# THE IMPACTS OF FOOD INSECURITY AMONG THE RESIDENTS OF ENDEBES DIVISION IN TRANS-ZOIA COUNTY

BY

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# DECLARATION

I Yego N Irene hereby declare that this research work is as a result of my personal effort and it has never been submitted to any institution for an academic award.

Signature Malin

Date 24 10/2012.

# APPROVAL

This research work has been submitted for examination to me for approval as a University Supervisor.

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Date 24 [10 | 2012.

#### **DEDICATION**

I dedicate this research to the memory of my inlaw Abilu Charles and sister chelimo Eunice for their great support to me during this research work and while at campus. Above all my sincere thanks goes to the family of the Mr. and Mrs. Apuwai Joseph for their spiritual suport they have been helpful to me during this process of research work and finally to the father to my baby Kelvin kiprop above all God bless you.

#### **ACKNOWLEDGEMENT**

I would like to indebt many people whose help contributed greatly to the successful completion of the research work my special thanks go to my, supervisor Dr.mwaniki Rosean whose method of supervision needs to be applauded for without his guidance; surely this research work would have not been a successful.

Particular thanks go to my parents Mr. and Mrs. Ndiwa for laying foundation for my education and giving me the utmost care and love during this period of research work. I am grateful for the material, moral and spiritual assistance that they always given into me.

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Not forgetting Kiprop Kelvin for his contribution both financial support and also to my son Kipruto Davis for the cooperation during this period.

# **ACRONYMS**

UNICEF _	Unicef nations children funds
FAO	Food Agricultural Organization
NGO's	Non –Governmental Organization
CBO's	Community Based Organization
GDP _	Gross domestic product
PEAP _	Poverty Education Action Plan
HIV/AID	S Human Imuno-Viru/Aquide Inodeficincy Syndrome
UN	United Nation
FEWS	Famine Early Warning System
UDHR	Universal Dedication Of Human Rights
WB	World Bank
SADS	Social Adjustment Programs

#### LIST OF TABLES

- Table 3.1 showing this population structure of enrobes division by sex
- Table 3.2 showing the sample composition
- Table 4.1 showing the socio-economic and demographic characteristic of the respondents
- Table 4.2 showing source of income for the respondents
- Table 4.3 showing causes of food shortages in enrobes division
- Table 4.5 showing coping strategies employees by rural household
- Table 4.7 showing strategies employed by respondents to produce food unsecunty

# LIST OF FIGURES

Figure 4.1 showing causes of	low crop yield
Figure 4.2 showing problems	when storing food

#### **ABSTRACT**

The analysis of food insecurity and coping strategies of rural people during food insecurity in Endebess division, Tranzoia district was examined between May and October 2012. The ultimate objectives of the study were to: (i) Examine the causes of food shortages in rural households of Endebess division (ii) document the coping strategies of the people during food shortages; (iii) to examine people's opinions on the mitigation of food shortage in their area.

The data were collected using questionnaires that were administered to respondents.

Questionnaires covered the social economic and demographic characteristics of respondents and all the objectives of the study. The sample size of the study constituted 30 households represented by their heads. Besides the respondents, Focus Group Discussions were conducted for both men and women. The researcher also interviewed key members of the community, for example local leaders, community based development workers, and cultural leaders among others. Data were analyzed using statistical package for the social scientists (SPSS) and a chi-square test was done to test the factors responsible for the prevalence of food insecurity in the area. It was found out that many people in the Division are food insecure with over 45% of the respondents reportedly having suffered from food insecurity as a result of poverty, sale of food to meet human basic needs, inadequate labor, unreliable rainfall and poor health. However, farmers have always coped with food insecurity by employing strategies like buying and borrowing food during periods of food shortages, engaging in casual labors, selling local brew and food ratio reduction among others.

There is therefore need for the government to modernize agriculture, improve prices for agricultural products, promote universal secondary education and diversify agriculture in order to alleviate food insecurity in this area.

# TABLE OF CONTENTS

DECL	ARATIONi
APPR	OVALii
DEDI	CATIONiii
ACKN	NOWLEDGEMENTiv
ACRO	DNYMSv
LIS	T OF TABLESvi
LIS	T OF FIGURESvii
AB	STRACTviii
СНАРТ	ER ONE1
PROB	LEM AND IT'S SCOPE1
1.0	Introduction1
1.1	Background to the study1
1.2	Problem Statement
1.3	Purpose of the Study2
1.4	Specific objectives3
1.5	Research Question
1.6	Scope of the Study3
1.7	Justification of the study3
1.8	Significance of the Study4
СНАРТ	ER TWO5
REVII	EW OF RELATED LITERATURE5
2.0	Introduction5
2.1	Conceptual Framework5
2.2	Causes of Food Shortages Among the Rural Households5
2.3	General Issues on Food Insecurity8
2.4	How food shortages can be mitigated11
2.5	Coping strategies to food insecurity
СНАРТ	ER THREE14
	HODOLOGY14
	Introduction14
	Research design14
	Research Population14
	Sampling Procedure
	Data analysis

CHAPTER FOUR18
PRESENTATION AND ANALYSIS OF DATA18
4.0 Introduction18
4.2 Causes of Food Shortage in Endebess Division.
4.5 Household Food Insecurity Coping Strategies
4.4 Strategies Recommended by the Respondents to Mitigate Food Shortage in Endebes Division
CHAPTER FIVE25
SUMMARY CONLUSIONS AND RECOMMENDATIONS25
5.0 Introduction
5.1 Summary
5.2 Conclusions25
5.3 Recommendations
BIBLIOGRAPHY27
APPENDIX I: QUESTIONNAIRE29
APPENDIX II: RESEARCH QUESTIONS
APPENDIX III: QUESTIONNAIRE FOR THE HOUSEHOLD HEADS34

#### **CHAPTER ONE**

#### PROBLEM AND IT'S SCOPE

#### 1.0 Introduction

# 1.1 Background to the study

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. While household food security is the application of this concept at the family level, with individuals within households as the focus of concern. Food insecurity, exists when people are undernourished as a result of the physical unavailability of food, their lack of social or economic access to adequate food, and/or inadequate food utilization (FAO 2000).

