasonal variation. Therefore the HRTAFI developed can be used as a proxy measure of food security. Awareness of the right to adequate food improves households capacity to be food secure.

Key findings

1. The pastoral households had overall higher annual income, however, this did not either translate to household food security nor realization of the right to food

2. Realization of the right to adequate food was influenced by realization of other rights such as education and health.
3. The realization of the right to adequate food positively influences household food security.
4. Household right to adequate food is a proxy indicator of household food security.
5. Realization of the right to adequate food was influenced by seasonality. Highest realization was realized during the wet season.

6.7 RECOMMENDATIONS

1. Progressive realization of the right to adequate food has been shown to have a positive influence on household food security. There is need therefore, to enhance rights based approaches in programmes targeting improved food security. There is also need to enforce it in the relevant policy formulation.
2. Households with better awareness of the right to adequate food showed improved food security. There is need to enhance awareness and sensitization of the different community groups of the same, and to enhance their capacities to realize the rights towards improving overall food security level.

3. Research Recommendation

Further research is needed on validity of HRTAFI as a measure of food security levels.

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5. Of these crops , which ones were meant for sale

6. What was the total income accrued from the sale of crops?_____

7. Was the harvest enough to carry you through to the next season?_____

1=Yes (go to qn 8) 2=No (go to qn 9)

8. If Yes, how many months did the harvested food last?_____ months.

1= Three 2=six 3= eight-twelve

9. If no, give reasons why._____

10. Give the household expenditure on the following foods for the last one month (all respondents)

- a. How often do you purchase the food
- b. What amount did you buy or amounts do you usually buy?
- c. What is the unit of measurements of the bought food items?
- d. What is the unit cost of the food item?

Food	Frequency of purchase	Amount	Unit	Cost/unit
Milk				
Maize flour				
Maize-Dry				
Green Maize				
Millet flour				
Wheat flour				
Potatoes				
Rice				
Plantain,cooking bananas				
Green leafy vegetables				
Fruits				
Meat				
Beans				
Sugar				
Baby food				
Cooking oil/fat				
Margarine				
Others: (specify)				

Goats _____
Camels _____
Chicken _____
Sheep _____
Donkeys _____

HOUSEHOLD DIETARY DIVERSITY QUESTIONNAIRE

Ask the female head of household or person responsible of household food the following question.

- i) Did you are any household member eat or drink the following foods during the day and at night in the home?
- ii) Did you or any household member eat or drink the following in the past 7 days?

Question no.	Food group	Examples	Last one day/night		Past 7 days	
			Yes	No	Yes	No
1.	Cereals and grain products:	Bread, maize (boiled, roasted), maize flour, millet, sorghum, rice, wheat				
2	Starchy roots and tubers and bananas	Arrow roots, cassava, sweet potatoes, irish potatoes, yams, turnips, plantain bananas				
3.	Grains and legumes	Beans (dry, green), bean flour, cowpeas, green grams, pigeon peas, lentils, peas (green , dry), soya				
4.	Nuts, oil seeds	Amaranth seeds, cashewnut, groundnuts, coconuts, pumpkin seeds, simsim, sunflower, water melon seeds				
5.	Leafy dark green vegetables	Amaranthus, kunde, spider weed, kales, spinach, managu, dhania, pumpkin leaves, kahurura, mabake, sweet potato leaves, indigenous vegetables, stinging nettle				
6.	Other vegetables	Lettuce, cabbage, egg plant, capsicums, carrots, cauliflower, leeks, mushrooms, onions, pumpkins, tomatoes				
7.	fruits	Apples, avocados, mangoes, pawpaw, oranges, lemon, water melon, bananas (ripe), loquats, passion, plums, guava, berries, tree tomatoes, pears				
8.	Meats and poultry	Wild game, sheep, goat, cow, liver, corned beef, camel meat, animal broth (milk and Blood)chicken, eggs, rabbit, pork, termites, sausages, matumbo				
9.	Fish and fish products	Fish fillet, omena, whole fish, tinned fish, Nile perch				
10.	Milk and milk products	Butter, camel milk, cows whole milk, goat milk, cheese, cows butter milk, condensed milk (cow/camel), milk powder, skimmed milk, sour milk, chego, yoghurt, cream,				
11	Oils and fats	Cooking oil not fortified, fish liver oil, ghee, cooking fat (Kimbo, chapa, tilly, kasuku, cowboy, lard, margarine (fortified Blueband), salad oil, sunflower oil, fortified oil.				
12	Sugar and syrups	Honey, molasses, jaggery, sugar, sugar cane				
13	Beverages	Alcohol (local brew), beer, coffee, packed				

