

**THE IMPACT OF GENDER INEQUALITIES ON FOOD
SECURITY IN RURAL HOUSEHOLDS IN NYANSIONGO
SUB-LOCATION, NYAMIRA COUNTY**

BY

ANNE KWAMBOKA OGOTI

REG: N69/79747/2012

**A PROJECT SUBMITTED TO THE INSTITUTE OF
ANTHROPOLOGY, GENDER AND AFRICAN STUDIES IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF ARTS IN GENDER AND
DEVELOPMENT STUDIES OF THE UNIVERSITY OF NAIROBI**

NOVEMBER 2014

DECLARATION

This project is my original work and has not been presented for any academic examination in any other university.

Signature: _____

Date: _____

Anne Kwamboka Ogoti

This project has been submitted for examination with my approval as the university supervisor.

Signature: _____

Date: _____

Dr. Wilfred Subbo

DEDICATION

To my beloved father Mr. Paulo Momanyi Nyandiko who believes in education and offers equal opportunities for the education of both the girl and boy child.

Table of Contents

LIST OF TABLES	v
LIST OF FIGURES	vi
ACKNOWLEDGEMENTS	vii
ABSTRACT	ix
LIST OF ABBREVIATIONS AND ACRONYMS	xi
CHAPTER ONE	1
BACKGROUND TO THE STUDY	1
1.1 Introduction	1
1.2 Statement of the Problem	5
1.3 Research Objectives	7
1.3.1 General Objectives	7
1.3.2 Specific Objectives	7
1.4 Justification of the Study	8
1.5 Scope and Limitations of the Study	8
1.6 Definition of terms	10
CHAPTER TWO	12
2.0 LITERATURE REVIEW	12
2.1 Introduction	12
2.2 Food Security	12
2.3 The role of women in food production in Sub Saharan Africa	13
2.4 Gender inequalities in food security	15
2.5 Poverty and gender inequalities in food security	16
2.6 Gender inequalities in Food Security in Nyamira County	16
2.6.1 Patriarchal Culture	17
2.6.2 Cultural beliefs and taboos on food consumption and nutrition	17
2.6.3 Health and nutrition	18
2.6.4 Education and Training	18
2.6.5 Unemployment	19
2.6.6 Environmental Conservation	19
2.6.7 Poverty	20

2.7	<u>Theoretical Framework</u>	21
2.7.1	<u>The Entitlement Approach or Theory</u>	21
2.7.2	<u>Relevance of the Entitlement Approach to this study</u>	22
2.8	<u>Assumptions</u>	24
<u>CHAPTER THREE</u>		25
3.0	<u>METHODOLOGY</u>	25
3.1	<u>Introduction</u>	25
3.2	<u>Research Site</u>	26
3.2.1	<u>Topography, Climate and Natural Resources</u>	27
3.2.2	<u>Economy</u>	28
3.4	<u>Research Design</u>	29
3.5	<u>Study Population and Unit of Analysis</u>	29
3.6	<u>Sample size and sampling procedure</u>	29
3.7	<u>Data Collection Methods</u>	30
3.7.1	<u>Documentary sources</u>	30
3.7.2	<u>Observation method</u>	30
3.7.3	<u>Key Informant Interviews</u>	31
3.7.4	<u>Focus Group Discussions (FGD)</u>	31
3.7.5	<u>Survey Questionnaire</u>	32
3.8	<u>Data Processing and Analysis</u>	32
3.9	<u>Ethical Considerations</u>	33
<u>CHAPTER FOUR</u>		34
<u>GENDER INEQUALITIES ON FOOD SECURITY IN RURAL HOUSEHOLDS IN NYANSIONGO SUB-LOCATION, NYAMIRA COUNTY</u>		34
4.0	<u>Introduction</u>	34
4.1	<u>Response Rate</u>	35
4.3	<u>Demographics of the respondents</u>	35
4.4	<u>Socio-economic and cultural factors of food security</u>	37
4.4.1	<u>Sources of Household Income</u>	37
4.4.2	<u>Access and Control of Household Income</u>	39
4.4.3	<u>Income spent on Household Food</u>	39
4.4.4	<u>Types of Livestock Reared</u>	40

4.5	<u>Farm Characteristics and Food Production</u>	41
4.5.1	<u>Ownership of the Household Farm</u>	41
4.5.2	<u>Farm size</u>	42
4.5.3	<u>Types of food crops</u>	42
4.5.4	<u>Allocation of Household Land for Food Crops</u>	42
4.5.5	<u>Responsibility of Preservation of Household Food</u>	43
4.6.	<u>Household labour Conditions and Food Production</u>	44
4.6.2	<u>Sources of extra labour</u>	45
4.6.3.	<u>Farm inputs</u>	46
4.6.4.	<u>Health challenges when cultivating farm</u>	47
4.6.6.	<u>Household Grain Requirements per Season</u>	47
4.6.7.	<u>Membership in Self-Help Groups</u>	48
4.7.	<u>Coping Mechanisms</u>	49
4.7.1.	<u>Coping mechanisms with household food insecurity</u>	49
4.7.2.	<u>Effects of Household Food Insecurity</u>	50
	<u>CHAPTER FIVE</u>	53
	<u>CHALLENGES OF FOOD INSECURITY IN RURAL HOUSEHOLDS</u>	53
5.0	<u>Introduction</u>	53
5.1.	<u>Ownership of the household farms</u>	53
5.2.	<u>Women’s role in rural household food security</u>	53
5.3.	<u>Household income</u>	54
5.4.	<u>Household Land Ownership and Food Security</u>	54
5.5.	<u>Food Production and Health Challenges</u>	55
	<u>CHAPTER SIX</u>	56
	<u>SUMMARY AND CONCLUSIONS</u>	56
6.0	<u>Introduction</u>	56
6.1	<u>Summary</u>	56
6.2	<u>Recommendations</u>	58
	<u>REFERENCES</u>	59
	<u>APPENDICES</u>	65
	<u>APPENDIX 1 SURVEY QUESTIONNAIRE</u>	65
	<u>APPENDIX 2: OBSERVATION CHECKLIST</u>	74

[APPENDIX 3: KEY INFORMANT INTERVIEW GUIDE](#)..... 75

[APPENDIX 4: FOCUS GROUP DISCUSSIONS GUIDE](#)..... 76

[APPENDIX 5: STATEMENT OF CONSENT](#)..... 77

LIST OF TABLES

Table 4.1: Demographic Data of the Respondents	36
Table 4.2: Marital status of the Respondents	36
Table 4.3: Highest Education of the Respondents	36
Table 4.4: Total Membership of the Household	37
Table 4.5: Type of Family of the Respondents	37

LIST OF FIGURES

Figure 3.1: Map of Nyamira County	26
Figure 4.1: Sources of income of the Respondents	38
Figure4.2: Proportion of Income spent on Food	39
Figure 4.3: Ownership of Household Farm	41
Figure 4.4: Methods of Preserving Household Food	43
Figure 4.5: Labour for Household Food Production	44
Figure 4.6: Types of Inputs used by the Respondents	46
Figure4. 7: Quantitiies of Food Harvested each Season	48
Figure 4.8: Enrolment by Respondents in Self-Help Groups	48
Figure 4.9: Coping Mechanisms during Food Insecurity Periods	49
Figure4. 10: Effects of Food Insecurity in the Respondent's Household	51

ACKNOWLEDGEMENTS

First and foremost, I acknowledge and give glory and honour to my maker God who guided me all the way to the successful completion of this project.

Secondly, I express my sincere thanks to the University of Nairobi and the Institute of Anthropology, Gender and African Studies for giving me an opportunity to study at the University for an M.A. Degree in Gender and Development. I am immensely grateful to Dr. Wilfred Subbo for his tireless and intellectual supervision that rendered the completion of this work. Furthermore, I feel indebted to Prof. Simiyu Wandibba whose invaluable guidance, inputs and support produced this project. I am also very grateful to the staff of the Institute of Anthropology, Gender and African Studies for their cooperation and support during my Masters programme.

Thirdly, I give my special thanks to all the respondents of the survey that I carried out in Nyansiongo Sub-Location, Nyamira County. They found time to be interviewed amidst their tight schedules. In the same vein, I greatly appreciate my research assistant who tirelessly traversed the villages even during rain storms and sometimes late at night so as to reach the respondents and submit the data before the deadline.

Fourthly, I take this opportunity to acknowledge the efforts of my classmates who encouraged me to ensure that the course work and the project were completed.

Lastly, I am very grateful to, and sincerely appreciate my husband and my children who always readily gave me all the support that I needed until I finished the study programme.

Once again, I wish to sincerely thank you all.

ABSTRACT

The study examined the impact of gender inequalities on food security in rural households in Nyansiongo Sub-Location, Nyamira County. The research sought answers to the following questions: One, what resources do women in Nyansiongo Sub-Location access and control to ensure household food security? Two, what are the attitudes and perceptions of women in Nyansiongo Sub-Location to ensure food security in their households? Three, what is the level of participation in decision making by the women in Nyansiongo Sub-Location to ensure food security in their households?

The main objective of the study was to investigate the impact of gender inequalities on food security in rural households of Nyansiongo Sub-Location in Nyamira County. The three objectives of the study were as follows: one, to examine women access and control of the resources necessary to ensure food security in households in Nyansiongo Sub-Location. Second, analyse the attitudes and perceptions of women in Nyansiongo Sub-Location towards food security in their households. Third, investigate the level of participation in decision making by women in Nyansiongo Sub-Location to ensure food security in their households. The study was guided by the Entitlement Approach/Theory. This theory is based on three conceptual categories: One, the endowment set, two, the entitlement set, and, three, the entitlement mapping (e-mapping).

The study was done in October 2014 and the target population consisted of women farmers in rural households in Nyansiongo Sub-Location, Nyamira County. A sample of 60 respondents was used in the study. The study elements were selected using the simple random sampling method. Data was collected using structured interviews, focus group discussions, key informant interviews, observation and secondary sources. Quantitative data was analyzed using the Statistical Package of Social Science (SPSS-18) computer programme whilst qualitative data was analyzed according to emerging themes of content analysis.

The main findings of the study were, one, the resources necessary for household food production, mainly land, oxen and plough, and farm equipment and implements were controlled by the husband or the father in-law, two, the household income was also controlled by the husband, three, the woman did not participate in decision making on household food security. Another findings were that the woman was the major labour provider for household food security.

It is therefore recommended that the woman should have control of the necessary resources like land and equipment to facilitate food security in the households. The woman should access and control the household income so as to provide for adequate food for the household members. She should also participate in decision making issues in food security issues in the household. The husband should provide the much needed labour in the production, harvest, preparation, preservation and storage of food in the household to ensure household food security.

LIST OF ABBREVIATIONS AND ACRONYMS

FAO		Food and Agriculture Organization
KARI	-	Kenya Agricultural Research Institute
KEPHIS	-	Kenya Plant Health Inspection Service
NGOs	-	Non-Governmental Organizations
MDGs	-	Millennium Development Goals
MOA	-	Ministry of Agriculture
SSA	-	Sub-Saharan Africa
WHO	-	World Health Organization
KIPPRA	-	Kenya Institute for Public Policy Research and Analysis
IEBC	-	Independent Electoral and Boundaries Commission
CAADP	-	Comprehensive African Agriculture Development Programme
NEPAD	-	New Partnership of African Development
UN	-	United Nations
UNDP	-	United Nations Development Programme
UNEP	-	United Nations Environment Programme
WB	-	World Bank
WFS	-	World Food Summit

CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 Introduction

Food is a basic need for human beings and it is necessary for survival, growth and sustainability. According to the FAO, food security and hunger eradication are among the top priorities on the international agenda today in view of the impact on agricultural productivity of global economic crises, food price spikes, and climate change. Food security gained prominence after the 1974 UN World Food Conference that approved an international undertaking on food security which, for the first time recognized that food security was a common concern of all nations. The extent to which gender inequalities in general, and the gender gaps in agriculture in particular, thwart attainment of food security is a key concern, given the vital role of women smallholders in rural households and communities (FAO, 2013).

The term 'food security' is widely used in publications, articles, statements, the media, among other areas, yet the meaning one gives to it varies considerably: The concepts surrounding hunger, famine and food security are blurred and these words are often used interchangeably. In this project paper only a few of the definitions will be addressed.