This implies that food-insecure people are those individuals whose food intake falls below their minimum calorie (energy) requirements, as well as those who exhibit physical symptoms caused by energy and nutrient deficiencies resulting from an inadequate or unbalanced diet or from the body's inability to use food effectively because of infection or disease.

According to UNICEF (1990), the concept of food insecurity refers to the consequence of inadequate consumption of nutritious food, considering the physiological utilization of food by the body as being within the domain of nutrition and health. Although vulnerability refers to the full range of factors that place people at risk of becoming foodinsecure, the degree of vulnerability of individuals, households or groups of people is determined by their exposure to the risk factors and their ability to cope with or withstand stressful situations such as the prevailing one in Endebess division.

During the last one and half decades, a lot of social-economic changes have occurred in Trans-zoia county and Endebess in general. The political upheavals of the 2007-2008 which resulted in the subsequent rebel insurgency in the area coupled with attacks have greatly altered, and undermined the local economy. Fore mentioned changes together with climatic irregularities have produced several effects in all aspects of life. The departure of cattle-backed economy led to a decline in agricultural productivity, widespread and high levels of poverty, high levels of illiteracy, poor health and health

consumption, environmental degradation and general dis-welfare (Igulot 2001).

All these undesirities are taking place against a background of a weak social response because of loss of property, reduction in agricultural production and collapse of the social exchange system.

Ever since then, households have never become sufficient and sustainable in their food requirements as evidenced by the number of families that experience hardships in fulfilling their food needs. The inability to meet both subsistence and other needs has caused a lot of stress in that families have to feed as well as meeting the medical costs, education for their children and respond to social obligations. This state of affair means families have to respond to the challenges of survival using the available means ands a result, households have to devise mechanisms for coping with prevailing problems such as food insecurity which is the core of this study.

#### 1.2 Problem Statement

Food insecurity in Trans-zoia has been an issue of concern for along time. Food insecurity is attributed to declining productivity associated with bad weather, insurgency and high rates of school going children who use many resources, inadequate labor, ill health, persistent poverty and unfavorable market conditions. In such cases, people are always left without any alternative apart from resorting to economic options like sale of domestic animals and poultry, sale of assets and seeking employment in other economic ventures outside their own region. By implication, these strategies do not sufficiently address the problem of food insecurity in the area thus making investigation on this particular problem an important issue if appropriate actions are to be taken.

Thus conducting analysis of food insecurity and the coping strategies of rural families during periods of food scarcity in Endebess region will facilitate an understanding of the situation and establishing ways by which households can be able to cope with food shortages. A clear understanding of the coping strategies being applied by the affected people would also guide concerned authorities in planning ways of improving food security and sustainable livelihoods of rural dwellers.

#### 1.3 Purpose of the Study

To analyze the impact of food insecurity among the residents of Endebess division in Trans-zoia county.

#### 1.4 Specific objectives

The specific objectives of the study were;

- 1. To examine the causes of food shortages in rural households in Endebess division.
- 2. To examine the major issues to food insecurity
- 3. To analyze how food shortages can be mitigated.
- 4. To analyze the coping strategies of the people during food shortages in the area.

# 1.5 Research Ouestion.

- 1 What are the causes of food shortages among the rural households in Endebess division?
- 2 What are the major issues to food insecurity?
- 3 How can food shortages be mitigated?
- 4 What are the coping strategies of the people during the time of food shortages?

# 1.6 Scope of the Study

The researcher will focus on the causes of food shortages among the rural households, general issues on food insecurity, relationship between food security, hunger famine and starvation. This will be done through consulting the available work of authors and by going to the field where the researcher will gather views from the respondents themselves The research study will be carried in Kenya, Trans-zoia county, Endebess division which is located in the Rift valley province.

The study will be limited to Endebess division which is located 20 kilometers from Kitale the county headquarters.

The study will aim at investigating the impacts of food insecurity among the residents of Endebess division in Trans-zoia County.

#### 1.7 Justification of the study

The study will be caried out in Endebess division inTrans-zoia County. The county is located in the Rift Valley province which is in the western part of Kenya. It borders West Pokot, Mt Elgon, Marakwet and Uasi Gishu district. Although Endebess is seen as a land of abundant resources, its people still lack access to adequate food, face persistent insecurity, unreliable rainfall and poor planning of the agriculture sector resulting from inadequate information.

The research therefore will aim at assessing factors responsible for the recurrent state of food insecurity and coping strategies of rural families during food inadequacies plus

bringing out a clear understanding of the hindrances to increased agricultural production and productivity at the household level in Endebess division.

The research study will take duration of two months from March and Aprill The study will therefore provide information that would be helpful in proper planning to fight food insecurity in the area. It is also anticipated that, both government ministries and departments, local governments together with NGOs and CBOS in the region could benefit from the results and recommendations of the this study.

### 1.8 Significance of the Study

To help the government to come up with appropriate policies of addressing food insecurity in Endebess division. This because different government bodies will use the findings to come up with appropriate measures which can aid in reducing food insecurity among the residents of Endebess.