Questi on no.	Food group	Examples	Last one day/night		Past 7 days	
			Yes	No	Yes	No
		commercial juice (quencher, etc), soft drinks, (coca cola, sprite, fanta), chocolate, tea, soya				
14	Spices	Black pepper, garlic, ginger, chillis, dhania, curry powder, royco,				
15	others	Composite meals or foods: e.g. cakes, scones, chapatis, pancakes, githeri, irio, ugali, pilau, biscuits , mandazi				

19. Was yesterday a celebration or a feast day where you ate unusual foods?

a) Yes _____ (go to qn.20)

b) No _____

20. If Yes, what foods where unusual?

21. Did you or anyone in your household eat anything (meal or snack) outside the home yesterday?

a) Yes _____ (go to qn. 22)

b) No _____

22. What foods were eaten outside the home?

HOUSEHOLD FOOD INSECURITY ACCESS SCALE (HFIAS) QUESTIONNAIRE

READ TO RESPONDENT:

“For each of the following questions, consider whether this has happened in the past one month (4 weeks). If the answer is YES to a question, please indicate how often this has happened”

Instruction for interviewer: Options for soliciting the frequency responses depend with

a) what happened in the last one month (past 4 weeks)

*b) indication that it happened **rarely** (once or twice), **sometimes** (3-10 times or at least once every week) or **often** (more than 10 times or more than twice every week)*

No.	Question	Response options	Code
		(0)No = It did not happen in the past one month (4 weeks) (1) Rarely = Once or twice in the past one month (4 weeks) (2) sometimes=Three to ten time in the past one month (4 Weeks) or at least once every week (3)Often = more than ten times in a month (4 weeks) or more than twice every week	
1.	In the past one month did you worry that your household would not have enough food?	0 = No If yes: ask respondent “how often did this happen?” 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)	...[]
2.	In the past one month did it happen that you or any household member were not able to eat the kinds of foods you would have preferred to eat because of lack of resources?	0 = No If yes: ask respondent “how often did this happen?” 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)	...[]
3.	In the past one month, did it happen that you or any household member had to eat a limited variety of foods because of lack of resources?	0 = No If yes: ask respondent “how often did this happen?” 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)	...[]
		If yes, ask respondent to describe(not for data entry purposes but for verification of the answer)	

4.	In the past one month did it happen that you or any household member were not able to eat the kinds of foods you would have preferred to eat because custom does not allow?	0 = No If yes: ask respondent "how often did this happen?" 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)	...[]
		If yes, ask respondent to describe(not for data entry purposes but for verification of the answer)	
5.	In the past one month did it happen that you or any household member went a whole day and night without eating anything at all because there was not enough food?	0 = No If yes: ask respondent "how often did this happen?" 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)	...[]
6.	In the past one month did it happen that you or any household member had to eat fewer meals a day because there was not enough food?	0 = No If yes: ask respondent "how often did this happen?" 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)	...[]
7.	In the past one month did it happen that you or any household member had to eat a smaller meal than you felt you needed because there was not enough food?	0 = No If yes: ask respondent "how often did this happen?" 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)	...[]
		If yes, ask respondent to describe(not for data entry purposes but for verification of the answer)	