The World Bank defines food security as "access by all people at all times to enough food for an active healthy life" (World Bank, 1986). The definition provided a standard for further definitions and addressed the issues of availability, accessibility and utilization of food for healthy living. Ellis (1992) defines food security as "access by all people at all times to enough

food for an active healthy life.” The 1996 World Food Summit Plan of Action defined food security as existing “when all people, at all times, have access to sufficient, safe, and nutritious food to maintain a healthy and active life” (World Food Summit 1996, para. 1). Furthermore, Barrett (1999) explains that food security takes into consideration the physiological needs of individuals, the complementarities and trade-offs among food and other basic necessities that households make, the dynamic nature of household food security over time and the levels of vulnerability and response to risk. The FAO defines food security as a situation when all people, at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for a healthy and active life (FAO, 1996). The inclusion of stability of food supply, and food and nutrition safety in the definition of food security (MoFA; 2007; USAID, 2008) has added additional dimensions to food security. Jade et al, (2010) elaborated five dimensions of food security as follows: Food availability, food accessibility, food utilization, stability of food supply, and food and nutrition safety.

Food security is a component of household livelihood security, other components being potable water, health facilities, educational opportunities, housing, time for community participation and social integration (Frankenberger, 1996). Food security gained prominence after the 1974 UN World Food Conference that approved an international undertaking on food security which, for the first time recognized that food security was a common concern of all nations.

At the macro level, food security implies that adequate supplies of food are available through domestic production or through imports to meet the consumption needs of all people in a country. At the micro level, i.e., household or individual, food security depends on a number of

factors which are in most cases, related to various forms of entitlements to income and food producing assets, as well as the inter-linkages between domestic and external markets. It also depends on the transmission effects, from the latter, on small, low-income and resource-poor producers and consumers.

The World Bank (1989) points out two types of food insecurity: chronic insecurity (experiencing inadequate diet occasioned by inability of households to acquire food through own production, purchase or through gifts), and transitory food insecurity (temporary decline in the households' access to enough food owing to instability in food prices, food production and incomes).

In Kenya, food insecurity is a monumental crisis affecting many, particularly in the rural areas. According to the Global Hunger Index Report 2009 (GHI, 2009), Kenya was rated among 30 countries with the least food security in the world. The pervasiveness of food crisis in Africa and its socially debilitating effects on the structure and continuity of African society, has underscored in increasingly stronger and more urgent terms, the need to approach with determination, the question of food availability and security (Kwesi, 1987). The objective of producing insights and answers which could be of concrete use to policy-makers, planners, opinion formers and scientists involved in the job of bridging the gap between food needs and available supply of the same (Kwesi, 1987).

According to von Grebmer et al 2009, global comparisons show a strong correlation between hunger and gender inequalities. Countries ranking highest on the index of global hunger are

also those where such inequalities are more severe. The element of gender in food security is very pertinent whether on-farm or off-farm production. Access to food can be achieved through: i) own production – for those who have access to land and can exploit it; ii) employment and self-employment to generate income and allow purchase of food; and iii) social transfers – including food-for-work or cash-for-work programmes and cash transfers.

Women are typically discriminated against as food producers, waged workers and as self-employed workers in off-farm activities. This can be seen in Government Programs, community and at household levels. The intra-household allocation of food disfavour women due to their subordinate position to that of men. The ability to access food depends on power – power to produce, power to purchase, and power to access it in intra-household allocation mechanisms. When women have less power than men, this translates directly to weaker access to food (Patel, 2012). Gender inequalities and lack of attention to gender in agricultural development have contributed to lower productivity, higher levels of poverty and under-nutrition (FAO, 2011; Quisumbing, A. R., 2003; World Bank et al, 2009). The 2012 World Development Report entitled “Gender Equality and Development” warns that failure to recognize the roles of men and women, and the differences and inequalities between them, pose a serious threat to the effectiveness of agricultural development strategies (World Bank, 2012).

Women in Nyamira County are the major labour providers in the farms. This is a task that is not regarded as an economic activity as it is never quantified in monetary value. Rather, it is counted as part of the woman’s reproductive roles. The women cultivate their household farms, plant the seeds (mainly maize), weed for them, and harvest the food crops. They ensure the

harvest is appropriately stored and used to prepare daily meals for the household members. They take care of the harvest to sustain the household food needs to the next harvest. Purchase of food is used as a last resort for the women because they ask money from their husbands. Other measures that the women use to get food are in the form of gifts from kin and friends; and work-for-food arrangements. Work-for-money is also another option which enables the women to purchase food for their households.

The extent to which gender inequalities in general, and the gender gaps in agriculture in particular, thwart attainment of these twin priority goals is a key concern, given the vital role of women smallholders in rural households and communities (FAO, 2013).

1.2 Statement of the Problem

Households in Nyamira County are experiencing food insecurity despite the efforts put by women in food production. From time immemorial, the women have been actively involved in the farm production of food for their households. Cultural norms in the community place women subordinate to men due to their biological makeup. Women therefore perform chores that are around the household while men go out to do more complex tasks like herding livestock. Farm work is considered routine and therefore put together with other repetitive chores that are done by women. Since it is not quantified in monetary terms, it is assumed as non-essential. The community also considers it a woman affair to prepare food for the members of the household. This makes it a great concern for the women to ensure food security in the household. Due to the community's patriarchal attitudes, women and girls do not enjoy equal opportunities with men in the socio-economic and political spheres.

In Nyamira County, food production, harvest, storage and preparation and provision are assumed to be part of the reproductive role of the women. Unlike cash crops that are a male domain in the area, own farm food production has been a female role. Therefore, women struggle to ensure food security in their households. This can be affirmed by researches done by Mackenzie (1998) and Heyer (2006) which found that female farmers in Kenya tended to focus on producing food rather than cash crops. The traditional family structure is gradually transforming in terms of responsibilities, roles and expectations. The traditional gender-division of labour is breaking down and women are increasingly undertaking tasks previously performed by men like engaging in waged employment. This is due to emerging trends of female headed households (FHHs) as a result of being widowed and rural-urban migration by men in search of waged employment. There are also women who are not married but have dependent household members.

The women in Nyamira County perform their reproductive roles while they expand their productive roles to supplement own-farm production. They are involved in waged employment and small businesses like brick making for sale. Despite all these efforts to increase household food production, food insecurity is being experienced in these rural households in Nyansiongo Sub-Location of Nyamira District. This phenomenon is of great concern, especially in such a place that was a food basket in the western region of Kenya until late 1980s and early 1990s when the Structural Adjustment Programme (SAP) strategies were introduced by the World Bank and the International Monetary Fund to address the Government debt problem. The

efforts input by the women in food security notwithstanding, the area is experiencing food insecurity. This study will, therefore, seek answers to the following questions:

- i. What resources do women in Nyansiongo Sub-Location access and control to ensure household food security?
- ii. What are the attitudes and perceptions of women in Nyansiongo Sub-Location to ensure food security in their households?
- iii. What is the level of participation in decision making by the women in Nyansiongo Sub-Location to ensure food security in their households?

1.3 Research Objectives

1.3.1 General Objectives

The research will investigate the impact of gender inequalities on food security in rural households of Nyansiongo Sub-Location in Nyamira County.

1.3.2 Specific Objectives

1. To examine women access and control of the resources necessary to ensure food security in households in Nyansiongo Sub-Location
2. To analyse the attitudes and perceptions of women in Nyansiongo Sub-Location towards food security in their households.
3. To investigate the level of participation in decision making by women in Nyansiongo Sub-Location to ensure food security in their households.

1.4 Justification of the Study

The findings of the study will highlight the challenges by women in the access and control of resources necessary to ensure food security in rural households in Nyamira County. The study will also show the attitudes and perceptions of women in ensuring food security in their households. At the same time, the study will show the level of women participation in decision making to ensure household food security in Nyansiongo Sub-Location. The study will come up with new knowledge on the subject matter. It will therefore add on to what is already documented. The study will also come up with proposals to address the above mentioned challenges. These proposals may be used by the relevant authorities and parties to ensure food security in Nyansiongo Sub-Location.

1.5 Scope and Limitations of the Study

A lot of research has been carried out on the issue of gender inequality. It has also been guided by a broad range of questions, objectives and assumptions. This study intends to examine the impact of gender inequalities in household food security in rural areas in Nyansiongo Sub-Location of Nyamira County. The study will be done within three weeks and its focus will be on the aforementioned questions and objectives. The study will not involve other household members in the area even if such information may be valuable. The scope is narrowed to focus on women so as to have an in-depth understanding of the target group.

The study sample will limit the generalization of the findings to the women population in the whole of Nyamira County as the amount of study results will not be representative to show

changes of the variables under study over time. It will also limit the application of the findings to other rural households in Kenya.

There may be uncooperative respondents who may feel uneasy to disclose personal information to strangers. They may also expect to be paid for their involvement in the study. The researcher and/or the assistant will explain to them that the information shared in the study will be kept confidential and will be used for the sole purpose of the research. They will be briefed at the start of the survey that their participation will be voluntary and there will be no monetary payment. The respondents will however be told that they will benefit by being more knowledgeable from the information of the research findings. The recommendations of the study may also benefit them as they may be used to ensure food security in the households.

The random sampling procedure to be used may have some limitations as some respondents may be absent at the time of the study. This is because the women in the Sub-Location have many and varied household chores, some of which take them out of the household for very long hours. This will be countered by incorporating the purposeful sampling technique.

The financial budget for the research may also be a challenge. This will be addressed by limiting the activities of the survey to be within the budget. The number of research assistants to be engaged will also be determined by the budget.

1.6 Definition of terms

Gender: the socially and culturally constructed differences between men and women. The social constructs vary across cultures and time and influence the economic, social, political and cultural attributes and opportunities associated with being male or female. These social differences and similarities are time bound and changeable.

Gender inequality: the inequitable enjoyment of socially valued goods, services, opportunities, resources and benefits by women and men.

Food security: A situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Food insecurity: A situation where some people do not have access to sufficient quantities of safe and nutritious food and hence do not consume the food that they need to grow normally and conduct an active and healthy life

Household: a basic unit of persons, kin and non-kin, who live in the same dwelling and share income, expenses and daily subsistence tasks.

Household food security: ability of a household to withstand seasonal variations in staple food (maize) availability through cultivation and storage of harvests. It also entails experiences in food shortage and coping strategies during times of food crisis.

Patriarchy: a situation where men dominate all spheres of life, which system has worked to the disadvantage of women, who are isolated and exposed to various forms of discrimination and violence.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This section presents the review of literature related to the impact of gender inequalities on food security in rural households in Nyansiongo Sub-Location of Nyamira County. The literature review is in the following areas: the importance of food security and the major contributing factors of food insecurity in rural households. It also addresses the impact of gender inequalities in food security in rural households. The section also presents the theoretical approach and the assumptions that will guide the study.

2.2 Food Security

Food security is a broad concept that includes issues related to the nature, quality, and security of the food supply as well as access to food (Iram & Butt, 2004). It also includes physical and economic access to food that meets people's dietary needs as well as their food preferences. It is a complex sustainable development issue that touches on areas of economic development, environment and trade. Food security is also a function of income and purchasing power, hence its relationship to poverty. It is also linked to health through malnutrition. There are four dimensions of food security that determine the level at which a community is placed in relation to vulnerability to hunger: i) food availability; ii) food accessibility; iii) food stability; and iv) utilization/nutrition. Food security encompasses access to and availability of food, as well as the distribution of resources to produce food, and the purchasing power to buy the food where it

is not produced. Food security is both an income and production issue; and therefore a poverty issue (Schuh, 1997).

Food insecurity can be categorized as chronic or transitory. Chronic food translates into a high degree of vulnerability to famine and hunger. However, chronic hunger should not be equated to famine since majority of African population experience chronic hunger and undernourishment as a result of poverty, and not necessarily as a result of famine.

Food security at household level means access by all members at all times having enough food for an active, healthy life. A household is considered food secure when its occupants do not live in hunger or fear of starvation. For farmers, food security depends primarily on the productivity of their family holding and whether that productivity can be sustained or increased. It therefore follows that land is a crucial determinant of food security, and especially for sub-Saharan Africa rural populations since their livelihoods are predominantly based on land produce. Women access to entitlements is very crucial for food security. Food security at community level is a condition in which residents of a community obtain safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.

2.3 The role of women in food production in Sub Saharan Africa

Africa is the only developing region where crop output and yield growth is lagging seriously behind population growth (Savadogo et Al., 1994). Nevertheless, agriculture is the most

important source of income in many African countries. For example in Ghana, agriculture accounts for 56 percent of the total income and 59 percent of the labour force have their main occupation in agriculture (Asenso-Okyere et al., 1993). “In developing countries, most women’s work is devoted to agriculture and they are involved at every stage of food production. Although the men usually plough the fields, and drive draught animals, women do most of the work involved in sowing, weeding, fertilizing and harvesting the staple crops like rice, wheat and maize - which allows for more than 90% of the rural poor’s diet. Women’s contribution to secondary crops like legumes and vegetables which are grown in home gardens is even greater as such crops are exclusively tended by women” - (adopted from an article by FAO on: *Women, Agriculture and Food Security*).

