

ST. JOHN'S UNIVERSITY OF TANZANIA



MASTER OF ARTS IN COMMUNITY DEVELOPMENT

RESEARCH TITLE: IMPACTS OF FOOD INSECURITY ON WOMEN'S
PARTICIPATION IN INCOME GENERATING ACTIVITIES IN RURAL AREAS
IN TANZANIA.

A CASE OF WOMEN AT HOUSEHOLD LEVEL IN CHAMWINO, DODOMA.

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE MASTERS OF ARTS IN COMMUNITY
DEVELOPMENT OF ST. JOHN'S UNIVERSITY OF TANZANIA.

RESEARCHER: HAPPINESS M MAHANGA

2016-2017

COPYRIGHT

This dissertation is copyright material protected, it is prohibited to reproduce by any means in full or in part except for short extract in fair dealing, for research or private study, critical scholarly review or discourse with an acknowledgment, without written permission of School of Development Studies on behalf of both the author and the St John's University of Tanzania.

CERTIFICATION

I, the undersigned, certify that I have read and hereby recommend for acceptance by the St John's University, a thesis entitled *"The impacts of Food Insecurity on women in income generating activities in rural areas in Tanzania. A case of women at household level in Tanzania.*

Signature

Name

Supervisor

DECLARATION

I Happiness .M. Mahanga, A masters student undertaking Master's degree of community development under the school of development studies. I declare that, for the best of my knowledge this research report is my own original work. It has not been presented in any Higher Learning Institution for similar or any other degree award before now.

Full name.....

Reg. No.....

Signature

Date.....

DEDICATION

To my parents Mr. and Mrs. Mahanga for laying down the foundation for my education, the

Work is also dedicated to my late uncle Dr, Didas Masaburi who passed away while I was undertaking this study. May Almighty Father rest his soul in eternal piece, Amen.

TABLE OF CONTENTS

COPYRIGHT	i
CERTIFICATION	ii
DECLARATION	iii
DEDICATION	iv
ACKNOWLEDGEMENTS	viii
ABBREVIATIONS.....	ix
ABSTRACT	x
CHAPTER ONE.....	1
INTRODUCTION	1
1.1 Overview.....	1
1.2 Background of the study.....	2
1.3 Statement of the problem	7
1.4 Research Objectives of the study.....	11
1.4.1 General Objectives.....	12
1.4.2 Specific Objectives.....	12
1.5 Research Questions	12
1.6 Significance of the study	12
1.7 Definition of the terms.....	13
1.7.1 Food Security	13
1.7.2 Food Insecurity.....	15
1.7.3 Household level.....	15
1.8 Chapter Summary	19
CHAPTER TWO	20
LITERATURE REVIEW	20
2.1 Chapter Overview.....	20
2.2 Food Insecurity	20
2.2.1 Magnitude of Food Insecurity in Tanzania	26
2.2.2 Factors contributing to Food Insecurity in Tanzania	27
2.2.3 Obstacles of dealing with Food Insecurity in Tanzania	33

2.2.4 Women and Food Security	39
CHAPTER THREE	58
RESEARCH METHODOLOGY	58
3.1 Chapter Overview	58
3.2 Research design	58
3.3 Study Area	58
3.4 Sampling Methods	59
3.4.1 Sampling procedures	59
3.4.2 Sample Size	60
3.5 Data collection procedures	60
3.5.1 Focus Group discussion was one of the data collection procedures used to collect information.	60
3.5.2 Observation	61
3.6 Data Analysis	61
3.7 Validity and Reliability	62
3.8 Ethical Consideration	63
3.9 Limitation of the study	64
3.10 Chapter Summary	65
CHAPTER FOUR	66
RESULTS AND DISCUSSION	66
4.1 Chapter Overview	66
4.2 Women's perceptions on the impacts of food insecurity in income generating activities... ..	66
4.2 Women's knowledge on the factors influencing food insecurity at household level	74
4.3 What income generating activities done by the women in Dabalo and Iringa Mvumi?	80
4.3 Women awareness on the effects of food insecurity on their income generating activities in rural areas in Dabalo and Iringa Mvumi.	80
4.4 key informants awareness on the impacts of food insecurity on women on income generating activities in rural communities in Dabalo and Iringa Mvumi.	82
CHAPTER SUMMARY	84

CHAPTER FIVE	85
CONCLUSIONS AND RECOMMENDATIONS	85
5.0 Chapter overview.....	85
5.1 Conclusion.....	85
5.2 Recommendations.....	86
LIST OF REFERENCES.....	92
APPENDIX A: FOCUS GROUP DISCUSSION: CHECKLIST GUIDELINES.....	96
APPENDIX B: CHECKLIST FOR THE KEY INFORMANTS.....	97
APPENDIX C: CONSENT FORM	98

ACKNOWLEDGEMENTS

I thank the Almighty God for his protection, blessings and bringing me up to this moment. I am as well glad to express my sincere gratitude to my supervisor DR, Geoffrey Kiangi whose valuable guidance and constructive criticism as well as his tireless efforts in giving good advices throughout this study have made the completion of this work possible. Furthermore, I would like to extend my gratitude to the University which provided materials from the library for me to undertake this study. I also thank the Director Dodoma District Council for the support. I also thank to DALDO office Chamwino district for his supportive assistance during field work. My sincere thanks also go to Mr. A. Kibaya, G. Mnyamale and M. Mtungi for their assistance during data collection. I also thank Mr. A. Jeremiah and G. Dugo for organizing various activities during data collection at Iringa Mvumi and Chilonwa wards. My appreciation also goes to Batuli Seif and Esther Khumbe for their support and encouragement and Prof Kopoka for the support on critical ideas to complete this work. More special thank also go to the women in Dabalo and Iringa Mvumi and the village leaders as well as other individuals consulted during the study, without whom this study would not have been successful. I express my special thanks to my parents Mr and Mrs Milton .Makongoro. Mahanga for their prayers, support and encouragement throughout the study.

ABBREVIATIONS

AIDS	-	Acquired Immuno Deficiency Syndrome
FAO	-	Food and Agriculture Organization
HIV	-	Human Immunio Virus
LIFT	-	Livelihood and Food Security Technical Assistance
SADC	-	South Africa Development Cooperation
TADB	-	Tanzania Agriculture development Bank
TAFSIP	-	Tanzania Agriculture and Food Security Investment Plan
UN	-	United Nations
UNDP	-	United Nations Development Program
URT	-	United Republic Of Tanzania
US	-	United State
USA	-	United State of America
USAID -		United States Agriculture and Development
WB	-	World Bank
WEF	-	Would Economic form
WHO	-	World Health Organization

ABSTRACT

Food insecurity has been one of the major calamities that faces Tanzania as one of the developing countries. Food insecurity is not only the lack of food but also goes far beyond availability, accessibility, nutritious, at all times, at all places. The rural communities in Tanzania are mostly affected by the presence of food insecurity to a large extent. Food insecurity not only affects the affects in all sectors politically, socially and economically. This study is about the impacts of food insecurity on women in income generating activities in rural communities at the household level in Chamwino. In particular, it focuses on individual women entrepreneur, housewives and women who do not have strong production and marketing advantages and links. This study, therefore tries to show how food insecurity impacts women on income generating activities and to draw solutions on the way to solve the problem so that rural areas, urban and the nation at large to be safe from food insecurity to a large extent.

Key Words: Food Security, Food Insecurity, Household, Poverty, income, Development and Participation

CHAPTER ONE

INTRODUCTION

1.1 Overview

This is a study on the impacts of food insecurity on women's participation in income generating activities in rural areas in Tanzania. Tanzania as one of the developing countries faces the calamity of food insecurity that affects the country in different sectors politically, socially and economically to a large extent. There are lot of studies and researches have been conducted in Tanzania on food security and insecurity but with evidence still food insecurity affects the development of the country from the household level to the national level to a large extent. The rural communities in Tanzania are largely affected by food insecurity especially at the household level despite of the agricultural activities taking place and also the efforts of the Tanzanian government on eradication of food insecurity.

Food insecurity as it is the most bad and hard situation facing the people in rural communities in Tanzania there comes the purpose of the study that is to assess on the impacts of food insecurity on women's generating activities in rural areas in Tanzania rural specifically on women at household level in Chamwino district and to draw and give possible solutions and ways to overcome this problem of food insecurity in Tanzania.