8.	In the past one month did it happen that you or any adult household member went to sleep at night hungry because there was not enough food?	<p>0 = No If yes: ask respondent "how often did this happen?" 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)</p> <p>If yes, ask respondent to describe(not for data entry purposes but for verification of the answer)</p>	... []
9	In the past one month did it happen that there was no food to eat of any kind in your house because of lack of resources to get food?	<p>0 = No If yes: ask respondent "how often did this happen?" 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)</p>	... []
10	In the past one month did it happen that the children complained of hunger for lack of enough food in the house?	<p>0 = No If yes: ask respondent "how often did this happen?" 1 = Rarely (1-2 times) 2 = Sometimes (3-10 times) 3 = Often (more than 10 times)</p>	... []

PERCEPTION TO RIGHT TO ADEQUATE FOOD

For the following statements indicate whether you Agree, Disagree or Do not know. The responses will take the values of: 1=Agree 2= Disagree and 3= Do not Know

	Statement	1	2	3
1	Everyone has a right to eat food every day			
2	The quality of food is not important as long as one eats food and is satisfied			
3	Cultural food restrictions contribute to inadequate food intake among the pregnant mothers			
4	Cultural food restrictions contribute to inadequate food intake among the lactating mothers			
5	Cultural food restrictions contribute to inadequate food intake among the boy child			
6	Cultural food restrictions contribute to inadequate food intake among the girl child			
7	Cultural food restrictions at times contribute to food insecurity among some households			
8	All able and of age adults should work to (employed or self employed) be able to eat well and provide for their families			
9	The government must provide food to the community			
10	Unemployment is not reason enough for adults not to provide for their families			
11	Lack of farming land is not reason enough for adults not to provide for their families			
12	Stable livelihoods are important to be able to continuously provide adequate food for the family.			
13	Retrenchment from employed service has adversely affected provision of adequate food for the family			
14	Retrenchment has motivated others identify talents within themselves and are having better income now and able to provide for their family better			
15	Women should wait upon their spouses to provide food for the family			
16	Good health is a must for realization of right to adequate food			
17	Availability and access to food at home would be improved if women are allowed to own property			
18	Breast feeding is the right of every child and they should be breast fed exclusively for the first 6 months of life			

RIGHTS TO ADEQUATE FOOD QUESTIONNAIRE

INSTRUCTIONS: Give the rating of the following statements as is applicable

The rating scale is as follows.

1= Strongly disagree 2= Disagree 3=Do not know 4= Agree 5= Strongly agree

S/n		Statements	1	2	3	4	5
1	Respect	Always have enough food to eat					
2		Always have free choice of food types to eat					
3		Have special food for the vulnerable and sickly					
4		Always able to purchase food items you want for the family					
5		Always able to grow food crops you desire /want					
6		Able to purchase farm inputs freely					
7		Do not require approval from other family members to plant certain food crops					
8	Protect	Always able to achieve equitable food distribution within the household					
9		Children food is usually special from the family foods					
10		Pregnant and lactating mothers have no food restrictions on certain foods					
11		All family members eat at the same time and together					
12		Some foods are attached to cultural taboos					
13		Able to make equal decision with spouse on the use of family resources					
14		Have a stable livelihood (constant and reliable source of income)					
15		Able to afford health care for the family					
16		Have access to health care					
17	Fulfill (provision and facilitation)	Aware of importance of iron and folic acid supplementation to pregnant mothers					
18		Mothers follow the routine immunization schedule for their children					
19		Always receive nutrition and health care information from health facility and other sources					
20		Receive nutrition and health care information always without having to request for it					

S/n	Statements	1	2	3	4	5
21	Able to get support care at home from other family members when unwell and ill at home					
22	Health centre within reasonable distance (5 km)					
23	Have access to nutrition education and health information on child care and family from the health centre					
24	Rely on both modern and traditional knowledge of health and child care practices					
25	Receive extension services regularly					
26	Attend freely and actively participate in field demonstrations, training and workshops					
27	Do not rely on spouse only to bring food home for the family					
28	Eat certain food types despite cultural restrictions					
29	Do not require consent to grow certain foods and prepare land					
30	Do not always purchase farm inputs through loans					
31	Children eat first before the adults in the family					
32	Have access to loan facility					
33	Do not rely on food aid all round the year					
34	Receive food aid only during emergency					

RIGHTS TO ADEQUATE FOOD AND ITS INFLUENCE ON FOOD SECURITY: (A case study of Kenya.)