A number of NGO'S responsible for the fight against food insecurity will use the findings to address the problem of food shortages. The findings will enable most of the NGO'S to understand the problem of food insecurity better and also create awareness among the local residents of Endebess division on the need to adopt mitigate measures of reducing food insecurity.

The study will enable the researcher to get an award of bachelor's degree in development studies at Kampala International University. The proposal after being approved will be submitted to the faculty of social sciences since it is one of the requirements of awarding the researcher a bachelor's degree in development studies.

The research findings will enable future researchers to increase on the available literature for further studies. The research findings will be used as source of literature by future researchers who will want to know more about food insecurity.

# CHAPTER TWO REVIEW OF RELATED LITERATURE

#### 2.0 Introduction

This chapter will discuss the causes of food shortages among the rural households, general issues on food security, the relationship between food security, hunger, famine and starvation, and people's opinion on how food shortage can be mitigated.

#### 2.1 Conceptual Framework

The study will show the relationship between food insecurity and the residents of Endebess division in Trans-zoia County.

Food insecurity
Food shortages
Lack of storage facilities
Natural calamities

Residents
Men and women
Children
youths

The independent variable is food insecurity while the dependent variable is the residents of Endebess division. Food insecurity factors such as food shortages, lack of storage facilities and natural calamities affect the residents who include both men and women, children and the youth.

# 2.2 Causes of Food Shortages Among the Rural Households

Although food insecurity is inevitably bound up with agricultural production, it should be considered within the broader context of poverty. Farmers and pastoralists are vulnerable to food insecurity not simply because they do not produce enough but because they hold little in reserve. They usually have scanty savings and few other possible sources of income. to achieve greater food security therefore in addition to boosting their agricultural output, they must create more diverse and stable means of livelihood to

insulate themselves and their households from external shocks (FAO 2002).

In Uganda, the quest for rural transformation is a key component of the national development efforts. The rural economy is dominated by agriculture, which is the mainstream of the national economy accounting for about 50% of total GDP (PEAP 2004).

In addition, the sector generates about 85% of export earning and employs more than 88% of Uganda's labour force (Uganda Vision 2025). Because about 89% of the Uganda population live in rural areas and depend on agriculture for their livelihoods, Uganda's agricultural sector is characterized by smallholdings, low input, low technology, poor infrastructure, and narrow market. Therefore the state of infrastructure especially roads are to some extent responsible for the marketing constraints and unfavorable terms of trade in rural areas.

The fact that 89% of Uganda's population live in rural areas and obtain their livelihood from subsistence agriculture, and constitute the 61% of the population living below the poverty line demonstrates existence of food insecurity in rural areas (MFEP 2002/3). There's therefore a direct relationship between food consumption levels and poverty where families with financial resources to escape extreme poverty rarely suffer from chronic hunger, while poor families do not only suffer most from chronic hunger but are also the segment of the population at the risk during food shortages and famines (FAO2003).

In a nut shell, food security is linked and affected by a number of social, economic, political and cultural variables like level of education, demographic characteristics, income levels, health status, cultural practices and belief, financial resources and political stability (UNHS 2002/03).

Although the low level of technology in most rural areas can be attributed to the poverty status of farmers, low education and training which makes them unable to afford modern

inputs, the political insecurity that prevailed and is still prevailing in some parts of the country coupled with cattle raiding has caused a decline in agricultural infrastructure and collapse of the tractor higher services in areas where they existed (PEAP 2004). This state of affairs has a significant bearing on rural life in general and food security plus nutritional requirements of the population in particular making under-nutrition, famine and hunger to remain among the most serious health and welfare problems affecting, in particular, the vulnerable groups. Despite the population having the capacity and potential to produce sufficient quantity and quality of nutritional requirements needed when given the opportunity, the overall calorie intake in developing countries is still low with more than eight hundred million people taking only 2162 out of the recommended 2200 calories per day (SOFI, 2004). Since, poverty cannot be divorced from food security analysis; its exclusion from food security conceptualization renders the entire endeavor futile because of the intertwined nature of the two concepts (Klaus 1999).

In Uganda, over 61% of the population lives below the poverty line, where beyond agriculture, only 8.12% of the rural households depend on employment income and brewing plus sale of local alcohol with all its damaging effects is a key component of this kind of rural economy. Given the nature of their economic and employment activities, it is vivid that the incomes of rural people are too low to offer a basic standard of living and food security (PEAP 2004). Much as there has been a decline in world food prices in the last twenty years, many people still go hungry because the prices still remain relatively high and considering the poverty level of the rural poor who cannot afford to buy food in the open market (Conway, 1998). This implies that unless the developing countries are helped to realize sufficient food, employment and shelter or to gain means to purchase food internationally, the political stability of the world will further be undermined and poverty and hunger wherever they exist will continue to affect majority of the people in the world (World Bank, 2003).

According to (Conway 1998), elimination of poverty and hunger can be a goal within peoples' means, depending on the objectives. Subsequently, if all the poor are to be fed, food production has to increase on the lower potential-lands where a high proportion of them live. Further more, for the rural landless and poor families living on insufficient

land, food production and natural development must become the means for increasing the market demand for food. Even when people are entitled to food either because they have produced it or they have earned incomes to buy it or they can receive food as part of an exchange program with kin or neighbors (Amartya1984), or under a government system of benefit (Conway 1998), access and entitlements are dependent on the nature of shocks and since entitled failure could not be predicted, factors responsible for such a collapse such as HIV/AIDS never gained attention (Amartya, 1984).