1.2 Background of the study

Food insecurity has been one of the contemporary issues facing most of the African countries such as Tanzania to the present day. On clear compelling example of vulnerability in Africa is food insecurity not having access to the quality, quantity and diversity of food necessary for an active and healthy life (Barret & Sahn, 2001). Food security became well known in the 1970s and has been a topic of considerable attention and mostly concerned with food supply in the form of grain stocks applied at regional or district levels (Kavishe and Mushi, 1993). According to According to FAO (2003) argues that, in 1999 to 2001 an estimated 798 million people were undernourished in developing world as a whole. Statistics show that the number of undernourished people in the developing world is no longer decreasing. During the first half of the 1990s, the number of chronically hungry people decreased by 37 million. In 1995 to 1997 however, the number has increased by over 18 million. This means that the World Food Summit goal of reducing the number of undernourished people by half the year 2015 can now be reached only if annual reductions can be accelerated to 26 million per year. The anticipated decline is more than 12 times the actual pace of reduction per year which at the moment stands at 2.1 million per year to date (FAO, 2015).

In Africa, most of the people engaging in Agriculture are the women compared to men to a high percent and also in the case of food, women in rural communities are responsible for food provision in the family or at the household level. In the case of Tanzania in Chamwino most women engage themselves in agriculture and few with small business that in most cases does not satisfy their daily basic need specifically food. It is undeniable that women in Africa are the

backbone of agricultural production. Women account for 70% of the labour, 60% of the production, and 80% of food crop produced. However, their long term benefits from the sector remain vague. Role of women in agricultural production is largely misrepresented due to myths and sheer neglect to accounting for the value of women's contribution. Women remain invisible to the eyes of most male practitioners, due to cultural and social constraints. Current gender blindness excludes women (Mhina, 1994). Tanzania's Agriculture Policy acknowledges the fact that women perform most of the tasks in crop farming.

Tanzania is not considered a food-deficit country, normally producing over most of her food requirement, high post-harvest losses, inefficient distribution systems and low incomes make food access a major concern for many rural households especially in the semi-arid of central and northern Tanzania like Chamwino district in Dodoma region which is in central Tanzania (Oforo, 2017). Tanzania agriculture still has numerous weakness including in the area of rural infrastructure (feeder roads, markets, storage facilities and many other), technology and agro-processing(URT,1997). Agricultural system in Tanzania has been largely rain dependent and highly vulnerable to climatic fluctuations , especially the semi-arid and arid areas of central and northern Tanzania. Pitiabale access to water and declining soil fertility are the main limiting factors to agricultural production. A large part of the country is considered semi-arid. Weather patterns have of recent deviated greatly from traditional seasons, and remain to the best part unpredictable. Irrigated land makes up only 4.3 % of the total area. Nevertheless, agriculture accounts for 89% of water used in the country, and contributes not less than 50% of the

GDP. Eighty percent of the agricultural production in Tanzania is undertaken by small farmers using simple basic technology (URT,1997).

Food insecurity in Tanzania has increased over the recent decade. Number of undernourished people has also increased from 23% to 40% in the past decade, with the average daily per capita calorie supply at 2'054 against the world average of 2'709. Severe underweight afflicts nearly 27% of the under five children, with 42% being under their rightful height. Production of staples in the northern regions of Tanzania has been largely below average, with maize production being 69% under expectations. Cereal production in 1998 was at 3.8 million tonnes (example 0.14 kilogrammes per capita), and the average yield per hectare was 1.21 tonnes. Yields have declined by 6.7% in the past ten years (Mhina, 2004).

Although overall food production has increased by 17% since 1981, per capita food production has fallen by 19.7% due to a faster population growth rate. For a successive number of years the country has experienced drought induced food deficits. Household food reserves and coping mechanisms have been greatly affected, with a large proportion of rural households experiencing dire straits. Coping mechanisms at the household level are reduced to a few options such as: reduction on calorific intake; migration to other areas; and, sale of productive assets. More than fifty per cent of the population in Tanzania lives below the national poverty line (example below \$1 a day). The bimodal and unimodal rainfall patterns in the northern and coastal areas play a huge role in this demise. In June-July 2003 food insecurity in Tanzania was diagnosed at 77'490 metric tonnes that have been affecting more than 2 million people (FAO, 2006).

According to a report by the URT, (2007), the 2002/03 farming season saw below average rainfall, with food crops falling between 30% and 50% in affected areas. However an assessment conducted by the “Food Security Information Team” in June 2003 in 52 districts, revealed that 70% of normal production was lost. The same URT, (2007) national food balance sheet for the 2003/04 period shows a gap of about 502’000 metric tonnes of grain (the net harvests for 2007 are estimated at 7.69 metric tonnes as compared to 8.57 million tonnes in the previous year). Furthermore URT, (2007), an assessment undertaken by the Ministry of Agriculture and Food Security in 72 districts showed that most households were to face food shortages due to the erratic rainfall patterns, until the June-September harvest in 2004. Food deficit of around 800’000 metric tonnes, or 10% of consumption requirements, was observed in a large number of districts during the 2002/2003 farming season. Price increases were the direct result of the deficit, with many poor households suffering. Sale of household maize reserves for cash to manage other household expenses aggravated household food insecurity in Tanzania (URT, 2007).

In Tanzania especially in rural areas, such as Chamwino district, women depend mostly in agriculture and small income generating activities (Oforo, 2017). Similarly poverty remains to be a , Since the attainment of the independence in 1961 Tanzanians, especially Women in rural areas, have been engaged on small scale agriculture in order to sustain their daily living at the household level (Oforo, 2017). Since the attainment of the independence in 1961, large part of food requirement is domestically produced. For the seasons with sufficient rainfall Tanzania has managed to produce sufficient food and sell

surplus to her neighbor countries. A food sufficient ration indicator shows that for the past four decade, the country has managed to have food sufficient ratio of between 88 and 111 per cent (WHO, 2012).

The government has put much emphasis on buying food domestically to enhance her National Food Reserve. The intention of the government is to have adequate reserve to supply food in the areas where there is insufficient food due to drought. According to National Food Reserve Agency (NFRA, 2013) the national food Reserve was 107,000 tons of maize in 2010. The Agency has continued with its roles of buying, reserving and supplying food in the areas where here is shortages dramatically. Agricultural crops which are grown in Chamwino district are those which do survive drought conditions prevailing in the area, like wheat, soghut, groundnut, sunflower, maize and grapevines. Apart from grapes, the rest of the crops produced in this district are for subsistence by local household living in the area only not as cash crops, leaving most local farmers poor and little to put in reserve hence leading to food insecurity in the area (Oforo, 2017).

The policy reads; "It is estimated that the ratio of males to females in the agricultural sector is 1:1.5. Women in Tanzania produce about 70% of the food crops and also bear substantial responsibilities for many aspects of export crops and livestock production. However, their access to productive resources (land, water, etc.) supportive services (marketing services, credit and labour saving facilities, etc.) and income arising from agricultural production is severely limited by social and traditional factors (FAO,2006)." In this case, since the old times and the social and traditional factors in Tanzania, the rural communities specifically Chamwino as the study is about food insecurity is

evident to be seen as a problem in the communities as agriculture is one the most important issue on eradication of food insecurity in Tanzania.

In addition to that, in rural communities in Chamwino the women have been engaging in other small business in generating income since then on selling of firewood and other small business like making the local beers. Due to the presence of absolute poverty in Chamwino the women also fails to develop their activities that enables them to sustain their daily living like food hence they face food insecurity to the present day in Chamwino (Oforo,2017).

1.3 Statement of the problem

Over 80% of the population in Tanzania lives in rural areas and the Economy depends on agriculture, the agricultural sector has been steady decline over the last decade or so. Declining agricultural production and increasing food shortages in part reflects this (FAO, 2012). Tanzania is at present experiencing a critical situation in terms of food security, accessibility and distribution. Once able to feed itself and import some food, since the1980s the country has become a net importer and hunger and malnutrition continue to be a critical issue (FAO, 2012).