In Sub-Saharan Africa, women contribute between 60 and 80% of the labour for food production, both for household consumption and for sale (FAO, 1998). They constitute the majority of smallholder farmers, providing most of the labour and managing a large part of the farming activities on a daily basis. Moreover, agriculture is becoming a predominantly female sector as a consequence of faster male out-migration, thus the ‘feminization of agriculture’.

An analysis on the different actors within the household farm has shown that additional income in the hands of women increases the budget share spent on the basic household needs (Duncan, 1997, Hoddinott and Haddad, 1995). On the other hand, women have more difficulties than men in gaining access to resources such as land, credit and productivity enhancing inputs and services. Indicators that can be used as predictors for food insecurity at the household level

include asset ownership, household size and dependency ratio (Haddad, Kennedy and Sullivan, 1994).

2.4 Gender inequalities in food security

Food security in SSA and indeed in other developing countries, is largely a women issue because it is part of their gender roles, (Moser, 1993). Women ensure the availability and provision of sufficient food supplies in their households throughout the year. There are also single headed households, mostly by women – the so called female headed households (FHHs). These households are either *de jure* FHHs (if they are run by single, widowed, divorced, or separated women) or *de facto* FHHs (the husband is not physically present, because, e.g., he is working far from home). FHHs are usually disadvantaged in terms of access to land, livestock, other assets, credit, education, health care, markets, and extension services (Odame et al., 2002). Access to land is not just a question of land size, but also of soil quality.

Women's isolation from the public arena, greater time scarcity, and lack of mobility limit their access to markets in various ways (FAO, 1988). For instance, women usually have less information about prices, rules, and rights to basic services. Moreover, distance from the market may limit their ability to sell or purchase in the market in the absence of adequate transport facilities; thus, differences between FHHs and male headed households (MHHs) in access to transportation will also matter.

Less education is often provided for female than for male children, such that female heads of households will have less education than their male counterparts in the same households (Meinzen-Dick et al., 2010; Quisumbing, 2003).

2.5 Poverty and gender inequalities in food security

The causes of poverty and food insecurity in Kenya include low agricultural productivity, inadequate access to productive assets (land and capital), inadequate infrastructure, limited and well-functioning markets, high population pressure on land, inadequate access to appropriate technologies by farmers, effects of global trade and slow reform process (Kinyua, 2004). Other factors that contribute to food insecurity include: pressure on agricultural land, low soil fertility, poor diversity of food crop production, poor post-harvest practices, poor access to fertile farmland and fishing areas. In addition, limited extension services, lack of marketing framework, lack of sufficient credit and income, labour and time constraints, single adult or child headed families, and diseases such as HIV/AIDS and Malaria. These problems affect the households' ability to increase food production and to care adequately for the nutritionally vulnerable (Callens, and Phiri, 2003).

2.6 Gender inequalities in Food Security in Nyamira County

Nyamira County was among the areas that constituted the food basket of Nyanza and South Rift regions of Kenya. The region is not categorized among the food risk areas in the country and therefore does not get any food allocation from the Government or food donations from charitable organizations. However, observations in households indicate that there is food insecurity in the County.

There are many factors that contribute to food insecurity in the County. This paper will investigate the gender inequalities that have an impact on food insecurity in the County.

2.6.1 Patriarchal Culture

Culture has a very strong influence on the community. The Abagusii people who inhabit Nyamira County have a very strong patriarchal culture that favours men mainly because the society is patriarchal. They are mainly subsistence farmers who practise mixed farming. They grow both cash and food crops in their small household farms. They also keep domestic animals like dairy cattle, goats and poultry. Due to patriarchy in this society, women do not participate in decision making in their households.

Women are not involved or consulted in land allocation for planting of food crops. Such allocations favour cash crops like coffee, tea, and pyrethrum due to their monetary value. This leaves minimum parcels of land for production of food crops, thus necessitating food insecurity. Therefore, women are left out in crucial food security matters yet they are the ones who produce the food in the farms. They till the land, plant, weed, harvest and store the produce, yet they have neither control nor ownership of the land and the farm produce.

2.6.2 Cultural beliefs and taboos on food consumption and nutrition

There are beliefs and taboos on food security that are against women, e.g. women do not eat chicken and eggs. From my personal knowledge, there is a belief that if a pregnant woman eats eggs, then her unborn baby will be dumb and deaf. This is a clear denial of a very good protein that would improve the health of the mother and her unborn baby.

Nutrition for women is usually poorer than that for men because the men get first priority in household food distribution. Nutritious food is served to men first before other household

members. In food scarcity periods, the men get more food than other household members because they are the first ones to be served. The women, as the child bearers and care givers become malnourished and therefore cannot be able to provide adequate labour in the household farms to ensure food security. This also affects unborn babies as the mothers are not healthy.

2.6.3 Health and nutrition

Reproductive gender roles of women as care givers to sick household members affect household food production due to their prolonged absence in the household farms. This adversely impacts on household food security as run late in planting and weeding or they skip the season altogether. The fact that, throughout the world, women on average have lower cash incomes than men is an example of a gender inequality.

Both gender differences and gender inequalities can give rise to inequities between men and women in health status and access to health care. For example:

The impact of new epidemics like HIV/AIDS and malaria has increased the morbidity and mortality rates in the County. The women, as caregivers in the households are heavily impacted by the diseases. Since these diseases affect the most productive group (15-49 years), the women, the aged and the children in the households become vulnerable to food insecurity.

2.6.4 Education and Training

Education for the girl child was considered a waste of resources for the household. As soon as she reached puberty, she was married off to fetch bride-wealth for settling household financial demands like paying for the education of the boy child. This has since changed since 2001

when the Government adopted the MDGs. Due to inadequate education and proper training, the women are unable to access credit to invest in modern farming methods. For the same reason of illiteracy, the women cannot use the latest information and technology to improve farming methods and yields. This gender inequality definitely has an impact on household food security.

2.6.5 Unemployment

The agricultural sector is the highest employer in the County yet it pays very low wages. This has seen the rural-urban migration of the men in search of better job opportunities. Thus, the women are left to perform their reproductive gender roles, including taking care of the children and working on the household farms. Even if women are employed in the farms, the pay is so small that it cannot be enough for household food security. The women, who are the main providers of farm labour (60-80%), are the ones who cultivate the the land, sow the seed, weed, put fertilizer, harvest and finally store the produce. This creates Female Headed Households (FHH). The so-called feminization of agriculture is created. Also, food production reduces due to inadequate labour. This phenomenon brings food insecurity in the household.

2.6.6 Environmental Conservation

Environmental degradation in Nyamira County has occurred as a result of unsuitable farming methods, effects of climate change, soil erosion, inadequate sanitary facilities, massive cutting down of trees for firewood, timber and clearing of land for agricultural use. Cultivation of the land up to the river banks has resulted to washing away of top soil into the available rivers.

This is due to inadequate parcels of land per household. This leads to reduction of soil nutrients and hence low agricultural productivity. The women who are responsible for production and preparation of household food endeavour to produce and p, who are the ones in contact with the environment, do not have the necessary knowledge to take care of it so as to ensure food security.

2.6.7 Poverty

Women represent a disproportionate percentage of the world's poor, that this trend is deepening, and that women's increasing share of poverty is linked with a rising incidence of female household headship (Chant, 2006). A critical catalyst was the 4th United Nations Conference on Women at which it was asserted that 70% of the world's poor were female, and eradicating the "persistent and increasing burden of poverty on women". Due to gender inequalities, women do not get equal opportunities as men to access formal education, get adequate training and secure employment to earn wages that can enable them improve their standard of living and come out of poverty. They are not adequately empowered to improve their standards of living. Household food security cannot be achieved when women are poor. This makes such households, especially the FHH live in poverty – thus the feminization of poverty.

2.7 Theoretical Framework

2.7.1 The Entitlement Approach or Theory

The study will be guided by **The Entitlement Approach or Theory**. This Theory was developed by Nobel Laureate Amartya Sen in 1977 in his famous book “*Poverty and Famines: An Essay on entitlements and Deprivation.*” The approach broke with the traditional view of famine analysis referred to as the food availability decline (FAD) approach. The FAD approach was a response to the Malthusian focus on population growth as a problem in itself. According to the FAD approach, the cause of famine was that food production was concentrated geographically or in time. Some countries or regions did not have enough food during a particular period of time to prevent famines. Natural disasters, inadequate production techniques or lack of infrastructure could all contribute to lack of food. Accordingly, his approach focused on food production capacities.

The entitlement approach is based on three conceptual categories:

1. The endowment set
2. The entitlement set, and
3. The entitlement mapping (e-mapping)

The endowment set is the combination of all the legally owned resources by a person conforming to established norms and practices. These include tangible assets like land, equipment, and animals. The intangible assets are such as knowledge and skill, labour, power and membership of a particular community. The entitlement set is the set of all possible combinations of goods and services (not just the one actually being enjoyed) that a person can

legally obtain by using the resources of his endowment set. This can be in the form of production, exchange or transfer. The entitlement mapping (e-mapping) is the relationship between the endowment set and the entitlement set. It is the rate at which the resources of the endowment set can be converted into goods and services included in the entitlement set.

According to Sen, famine is not caused due to shortage of food but due to failure of entitlements. A person suffers from failure of food entitlement when his entitlement set does not contain enough food to enable him to avoid starvation in the absence of non-entitlement transfers such as charity. Since entitlement set is derived by applying e-mapping on the endowment set, the entitlement failure and this famine can occur only through some adverse change either in endowment or e-mapping or both. There are two types of famines – one is caused due to change in endowment and the other, due to change in e-mapping. Another way of analyzing famine is that e-mapping consists of three different kinds of relations: production, exchange and transfer. Therefore, famines can be caused due to the following reasons:

1. Endowment loss
2. Failure of production
3. Exchange failure, and
4. Transfer failure.

2.7.2 Relevance of the Entitlement Approach to this study

The idea of entitlements helps to draw attention to the importance of distribution rights in determining access to food and overcomes the narrow focus on food availability. However, there is another deeper level of inequity. Entitlements are not determined in perpetuity, they are often changed through negotiation, bargaining, conflict, over-ruling, force, and redistribution of

resources. Women's entitlements not only allow them lesser claims on food but they have less power to change the distribution of entitlements or enforce their share of the existing distribution. The Entitlement Approach is therefore applicable to the study to be conducted in Nyansiongo Sub-Location, Nyamira County because the gender inequalities have an impact on food insecurity in the research area.

The culture of the Abagusii Community does not provide for women to own/inherit household resources like land, animals and other tangible assets. In the same breath, women and girls are denied education and training opportunities in preference to men and boys on the premise that the latter will be more resourceful when they have acquired such knowledge. This gender inequality impacts negatively on household food security as women are the producers and providers of food in the household yet they do not have control over the necessary resources to ameliorate the situation. Little or no education does not empower women to compete equally with men in employment opportunities that would empower them to own the so-called '*endowment set*'. In the same vein, the women in Nyansiongo Sub-Location do not have the goods and services that can be obtained by using the resources aforementioned. This is a further disadvantage for the women in ensuring household food security. Another factor is that culture does not provide for women in the community to participate in decision making on issues of household food security. Thus, they do not have a voice in household decision making.

The farm equipment like the plough and animals (oxen) that are used in the preparation of farmland are at the disposal of only the males in households. It is believed that women cannot

harness the oxen to plough the crop fields. Thus they are left to use hoes and other small farm implements to cultivate the land for planting. This slows down the preparation of the farms and planting of the crops. It affects both the quality and quantity of the harvested crop. Even if the women harvest the food crops and milk the cows, they do not have control to exchange or transfer the products to ensure food security in the households. This directly impacts on the household food security. If women were given their entitlements, then the issue of household food security would be addressed.

2.8 Assumptions

1. There are gender inequalities in the access and control of the resources necessary to ensure food security in households in Nyansiongo Sub-Location.
2. The women in Nyansiongo Sub-Location have certain attitudes and perceptions towards food security in their households.
3. The women in Nyansiongo Sub-Location participate in household decision making to ensure food security in their households.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

This section discusses the procedures and strategies that were followed in conducting the study. It gives a description of the location, the physiographic and natural conditions, population, water, and infrastructure, economy and the status of food security in the area. This is followed by an outline of the study design, target population and unit of analysis, sample size, sampling procedure, data collection tools and techniques, data management, data analysis and presentation. The ethical considerations throughout the research process are also outlined.