According to FAO (2002), HIV/AIDS affects food security mainly in two ways. First, the disease weakens and kills adults in their prime income-producing years, which decreases household income, and secondly, agricultural production is reduced by the extra demand of caring for ill family members. In Uganda, 9.4% of the population was reported to be infected with the disease by late 1990s (UNAID, 1998) and the HIV/AIDS surveillance report of 2002 shows that 1.050.555 people are living with HIV/AIDS in Uganda. The disease also forces those affected—households to liquidate their assets to buy food requirements and cover medical and funeral expenses. Rural-urban migration is also sometimes triggered by the disease as households attempt to replace income lost to illness and death. For this reason, many affected households often experience seasonal, episodic or chronic food shortage. The problem can be severe among young children, pregnant and lactating mothers, and elderly persons. How such persons or households would cope with this disorder and food security is a prediction beyond control of most researchers at the moment (Igulot 2001).

#### 2.3 General Issues on Food Insecurity

Food security as an issue, gained prominence in the 1970's and has since been a topic of considerable attention. Although the concept of food security is complex to understand, different scholars and agencies have put forward several definitions.

FAO (2003) defines food security as a situation when all people at all times have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life,

USDA (2003) puts forward the same view and proceeds further to say, food security includes at minimum the ready availability of nutritionally adequate and safe foods, and

an assured ability to acquire acceptable foods in socially acceptable ways (that is without resorting to emergency food supplies, scavenging, stealing, or other dubious coping strategies).

However, Maxwell and Frankenberger (1992), consider food insecurity as an issue of aggregate supply at the international market. In 1979, the world food program report conceptualized food security by equating it with an "assurance of supplies and a balanced supply-demand situation of stable foods in the international market".

According to World Bank (1979), increased food production in the developing countries would be the basis on which to build their food security. Although this meant that monitoring by Famine Early Warning Systems (FEWS) for food insecurity was to focus on the availability of food in the world market place and on food production systems of developing countries, global food availability does not ensure food security to any particular country because of limitations related to access to the available surpluses elsewhere (Buchanan-smith, and Davies, 1995).

Furthermore, the global approach to food security would have more meaning if legal commitments of the United Nations (UN) such as the Universal Declaration of the Human Rights (1948), which accepts the "right to adequate standard of living", including food; the International Covenant on Economic, Social and Cultural Rights (1996) which calls for "an equitable distribution of world food supplies in relation to need", and the Universal Declaration on the Eradication of Hunger and Malnutrition in (1974), which declares that "every man, woman and child has an inalienable right to be free from hunger and malnutrition".

According to Maxwell and Frankenberger (1992), although each of these tenets suggest implicitly or explicitly the distribution of world food to the needy, and members accepted these declarations, responding to food needs of other countries has been left to the discretion of individual surplus-producing countries since the UN has no power to enforce such declarations (Maxwell and Frankenberger (1992) This implies that a global conception of food security does not guarantee food security at either national or household level. Due to the above situation, the debate on food security shifted to the national level during the 1980s and it was also noted that an increase in food production

itself does not guarantee food security.

According to Von Brian and Pandya-Lorch (1992), availability of food at the national level is but one factor for food security. In trying to work out a food balance sheet for a given country, supporters of this idea proposed that if food availability was more or less equal to the food needs of the country's population in general, then that country was food secure.

Given this perspective, the basis of famine early warning would then be the monitoring of production at the national level without taking into consideration other important and relevant social, political and cultural factors (Ministry of Animal and Fisheries 1993).

The assumption underlying this perspective was that whatever food was produced in the country would be evenly distributed to each region and household. However, this has not been the case as those who failed to produce enough food needed to access the surplus food via the market which is highly dependent on their purchasing power. To make matters worse, in poor countries like Uganda, many people do not have the necessary purchasing power. National governments too, often lack the necessary financial resources to buy the surplus food and distribute it to the "haveless" and "have-nots". Thus, it was concluded that food availability at the national level would not provide food entitlement to households and individuals (Clay 1988)

Subsequently, the debate on food security narrowed down to the household level in the late 1980s. According to Maxwell and Frankenberger (1992), household food security was then defined as "access to adequate food by households over time". This implied that each member of the household was secure, if the household in general had access to food. The assumption was that household members' strong family ties would ensure that each member equally shared the food. And that when households generated surplus over and above their basic food requirement, the excess resources would be diverted into assets which could then be liquidated during a food crisis (Swift, 1989). The perspective also assumed an intact household where members jointly maximized some collectively owned resources and focus famine Early Warning Systems (FEWS) was therefore focused on identifying inadequacy of food at household level (Becker 1981).

### 2.4 How food shortages can be mitigated

The 1990's discussion on food security focused more on poverty reduction, sustainability, and livelihood strategies (Carney, 1998.) Under this approach, more emphasis has been placed on intra-household issues where identification of survival strategies in the livelihoods of the food insecure are given due attention. As was also reported by Ellis (1999), the basis of this is household assets, human capital, as well as financial and social capital that constitute a checklist by which constraints on livelihood success can be prioritized for action to remove them and the links between them.

Although, this approach is multidimensional and seeks among other things to incorporate the local conditions and insights of the concerned the International Monetary Fund and World Bank and other donor agencies have influenced developing countries to embrace Social Adjustment Programs (SAPs) as a means of halting the slumping economic conditions in these countries. As a result, Uganda unexceptionally embarked on this exercise and has been observed by the WB (1993) that like most other committed countries, Uganda succeeded in achieving the SAP and ERP objective of arresting and reversing declining economic growth (WB 1993). However, according to Igulot (2001), concerns and research should be redirected to provide answers to unanswered questions pertaining to the wider social, economic and political environment in which the households, in general, and the individuals in particular operate and yet influence the sufficiency, access, entitlement, and security to food.