COMMUNITY FOCUS DISCUSSIONS

A Efficiency of service provision from the following sectors, perceived constraints and coping strategies or responses adopted.

Sectors	Problem/Issues	Perceived constraints	Coping responses/ strategies
Health			
Agriculture			
Water			
NGOs			
CBOs			

B IDENTIFICATION OF HOUSEHOLD THAT ARE FOOD INSECURE

- a) Within this community how would you identify a household that does not have enough to eat?
- b) What characteristics depict a needy household within the community?
- b) At times of food shortage /scarcity what coping responses/ strategies are adopted?
- c) What foods does the community regard as ‘foods for hard times’?

C KEY INFORMANT INTERVIEWS SCHEDULE (CHECKLIST)
(Target group – Community Leaders)

AIM:

- 1. To find out gender contribution to food production
- 2. To find out about resource control within the households
- 3. To investigate rights to food violation
- 4. To identify coping responses to food shortage
- 5. To investigate age disparities to rights to adequate foods

D FOCUS GROUP DISCUSSION CHECK LIST

Right to food

- 1. What do they understand by the word ‘Rights’?
- 2. What does ‘Right to food’ mean to them?
- 3. How can I tell that Human Rights are met at household level?
- 4. How do they ensure attainment of right to food at household level?
- 5. What circumstances prevent realization of right to adequate food at household level?
- 6. How do households cope or respond to denied and violated rights to adequate food? How are rights violations or abuse manifested?
- 7. How justice is attained or what are the redress mechanisms for violation of rights?
- 8. Are there incidences when food is available but claimants refuse or reject it? How is this then handled?
- 9. Who is or are responsible in realization of right to food at household level? What are their roles and responsibilities?
- 10. Definition of terminologies in the context of right to food.

Breast feeding Practice

- 1. How long are infants breast fed?
- 2. Do they give pre-lacteals?
- 3. What challenges do mothers encounter that constrain breastfeeding practice?
- 4. Where and from whom do they source information on child feeding and care?
- 5. What challenges are associated with information received from the clinics?
- 6. What characteristics can be associated with mothers who exclusively breast feed and those who don’t?
- 7. What is the role of the spouse in exclusive breast feeding?

RIGHTS TO ADEQUATE FOOD AND ITS INFLUENCE ON FOOD SECURITY: (A case study of Kenya.)

HOUSEHOLD 24 HOUR FOOD RECALL

Questionnaire No. _____ Date of Interview _____

Location _____

Name of Interviewer _____

Household No. _____

Name of head of household _____

Name of respondent _____

=====

Please ask the mother or the person in-charge of food preparation the following questions and fill up the table below.

1. Starting from yesterday morning what meals/ dishes did the household eat?
2. What were the ingredients of each meal?
3. How were the dishes prepared?
4. What amounts of each ingredient were cooked?
5. Who and how many people ate the food?
6. Where there any leftovers? If so what amount?

Time	Dish	Ingredients	Prepn. Method	Amount cooked	Consumed by (no.)			Leftover
					<5	5-15	15+	
Morning								
Mid morning snack								
Lunch								
Afternoon snack								

Time	Dish	Ingredients	Prepn. Method	Amount cooked	Consumed by (no.)			Leftover
					<5	5-15	15+	
Evening								
Late night snack								