3.2 Research Site

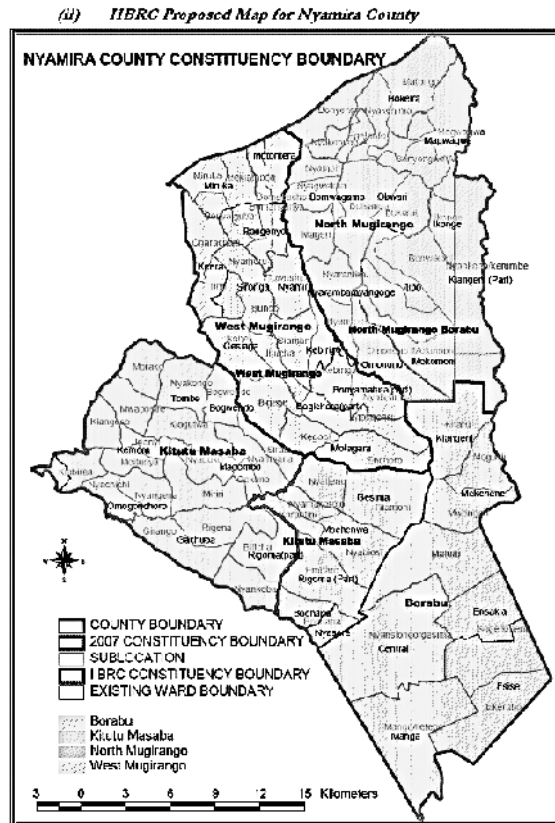


Figure 3.1: Map of Nyamira County
 (Source: Independent Electoral and Boundaries Commission (IEBC))

Nyamira County is one of the forty seven Counties in Kenya (Fig. 3.2). The County borders Homa Bay County to the North, Kisii County to the West, Bomet County to the South East and Kericho County to the East. The county covers an area of 988.4km². It lies between latitude 00 30⁰ and 00 45⁰ south and between longitude 34 45⁰ and 35 00⁰ east (Ministry of Devolution and Planning (2013): Nyamira County Development Profile).

The County has four constituencies: West Mugirango, Kitutu Masaba, North Mugirango, and Borabu. According to Nyamira County Profile, 2013 published by the Ministry of Planning and Devolution, The County is divided into 13 Divisions/Wards with 33 Locations and 88 Sub Locations. Borabu Constituency is the largest with an area of 248.3km² followed by North Mugirango with an area of

219.9km². The research site (Nyansiongo Sub-Location) is in Borabu Constituency. Nyansiongo Sub-Location is in Nyansiongo-Gesima Location. There are 8 Assistant Chiefs and 50 Village Elders who support the Chief in the administration of the Sub-Location.

3.2.1 Topography, Climate and Natural Resources

The County's topography is mostly hilly Gusii highlands and covers 899.3km². The County has a tropical climate of hot and cold seasons. Rainfall is experienced for much of the year. Natural resources include arable and pasture land, rivers and a few forests. The main rivers that traverse the County are River Kuja and River Sondu. The levels of these rivers have been declining over the years due to environmental degradation especially improper farming methods and planting of blue gum trees in the water catchment areas and river banks. The low zones comprise of swampy wetlands and valley bottoms while the upper zones are dominated by the hills. The County has red volcanic (Nitosols) soils which are suitable for farming because they are deep, fertile and well-drained. The soils at the valley bottoms are suitable for brick making. (Ministry of Planning and Devolution (2013): Nyamira County Development Profile).

The County has a bimodal pattern of annual rainfall that is well distributed, reliable and adequate for a wide range of crops. Annual rainfall ranges between 1200 mm and 2100 mm per annum. The long and short rain seasons start from December to June and July to November respectively, with no distinct dry spell separating them.

The average farm size for cash crops and food crops per household is 2.4 ha. There has been over-subdivision of land to accommodate the increasing population.

3.2.2 Economy

The main economic activities are tea, coffee, pyrethrum, and animal husbandry. Agricultural productivity is practised throughout the year because of the continuous rainfall. The staple food crop is maize. Other food crops are sweet potatoes, finger millet, beans, bananas, among others.

3.4 Research Design

The research design is the researcher's plan of action for answering the research questions and meeting the objectives of the study. The study took a period of three weeks. It was cross-sectional and applied both qualitative and quantitative research techniques to find out the impact of gender inequalities in household food security in Nyansiongo Sub-Location of Nyamira County. The study was triangulated.

3.5 Study Population and Unit of Analysis

The target population was all the women farmers who lived in the 50 villages in Nyansiongo Sub-Location, Nyamira County. The unit of analysis was the individual woman farmer in the research site.

3.6 Sample size and sampling procedure

The sample size consisted of 60 respondents. The purposeful sampling technique was used to select the research site. Purposeful sampling was also used to select six villages that were adjacent to one another, for ease of logistical coordination. Each of the Village Elders of the six selected villages above provided a list of 100 women farmers. This formed the sampling frame of 600 women farmers. A simple random sampling procedure (lottery) was used to select 60 women farmers to form the sample size.

Purposive sampling was used to select six key informants in the study area. It was based on their knowledge about the gender inequalities in the community and the production and preparation of food in the area. They included three chairpersons of registered women groups,

Women Enterprise Fund Official, the Agricultural Officer, Nyansiongo Division and the Assistant Chief of Nyansiongo Sub-Location.

The purposive sampling technique was used to select one Village Elder based on length of experience, for the focus group discussions. He selected five women farmers (ensured representation by polygynous, monogamous, widows, and FHHs (*de jure*, and *de facto*)) for the focus group discussions.

3.7 Data Collection Methods

3.7.1 Documentary sources

Literature on household food security and the impact of gender inequalities on food security in rural households in Nyamira County had been reviewed to form the background of the study. It was used as reference points during the discussions of the study. Secondary information for the study was from relevant books, internet sources, journals and other publications on the subject.

3.7.2 Observation method

The researcher used the observation check list to find out the household food security by observing various indicators. These were the social, economic and cultural factors affecting household food security, organization of labour for household food production, farm characteristics and food production; and coping mechanisms in times of reduced household food. The observation check list (Appendix 2) was used.

3.7.3 Key Informant Interviews

The interview was conducted with three chairpersons of registered women groups, an official of the Women Enterprise Fund (WEF), the Agricultural Officer, Nyansiongo Division and the Assistant Chief of Nyansiongo Sub-Location. Issues that were covered included socio-cultural gender roles among the Abagusii community, the gender inequalities in household food security, and coping mechanisms used by women to resolve food insecurity in Nyamira County. Another issue was to find out how the food insecurity in the households and the coping mechanisms impacted on the lives of the household members, especially women and children. The researcher also investigated whether households got food assistance during food scarcity periods. A key informant interview guide (Appendix 3) was used to collect the data. The researcher and the research assistant took notes of the discussions and these were included in the project paper.

3.7.4 Focus Group Discussions (FGD)

The group comprised of one Village Elder who was selected based on his length of experience on the job. He selected five women farmers (ensured representation by polygynous, monogamous, and FHHs (*de jure*, and *de facto*)) for the focus group discussions. The discussions were on the socio-economic and cultural factors on food security in the area. They also discussed the support system for gender inequalities in household food security. The FGD was conducted using an FGD guide (Appendix 4). Notes of the discussions were taken by the researcher and the research assistant. The notes were included in the project paper.

3.7.5 Survey Questionnaire

The group comprised of 60 randomly selected respondents. The questionnaire had closed questions to obtain factual information and open-ended questions to obtain the respondents' opinions and explanations to provide more insight on the impact of gender inequalities in food security in the area. A survey questionnaire (Appendix 1) was used for data collection. The questionnaires were self-administered. However, the researcher and the assistant were at hand to guide, clarify and translate the questions to illiterate respondents. The data collected covered the demographics of the respondents, the household socio-economic and cultural factors of food security, farm characteristics and food production, women's role in provision of household labour in food production and the challenges that they experienced in food production. The survey also collected data on household coping mechanisms employed during food insecurity periods.

3.8 Data Processing and Analysis

After the data were collected, it was cleaned and checked for consistency and accuracy of the responses. Completed questionnaires reviewed daily for completeness and were accessible only to the researcher and the research assistant. Data from completed questionnaires was entered into the Statistical Package for Social Sciences (SPSS Ver. 18) computer programme for analysis. Findings from the quantitative survey were presented in tables, percentages and pie charts. Qualitative data from observations, key informant interviews and FGDs was analyzed thematically and was presented in verbatim quotes and selected anecdotes. These were used to enrich the quantitative derived results. Conclusions were drawn, guided by the objectives and assumptions of the study.

3.9 Ethical Considerations

Permission from the relevant Government authorities was sought before embarking on the field work. Authority from the Ministry of Higher Education was sought through the National Council for Science, Technology and Innovation.

The Assistant Chief of Nyansiongo Sub-Location and the Village Elders were presented with copies of the letter of introduction for the research to proceed.

Prior to the survey, a statement of consent (Appendix 5) was read to the respondents and they were told of their informed consent to participate in the study. Those who agreed signed the consent form.

Confidentiality and privacy were maintained throughout the data collection, analysis and dissemination stages. Participants were also informed of their rights to withdraw from the research study at any stage (Appendix 5).

CHAPTER FOUR

GENDER INEQUALITIES ON FOOD SECURITY IN RURAL HOUSEHOLDS IN NYANSIONGO SUB-LOCATION, NYAMIRA COUNTY

4.0 Introduction

This chapter presents the research findings on the impact of gender inequalities on food security in rural households in Nyansiongo Sub-Location, Nyamira County. I am analysing the results of the objectives of the study which are as follows: one, to examine women access and control of the resources necessary to ensure food security in households in Nyansiongo Sub-Location, two, analyse the attitudes and perceptions of women in Nyansiongo Sub-Location towards food security in their households, and three, investigate the level of participation in decision making by women in Nyansiongo Sub-Location to ensure food security in their households.

The chapter begins by presenting the rate of respondents who participated in the survey. This is followed by the socio-demographic characteristics of the study sample. The subsequent sections present the findings of the study on the following: socio-economic and cultural factors of food security, coping mechanisms and effects of household food security. Information obtained from non-participant observation, key informants, focus group discussions, and secondary sources has been used to validate some of the responses to the questions in the questionnaire.

4.1 Response Rate

The study sampled 60 respondents from the target population of 600 women farmers in collecting data for the study. The study showed that all target respondents filled in the questionnaires and returned them, contributing to 100% response rate. This response rate was good, representative and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and above is excellent. This commendable response rate can be attributed to the data collection procedure, where the researcher herself with the help of one research assistant administered questionnaires and waited for respondents to fill in. Any clarifications sought by the respondents were addressed immediately. The response rate here demonstrated the willingness of the respondents to participate in the study.

4.3: Demographics of the respondents

The demographic components of the respondents are summarised in Tables 4.1 to 4.5 below. They consist of the following: age, marital status, education, household size and the family type of the respondents respectively. The majority of the respondents (46%) were in the age 35-44 years, followed by 32%, those aged between 25-34 years, and 20% of the respondents were aged 45-54 years. The minority (2%) were young adults below 24 years.

Table 4.1: Ages of the Respondents

Age	Frequency	Percentage
18-24 years	1	2
25-34 years	19	32
35-44 years	28	46
Above 44 years	12	20
Total	60	100

On marital status, 83% were married, 10% were widowed, 5% were single while 2% were divorced. This is as shown in Table 4.3 below.

Table 4.2: Marital status of the Respondents

Marital status		
Married	50	83
Divorced	1	2
Widowed	6	10
Single	3	5
Total	60	100

In the area of education, majority of the respondents (71%) had completed secondary education, while 20% had completed primary education. Other levels of education (e.g., diplomas and certificates) constituted 7% while 2% were university graduates. This is shown in Table 4.4 below:

Table 4.3: Highest Levels of Education of the Respondents

Education		
Primary	12	20
Secondary	42	71
University	1	2
Other	4	7
Total	60	100

Most households (63%) consisted of 5-7 members, 24% consisted of 3-4 members while 13% had between 8-10 members, as shown in Table 4.4 below:

Table 4.4: Total Membership of the Household

Household size		
3-4 members	14	24
5-7 members	38	63
8-10 members	8	13
Total	60	100

Most of the respondents (92%) were in monogamous families while 8% were in polygynous families as shown in Table 4.5 below:

Table 4.5: Types of Family of the Respondents

Family type		
Polygynous	5	8
Monogamous	55	92
Total	60	100

4.4. Socio-economic and cultural factors of food security.

There were several social, economic and cultural factors that contributed to the food insecurity in the study area. These are discussed below:

4.4.1. Sources of Household Income

Most of the respondents had their incomes either from small businesses, sale of farm produce or from other sources such as paid labour, as shown in Figure 4.1 below:

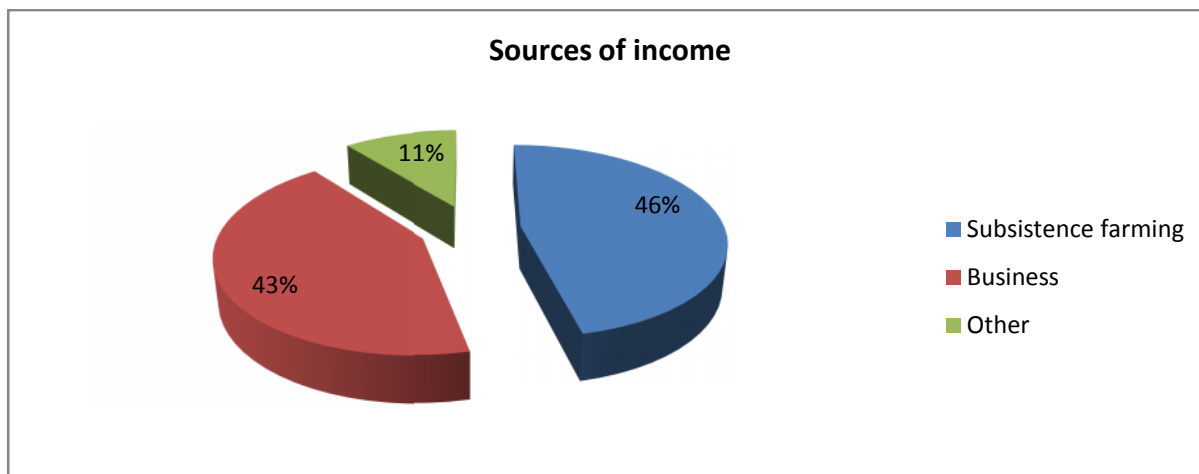


Figure 4.1: Sources of income of the Respondents

The respondents were engaged in subsistence farming (46%), businesses (43%) and other income generating activities (11%). Observations showed that the household farms were intensely cultivated and a variety of crops planted were in various stages of growth. The most noticeable food crops were maize and beans. Women were the majority working in the farms. A few of the women also operated small businesses in the local open air market. Other women survived on paid labour in the farms.