The scarce exported agricultural products are marketed at very low price while the limited foreign exchange earnings occurring from such commodities are diverted from more important uses to pay for food imports (FAO, 2012). Security and self-sufficiency are therefore not related to food alone but to the general and pervasive problem of poverty, unequal distribution of income, weaker purchasing power and unfavorable terms of trade as well as the burden of external debt servicing (FAO, 2012).

Food insecurity in Tanzania is a serious problem and is widespread even when Tanzania experience bumper harvest. Despite people's involvement in small scale farming activities and also involvement in small business like still food insecurity remains to be a disaster on development in all ways, economically, socially and politically to a large extent (FAO, 2015).

However, little has been done in dealing with food insecurity through various policies and other strategies by the government and yet more outcomes due to food insecurity rise to the present Tanzania (URT, 2012). As Tanzania experiences the presence of severe food insecurity in places such as Chamwino people live in serious condition that affects their daily production to sustain their livelihood. Chamwino district has serious food shortage to the extent that families do not get adequate food all the time (Oforo, 2017). And also it reached a point in 2016 that famine severely affected the population in the district to the extent of forcing the majority to survive on roots and armyworms (Oforo, 2017). In Dabalo Ward some 80 kilometers from the district headquarters, the situation is more pathetic as most residents lament over serious scarcity of food. The prices of maize has catapulted drastically in a way that formerly a tin of maize was sold for TZS 12,000 but the same now goes for up to TZS 28,000 (Oforo, 2017).

In this sense, food insecurity affects women mostly as most of the food producers are women. Women are abandon with their men and left behind helpless wives and children on empty stomach and with no any assurance of getting daily meal, engages in agriculture, women cook, women takes care of the family in all sectors where by this makes them the victims of the circumstance . Through ongoing suffering of the women in Chamwino due to

food insecurity although there are things performed by the government and other organizations at large, still women faces food insecurity whereby it affects the empowerment of women socially, politically and economically. The government still fails to control the problem of food insecurity due to corruption, self-interest, poverty, ignorance and also lack of strong policies that would help in reducing the wide spread of food insecurity (LIFT, 2009). In this sense the problem of food insecurity stands to be a problem in the development of Tanzania as a country and also to women as the mother of the nation who contributes large percent of the income and the gross domestic program to a large extent (Oforo, 2017).

The Tanzanian government established various policies in agriculture example the Kilimo Kwanza, Kilimo UTI wamgongo and many other various policies that were enacted for the development of the agricultural sector. With the problem of food insecurity in Tanzania especially in the rural communities. Due to the stranding situation of food insecurity, Tanzania's Agriculture Policy acknowledges the fact that women perform most of the tasks in crop farming. The policy reads; *"It is estimated that the ratio of males to females in the agricultural sector is 1:1.5. Women in Tanzania produce about 70% of the food crops and also bear substantial responsibilities for many aspects of export crops and livestock production. However, their access to productive resources (land, water, etc.) supportive services (marketing services, credit and labour saving facilities, etc.) and income arising from agricultural production is severely limited by social and traditional factors (Mhina, 1997).*

In this case, the policies as stated above proves the presence of the problem of food insecurity that the gap between men and women with absence of

cooperation in the community due to social factors then women as the main producers, produces less that becomes adequate for the household level and hence severe food insecurity in the community that not only affects the social sector, but also the political and economic sector to a large extent.

The purpose of the study is to access the impactss of food insecurity on women's participation on income generating activities in rural areas in Tanzania using women at household level in Chamwino District as an example. Below is the figure 1 that shows the map of the study area Chamwino.

1.4.1 General Objectives

The general objective of the study is to assess the impacts of food insecurity on women's participation on income generating activities in rural areas in Tanzania. A case of women at household level in Chamwino district.

1.4.2 Specific Objectives

1.4.2.1 To investigate women's knowledge on the factors that influence food insecurity at their household level in chamwino.

1.4.2.2 To determine income generating activities carried out by women at household level in chamwino.

1.4.2.3 To explore women's awareness about the effects of food insecurity on their participation in income generating activities at household level in Chamwino.

1.5 Research Questions

- i. What are the women's perceptions or knowledge on the factors that influence food insecurity at their household level in chamwino?
- ii. What are the women's income generating activities at household level in chamwino?
- iii. What are the women's awareness about the effects of food insecurity on their participation in IGAs at household level in Chamwino?

1.6 Significance of the study

The study intends to reveal the impactss of food insecurity on women's participation on income generating activities in rural areas in Tanzania.

- i. It will help the government to establish policies that will help women as the main producers in rural areas by encouraging them through empowering in food production and other income generating activities in order sustain their daily living..
- ii. The findings may come with new measures that the government entities must know in maintaining food security at household level in the country.
- iii. The study will help on bringing about development in Tanzania at all sectors economically, socially and politically where by the impactss will be taken care of and the women will be encouraged on more production that will increase more income and surplus profit where by in one way or another adds up in the national income to a large extent..
- iv. In addition to that, the study was done to enable the researcher to fulfill the requirement for the degree of masters of community development of St. Johns University.

1.7 Definition of the terms

The terms that will be used frequently in the text are defined here to provide a common

Basis for conveying meaning. These include: food security and food insecurity and the key variables used in the study.

1.7.1 Food Security

Food security is essentially built on three pillars: food availability, food access, and food utilization. An individual must have access to sufficient food of the

right dietary mix (quality) at all times to be food secure. Those who never have sufficient quality food are chronically food insecure. Those whose access to an adequate diet is conditioned by seasonality are food insecure and are generally called seasonally food insecure. Individuals who normally have enough to eat but become food insecure in the face of disasters triggered by economic, climatic, and civil shocks (war and conflict) are transitorily food insecure. The “at all times” element of the food security definition makes risk and associated vulnerability an important element of the food security concept.

The definition of food security is often applied at varying levels of aggregation, despite its articulation at the individual level. The importance of a pillar depends on the level of aggregation being addressed. At a global level, the important pillar is food availability. Does global agricultural activity produce sufficient food to feed all the world’s inhabitants? The answer today is yes, but it may not be true in the future given the impacts of a growing world population, emerging plant and animal pests and diseases, declining soil productivity and environmental quality, increasing use of land for fuel rather than food, and lack of attention to agricultural research and development, among other factors (World Bank 2000)

Food security can be well referred as the process when all people at all times have physical and economic access to sufficient, safe and nutritious food for a healthy and active life” (WHO, 2002). The components of food security are: availability of food or the amount of food that actually exists (local production and other sources); people’s physical, economic and social access to food, and the stability of this access over time; the quality or nutritional adequacy of that food; and people’s ability to utilize this food, including the patterns of control

over who eats what and the physical ability to absorb nutrients. Generally, food security exists when all people at all time have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (WB, 1990).

1.7.2 Food Insecurity

Food insecurity is one of the contemporary issues facing most of the African countries such as Tanzania to the present day. On clear compelling example of vulnerability in Africa is food insecurity not having access to the quality, quantity and diversity of food necessary for an active and healthy life (Barret&Sahn 2001).According to world health organization (WHO), health is the state of complete physical, mental and social well-being and not merely the absence of disease.

Food insecurity can be well defined as a state in which consistent access to adequate food is limited by a lack of money and other resources at times during the year. There are three major pillars of food insecurity that are the availability, ensuring and adequate food supply to provide for the nutritional needs of the population, access, ensuring that incomes and food prices together maintain real purchasing power sufficient to ensure the ability to obtain a nutritional satisfactory diet and utilization ensuring that food within the household is used effectively to maintain the health of all members of the community.

1.7.3 Household level

Households in developing countries experience varying levels of vulnerability, which ranges from high to low. Household livelihood and food

security can only be fully understood within this vulnerability context (LIFT, 2009).

Household livelihood and food security are inversely related to a household's level of vulnerability.

Households engage in a variety of livelihood activities corresponding to their level of vulnerability. The most vulnerable households tend to engage in livelihood activities characterized by destitution or distress. Households in destitution/distress are also the most livelihood and food insecure. Highly to moderately vulnerable households tend to engage in livelihood activities characterized by *ex ante* risk reduction and *ex post* loss management in anticipation of or in response to stresses and shocks. These households initially manage loss using reversible coping strategies but may be driven to engage in less reversible coping strategies making them more vulnerable to future stresses and shocks, while simultaneously making them more livelihood and food insecure. Less vulnerable households tend to focus on livelihood activities aimed at increasing household income by engaging in higher economic risk and higher return income generating activities (LIFT, 2009).