APPENDIX 2: STANDARDIZATION OF HOUSEHOLD MEASURES

Item	Weight	Item	Weight
Maize flour		Rice	
1 cup (sz 15 or 8 Melamine)		1 cup	200
1 cup (sz 9 Melamine)	2335g	1 cup sz 15 melamine	350
1 kasuku 2kg		1 cup sz 8 melamine	450
1 kasuku 500g	50g	1 mug	200
kasuku kg empty	75g	Banana (ripe)	
Kasuku 2kg empty	175	Medium	123.5
1 cup sz 15	350	Large	146.9
1 cup sz 8			
Kales		Cooking oil	
1bunch		1 cup sz 15 melamine	350
		1 serving spoon fat	
Cabbage		Sweet potatoes (raw)*waste (13.28%)	
Very small	665	1 heap (40/-)	1450
Small	750	1 heap (50/-)	1690
Medium	1460	1 heap (30/-)	1375
Large	1980		
Onion –bulbs		Sweet potato	
Medium	50g	Small	283
Large	80g	Medium	460
Onion leaves		Soya	
1 bunch (10 leaves)	100g	1heaped tbsp	25
Potatoes		Arrow roots (raw)\$ (waste 19.23%)	
Average weight	90g	Medium	535
½ kg = 6 medium pcs	500-550g	Large	940
1 kasuku 2kg	2175	Very large	1600
1 kasuku 1kg	1125		
Millet Flour		Beans	
1 glass (250ml)	140	1 kasuku 1kg	1475
1 heaped tbsp	25	1 cup sz 15 melamine	350
1 cup sz 15	175	1 cup sz 8 melamine	450
1 cup sz 8	350		
Sugar		Maize (cob /green)	
1 sieve level	100	Large pcs	220
1 tablespoon	14.28	Medium	150
Ndengu		Maize	
1 glass (250ml)	175	1 kasuku 2kg	2200
1 cup (tea mug)	200	1 kasuku 1kg	1200
Carrots		Tomatoes	
1 medium	68	Medium	71.3
1 small	25	Large	110
1 heap (≈6 med pcs)	408		
Capsicum (hoho)		Bread (4 slices)	75
Large	90-95		
Small	45		
Corgette (Zucchini)		Chapati	

Item	Weight	Item	Weight
medium	87.7	Small	100
		Medium	130
Banana (plantain)		Ugali	
Medium	250	1 plate (small)	275
Small	150	1 plate (medium)	330
		1 plate (big)	450

APPENDIX 3: CONSUMER UNITS

Consumer units used in calculating household energy needs

Age (yrs)	Male	Female
Children		
1-3	0.4	0.4
3-5	0.6	0.6
5-7	0.7	0.7
7-9	0.8	0.8
9-12	0.8	0.8
Adolescents		
12-21	1.1	1.1
Adult		
Sedentary	1.0	0.8
Moderate	1.2	0.8
Heavy (active)	1.4	0.9

Source: Sehmi, 1993.

APPENDIX 4: GLOSSARY

Abuse of rights: refers to the inability or intentional failure of other duty bearers, with the exception of the State, to uphold rights to the claimant or the right holder.

Adequate food: refers to food which is balanced with sufficient nutrients to meet dietary and physical activity requirements for each person at all times.

Claimants: refers to those who depend on the state community or household heads to be free from hunger, malnutrition and poverty. They are also referred to a right holder or claim holders.

Disability adjusted live years: refers to the sum of years of potential life lost due to permanent mortality and the years of productive life lost due to disability.

Duty bearers: refers to those obligated to uphold rights (usually states or governments, household heads, individuals i.e. able adults and who have the responsibility, authority and resources of satisfying the claims to right holders. In this study, duty bearers will include Individual (able adults) and household heads, at the household level, who ideally are expected to provide for themselves and their families. At the community level, this includes community institutions and other change agents who are expected to provide support and facilitate realization of factors or entitlements that influence food security. Lastly at the national level is the state whose responsibility is to fulfil, by creating an enabling environment to facilitate the capacities of individuals and communities to take action themselves; and the mandate to provide for all, being only during times of crisis that are justified through direct provision of food, which is also adequate, to affected populations.

Entitlement: refers to set of income assets, commodities and human capacities and skills which households establish control over and which secure their livelihoods.