Nearly half of the respondents interviewed had average monthly incomes between Ksh.1000-Ksh.2000. These were followed by 24% who earned between Ksh.2000-Ksh.5000, and 17% earned above Ksh.5000, while 13% had incomes below Ksh.1000. Observations showed that women were poor and struggled to provide food for their household members. The chairperson of a women group said that most women in the area lacked money. This hindered them to enrol in the women groups in the area and benefit from such funds as the Women Enterprise Fund. This information was corroborated by the area Assistant Chief.

4.4.2. Access and Control of Household Income

There were 72% of the respondents who said their husbands had all access and control of income, 20% said the control was in other significant persons like father-in-law, father, grandfather, while 8% said they controlled the income. Information from the focus group discussion was that the husband was the head of the household and had the total control of all income. The wife would not be entrusted with the income as she did not have the capacity to make good use of it. Furthermore, control of the household resources including income gave him the status as head of the household.

4.4.3. Income spent on Household Food

The respondents allocated varied proportions of their income on household food. Figure 4.2 below indicates the proportions of income allocated on food.

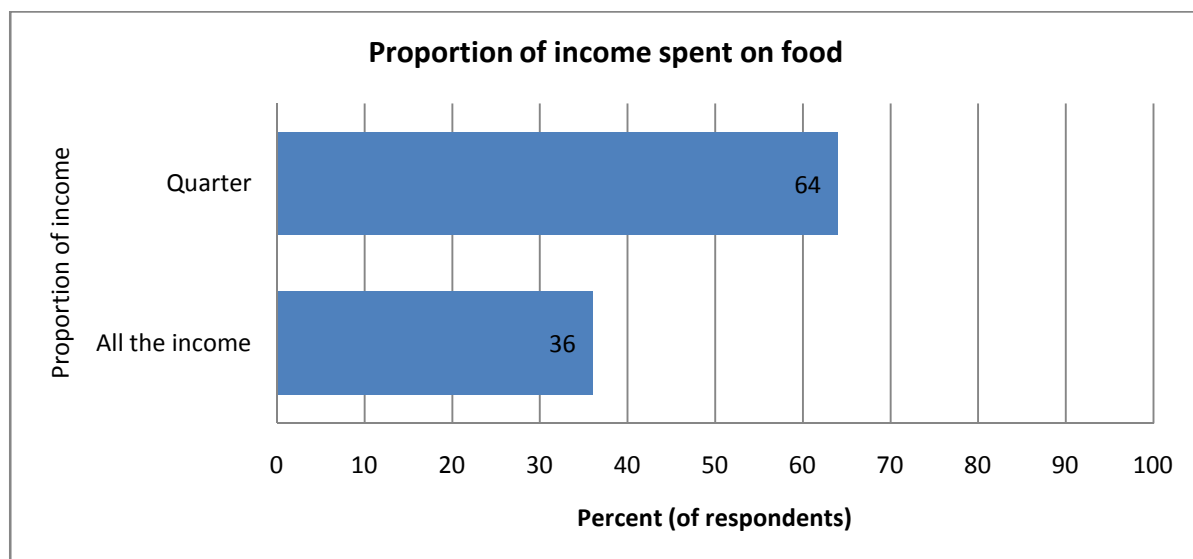


Figure 4.2: Proportion of Income spent on Food

Most of the respondents (64%) spent a quarter of their incomes on food while 36% spent all their incomes on household food. Almost all respondents (95%) said expenditure on food was allocated by other significant persons such as husband or father-in-law while 5% said they allocated the expenditure of food by themselves.

The income allocated for purchase of food was not sufficient and the respondents had different reasons for this. The responses were from limited production resources to other prioritized expenses.

Most of the respondents did not allocate adequate income on food because the money was used to pay for other expenses like school fees for their children. Others said that due to poor production methods, the yields were very poor and therefore no surplus of food stuff was left for sale. The respondents had small parcels of household land, which greatly reduced the total farm production. This also negatively affected the total household income. Other respondents (39%) cited high cost of living while 4% had other priorities.

4.4.4 Types of Livestock Reared

The respondents kept livestock which consisted mainly of local breed. There were 45% of the respondents who kept local cows, 28% kept poultry, 14% had goats and 7% kept dairy cattle and 6% reared sheep. All the animals were owned by the husband and the woman had no control over them. He approved the quantities of animal products like milk, chicken and eggs that were used in the household food. The rest was sold and he received all the proceeds. This was confirmed during the focus group discussions when all the participants said that all the

animals in the households belonged to the husband and the wife did not have control of the livestock.

4.5 Farm Characteristics and Food Production

4.5.1 Ownership of the Household Farm

Land ownership in the study area is by the husband or father in-law. This is clearly depicted in Figure 4.3 below:

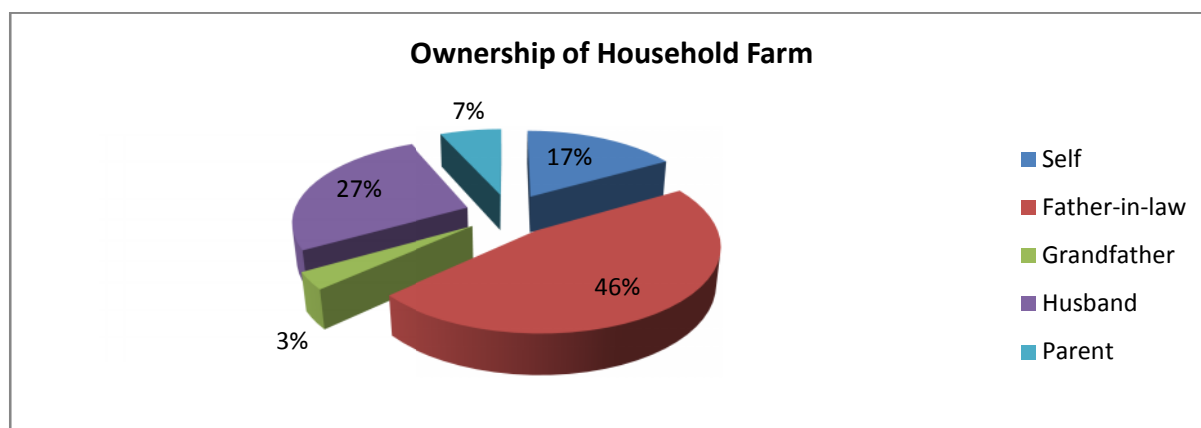


Figure 4.3: Ownership of Household Farm

Most of the respondents (46%) said the household farm land was registered in the name of father-in-law, 27% said land was registered in their husband's name, 17% owned their land, 7% had their land registered in their parent's name while 3% had their farm land registered in grandfather's name. This was confirmed in the FGD where participants agreed that from time immemorial, land was never in the wife's name. This is due to the strong patriarchal norms of the community.

4.5.2. Farm size

Majority of the respondents (71%) had between 1-3 hectares of farm land, 22% had less than one Hectare while 7% had more than three Hectares of farm land. Thus, majority of the respondents had small parcels of land which would not sustain own-farm food production for the household. There were cash crops and food crops on the parcels of land. A portion of land was also set aside for livestock fodder.

4.5.3 Types of food crops

The respondents grew several types of food crops for household food. Figure 4.10 below shows the types of food crops produced by the respondents:

The results showed that 45% of the respondents grew maize which is a staple food crop in the community, 33% cultivated beans, 9% produced bananas, 4% grew vegetables, 3% finger millet and sweet potatoes while 1% grew Irish potatoes, cabbage and sugarcane.

4.5.4 Allocation of Household Land for Food Crops

Allocation of household land for growing of food crops to provide sufficient household food in the study area is a challenge because of the small parcels of land per a household. Table 4.3 below shows responses on the land reserved for food production. It also shows who makes the decision on the portion of land to grow food crops.

Table 4.6: Household farm under food crops

Land under food crops	Frequency	Percentage
All of it	5	7
Half of it	20	33
Quarter of it	35	70
Total	60	100

Quarter of the land was under food crops as reported by 60% of the respondents, 33% said half of farm land was under food crops while 7% used all their land to produce food crops.

Most of the decisions on the proportion of land to be under food crops are made by the husband (82%), while 12% indicated that the decisions are made by the respondents themselves, while 4% of the respondents said the decision rests with other significant household member like father, grandfather, and in-laws.

4.5.5 Responsibility of Preservation of Household Food

The respondent was solely responsible for the preservation of household food. Figure 4.4 below shows methods used by respondents to preserve household food.

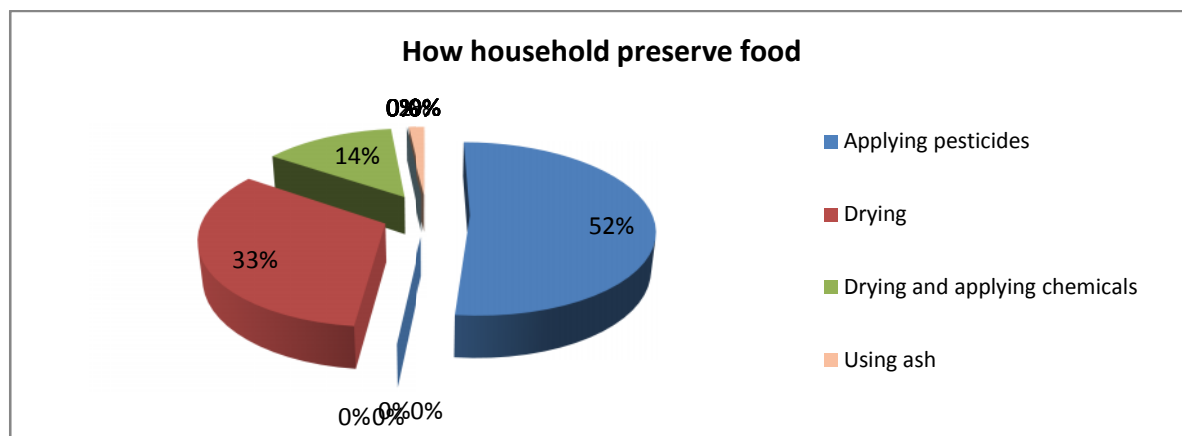


Figure 4.4: Methods of Preserving Household Food

Household food was preserved either by applying pesticides, (52%), by drying (33%), by both drying and using chemicals (14%) and by using wood ash (2%). The food was then stored either in sacks or in a granary.

4.6. Household labour Conditions and Food Production

4.6.1 Household members providing labour in food production

Most of the labour towards household food production was provided by the woman. This is depicted in Figure 4.5 below which shows the responses from respondents on the number of household members who provided labour for household food production.