According to USAID (2003), several key steps to increasing agricultural productivity which would in turn be a key to increasing rural income and reducing food insecurity are; boosting agriculture, science and technology, improving Security, property rights and access to finance, enhancing human capital through education and improved health, conflict prevention and resolution mechanisms, democracy and governance based on principles of accountability and transparency in public institutions as well as the rule of law would need to be implemented or reinforced in many rural areas of developing countries.

According Paul Dorash is also concerned with the rise in international cereal prices in 2007 and 2008 had a profound impact on the food security of countries in this area but

cautions against over —reaction with policies that ultimately slow economic growth and inhibit poverty reduction, instead, he advacates the accumulation of national stocks to prevent very large price increases reliance on international trade to limit the need for government interventions in most years, promotion of domestic agriculture and targeted safety net programmes for poor.

#### 2.5 Coping strategies to food insecurity

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#### **CHAPTER THREE**

#### METHODOLOGY

#### 3.0 Introduction

This chapter discusses how the research study will be carried, sample participants, sample size, research instruments, sources of data and how data will be analyzed.

#### 3.2 Research design

This method of research will be carried endebess division. Response will involve a transect walk through the villages during which, questionnaires will be administered to those who know how to read and write and direct interviews will be conducted to those who cannot not read and write. Individual and group discussions will also be held together with some key/ prominent informants such as the Religious leaders, women groups and civil servants.

## 3.3 Research Population

According to Census Population conducted in 2009, Endebess division has a relatively high population of about 35025 people comprising of 17,000 males and 18,025 females (Table 3.1). The main economic activity of the people is subsistence agriculture where crops are grown and animals kept. Some of the crops grown include maize, potatoes, finger millet, sorghum, cassava, cow peas, sweet potatoes, Soya beans, and beans

Table 3.1 The Population Structure of Endebess Division by Sex

Sub location	Male	female	Sub total
Chorlim	4039	4428	8467
Kaibei	3903	4158	8061
Mubere	5488	5783	11271
Matumbei	3570	3683	7253
Total	17000	18025	35025

Source: Census Report 2009.

#### 3.4 Sample Size

The respondents will be randomly selected and categorized. The researcher will use a target population of 381 respondents and they will be comprised of both sexes but

different marital status and age groups The study will intend to use 381 respondents as the best representative sample to give relevant information in the attachment area comprising of core stakeholders who may have the detail of the problem under investigation.

# 3.5 Sampling Procedure

Endebess division in Trans-zoia County will be purposively selected for this study because most of the people in the area are farmers and derive much of their livelihood from agriculture. Data will be collected from all the four sub locations (Chorlim, Kaibei, Mubere and Matumbei) that make up Endebess division. The number of respondents selected from each sub location vary depending on the size of the sub location and its accessibility.

**Table 3.2 Showing Sample Composition** 

Status of	cholin	kaibei	mubere	Matumbei
respondent				
Household heads	30	40	45	18
Women between 20 to 30 years	20	25	30	24
Men between 25- 35 year	15	20	34	22
Community leaders	10	15	18	15
Total	75	100	127	79

#### 3.6.0 Research Instruments

#### 3.6.1 Questionnaires

A set of questions will aim at generating the required information for the study will be designed, pre-tested and edited to improve their reliability and validity. After approval by the supervisor, questions will be printed on paper and then administered to the respondents of different households that will be sampled for the study. The instrument will be chosen since it will facilitate easy understanding to the respondents to give relevant data.

#### 3.6.2 Observation

This will be mostly effective during the transect walk through the villages. Most of the information will also be obtained on sight. This method will be preferred because it provide first hand information seen on the sight. It will also help to relate information that respondents will provide in the questionnaires and what they were actually doing.

#### 3.6.3 Focused Group Discussions

The Focused Group Discussions will be used mainly for assessing the respondent's level of awareness on food insecurity. Three focused group discussions will be conducted differently, one with women, and another with men and the other with both men and women. This method will be appropriate because it will enable collection of comprehensive information which otherwise will be difficult to get using other methods.

#### 3.6.4 Interview

The study will be conducted using interviews in order to collect data. The researcher will use this instrument on women with the help of research assistant who will help in translating the words into local languages in order to facilitate easy understanding.

#### 3.7 Sources of Data Collection

The study will conducted using the primary and secondary sources of data

#### 3.7.0 Primary Sources

The primary source of data will include questionnaires, focus, group discussion, and

interviews. This will enable the researcher to collect information from the respondents on food insecurity.

#### 3.7.1 Secondary Sources

The secondary sources to use will include magazine, newspapers, journals, and other literature to examine the impacts of food insecurity among the residents of Endebess division.

# 3.8 Data analysis

Data were edited on a daily basis to ensure that all responses were complete and consistent. The information on the questionnaires will be coded and entered into a computer program (The statistical packages for social scientists-SPSS) and will be summarized into graphs, pie-charts, tables of frequencies and percentages. Further analysis will also be carried out on relevant statistical tests on the factors responsible for the prevalence of food insecurity in the area.

#### 3.9 Ethical Consideration

The researcher will get an introduction letter from the University management together with the University identity card. There after an authority letter from the District Officer (DO) in Endebess division will be obtained and given to research assistant. This will be done to avoid the questioning from the local authorities and respondents with the help of councillors, village elders and the assistant chiefs. The respondents will also be assured of their confidentiality.