Farming community: refers to communities whose livelihood stems from cultivation of crops and livestock rearing but do not move about in search of pasture for the animals. Most have definite land acreage for their farms.

Food insecurity: refers to deprivation of food due to lack of opportunity to produce food, insufficient income to purchase the food needed and inability to work at all. In the study, it will refer to a situation when the households have limited access to productive and inadequate assets to ensure adequate food to meet body requirements for all household members and inability to work at all.

Food and nutrition security: refers to the ability of the household to have access to adequate food to meet their daily requirements for growth and physical activity for all members as well as access to health care and safe environmental sanitation

Food security: refers to the ability of households to adequately meet their dietary requirements for all members for a healthy life either through food production or purchase, whereas, dietary requirements will imply any substance that people eat or drink to maintain life and growth and which is in sufficient amount and quality and safe to meet body requirements and an active life. (FAO, 2002)

Food insecurity: Refers to a situation when people do not have adequate physical, social or economic access to food as defined in food security.

Food sovereignty: refers to the right of people 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 and to restrict the dumping of products in the market.

Gender: refers to the widely shared expectations and norms within a society about roles, rights and responsibilities of men and women. In the study, it will refer to socio-cultural roles assigned to different sexes.

Household: refers to an economic and social unit composed of members, who may or may not be related, but pool their resources for their sustenance and usually shared meals together for at least 3 days to 12 months prior the survey.

Human right: refers to the ability of all to access and control their entitlements and assets to ensure adequate food, clothing, housing and improved living conditions.

Hunger: refers to a condition where an individual or household is not able to have three meals in a day over a long time, often marked by inadequate intake to meet daily requirements of energy and protein. It is usually a recurrent and involuntary lack of access to food.

Indivisibility of rights: refers to the contribution of the other rights towards realization of a right. In this study, it will refer to the realization of the rights to education, work, property and health in the achievement of the right to food.

Justiciability or right to food: refers to procedures or mechanisms put in place to ensure justice is upheld in realization of the right to adequate food in case of violations, abuse or denial of rights to a claimant

Livelihood stability: refers to the household ability to employ buffer mechanisms to ensure household food security irrespective of harsh conditions.

Malnutrition: refers to a condition which results from either excessive or insufficient nutrient intake resulting to impaired growth and body function. That condition due to excessive intake is referred to as over nutrition and that due to inadequate intake is referred to as under nutrition.

Obligations: refers to the duties duty bearers have with respect to the right to food. These include the obligation ‘to respect’, ‘to protect’, ‘to fulfil (facilitate)’ and ‘to provide’.

Respect- this obligation requires the state and/or duty bearers to refrain from interfering directly or indirectly with the enjoyment of the right.

*Protect-*This obligation requires the state and or duty bearers to take measures that prevent third parties from interfering with the enjoyment of the right.

Fulfil (facilitate)- This obligation requires the state or duty bearers to adopt appropriate legislative administrative, budgetary , judiciary , promotional and other measures towards the realization of the right.

Fulfil (provide) - This obligation requires the state or duty bearers to directly provide assistance or services for the realization of rights at a time of emergency.

Pastoral community: refers to a community whose livelihood stems from livestock rearing in the range lands and who move about in search of pasture.

Progressive realization of right to adequate food: refers to the continuous improvement in realization of the right to adequate food by households through reduced human suffering by hunger, under nutrition and poverty through enhance entitlement, capacity and empowerment to take charge of their food needs.

Realization of the right to adequate food: refers to the degree households have control over their entitlements (human and non-human) towards attainment of adequate food for household members at all times.

Right to adequate food: Refers to the right to have regular, permanent and free access either directly or by means of financial purchases to qualitative and quantitative adequate and sufficient food with respect to the cultural traditions of the people to which consumers belong and which ensure physical, mental, individual, and collective fulfilling and dignified life free of fear. In the study, it will be used interchangeably with the right to food.

Starvation: refers to involuntary lack of access to food and food intake due to lack of resources to acquire food.

Violation of rights: refers to the State's inability to uphold rights to the claimant.