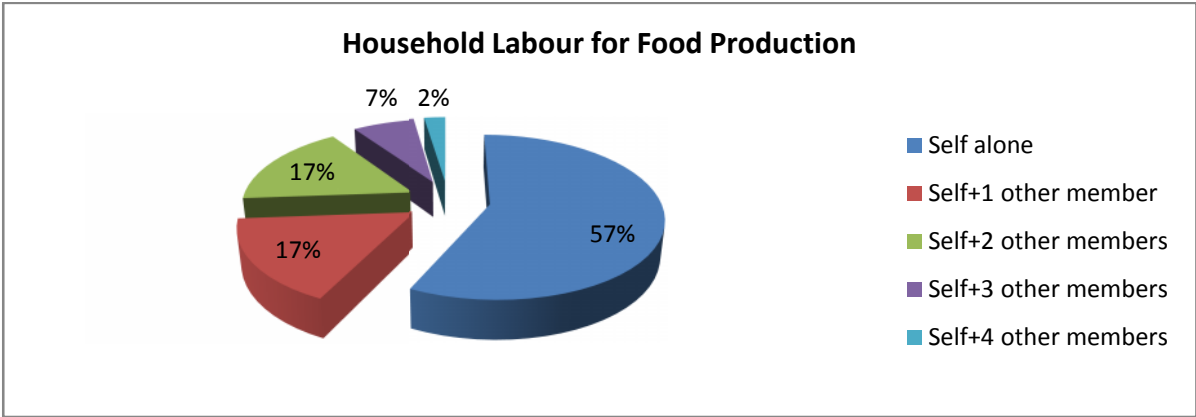


Figure 4.5: Labour for Household Food Production

When asked about the number of household members providing labour in household food production, 57% said they solely provided labour for food production, 17% said one or two additional members provided labour, 7% said upto three additional members provided labour while 2% said upto four additional members provided labour for household food production. Observations showed only women tilling and weeding in the household farms.

One key informant said this:

“The community is patriarchal and women who are the care givers in the household also provide labour in the household farm to ensure food security. Food production is part of domestic work and women enjoy doing it.”

Another key informant also said this:

“Omosacha nere omotwe bwo’mochie oye. Omokungu n’abana nigo bakomoigwera. Ninki bono ndakore? Abakoro nabo batebete igo” - loosely translated - (The husband is the head of his household. The wife and children have to obey him. What can I do? Our ancestors said so).

4.6.2 Sources of extra labour

Most of the respondents (86%) got extra labour by hiring for cash, 10% got extra labour in form of payment in kind and 4% as small exchange working groups. The labour was hired by the husband (88%), while other significant person (grandfather and father) was responsible (8%) and 4% said they were responsible in hiring extra labour.

When asked ‘who else assisted with food production in her household, a participant of FGD said this:

“It is only me who provides labour in the farm. My husband does not listen to my pleas to assist me in the farm work. In fact, he says that I am very lazy, that is why I lack food in my kitchen store. (How come other women are not crying like you? He asks me). I have to work hard for feeding my children – she quips).

4.6.3. Farm inputs

The respondents had various experiences on the management of their farms to improve food production. Figure 4.6 below shows types farm inputs used by the respondents

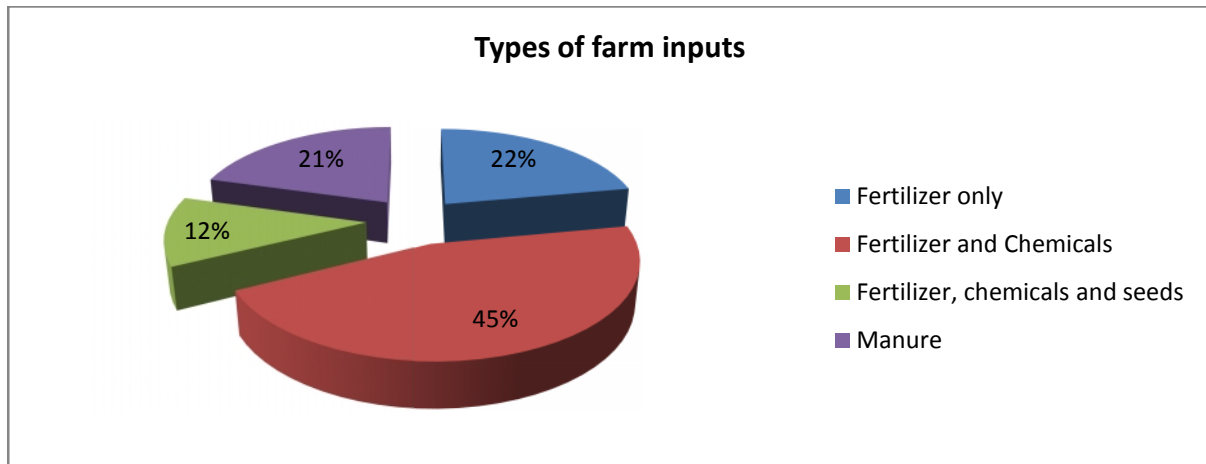


Figure 4.6: Types of Inputs used by the Respondents

Fertilizers and chemicals were the most used farm inputs by (45%) of the respondents, 22% used fertilizers only, 21% used fertilizers, chemicals and seeds while 12% used animal manure.

The decision on which type of farm input to use was made by other significant person (husband or father-in-law) who made over 94% of the decisions on household food availability while only 6% of the respondents made such decisions. One key informant said that:

“Production of food has declined due to poor soil fertility. When the wife asks for money from the husband to buy fertilizer, he gives it very late into the planting season or he never gives it, citing lack of money. The wife would plant without the fertilizer for fear of being ‘left behind’ by the other farmers. Of course the yields were cannot be good”.

4.6.4. Health challenges when cultivating farm

The respondents had various health challenges while working in their household farms to produce food for their households. They reported that they experienced various health challenges while ensuring that they produced food for their households. Majority (66%) said that they experienced general fatigue and tiredness while 34% experienced specific organ challenges like backache, headache, hurting limbs, among others. One FGD member said the following:

“I am alone with the children here while my husband is in the city working. He does not send me money because he says that he earns very little salary which he uses to pay for house rent and his upkeep. I cannot tell him of my health issues because he cannot help me. I have to work in the farm to feed my children.”

4.6.6. Household Grain Requirements per Season

Own-farm household grain production was not enough to cover a whole season before the next crop was harvested. Most of the households (42%) required between 201-500kg of maize between two harvesting seasons, 15% required between 501-700kgs, 34% required over 700kg while 9% required less than 200kg of maize for food until the next harvesting season. Most of the responses (78%) supplemented the deficit with purchases of grain food stuff from the market while 22% received gifts from sources like relatives, friends and church organizations. The quantities of grain food that is harvested per household per season is as shown in Fig. 4.7 below:

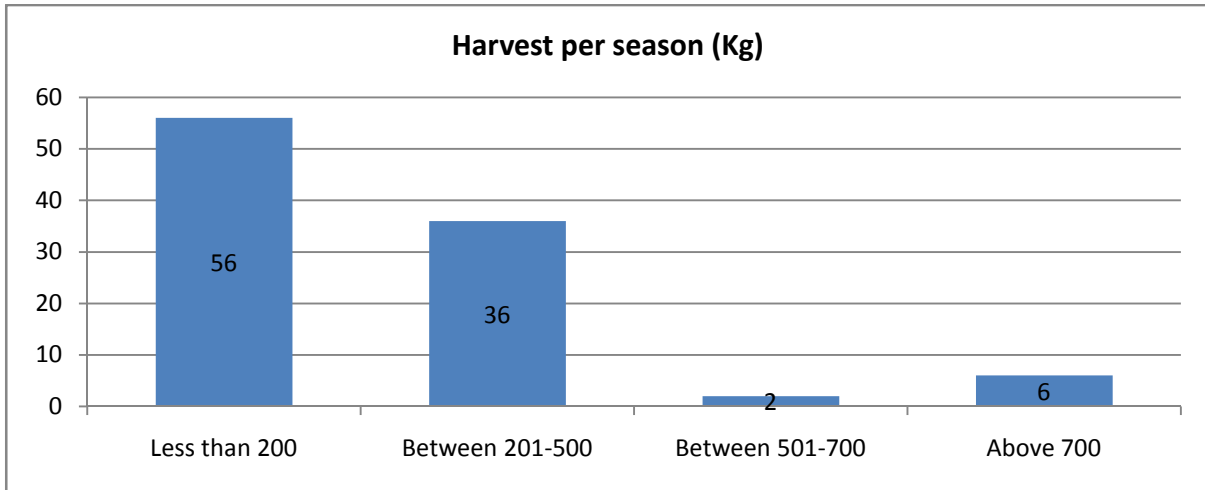


Figure4. 7: Quantities of Food Harvested each Season

Majority of the respondents (56%) harvested less than 200Kg of maize (main grain food stuff) while 36% harvested between 201-500kg and 6% harvested over 700kg per season.

4.6.7. Membership in Self-Help Groups

Most of the respondents (78%) belonged to at least one self-help group or a community-based organization. They gave reasons why they had joined such organizations. This is presented in Figure 4.8 below.

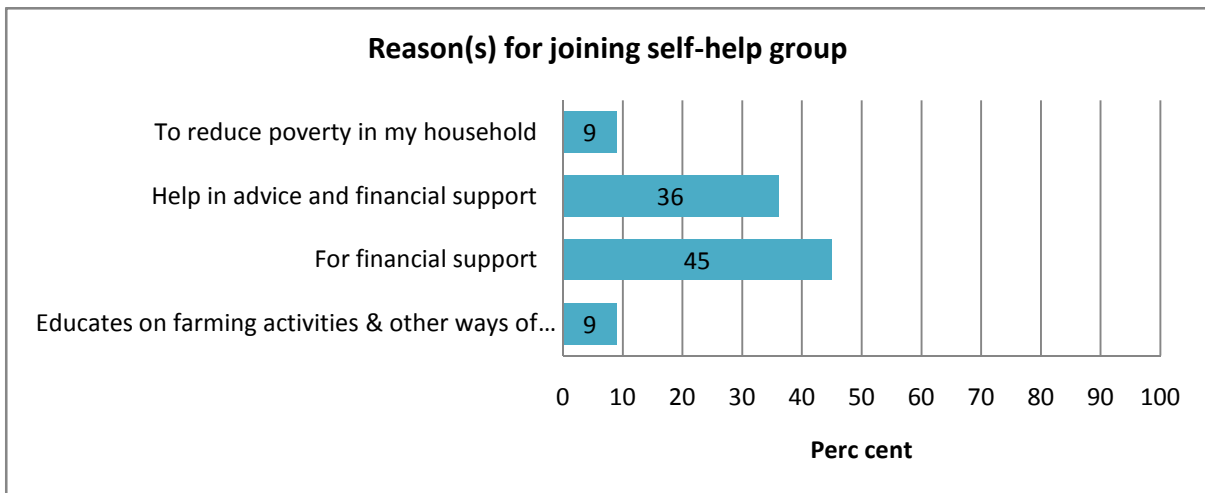


Figure 4.8: Enrolment by Respondents in Self-Help Groups

The respondents had various reasons for joining self-help groups but the most common reason was for financial support as indicated by 45% while 36% were to get both advice and financial support, 9% joined to acquire new farming methods and other ways of generating income in order to help reduce household poverty.

4.7. Coping Mechanisms

4.7.1. Coping mechanisms with household food insecurity

The respondents had developed mechanisms of coping during times of food reduction in their households. This is presented in Figure 4.9 below:

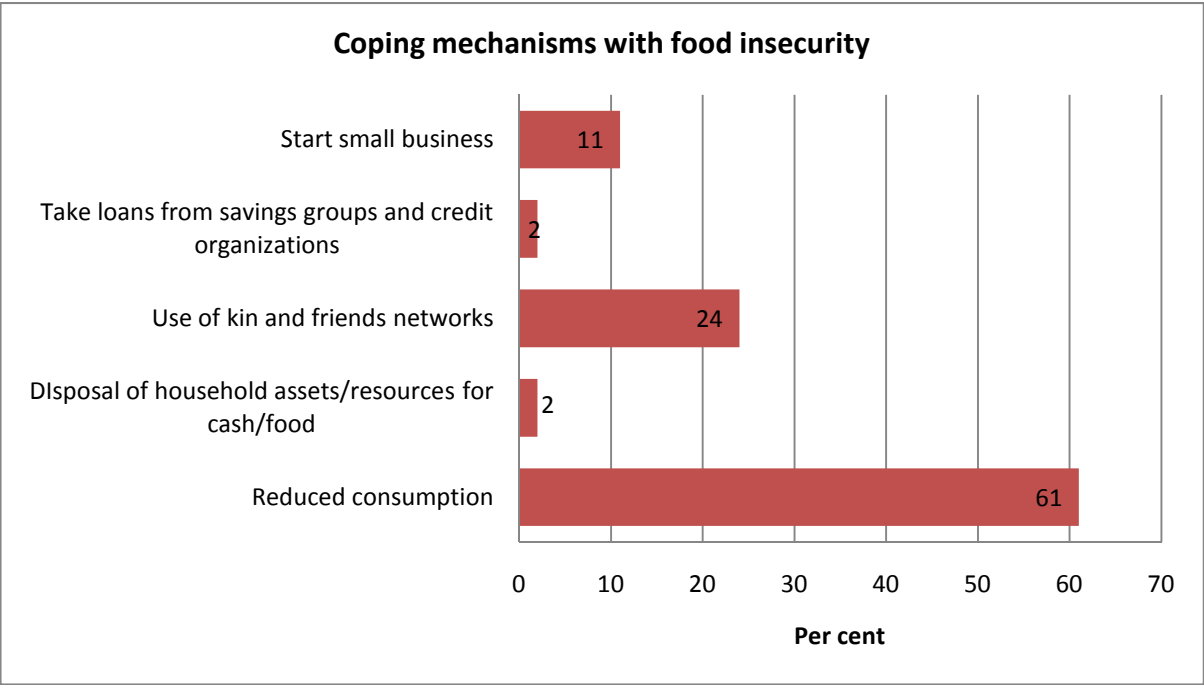


Figure 4.9: Coping Mechanisms during Food Insecurity Periods

In order to cope with food insecurity, households developed mechanisms to help them move on during periods of shortages. The most applied was reducing the amounts of consumption as reported by 61% of the respondents. 24% turned to next of kin and friends with surplus for aid, 11% started small businesses to generate some income which they used to buy food while 2% disposed of household assets or took loans from savings groups (*chamas*) to purchase food stuff. A key informant said that she had joined an informal group (*Ekeombe*) where women members assisted one another with food portions in periods of reduced food in their households. The group also provided labour for food. Another key informant said that she took some little money from her savings in her *chama* to buy food because the husband did not want to “get involved with small matters of purchase of food”.