#### **CHAPTER FOUR**

#### PRESENTATION AND ANALYSIS OF DATA

#### 4.0 Introduction

This chapter discusses the socio-economic and demographic characteristic of the respondents, source of income among the people of Endebess, causes of food shortages and low yields, the problems experienced during storage, food insecurity coping strategies and the respondents opinion on how to mitigate food shortages in Endebess division.

Socio- Economic and Demographic Characteristics of the Respondents

The socio- economic and demographic characteristics of the respondents are presented in Table 4.1 in this study where 70% of the respondents were males and 30% were females. 40% of the respondents were aged between 30-39 years, 33.3% were aged, between 20-29 years, 10% and 16.7% of the respondents were aged between , 40-49 and 50 years and above respectively. About 33.3% of the respondents had attained primary education, 36.7% secondary education, and 30% had attained tertiary education level. Majority of the respondents (56.7%) were married, 23.3% were single and only 20% had divorced. About 67% of the respondents were subsistence farmers, 20% were civil servants and 10% were businessmen.

Fifty percent of the respondents owned land between 2-5ha, 36.7% owned 6-10ha of land and only 13.3% of the respondents owned more than 10ha of land. Sixty percent of the respondents acquired land through inheritance from parents (customary), 23.3% and 16.7% of the respondents acquired land through leasing and free hold respectively. While 68% of the respondents had their land under crop cultivation, only 8% of the respondents had their land under fallow. This is shown in Table 4.1 below.

Table 4.1 Socioeconomic and Demographic Characteristics of the Respondents

Characteristics	Number of respondents	%
Sex		#A A
Male	21	70.0
Female	09	30.0
Age		
20-29	10	33.3
30-39	12	40.0
40-49	03	10.0
50+	05	16.7
Level of education		
Primary	11	33.3
Secondary	10	36.7
Tertiary	09	30.0
Marital status		
Single	07	23.3
Married	17	56.7
Widowed	06	20.0
Occupation		
Farmer	20	66.7
Business man	03	10.0
Civil servant	06	20.0
Others	01	03.3
Land size		
1-5	15	50.0
6-10	11	36.7
10+	04	13.3
Land tenure		
Customary	18	60.0
Lease hold	07	23.3
Free hold	05	16.7
Uses of land		****
Crops	21	68.0
Fallow	02	08.0
Forestry	01	02.0
Wetlands	06	20.0

Sources of Income to the People of Endebess Division.

Over 80% of the respondents reported farming as their major source of income, 40% reportedly obtained their income from business, and 33% and 16.7% earned their incomes from civil services and poultry rearing respectively. Brick making, hunting and charcoal burning were also other sources of income reported by minority respondents (Table 4.2).

 Table 4.2
 Sources of Income for the respondents

Frequency	%
35	33.3
22	15.0
15	12.7
10	10.3
8	10.6
5	14.4
5	7.7
100	100
	35 22 15 10 8 5

# 4.2 Causes of Food Shortage in Endebess Division.

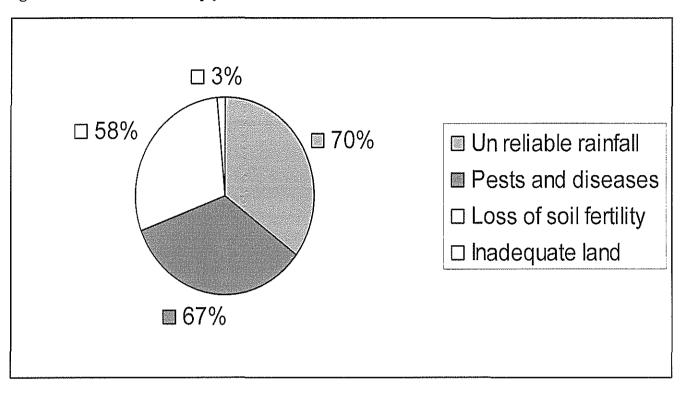
Factors identified by the respondents as being responsible for food shortages in the area ranged from physical conditions to socio- economic ones. Sixty eight percent of the respondents reported bad weather as being the major cause of food shortages in the area. Other causes of food shortages reported in the area were sale of food to pay school fees, big family size and low levels of incomes among farmers reported by 52.6%, 36.8% and 31.6% of the respondents respectively (Table 4.4). Besides, inadequate labor, poor health conditions, poor storage facilities and low fertility of land were also reported as causing food shortages in the area.

 Table 4.4
 Causes of Food Shortages in Endebess Division

Cause	Frequency	%
Unreliable rainfall	20	18.0
Selling of food	17	13.0
Big family size	15	13.0
Poverty (low income levels)	12	12.0
Inadequate labor	10	12.0
Poor health conditions	07	10.0
Poor storage facilities	06	8.0
Inadequate land	05	7.0
Pests and diseases	05	5.0
Loss of soil fertility	03	3.0
Total	100	100

Despite the existence of many crop varieties in Endebess division such as maize, beans, potatoes, cow peas and many others, farmers still complained of low yields due to unreliable rainfall, occurrence of pests and diseases, loss of soil fertility and land shortage reported by 70%, 67%, 58% and 3% of respondents respectively as shown in Fig. 4.2 below.

Figure 4.1 Causes of low crop yield in Endebes division



# 4.3 Problems Experienced When Storing Food

The major food storage problem reported by over 96% of the respondents was destruction by odents (mostly rats) followed by weevils and cold floors reported by 60% and 26% respondents respectively. Other storage constraints were fire out breaks, thieves, inadequate storage facilities and termites Fig. 4.3below.