If one or more household member suffers from HIV/AIDS, this can potentially make the household both more vulnerable and more livelihood/food insecure than would otherwise be the case.

Livelihood interventions roughly correspond to the household's vulnerability status. Livelihood provisioning interventions correspond to the most vulnerable households in destitution or distress. Livelihood protection

interventions correspond to vulnerable households engaged in risk reduction and loss management activities. Finally, livelihood promotion interventions correspond to somewhat vulnerable households engaged in income growth activities.

A household is a domestic unit consisting of a family who live together along with non-relatives. Also household can be well known as the people living together in one house collectively. The study deals with household level or family level as far as women are more consent with food production and food supply in the rural communities in Tanzania to a large extent.

Intra-Household Issues with Food Security

The definition of food security adopted here applies to the individual. This is true as well of most other definitions of food security. Only rarely do definitions of food security refer to the household, whether as an aggregation of individuals whose food needs must be met or as a unit. In contrast, livelihoods, and their vulnerability contexts, are typically defined at the household level. To facilitate integration of the concepts, this framework adopts a household-level perspective. While this approach is taken to facilitate greater conceptual simplicity and clarity, it does present some conceptual challenges (LIFT, 2009).

In particular, moving from the individual level to the household level requires making a set of simplifying assumptions about the intra-household structure and dynamics (e.g., preferences, incentives, or power) to identify the types of activities, relationships, and processes that contribute to the household's

improved food security. Under these assumptions, households are portrayed as homogenous and independent units that act cooperatively to maximize a shared utility function (LIFT,2009).

In practice, however, households are heterogeneous units nested solidly within dense social networks and whose members often possess different preferences, incentives, and power. LIFT, (2009) describe them; households are, “internally diverse organizations, embedded within and shaped by wider structures.” This has a couple important implications for our conceptual framework.

First, different household members have different access to and control over assets whether due to specific intra-household power dynamics, more general social norms, or other factors. This in turn affects their ability to allocate labor and non-labor resources to generate income or produce food and thereby secure their access to food. Given that diversifying income is one of the main strategies to reduce the risk of food insecurity, operationalizing a household conception of food security requires an understanding of intra-household dynamics related to assets ownership/control and income-generation and how they affect different household members.

Second, there often exist intra-household disparities related to the allocation and control of income and food. The effect of income on the food security of household members depends on who controls the income. Maternal income effects on food security and family health (particularly for the women and children in the household) can be significantly larger than paternal income effects. Similarly, the effects of stresses or shocks on the intra-household allocation of food can be different for different household members. In

particular, the nutritional burden of increased food insecurity often falls disproportionately on women and girls, although they also appear to benefit disproportionately from improvements in food security (LIFT, 2009).

Third, intra-household dynamics cannot be divorced from the social context in which the household exists. Social norms create a set of behavioral expectations that powerfully affect intra-household dynamics related to things such as income-generation, food access, and food utilization. Some of these effects are described above, although they are not limited to these. The nature and strength of social norms vary from context to context, although important regional regularities do exist (LIFT, 2009). Models of individual or household behavior that fail to give due weight to the effect of social norms are undoubtedly miss specified.

1.8 Chapter Summary

This chapter has given the clear picture of the study where by the aim of the study, where the study takes place, the aims and objectives and the significance of the study are given and explained. In addition to that, this chapter is one of the most important chapter of the study as the main theme is being introduced and that is the aim of the study that is to assess the impactss of food insecurity on women's participation on income generating activities in rural areas in Tanzania, A case of women at household level in Chamwino district

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This Chapter reviewed literature from the findings of other studies documents, journals, books and also views from other authors and researchers that brings about the empirical review which guided the development of the study, on which the analysis of data for the present study was based. It focuses on the impacts of food insecurity in rural communities at household level.

2.2 Food Insecurity

Food insecurity is one of the major challenges of development in most of the African countries, politically, socially, economically and socially. Food insecurity can be well referred as the absence of food availability and absence of means to access food in the country. Food insecurity does not only mean access of food but also absence of proper balanced diet in the community to a large extent. In Tanzania food insecurity is one of the major calamities that face Tanzania at large; people die of hunger, people faces starvation, diseases and also causes death and depopulation in the Tanzanian community.

On clear compelling example of Vulnerability in Africa is food insecurity not having access to the quality, quantity and diversity of food necessary for an active and health life (Barret&Sahn 2001) .Food insecurity can be well defined as a state in which consistent access to adequate food is limited by a lack of money and other resources at times during the year. In addition to that, there are three pillars of food insecurity that are the availability, ensuring and adequate food supply to provide for the nutritional needs of the population,

access, ensuring that incomes and food prices together maintain real purchasing power sufficient to ensure the ability to obtain a nutritional satisfactory diet and utilization, ensuring that food within the household is used effectively to maintain the health of all members of the community. In Tanzania food insecurity can be seen through severe hunger and starvation to the most parts of the country.

In the parts like in Dodoma, Singida, in Tanzania there is a large number of people who starves due to lack of food and access of food to a large extent. People starve also due to poverty as people cannot afford to buy food in order to eat and live healthy instead they go hungry. Poverty is a biggest threat in Tanzania not only in the cause of food insecurity in the country but also in other sectors like it affects the country development at large politically, socially and economically to a large extent (United Nations Development Programme, 2012).

In addition to that, food insecurity is an economic and social indicator of household well-being. According to the U.S Department of Agriculture (USAID,2012), a food insecurity is defined as a household-level economic and social condition of limited or uncertain access to adequate food. Household can have low food security or very low food security.

Low food security occurs when individuals have “reduced quality, variety, or desirability of diet [with] little or no indication of reduced food intake. Very low food insecurity is defined by the USAID as “an individual-level physiological condition that may result from food insecurity. For households with very low

food security, “normal eating patterns of one of more household members were disrupted and food intake was reduced at times during the year because they had insufficient money or other resources for food.

Low and very low food security have been associated with chronic health problems in adults, such as heart disease, diabetes, high blood pressure, obesity, and mental health issues, including major depression. Child hunger can have serious health consequences, including anaemia, impaired cognitive development, and stunted growth, and can affect children’s behavioural, social, and educational development (FAO, 2006).

Food insecurity is lack of access to enough food (FAO,2006). A household is said to be food insecure when it fails to meet its dietary food intake in terms of quantity and quality (Lorri and Kavishe, 1990). URT (2007) noted that food insecurity exists when there is inadequate food for the people who need it. This situation can arise either due to inadequate food production and problem in distributing this food to the people who need it or because the people cannot afford to buy the food that is available. Food insecurity exists whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable ways is limited or uncertain (UN, 2006). It arises due to lack of enough food or inadequate diet for part or all the year or faces the possibility of inadequate diet in the future. Therefore, in this study a household is said to be food insecure when it fails to meet its dietary food intake in terms of quantity and quality.

According to FAO (2003), irrigation increases yields of crops by 100% to 400% along with higher yields; irrigation increases income and reduces hunger and poverty. Where irrigation is widely available, under nourishment and poverty

are less prevalent. Farmers benefit directly from irrigation. Through increased production and more stable incomes, the higher value of irrigated land increases. Even landless and labourers and small farmers who lack the resources to employ irrigation themselves often benefit through higher wages, lower food prices and more varied diet. Every job created in irrigated agriculture yields another job in agricultural services and the processing industry. When agriculture is less labour-intensive, it may employ affordable small-scale techniques. The impacts can be great if combined with access to credit, marketing and agricultural extension services.

According to FAO, (2005) noted that more than 70% of poor people in developing countries live in rural areas and depend on agriculture for both food and income. Unfortunately, many developing countries have neglected the rural sector, giving priority instead to urban areas and the drive for industrialization. What little attention agriculture has received has been focused, more often than not, on cash crops for export rather than staple crops for local consumption. In recent years, the developed world has also paid less attention to helping developing countries to increase agricultural production. Between 1980 and 1990, the share of development assistance directed to agriculture dropped from 20 to 14 percent. In many cases, the most effective way to strengthen food security and improve the lives of the poor is by helping the agricultural sector. Increased agricultural production can raise the incomes of farmers and agricultural inputs, services and consumer goods. This, in turn, increases employment opportunities in rural areas and helps slow migration to urban centres (FAO, 2006).