4.7.2. Effects of Household Food Insecurity

There were varied effects of household food insecurity. Figure 4.10 below presents the effects of food insecurity in respondent’s households focusing more on the children and dependants.

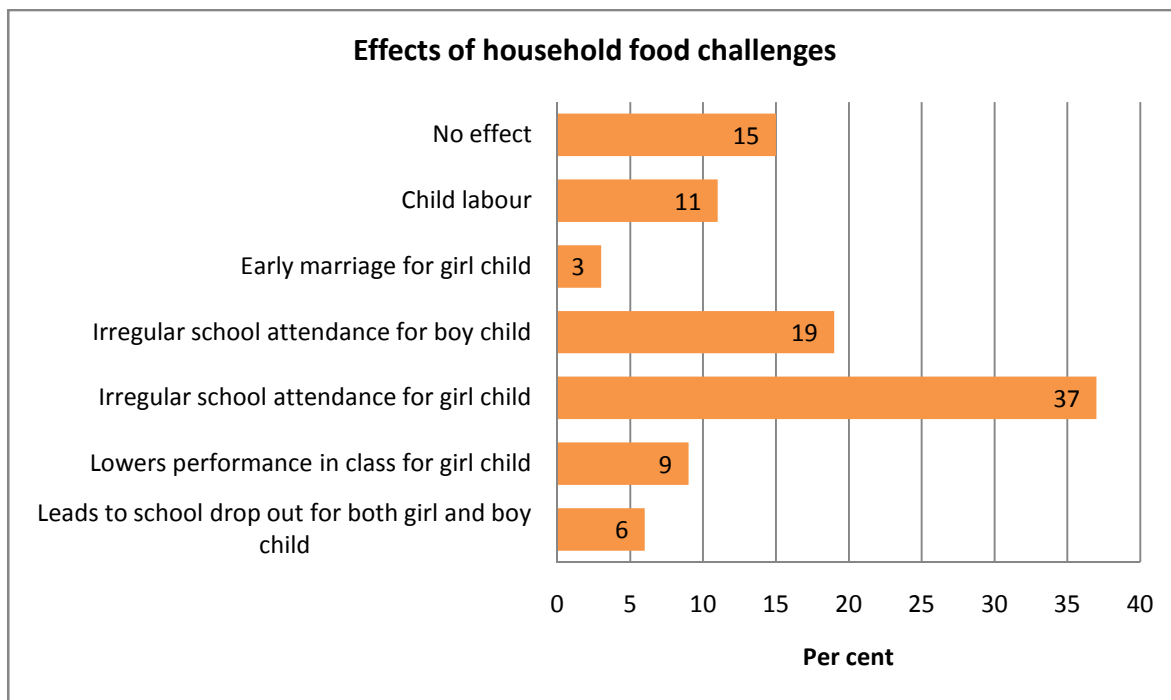


Figure4. 10: Effects of Food Insecurity in the Respondent's Household

Most of the respondents said that they faced many challenges in ensuring food availability in their households. These challenges had numerous effects on the members of the households. The prevalent effect was irregular school attendance by the girl child as reported by 37% followed by irregular school attendance by the boy child (19%) while 11% of the respondents said that household food insecurity led to increased child labour.

A key informant said that:

“Being a widow, it has been very difficult for me to have sufficient food for my children and provide for their school fees. Not long ago, a church organization started supporting me with school fees for my children in Primary School. It also gives small portions of food from time to time. I am very grateful to them.”

When asked whether there was assistance for food from other sources, one of the key informants said that the Government had not earmarked the area as food risky. Therefore, Government assistance in provision of food had not been forthcoming. He suggested that there was need for the County Government to intervene in such situations.

CHAPTER FIVE

CHALLENGES OF FOOD INSECURITY IN RURAL HOUSEHOLDS

5.0 Introduction

This chapter presents findings on the challenges faced by women in food security in their rural households. This is because women play a significant role in the production, preparation; provision, preservation and storage of household food. The challenges also show the impact of gender inequalities in food security in rural households as shown below:

5.1. Ownership of the household farms

The findings showed that the title of the household farms were in the name of the husband (Fig. 4.3). He was the one who allocated the portion of household land for food crops. The man also decided on the types of farm inputs to be used and he hired the labour to assist on the farm.

5.2. Women's role in rural household food security

The study showed that women were the main labour providers in household food production. (Fig. 4.5). They were also the ones who prepared, preserved and stored household food respectively). In their traditional gender roles as care givers and home makers, the women's role includes household food production, preparation, preservation and storage. They were

overworked yet they were not appreciated as they were in a subordinate position to that of men due to the patriarchal system in the community.

5.3. Household income

Tea was the cash crop that grew in the study area and the man controlled all the income earned from the crop. Thus, the woman did not have access and control of the household income to provide for household food shortages. The findings also showed that the quantities of food produced in majority of the households were not enough to sustain them until the following harvest (Fig. 4.7). The respondents supplemented their own-farm production mainly with purchases from the market. The women faced a challenge since they did not have access and control of the household income to buy the food.

5.4. Household Land Ownership and Food Security

Traditionally, the women in the Abagusii community provided household food, yet they were not empowered to produce enough food to sustain the household to the following harvest. They did not own household land and they did not get sufficient assistance from her household members, especially the husband to provide adequate labour for household food production.

5.5. Food Production and Health Challenges

Women suffered health problems as a result of heavy workload in the household farms. They were the major labour providers in their household farms to produce food. This meant that they were overworked in areas they could have easily shared the work with other household members, especially the husband. The women experienced health challenges like general fatigue and other severe ailments. This added to reduced food production in the households.

CHAPTER SIX

SUMMARY AND CONCLUSIONS

6.0 Introduction

This chapter summarizes the study findings in line with the three objectives that guided the study as follows: one, to examine women access and control of the resources necessary to ensure food security in households in Nyansiongo Sub-Location, two, analyse the attitudes and perceptions of women in Nyansiongo Sub-Location towards food security in their households, and three, investigate the level of participation in decision making by women in Nyansiongo Sub-Location to ensure food security in their households.

6.1 Summary

In order to summarize the findings of this study, it was necessary to revisit the objectives that guided the study. As pointed out in chapter one, the overall study objectives was to investigate the impact of gender inequalities on food security in rural households of Nyansiongo Sub-Location in Nyamira County. The specific objectives were:

1. To examine women access and control of the resources necessary to ensure food security in households in Nyansiongo Sub-Location

2. To analyse the attitudes and perceptions of women in Nyansiongo Sub-Location towards food security in their households.
3. To investigate the level of participation in decision making by women in Nyansiongo Sub-Location to ensure food security in their households.

There was food insecurity in the area under study due to gender inequalities in the households. Women were the major labour providers in the household farms yet they did not access modern implements/equipment to improve food production. The community was patriarchal and due to the gender inequalities, women did not own the resources like land for food production. Household income was controlled by the man. This affected the production of sufficient food in the household. Women did not have training on modern farming methods so as to facilitate food production. This also contributed to the reduced food quantities from the household farms.

Household food insecurity impacted negatively on the girl child as her schooling was interrupted due to food shortage. The health status of the woman and the young children was affected due to reduced food intake, sometimes no balanced diet. The woman was also overworked, which resulted in her health challenges. Gender inequality did not change the gender roles, especially those of women who were burdened as caregivers in the household and labour providers in the household farms.

6.2 Recommendations

1. The Government and development partners involved in food security issues should empower women so that they can realize food security in their households.
2. Gender equality, as stipulated in the New Constitution, should be embraced and applied in all sectors of the society. This will remove patriarchal tendencies in the society that insubordinate and discriminate against women. Thus the equality of women and men will bring equal participation in decision making on household food security.

REFERENCES

Asenso-Okyere et al., (1993). *Policies and Strategies for Rural Poverty Alleviation in Ghana*.

ISSER, University of Ghana, Accra.

Barrett, Christopher B. (1999), “Stochastic Food Prices and Slash-and-Burn Agriculture,”

Environment and Development Economics 4,2: 161-176.

Chant, S. (2006). ‘Revisiting the “feminization of poverty” and the UNDP gender indices:

what case for a Gendered Poverty Index?’, Gender Institute Working Paper Series, 18, London

School of Economics, London.

Doss, C.R. (2001). Designing Agricultural Technology for African Women Farmers: Lessons from 25 Years of Experience. *World Development*, 29 (12): 2075-2092

Doss, C.R. (2010). If Women Hold Up Half the Sky, How Much of the World’s Food Do They Produce? Background paper, 2011. *State of Food and Agriculture Report (SOFA Report)*,

FAO, Rome

Duncan, Thomas (1997). “Incomes, Expenditures, and Health Outcomes”. In: Haddad, L.;

John, Hoddinotta and Harold Alderman (1997). *Intrahousehold Resource Allocation in Developing countries* (Eds.), John Hopkins University Press, Baltimore and London.

Ellis F. (1992). *Agricultural Policies in Developing Countries*. Cambridge University Press, University of Cambridge, NY, USA

FAO. (1994). *Women, Agriculture and Rural Development, a Synthesis Report of the Africa Region*. Rome.

FAO. 1996. *Rome Declaration on World Food Security and World Food Summit Plan of Action*. World Food Summit 13-17 November 1996. Rome

FAO. (1998). *Rural Women and Food Security: Current situation and perspectives*. Rome

FAO (2006). *The State of Food Insecurity in the World*. Rome.

FAO (2011). *The state of food and agriculture 2010–2011. Women in agriculture: Closing the gender gap for development*. Rome.

FAO (2011). *The State of Food and Agriculture: Closing the gender gap for development*. Rome

FAO (2013). *Gender equality and food security: Women's Empowerment as a Tool against Hunger*

Frankenberger, T. (1996). *Measuring Household Livelihood Security: An Approach for Reducing Absolute Poverty*. Food Forum, No. 34. Washington, DC.

Haddad, L, E. Kennedy, and J. Sullivan (1994). Choices of Indicators for Food Security and Nutrition Monitoring”. *Food Policy*. 19(3):329-343.

Hoddinott, J. and Lawrence Haddad (1995). “Does Female Income Share Influence Household Expenditure Patterns? Evidence from Côte d’Ivoire”. *Oxford Bulletin of Economics and Statistics*. 57(1): 77-96.

Heyer, A. (2006). The gender of wealth: Markets and power in central Kenya. *Review of African Political Economy*, 107, 67–80.

Iram, U., & Butt, M.S. (2004). Determinants of household food security: An empirical analysis for Pakistan. *International Journal of social Economics*, 31(8), 753-766.

KIPPRA, Dec. 2007 Kenya Agricultural Sector Data Compendium, pg. 75

Mackenzie, A. F. D. (1998). *Land, ecology and resistance in Kenya 1880–1952*. Edinburgh: Edinburgh University Press.

Maxwell S. and Smith M. (1992). *Household Food Security: A conceptual Review*. Institute of Development Studies, University of Sussex, Mimeo.

Meinzen-Dick et al. (2010). *Engendering agricultural research*. IFPRI Discussion Paper 973. Washington, DC: International Food Policy Research Institute. Available at: <www.ifpri.org/publication/engendering-agricultural-research

Moser, C. (1993). *Gender Planning and Development: Theory, Practice, and Training*. London: Routledge.

Nyariki, D.M. (June 2007). *Kenya Position Paper on The Horn of Africa Initiative on Tackling Food Insecurity*, pg 2-9

Odame et al. (2002). *Gender and agriculture in the information society*. ISNAR Briefing Paper No. 55.