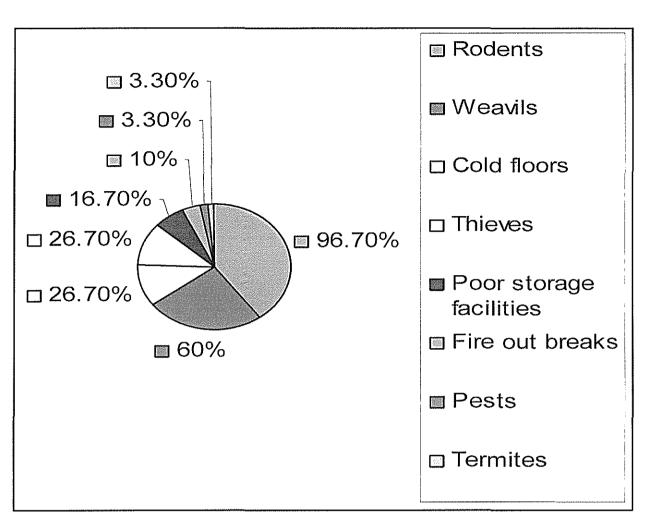


Figure 4.2 Problems experienced when storing food

# 4.5 Household Food Insecurity Coping Strategies

While 87% of the respondents reported that they buy food from those who are not affected by food insecurity, 39.1% said that they always borrowed food from relatives neighbors and friends and 21.7% reportedly always resort to causal labor in exchange of food stuffs besides fishing. Other coping strategies reported by the respondents include engaging in the sale **chang'aa** to get some money for buying food, hunting, food ratio reduction and seeking aid from government and churches (Table 4.5).

 Table 4.5
 Coping strategies Employed by the rural households of Endebes Division

Strategies	Number of respondents	%
Buying food	30	30.0
3orrowing food	20	14.0
Casual labor	13	10.0
Fishing	11	10.0
Selling chang'aa	10	7.0
Relief aid	06	6.0
Food ratio reduction	05	6.0
Hunting	05	6.0
Fotal	100	100

# 1.4 Strategies Recommended by the Respondents to Mitigate Food Shortage in Endebes Division.

Four main strategies were proposed by respondents to minimize food shortages in the area. Ninety percent of the respondents proposed that government should intervene in promoting food production through modernization of agriculture at the grass root level, and 48.2% of the espondents suggested that there should be improvement in market prices for agricultural products so as to restrict farmers from selling food. While 65% of the respondents suggested that government should promote Universal Secondary Education (USE) to reduce sale of food to neet expenses for school fees, only 16.7% of the respondents reported that diversification of agriculture rather than monopolizing crop production would facilitate the process involved in alleviation of food shortages in the area (Table 4.7).

Table 4.7 Strategies Recommended By the Respondents to Minimize Food Insecurity

Strategy	Frequency	%
Modernization of agriculture	33	30.7
Promotion of USE	30	31.3
Improving market prices	27	26.4
Diversification of agriculture	10	11.6
Total	100	100

#### CHAPTER FIVE

### SUMMARY CONLUSIONS AND RECOMMENDATIONS.

## 5.0 Introduction.

This chapter discusses the summary conclusions and the recommendations to food shortages in Endebess division

### 5.1 Summary

The study used a profile of respondents of both sexes and varying age groups according to the profile of male 70% and 30% female, 40% of the respondents were aged between 30-39 yrs, 33.3% were aged between 40-49 and 50 years, about 33.3% of the respondents had attained primary education 36.7% secondary education and 30% tertiary education level and about 56.7 married and 23.3% single while 20% divorced.

According to the purpose of these study is to analyze the impact food insecurity among the residents of Endebess Division. Researcher will come up with strategies to solve the problem, affecting the people by involving the government and NGO's who came with appropriate policies of reducing food insecurity among the residents of Endebess and also finding way to address the problem of food shortages.

Basing on the study findings, the causes of food shortages in the region as unreliable rainfall, low income levels, poor health conditions, poor shortage facilities, inadequate land, pests and diseases and loss of soil fertility.

### 5.2 Conclusions

In general, the people of Endebess division are food insecure with over 45% of the respondents reportedly having suffered from food insecurity. The major causes of food insecurity in the area ranged from general poverty, through sale of food to meet human basic needs, inadequate labor, and unreliable rainfall to poor health.

In spite of the existence of food insecurity in this area, farmers have always coped with it by employing strategies like buying and borrowing food during periods of food shortages, engaging in casual labor in exchange of food although these strategies have been constrained by low income levels among farmers, ill health and the unreliability of some of these strategies.

The respondents suggested that modernization of agriculture by government, introduction of Universal Secondary Education to minimize excessive sale of food and improvement in market conditions as well as diversifying agriculture should be promoted to alleviate the problem of food shortage.

### 5.3 Recommendations

- Government should Endeavour to end the armed conflict in the neighboring districts to enable the affected people of Endebess to regain their cattle backed economy and to enable the internally displaced people to return home or find new livelihood. Restocking would be one way of reducing poverty as well as inadequate labour which are constraints to food security in Endebess. In addition, government should use public resources transparently and efficiently to eradicate poverty. It should promote protection of environment and natural resources on which the poor depend.
- Government should effectively implement its policies on Universal Secondary Education to reduce excessive sale of food by the respondents in order to pay school fees especially at the secondary level.
- The local government should aim at strengthening modern agriculture to enable farmers to benefit from it and should emphasize social infrastructure development especially rural roads and hospitals to reduce the rate of illness that affects food production.
- The local community of Endebess division should cooperate with the policy makers, Non governmental organizations, community based organizations in order to reduce the problem of food insecurity in the area.
- According to USAID (2003), several key steps to increasing agricultural productivity which would in turn be a key to increasing rural income and reducing food insecurity are boosting agriculture, science and technology, improving Security, property rights and access to finance, enhancing human capital through education and improved health, conflict prevention and resolution mechanisms, democracy and governance based on principles of accountability and transparency in public institutions as well as the rule of law would need to be implemented or reinforced in many rural areas of developing countries.
- In addition, the government should ensure that security is restored in Trans-zoia and in the neighboring districts so as to reduce insecurity problems such as those caused by the Saboti Land Defence Forces (SLDF) during the post election violence of 2007/2008.s