Higher agricultural production can improve food security by decreasing food prices for consumers, increasing rural incomes and contributing to economic development. Baldwin (2006) reported that in developing countries one percent rise in per capita agricultural output led to nearly two percent rise in incomes of the poorest people. However, increased agricultural production is vital, but not sufficient, for poverty reduction and economic development. No developing country has successfully reduced poverty through agriculture alone (institutional and industrial development are often needed), but almost none have achieved it without first increasing agricultural productivity.

WHAT ARE THE CONTRIBUTORS TO FOOD INSECURITY?

Food insecurity is the result of numerous obstacles that people face. Food-insecure individuals often live in poverty, are unemployed, have low paying jobs, face unstable housing, or have obtained low levels of education.⁸ National Census data found 15% of U.S. residents living below the poverty level between 2009 and 2013. Locally, in 2014, the U.S. Census reported that 12% of Brown County residents lived in poverty (29,211 individuals), up from 10% in 2007 (USAID, 2013).

According to the USAID, in 2013, 42% of households' with incomes below the poverty line were food insecure.

In contrast, only 7% of those with incomes above 185% of the poverty line were food insecure. According to the USDA, "employment is a key determinant of food insecurity in households with children." The 2013 USAID, (2013) annual report on the Food Assistance Landscape found that households with children headed by an unemployed adult were three and a half times more likely to be food insecure than households with an adult employed full time. However,

merely having employment and earning wages cannot prevent food insecurity. Three-quarters of U.S. households with food-insecure children had employed adults, the majority of them (60%) employed full time. Likewise, households where adults have multiple part time jobs cannot escape a high rate of food insecurity. A study used 2003-2005 data from the Current Population Survey to compare the food insecurity rates of full-time employed adults to adults holding several part time jobs. Despite the fact that the households had similar incomes, those with members in nonstandard work arrangements were 43% more likely to experience food insecurity.

The authors postulate that “instability in income and work schedules may affect a household's ability to budget money and time for obtaining food.” People with low incomes face challenges in maintaining affordable, stable housing, a challenge that intersects with concerns about food insecurity. The U.S. Department of Housing and Urban Development (HUD) classifies those who pay more than 30% of their household incomes for housing as “cost burdened.”¹⁶ High housing cost burdens prevent such households from affording items such as food, clothing, and medical care. HUD estimates there are currently 12 million households in the United States paying more than half of their annual incomes for housing. Many individuals in Brown County face the same challenge. In 2009-2013, 43% of renter households and 28% of mortgage-holding households in Brown County were reported to be cost burdened.¹⁸ Another important local resource indicates the financial pressure facing Brown County's low-income families. The 2-1-1 program is a 24-hour call center connecting those in need with resources in the community. To track community needs, the program also tracks the purpose of the call and whether

the caller obtained the needed resources. According to the program's 2014 report, two of the top caller requests in Brown County were the inability to pay for utilities and requests for rent payment assistance.

HOW COMMON IS FOOD INSECURITY?

The USAID conducted an annual survey in 2013 (USAID, 2013) to estimate the prevalence of food insecurity in the USA. According to that research, 17.5 million people (14.3%) of the USA households met the criteria for food insecurity. Twenty percent (20%) of those food insecure households, nearly half had very low food security. The USAID reported that 19.5% (8.6 million) of households with children under the age of 18 were food insecure. In 10% of households, *both* the adults and children experienced food insecurity, despite the attempts by adults to shield children from the effects of food insecurity by reducing their own intake(USAID, 2013).

2.2.1 Magnitude of Food Insecurity in Tanzania

In Tanzania there is large importation of food from abroad and other parties of the world this is due to the absence of sufficient food that would sustain the country hence other community members who cannot afford to buy food in high price go hungry and hence starvation and even may lead to death. A child develops diseases such as kwashiorkor due to lack of proper food with lack of proper vitamins to sustain the health of their bodies. In addition, in Tanzania in terms of food insecurity, there is lack of the means to acquire food to a large extent. People in the country does not have much knowledge to acquire food through agriculture and also through get employed to earn money and to earn

their daily main needs such as food hence they go hungry and leads to death and other diseases to a large extent (World Health Organization, 2011).

In addition to that, food insecurity in Tanzania is seen through low yield where by the crops are not sufficient and in high standard that would sustain the population aimed or intended to feed. Low yield is a common problem that largely faces most of the underdeveloped countries that faces the problem of food insecurity of hat undermines the development of that particular country socially, politically and largely economically (Pingali, 2012). This is due to lack of capital and loans to help the farmers to produce in good standard and also government support through loans and capital that needed for the farmers to be able to buy crops, pesticides, fertilizers and other things required for the cultivation of the food crops.

2.2.2 Factors contributing to Food Insecurity in Tanzania

In Tanzania, there are various contextual factors that contribute largely to food insecurity. These factors can be into politically way, socially and economically. Firstly, one of the factors that lead to food insecurity in Tanzania is Poverty. Poverty is the state where an individual cannot afford the basic needs like food, shelter and clothes. Extreme poverty is a cause of food insecurity. In other way, poverty in food insecurity we can address it as lack of food entitlement. According to Sen (1981), he called poverty the lack of food entitlement in reference to the lack of access to land, credit income and family support systems which was found to be major cause of famine and hunger. Sen challenged the prevailing view of the time that famine was caused primarily by a food production shortfall, later expanding his entitlement thesis in his widely read book, *Poverty and Famine*. Sen (1981) came to realize that people starve

because of a food entitlement failure and not because of a food availability failure. In this sense, this identifies that lack of food entitlement or poverty as a phenomenon it is a major cause of food insecurity in the country.

In addition to that, another factor contributing to food insecurity is the adverse climatic conditions (droughts and floods). Droughts and floods are extraordinary threats to the food security in Tanzania. Floods and droughts have been the major destruction of the crops, plantations and all the food production systems in Tanzania and hence the community faces hunger and starvation to a large extent (FAO,2016). The rapid onset floods frequently found to threaten thousands of lives, to displace population, to damage properties and to disrupt the provision of basic necessities that households were accustomed to acquire through the existing economic and social infrastructure. Also the slow onset droughts are found to be equally destructive even more than floods in some way or another (SADC, 2006). This shows how climate change in terms of lack of rainfall and droughts and massive floods cause extensive harm to the people in terms of destruction of their properties such as farms, livestock and food crops used as food hence food insecurity.

Moreover, poor governance and mismanagement is another cause of food insecurity in Tanzania at large. Mismanagement and poor governance are reflected in the inappropriate food security strategies adopted at a national level. In this sense, this section sets out to define the inappropriate food security strategies of Tanzania which entails waiting for natural disasters before requesting help from the international community hence people suffer from lack of food (FAO,2016). The failure of governance is that lack accountability and

financial mismanagement and wide spread of corruption. The Tanzanian government at large, the government officials tend to benefit themselves first and the citizen later example on financial management, the budget does not ensure availability of food to those poor areas where people starve and die of hunger. In this sense this cause food insecurity in Tanzania to a large extent (FAO, 2016).

Furthermore, another factor contributing to food insecurity is the increase or growth of population (FAO, 2015). As the population grows daily their rise high demand of food example in Tanzania we have arable land but not all the areas In Tanzania, so as the population grows people tend to use the land, they fight over the land so that to produce food in a way that the land turns out to be not enough for the population. According to Anandh, (2011), says that, as the population grows it has been suggested as the major cause of reduced land are and mostly the arable land loose annually through degradation in soil erosion (FAO,2015). In addition to that, through increase of the population even water supply turns out to be unevenly distributed to a large extent. People get affected through lack of water so they cannot produce and cultivate and also absence of land for cultivation hence food insecurity (FAO,2015).