Parker, R. (1993). *"Another Point of View: A Manual on Gender Analysis Training for Grassroots Workers."* New York: UNIFEM.

Patel, R. C. (2012). *Food Sovereignty: Power, Gender, and the Right to Food*. PLOS Medicine 9(6): e1001223. DOI:10.1371/journal.pmed.1001223

Quisumbing, A. R. (2003). *Household decisions, gender and development: A synthesis of recent research*. Washington, DC: International Food Policy Research Institute.

Saito, et al. (1994). *Raising Productivity of Women farmers in sub-Saharan Africa*. World Bank Discussion Paper 230. Washington, DC.

Republic of Kenya. *National Food and Nutrition Security Policy, 2011*

Savadogo et al. (1994). “*Farm Productivity in Burkina Faso: Effects of Animal Traction and Nonfarm Income*” *American Journal of Agricultural Economics*. 76(3):608-612.

Schuh, Edward G. (1997). “*Why does Gender Matter?*”. *Women, Agricultural Intensification, and Household Food Security*. Proceedings of the workshop held at the Sasakawa Centre, University of Cape Coast, Ghana, June 25-28, 1996.

von Grebmer et al. (2009). *Global Hunger Index: The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*. Bonn, Germany/Washington, DC/Dublin, UK: Deutsche Welthungerhilfe/IFPRI/Concern Worldwide.

World Bank Report (1989). *Food Security Studies*.

World Bank Report (2012). *World development report: Gender equality and development*. Washington, DC.

WB, FAO & IFAD (2009). *Gender in agriculture sourcebook*. Washington, DC.

United Nations. (1974) *United Nations World Food Conference. Assessment of the World Food Situation, Present and Future*. Document E/CONF. 65/3.

Paper on: [Food security issues in Southern Africa : selected proceedings of the Conference on Food](#)

[Security Issues in Southern Africa, Maseru, 12-14 January 1987](#)

<http://www.standardmedia.co.ke/thecounties/article/2000110469/fear-of-famine-as-strange-disease-wipes-out-maize>

APPENDICES

APPENDIX 1 SURVEY QUESTIONNAIRE

SECTION 1: DEMOGRAPHICS OF THE RESPONDENT

IDENTIFICATION

1. Farmer's name: _____

2. Age: _____

3. Marital Status:

(01) Married

(02) Divorced

(03) Widowed

(04) Single

4. Type of family:

(01) Polygynous

(02) Monogamous

SECTION 2: SOCIO-ECONOMIC AND CULTURAL FACTORS OF FOOD SECURITY

5 Level of education completed:

- (01) None
- (02) Primary
- (03) Secondary
- (04) University
- (05). Others (Specify)

6. How many children do you have?

7. How many people do you take care of in your household?

Please indicate the composition of your household by gender and age in the table below:

HH Member	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10
Gender										
Age										
Relationship to HH Head										

8. Do you have dependent children of school going age in your household?

- (01) Yes
- (02) No

9. If yes, please indicate the members and level of education

Member	Gender (M/F)	Age	Own Child/	Dependent Child	Pre-Primary	Primary	Secondary	College
01								
02								
03								
04								

10. Apart from your own children, when did you start taking care of the other dependants in your household? _____

What is your occupation? _____

11. Do you have any other source of income?

(01) Yes

(02) No

12. If yes, what are the other sources of incomes?

(01) Subsistence farming

(02) Business

(03) Others (Specify) _____

13. Do you rear livestock?

(01) Yes

(02) No

14. If yes, please specify the kinds of livestock: _____

15. What is your average income per month? _____

(01) Below Kshs. 1000

(02) Kshs. 1000 – 2000

(03) Kshs. 2000 – 5000

(04) Above Kshs. 5000

16. Who has access and control of the household income?

(01) Self

(02) Significant other (Specify) _____

17. How much of your total income do you spend on food per month?

(01) All the income

(02) Half of the income

(03) Quarter

(04) Do not know

18. Who allocates the expenditure for household food?

(01) Self

(02) Significant other (specify) _____

19. Is the income allocated for food enough for your household food requirements?

(01) Yes

- (02) No
20. If no, explain: _____

21. Do you face any problems in providing food to the dependants in your household?
 (01) (Yes)
 (02) (No)
22. If yes, which specific problems do you face in providing adequate food to those in your household? (*You can tick more than 1*)
 (01) Lack of access and control of income in the household.
 (02) Lack of adequate income to purchase enough food
 (02) Unavailability of food varieties in the market
 (03) Lack of adequate labour to engage in income generating activities.
 (04) Inadequate household labour to engage in subsistence farming.
 (05) Lack of adequate land for food production
 (06) Poor harvest due to unreliable weather patterns
 (07) Disease that infects the main staple food (Maize) while in the field
 (08) Post-harvest diseases and pests
 (09) Inadequate storage facilities
 (10) Others (specify) _____

23. Do you receive assistance with food from outside your household?
 (01) Yes
 (02) No
24. If yes, from where? (*You can tick more than 1*)
 (01) Relatives (02) Friends
 (03) Church Organizations (04) Local Government
 (05) Other (specify)

SECTION 3: FARM CHARACTERISTICS AND FOOD PRODUCTION

25. In whose name is the title of your household farm?
(01) Self
(02) Significant Other (Specify) _____
26. What is the size of your farm in acres? _____
27. What are the main food crops that you grow? _____

28. What is the proportion of the household farm that is under food crops?
(01) All of it (02) Quarter of it
(03) Half of it (04) None of it
(05) Others (specify) _____
29. Who decides on the proportion of household land to be under food crops?
(01) Self
(02) Significant other (Specify) _____
30. Do you grow any cash crops?
(01) Yes
(02) No
31. If yes, which cash crops do you grow?
(01) Tea (02) Coffee
(03) Pyrethrum (04) Other
32. What are the benefits of the cash crops grown? _____

33. Who has access and control to the income from the cash crops?
(01) Self
(02) Significant other
34. Have you received any assistance from any organization for your farming activities?
(01) Yes
(02) No

35. If yes, specify which kind of assistance and by whom? (*Prompt: training, loans, farm inputs, mechanization, etc*): _____

36. Who preserves your household food?

(01) Self

(02) Significant Other (Specify) _____

37. How is your household food preserved? _____

Who stores your household food?

(01) Self

(02) Significant Other (Specify) _____

38. How is your household food stored? _____

SECTION 4: HOUSEHOLD LABOUR CONDITION AND ORGANIZATION OF FOOD PRODUCTION

39. How many members of your household provide labour for food production? (Prompt for gender).

40. Is the labour from your household enough for your food production requirements?

(01) Yes

(02) No

42. If no, how do you get extra labour? (*you can tick more than 1*)

(01) Hire of labour for cash

(03) Small exchange working groups

(02) Use of gifts

(04) Payment in kind

(05) Others (Specify) _____

43. Please indicate the number of persons that work on your farm by gender and age. Also indicate the average number of hours each person works on a daily basis

Gender M/F	Age	Working hours per day		Worker Status	Notes (HHH, MC, FC, CL, SEWG)

Key:

- HHH: Household Head
 MC: Male Child
 FC: Female Child
 CL: Casual Labour
 SEWG: Small Exchange Working Group

44. Who is responsible for hiring of farm labour?

- (01) Self
 (02) Significant other (Specify, giving reasons) _____

45. Do you use farm inputs for food production in your household farm?

- (01) Yes
 (02) No

46. If yes, specify the type of inputs use. _____

47. Who makes decisions on the type of inputs to be used in the household farm?

- (01) Self
 (02) Significant other (Specify) _____

48. Do you experience any health challenges when cultivating in your farm?

- (01) Yes
 (02) No

49. If yes, which health challenges do you experience? (*You can tick more than 1*)

- (01) General fatigue and tiredness
 (02) Specific organ health challenge

- (03) Others (Specify) _____

50. What is the number of kilograms of grain food grain stuff do you produce per season?
 (Specify for each grain). _____

51. On average, how many kilograms of each of the grain crops would be adequate to feed
 your household members between 2 harvest seasons?
52. What is the main source of your grain foodstuffs?
 (01) Own farm production
 (02) Purchase from the market
53. Do you belong to any self-help group or community-based organization?
 (01) Yes
 (02) No
54. If yes, specify the reasons for joining the group or organization. _____

SECTION 5: COPING MECHANISMS

55. What coping mechanisms do you take to cope with food insecurity in your household?
(You can tick more than 1)
 (01) Reduced consumption
 (02) Disposal of household asses/resources for cash/food
 (03) Buy in small quantities
 (04) Use of kin and friends networks
 (05) Take loans from Savings Groups and Credit Organizations
 (06) Start small business
 (07) Others (Specify) _____
56. How do your household members cope with the food challenges in your household?

57. How do these challenges affect their lives? (*You can tick more than 1*)

(01) Leads to school drop out for both girl and boy child.

(02) Leads to school drop out for girl child only

(03) Leads to school drop out for the boy child only

(04) Lowers performance in class for girl child

(05) Irregular school attendance for girl child

(06) Irregular school attendance for boy child

(07) Early marriage for girl child

(08) Child Labour

(09) No effect

(10) Other (Specify) _____

58. As a food provider for your household, how do you think the food insecurity can be resolved? _____

APPENDIX 2: OBSERVATION CHECKLIST

1. Social, economic and cultural factors of food security
 - (01) Occupation of Household Head
 - (02) Inter-household food exchange and cooperation for food production.
 - (03) Methods of soil fertility management (use of fertilizers, mulches, inter-cropping, compost application, among others)
 - (04) Household food storage strategies
2. Organization of labour for food production
 - (01) Division of labour in food production, preservation and storage.
 - (02) Who makes decisions on allocation of resources and food production?
3. Farm characteristics and food Production
 - (01) Land size.
 - (02) Proportion of land under food and cash crops.
 - (03) Livestock reared and use of livestock products (milk, eggs, meat, etc).
 - (04) Food processing methods.
 - (05) Yields indicators (see quality, harvest quantity and quality).
 - (06) Health status of household members (allocation of food, type of food consumed, etc).
 - (07) Food preservation and storage methods.
4. Coping Mechanisms
 - (01) Reduction of food portions and frequency of servings
 - (02) Gifts from kin and friends
 - (03) Others.

APPENDIX 3: KEY INFORMANT INTERVIEW GUIDE

Socio-Cultural gender roles among the Abagusii Community

- (01) Traditional social values attached to the status of women in the Abagusii Community
- (02) Traditional social values attached to the status of men in the Abagusii Community
- (03) Traditional gender roles of women in the Abagusii Community
- (04) Have there been changes in social values and why?
- (05) Have there been changes in gender roles and why?

Gender inequalities in Food Security

- (06) What are the gender roles of men in food production in Nyamira County?
- (07) What are the gender roles of women in food production in Nyamira County?
- (08) What are the challenges that women experience during food insecurity periods?
- (09) How can these challenges be overcome?

Coping mechanisms employed by women to resolve food insecurity in Nyamira County.

- (01) What coping mechanisms do women employ in their households during food insecurity periods? (probe if these involve divestment, reduced consumption, buying in small quantities, austerity, disposal of assets, use of kin and friends networks, joining savings and credit schemes).

Impact

- (02) How do both the food insecurity and coping mechanisms impact on the lives of the household members?

Support Systems

- (03) Is there assistance from other sources?
- (04) Which ones?

Do you have any other comments that you would like to add?

APPENDIX 4: FOCUS GROUP DISCUSSIONS GUIDE

Socio-economic and cultural factors of food security

- (01) Do you use any method of soil fertility management?
- (02) How do you preserve and store food in your households?
- (03) Do you rely solely on your food production or purchase some from the market?
- (04) Who is the major labour provider in food production in your household?
- (05) How do gender roles impact food production in your household?
- (06) How can the food security problem be solved?
- (07) Who else assists in food production in your household?
- (08) How do you cope with the food insecurity in your household?
- (09) What is the impact of food insecurity in your household?

Support system for gender disparities in household food security

- (01) Is Government policy on gender equality applied to secure household food security?
- (02) What can the community do to ensure full an equal participation by all household members in security food security?

Do you have any other comments that you would like to add?

APPENDIX 5: STATEMENT OF CONSENT

I am conducting a research project as a student of gender studies, University of Nairobi. During the research, we will receive no personal benefit from being part of the study. However, your participation will help us understand the impact of gender inequalities in food security in Nyamira County. We require about 40 minutes of your time.

Any information you may provide will be treated confidentially. This means that while we may publish and share the information you provide for research purposes, your name and identity will not be provided. You can stop being part of the study at any time. Your participation in the study is voluntary and there will be no consequences for turning down the interview.

There is no compensation made for your participation in the study. If you wish not to be part of this study, please inform us so.

Thank you very much.

Participant Name (written by researcher)

Signature

Place

Date and time