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## APPENDIX I

## **QUESTIONNAIRE**

This questionnaire is designed to collect information on analysis of food insecurity and coping strategies of rural households during periods of food shortages. It is a partial fulfillment of the requirements for the award of a degree. The purpose of the research is therefore purely academic and any information given will be treated confidentially.

## TO BE FILLED BY THE HOUSEHOLD HEAD

## **DEMOGRAPHIC CHARACTERISTICS**

	Female ()
1.4	marital status single ( ) married ( ) widowed ( ) divorced ( ) separated ( )
1.5	Age 20-29 () 30-39 () 40- 49 () 50+
1.6	Number of children
1.7	Number of people in the household

### PART TWO: SOCIO-ECONOMIC PROFILE

?.1 level of education
 Primary ()
 Secondary ()
 Tertiary ()
 Others ()
?.2 Occupations
 Farmer ()
 Business man ()
 Civil servant ()

Others ()

1.1 sex Male ()

# 2.3 Incomes per annum

# Sources of income

Activities / sources	Amount obtained per year
2.4 size of land owned	
Less than 1.0 ha ()	
1-5 ha ( )	
6-10 ha ( )	
10+()	
2.5 land tenure system under which land is o	wned
Customary () free hold () lease () other	s (specify)
2.6 crops under	
Crops ()	
Fallow ( )	
Forestry ()	
Wetlands ( )	
2.7 Which food crops do you grow?	
	•••••••••••

2.6 How much out put do you obtain per crop?		
Crop	Out put	
2.9 Which food crops do y	ou like most?	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		•••
2.10 how do you store food	d?	
		• • •
		• • •
,		•••
2.11 How long does food t	take to get finished before the next harvest?	
		•••
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•••
,		
2.12 What problems do you	ou experience when storing food?	
		•••
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
2.13 house hold belongings	s	
•••••		•••
		•••
		••••

# PART THREE: LEVEL OF AWARENESS OF FOOD INSECURITY

3.1 do you have enough food to feed your family
Yes() No()
If no, what are the causes of food shortages in your household?
3.2 How do you obtain extra food to feed your family during food shortages?
3.3 What economic activities do you engage during food shortages?
3.4 What steps do you take when dealing with food shortages?
***************************************
3.5 What do you recommend could be done to deal with food shortages?

THANKS FOR YOUR COOPERATION, GOD BLESS YOU.

## APPENDIX II

## RESEARCH QUESTIONS

- 1) How do you obtain food?
- 2) Do you have enough food to feed your family?
- 3) What are the signs of a house hold experiencing food shortages?
- 4) What are the causes of food shortages in your family?
- 5) How do you cope during food shortages?
- 6) How does the husband-wife relationship affect food availability in your house hold?
- 7) What are the livelihood strategies that you engage in during food shortages?
- 8) How do these livelihood strategies address food shortages in your house hold?
- 9) How did people ensure food sufficiency in the past?
- 10) What policies are you aware of that are related to food security issues?
- 11) What do you recommend to be done to avoid food shortages in your area?

### APPENDIX III

# QUESTIONNAIRE FOR THE HOUSEHOLD HEADS

This questionnaire is designed to collect information on the impacts of food insecurity among the residents of Endebes division. It is a partial fulfillment of the requirements for the award of a pachelor's degree in development studies at Kampala International University. The purpose of the research is therefore purely academic and any information given will be treated with confidentially.

Γick appropriately.

## DEMOGRAPHIC CHARACTERISTICS

I. Sex Male ()
Female ()
2 marital status
Single () married () widowed () divorced () separated ()
3 Age 20-29 () 30-39 () 40- 49 () 50+
Number of children
5 Number of people in the household
PART TWO: SOCIO-ECONOMIC PROFILE
5 level of education
Primary ( )
Secondary ()
Tertiary ()
Others ()
7 Occupations
Farmer ()
Business man ( )
Civil servant ()
Others ( )
3 Incomes per annum

# Sources of income

Activities	Income per Annum

) -: Cl d d	
each size of land owned	
Less than 1.0 ha ()	
1-5 ha ( )	
6-10 ha ( )	
10+()	
0 land tenure system under which land is owner	ed
Customary () free hold () lease () others (s	pecify)
12 crops under	
Crops ()	
Fallow ( )	
Forestry ()	
Wetlands ()	
13 Which food crops do you grow?	

?
Output
••••••
•••••
efore the next harvest?
oring food?
•••••••••••••••••••••••
••••••
••••••••••••••••••••••••

# ART THREE: LEVEL OF AWARENESS OF FOOD INSECURITY

To you have enough food to feed your family?
Yes() No()
no, what are the causes of food shortages in your household?
How do you obtain extra food to feed your family during food shortages?
What economic activities do you engage during food shortages?
· · · · · · · · · · · · · · · · · · ·
•••••••••••••••••••••••••••••••••••••••
What steps do you take when dealing with food shortages?
What do you recommend could be done to deal with food shortages?