Also, food insecurity can be caused by lack of education or ignorance (WHO, 2013). Food insecurity is not only about lack of food but also the availability of food but poor diet due to lack of knowledge in balanced diet. Food is important but it should be taken on a right way so that one can acquire vitamins from certain food, other minerals that needed for the human body to survive against diseases and also the children to grow well by avoiding malnutrition diseases

that can lead them to death and severe pain (WHO, 2013). Therefore through this food insecurity occurs to a large extent. Semi-autonomous boards, appointed by the Ministry of Agriculture, Food Security and Cooperatives (MAFSC), issue agricultural licenses to administer the cashew nut, coffee, cotton, pyrethrum, sisal, sugar, tea and tobacco sub sectors. They co-ordinate each sub-sector, enforce quality standards, provide inputs and facilitate Research and Development (R&D) funding (URT, 2006). While they play a valuable role in convening stakeholders and monitoring quality, the regulatory restrictions to trade imposed by some boards may increase the costs and the uncertainty for investors. Agricultural trade is also hindered across borders because of long goods clearance at customs offices. In addition, periodic export bans on maize and rice can prohibit access to larger and often closer regional markets and may thus reduce farmers' incentives to increase production (URT, 2006).

Also. Another cause of food insecurity in Tanzania is that there is limited access to finance in agriculture to a large extent. While the financial sector has developed quickly over the last few years, it remains highly concentrated and dominated by over-liquid banking institutions. 56% of the population, and in particular small businesses in rural areas, remains excluded from any financial service. In 2011, only 8% of the rural population had access to formal financial institutions (banks and insurance companies). According to the Global Competitiveness Report (2013-14), access to financing is cited as the most problematic factor for doing business in Tanzania, closely followed by infrastructure (WEF, 2013). Credit from commercial banks has increased significantly over the last five years but only 12% of this credit went to

agriculture. Only 8% of the domestic lending to agriculture went to agricultural production, with the rest channeled to agricultural trading.

Despite the considerable support given to microfinance in recent years, the impacts of microfinance on access to financial services has been negligible. Microfinance institutions have been lending at higher interest Rates than commercial banks, averaging 30%. Savings and Credit Cooperative Societies (SACCOS) may have the greatest potential to expand credit supply to agriculture. While their number has been growing, it remains too limited to meet demand in rural areas. Furthermore, they remain largely unregulated, resulting in high variations in service quality and management practices. The lack of collateral represents a critical issue to access both formal and semi formal credit. Commercial banks require a legal collateral covering 125% of the credit amount (OECD, 2013).

Efforts to facilitate access to credit have had limited impacts (URT,2006). The Tanzania Investment Bank has an agricultural window offering concessional loans and an agricultural input trust fund (AGITF) has been issuing short term soft loans since 1994, in particular to farmers and farmers' groups for farm machineries and to stockiest for inputs. The Tanzania Agricultural Development Bank (TADB) is also being established. However, these scheme mainly target medium-scale farmers who have collateral, and do not reach most smallholders. Consequently, the informal financial sector remains the major source of financial service for smallholders, but its scope and coverage are limited.

In Tanzania at the present there are various opportunities for dealing with food insecurity to a large extent. In Tanzania we have plenty of land and our land is of natural fertility to a large extent. This can be argued through the natural fertility of the Kilombero valley. According to (KSCL Annual Report, 2008) states that the Kilombero valley is luck with natural fertility land that is a flat bowl-like physical structure. It lies east of the Udzungwa Mountain and extends to the north and south of the Great Ruaha River in Kilosa District. The valley has warm climatic conditions, enough short and long rainfall seasons. The warm climatic condition in the Kilombero Valley is favourable for growing sugarcane. In this sense, Tanzania as a country is seen blessed with good climatic condition at some point and god fertile land for cultivation; hence the government can give support to the farmers to produce more food in order to eradicate the problem of food insecurity in Tanzania to a large extent. Also, in these points we can have another opportunity out of it that is the presence of favourable climatic conditions that favours the growth of crops that can enable presence of food in Tanzania (KSCL Annual Report, 2008).

Also, another opportunity for dealing with food insecurity in Tanzania is availability of water and water sources (URT, 2006). Tanzania as a country is blessed with availability water and a lot f water sources that can provide water and water for irrigation for cultivation to the farmers. Due to the presence of water, the farmers can easily do cultivation of food crops to a large extent and hence they can provide food to the rest of the Tanzanian community at large. In this sense, the Tanzanian government needs to support the farmers example through providing machines and capital that can be used for irrigation system will enable the farmers to not only depend on rainfall but also the farmers can

get water for cultivation from irrigation hence there will be presence of food to a large extent and the eradication of food insecurity (URT,2006).

Moreover, another opportunity for dealing with food insecurity in Tanzania is the availability of agricultural policies. In Tanzania there are agricultural policies such as Kilimo Kwanza, Kilimo Utiwa Mgongo that can support farmers in various different ways through loans and capital and other agricultural equipment that ensures good production of food crops. This is one of the opportunities that if are well implemented can be well suitable for elimination of food insecurity in Tanzania to a large extent (URT, 2013).

2.2.3 Obstacles of dealing with Food Insecurity in Tanzania

There are various obstacles for dealing with food insecurity in Tanzania. One of the biggest challenge or obstacle of dealing with food insecurity in Tanzania is the presence of large number of uneducated or ignorant people or in other way due to the presence of lack knowledge in food security. This can be argued through the diet people take (FAO, 2013). A lot of people within the country they have no knowledge on how to have proper diet and proper vitamins, they just eat what is present and prepared hence some lack some important vitamins and minerals in the bodies and hence they develop dangerous diseases caused by lack of proper food that is required by the human bodies to a large extent. Also a lot of people in Tanzania due to lack of knowledge they can't access food through agriculture, because it takes ones knowledge to cultivate food crops example cassava, potatoes, wheat so that can be used for food instead people do not have knowledge to do that and hence they go hungry ad starve to a large extent (World Health Organization, 2013).

In addition to that, another obstacle is the absence of government support to the poor farmers (FAO,2011). The government of Tanzania does not give much support the farmers in terms of capital and loans that can be used for the farmers to buy crops to buy good facilities and equipment and also pesticides for the cultivation of crops so that they can produce much food for the Tanzanian community at large and also food for themselves. In the absence of loans and capital to support the farmers to produce, the farmers and the people who depend food from the farmers faces food insecurity (FAO, 2011).

Also, in Tanzania there is no access to land to a large extent (FAO,2011). In order food insecurity to end there should be access to land that people can cultivate and produce food, instead only the rich can access to the land to a large extent than the poor in a way that it affects the most of the Tanzanian people at large through absence of food. In addition to that, also there is conflicts over land example in Morogoro that the farmers and the pastoralist both fights for the land hence the farmers cannot cultivate and also the pastoralist cannot keep their cattle with fear they can be killed by the farmers and this is all due to lack of land for them to produce food in two different ways (FAO, 2011).

Moreover, climate change is one of obstacle of dealing with food insecurity In Tanzania. Climate change is the change of weather that affects the cultivations to a large extent. At times heavy rainfall appears and destroys the crop cultivation and also too much sun dries everything and also the farmers get affected and also other people in the community because they fail to get food that can sustain the large Tanzanian community to a large extent.

Tanzania is an emerging economy with high growth potential. With per capita GDP of USD 500 the economy has shown strong and consistent growth over the last decade averaging 6.0% per annum with the strongest growth in the industry and services sector and somewhat weaker performance in agriculture (TAFSIP, 2011). Despite solid economic growth Tanzania has not been able to achieve significant reductions in poverty or shown some improvements in nutritional status. For example in year 2007, the national poverty headcount fell by only 2.1 per cent from 35.7 per cent in 2000-01 to 32.6 per cent (TAFSIP, 2011). Nutritional indicators also showed little improvement (TAFSIP, 2011). Over the same period, the share of people with insufficient calorie (food) consumption fell by only 1.5 per cent from 25.0 per cent to 23.5 per cent; and stunting of children under five years of age was unchanged at 38 percent (TAFSIP,2011).

Vitamin A deficiency affects about 24 per cent of the children. Anemia caused by iron deficiency impairs the growth and learning ability of children, lowers resistance to diseases and reduces work capacity and productivity of adults. Anemia affects 72 per cent of children under five years of age and 48 per cent of women of reproductive age. Malnutrition is the underlying cause of over 50% of the under five mortality rate in Tanzania³. Against this background, TAFSIP (2011) provides an important and very timely opportunity to bring together all the relevant stakeholders around a common agenda for reducing malnutrition.

World Bank Report on Fortification Action Plan Action Plan on Provision of Vitamin and Minerals to the Tanzania Population, Consultancy, by Anna

Verster & Mr Quentum, 2010) NGSRP (Mainland) and ZSGRP (Zanzibar) - normally known by their Swahili acronyms: MKUKUTA (Mainland) and MKUZA (Zanzibar) .

Food security has been fluctuating between years of surplus in good season and years of deficit in poor rainfall season. Some regions and districts have had food surpluses of varying magnitude on an annual basis. However, there are still regions and districts with pockets of persistent food shortage annually. Moreover, at the lower levels such as the household, efforts by government and others to support increased agricultural productivity and production notwithstanding, food insecurity continues to be a challenge to some section of the population in both rural and urban areas. It is within TAFSIP that holistic approaches towards achieving national food security through increasing production and productivity along value chains are undertaken (TAFSIP, 2011). The apparent disconnect between economic growth and poverty and food security outcomes can be attributed to three factors, low investment in agriculture sector, , agricultural sector growth has been driven by small-scale farmers producing for subsistence and low use of improved inputs resulting in low per capita food production and market constraints and Under nutrition and malnutrition are constraining productivity in the smallholder sub-sector (TAFSIP,2011).

Limited progress in rural poverty reduction is also related to relatively slow growth of agricultural GDP (4.4 per cent compared to the national level of seven per cent) relative to a 2.3 per cent rural population growth rate (TAFSIP, 2011). This point to a need to broaden the base of agricultural growth to target

crops that are important to the poor in terms of both income and nutrition, and to lift the overall sectorial growth rate well above the rural population growth rate. In this regard the CAADP target of 6 percent sectoral growth, whilst challenging, is regarded as a minimum to make significant reduction in rural poverty and food insecurity (TAFSIP, 2011).

ZSGRP/MKUZA (Zanzibar) which focuses on similar targets as well as the Millennium Development Goals (MDGs) and other commitments aimed at combating, rural poverty, malnutrition, disease, illiteracy, gender inequities, and environmental degradation. Tanzania has implemented the first generation of these strategies and is now implementing the second generation of these strategies, MKUKUTA II and MKUZA II. In both phases agriculture is given a prominent role in economic growth and poverty reduction since the rural sector contains the majority of the poor population. The two initiatives recognise the importance of food and nutrition security, climate change adaptation and improving survival, health, nutrition and well-being, especially for children, women and vulnerable groups (TAFSIP, 2011).

Lessons from on-going poverty reduction initiatives indicate that agriculture must grow robustly for GDP growth to be broad-based whilst targeting the pro-poor. In relation to food security NGRSP II targets: (i) increasing crop production to improve food security; (ii) maintenance of a strategic grain reserve of at least four months supply; (iii) developing and promoting crop and livestock varieties adaptable to climate change; and (iv) strengthening early warning and natural disaster response capacity. Linked to food security are health related issues to significantly reduce under-nutrition and malnutrition.

The proposed steps within NSGRP II and ZSGRP II are very much in line with the principles of CAADP Pillar III which advocates equitable access to food and paying special attention to the nutritional needs of vulnerable groups.

Three clusters of outcomes are identified in MKUKUTA II and MKUZA II as was the case in the first phase of these strategies: Cluster I is on economic growth and the reduction of income poverty; Cluster II is on improvement in the quality of life and social well-being; and Cluster III is on governance and accountability (TAFSIP, 2011). The major goal for Cluster I is GDP growth of 6-8 per cent over the next decade. MKUKUTA goals for the agricultural sector include: (i) an increase in agricultural growth from 5 to 10 per cent: with an increase in growth of the livestock subsector, from 2.7 to 9.0 per cent; (iii) an increase in food production from 9 million tonnes to 12 million tonnes; (iv) a reduction in the rural population living below the basic needs poverty line from 39 to 24 per cent; (v) a reduction in the proportion of the rural food poor from 27 to 14 per cent; (vi) reduction in the prevalence of stunted and underweight children; and (vii) an increase in off-farm income-generating activities.

MKUKUTA II draws lessons extensively from the 2001 Rural Development Strategy (RDS) and the Agricultural Sector Development Strategy (ASDS). While the RDS provides a framework for harmonised rural development, the ASDS envisages the creation of an enabling environment for improved agricultural productivity. Other national policies relevant to rural poverty reduction include policies on land, water, trade, cooperative development, microfinance, as well as cross cutting issues in gender, HIV/AIDS and environment. In Zanzibar the Agricultural Sector Plan (ASP) has been a major

input in MKUZA providing a framework for setting targets for growth of the agricultural sector. The ASP addresses critical issues such as the creation of a favourable climate for private-sector activities, clarification of the roles of the public and private sectors in service delivery and strengthening the institutional framework (TAFSIP, 2011).

The eastern parts of the country. Consequently, between 2001 and 2007 Tanzania's poverty rate only fell from 35.7 to 33.6 percent, while the share of the population consuming insufficient calories (food) declined marginally from 25.0 to 23.6 percent. With poverty and food insecurity largely concentrated in rural areas it can be presumed that there has been hardly any improvement in the livelihoods of rural people although Tanzania was experiencing robust economic growth (TAFSIP, 2011).

2.2.4 Women and Food Security

Today the world has enough food to feed everyone, yet an estimated 854 million people worldwide are still undernourished (FAO 2006). Poverty not food availability is the major driver of food insecurity. Improvements in agricultural productivity are necessary to increase rural household incomes and access to available food but are insufficient to ensure food security. Evidence indicates that poverty reduction and food security do not necessarily move in tandem. The main problem is lack of economic (social and physical) access to food at national and household levels and inadequate nutrition .

Food security not only requires an adequate supply of food but also entails availability, access, and utilization by all men and women of all ages, ethnicities, religions, and socioeconomic levels. Gender-based inequalities all along the food production chain “from farm to plate” impede the attainment of food and nutritional security. Maximizing the impacts of agricultural development on food security entails enhancing women’s roles as agricultural producers as well as the primary caretakers of their families. Food security is a primary goal of sustainable agricultural development and a cornerstone for economic and social development, and so serves as a road map that indicates how addressing gender in agriculture development in the other Modules can be optimized to maximize the impacts on food security (World Bank, 2001).

It also demonstrates the vital and often unacknowledged role that women play in agriculture, as well as how their critical role in ensuring sustainable agricultural development translates into household-level improvements in food and nutritional security. Women are typically responsible for food preparation and thus are crucial to the dietary diversity of their households. Women are generally responsible for selecting food purchased to complement staple foods and to balance the household’s diet. Even in the Sahel where men control the granaries, women are responsible for supplying the “relishes” that go with the grains, and it is these that provide the bulk of the micronutrients (FAO, 2001).

In many developing countries, the agricultural sector represents over 30% of GDP and two thirds of the workforce. According to the World Bank, in such countries agricultural sector growth would be 3.2 times more effective in reducing poverty by 1 dollar/day than growth in any other sector. What is more, this sector can be far more resistant to economic and financial crises .Approximately 3.1 billion

people, or 45% of the global population, live in rural areas. Of these, around 2.5 billion depend on agriculture as their principal means of subsistence. A portion of this figure is made up of peasant women, specifically 500 million, who do not own any land and receive barely 5% of the agricultural resources.

The promoting of investment and the restructuring of the agricultural sector in developing countries represent the most effective way to increase productivity and stimulate their economic growth. Donor governments and agencies must take both aspects into account in order to decide upon their development policies. They should also take into account that closing the gender gap which exists in the rural sector would certainly be one of the most effective ways to achieve such an increase in productivity. Women who live in rural areas represent 25% of the world's population and constitute an average of 43% of the workforce in developing countries. This percentage oscillates between 20% in South America and 50% in South-East Asia and sub-Saharan Africa. And it is precisely in such rural areas where the differences and difficulties suffered by women and girls are most acute (World Bank, 2012).

Yet similar inequalities also exist closer to home, in Europe. A few statistics will suffice to prove this point: more than 80% of women living in the countryside collaborate with or assist their husbands, 28.7% of agricultural workers are women and agricultural holdings run by women are 40% smaller than those run by men.

The rural woman plays an essential role in the four pillars related to food security: availability, accessibility, utilization and stability. However, women in

rural areas of developing countries are at a disadvantage due to the fact that they do not have access to the same opportunities or resources as men owing to stereotype issues based on gender. There is a gender gap as regards access to certain resources such as: land, energy, technology, loans, pesticides and fertilizers. Furthermore, women have more limited access to training, information, public services, social protection and markets (Brown, 1994).

Article 14 of the «The Convention on the Elimination of All Forms of Discrimination against Women» specifically highlights States' obligations to eliminate discrimination against women in rural areas. Yet, despite such commitments, governments are not responding with sufficient urgency in order to address the needs and priorities of rural women (FAO,2012). There is a strong link between food security, good nutrition and gender. A gender approach to food security can enable shifts in gender power relations and assure that all people, regardless of gender, benefit from, and are empowered by development policies and practices to improve food security and nutrition. This brief gives an overview on why and how to consider gender aspects in both short-term humanitarian assistance and long-term development cooperation that address food security (FAO, 2015).

Every woman, man and child has the right to adequate food. In far too many cases, women and girls are overrepresented among those who are food-insecure, partly because women often are denied basic human rights such as the right to own property, to find decent work, and to have an education and good health.

People's overall access to food relies to a great extent on the work of rural women. Women comprise, in average, 43 percent of the agricultural labour force in developing countries. Hence, securing women's human rights is a key strategy in assuring food security for all. Women are involved in a variety of agricultural operations such as crops, livestock and fish farming. They produce food and cash crops at subsistence and commercial levels. At community level women undertake a range of activities that support natural resource management and agricultural development, such as soil and water conservation, afforestation and crop domestication. Women often have (Brown, 1994).

Also, as well as understanding of local biodiversity importance for the development of adapted and improved varieties. Also for dietary diversity women have a decisive role. Poor households headed by women often succeed in providing more nutritional food for their children than those headed by men. There is a strong correlation between a higher level of gender equality and lower level of child mortality (Brown, 1994). Cultural traditions and social structures often mean that women are more affected by hunger and poverty than men even though women, and in particular expectant and nursing mothers, often need special or increased intake of food. And too often, child hunger is inherited: a mother who is stunted or underweight due to an inadequate diet often give birth to low birth weight children.

Women face numerous obstacles to access productive inputs, assets to land and services required for rural livelihoods. These include access to fertilizers,

livestock, mechanical equipment, improved seed varieties, extension services, agricultural education and credit. Women receive for example only 5 percent of agricultural extension services worldwide. As rural women often spend a large amount of their time on additional household obligations they have less time to spend on food production or other income opportunities. Women also have less access to markets than men which hamper their opportunities to earn an income even further, and thus their possibilities to be able to buy food. With fewer assets and heavier burdens, women are more vulnerable to shocks and less well positioned to respond to e.g. the impacts of climate change or other rapid changes in the environment (FAO 2001).

Social and economic inequalities between men and women result in less food being produced, less income being earned, and higher levels of poverty and food insecurity. If women farmers had the same access to re-sources as men, the agricultural yield could increase by 20 to 30 percent. This could raise total agricultural output in developing countries by 2.5 percent, which could reduce the number of hungry people in the world by 12 to 17 percent.

Another emerging challenge in food security and nutrition that needs to be addressed is to enhance women and men's resilience to climate change; example by diversified production as well as strengthened capacity to respond to challenges related to climate change, building on the different needs and coping mechanisms of women, men, boys and girls.

Disasters, especially droughts, and emergency situations are the most common causes of food shortages in the world (WFP).In humanitarian contexts

discrimination of women and girls may be reinforced, and the occurrence of domestic violence increase during times of food scarcity. Because of women's specific roles and experiences in food production and preparation, it is crucial to include them in emergency-related food security planning and decision making as potential change agents and decision makers, rather than as the "victims" they often are portrayed to be.

Food Insecurity with relation to poverty

Poverty is one of the major causes of food insecurity in Tanzania. The prevalence of income poverty is still high in Tanzania. According to the Poverty and Human Development Report (2005) basic needs poverty decreased from 38.6 percent in 1991/1992 to 35.6 percent in 2000/2001 and the projection that have been used indicates that there has been a further decline to 29.5 in year 2005. Food poverty has declined from 21.6 percent in 1991/1992 to 18.7 percent in 2000/2001. Food poverty was targeted to further decline to 15 percent in year 2003 and targeted to continue declining to 10 percent by year 2010. There is also a big disparity between urban and rural poverty for both food and basic needs poverty. Poverty remains overwhelmingly in rural areas where 87 percent of the population lives and is highest among households who depend on agriculture. Basic needs poverty in urban areas in 1991/1992 was 28.7 percent while in rural areas it was 40.8 percent. In year 2000/2001 basic needs poverty in urban areas was 26 percent while in rural areas it was 38.7 percent (URT, 2006). Projected basic poverty in urban and rural areas (excluding Dar es Salaam city, which has a peculiar characteristics from other urban areas) stands at 15.3 percent and 32.9 percent respectively (URT, 2006). Food poverty on the other hand in urban areas excluding Dar es Salaam in 1991/1992 was 15 percent while in rural areas was 23.1 percent. In

year 2000/2001 in other urban areas it was 13.2 percent while in rural areas it was 27 percent (URT, 2006).

Based on the URT, (2006) Malnutrition is still a common problem in Tanzania. This report (URT, 2006) reveals that there is no significant nutritional status improvement for the under fives in Tanzania. Stunting, though on decline, continues to affect a sizeable proportion of children in the country. It declined from 47 percent in 1991/1992 to 44 percent in 1999 and 38 percent in 2004. During year 1991 and 1999 underweight in children increased from 29 percent to 30 percent, while wasting decreased from 7 percent in 1991 to 5 percent in 1999 and further declined to 3 percent in 2004. Child malnutrition is much worse in rural areas than in urban areas and much higher in the poorest quintiles (URT, 2006). Tanzania's main source of food to the majority is through agricultural production. Although the country is not drought prone, but food insecurity in the country is both transitory and chronic in nature (URT, 2006). Transitory food insecurity arises from instability of food production, food prices, or household's income is common in marginal areas of the central and northern regions of Dodoma, Singida, Shinyanga, Tabora, some parts of Tanga, Arusha, Kilimanjaro and Manyara. As in many Sub-Saharan African countries, even in areas with surplus production, farm households sell their surplus product immediately after harvest (URT, 2006). As a result six to nine months later in the year many do not have their own crop or the cash to purchase food from the market. The situation is particularly critical during the rainy season when calories needs are high due to agricultural work and market prices are high due to shortage in supply especially in urban areas where food insecurity is often

caused by price fluctuations. Other factors contributing to seasonal food insecurity include, overselling due to competing needs for cash including health, education and clothing. In addition inadequate postharvest management knowledge contributes to food insecurity. This scenario perpetuates the cycle of food insecurity, as it causes people to change their eating patterns and habits (URT, 2006). This is detrimental to their health, nutritional well-being and productivity. Continuous or chronic food insecurity is common to the urban poor households, the rural landless and the resource poor smallholder farmers and pastoralists (URT, 2006). The situation with regard to food availability, accessibility and utilization is as outlined below:

Food Availability

Regarding food availability, the URT (2014) has shown that the major source of food supply in Tanzania is from local production. On average Tanzania produces about 95 percent of its food requirements. In some years the country's food self sufficiency measured by the Self Sufficiency Ratio (SSR) is over 100. Although there are pockets of food shortage in some regions and districts even when SSR is over 100. In such years, the problem is mainly distribution within the country. The SSR in Tanzania case, however, may not capture the extent of food availability in the country because it does not take into account other food commodities that are produced such as livestock and livestock products; wild animals; fish and other marine or aquatic products. In addition, non-timber forestry products, fruits and vegetables are also not captured. These foods are important in the Tanzania's food basket and contribute significantly to food availability in the country. Efforts are underway to capture these foods in the determination of the country's food self-sufficiency

ratio. With exceptional of wheat, food imports do not play a significant role in the total food supply in Tanzania as most of food supply is from domestic production (URT, 2014).

Most of food imports in the country is comprised of wheat in both surplus and food shortage years. However, the country imports substantial amount of wheat. For example, over the period of 1999 to 2003, the country imported an average of 300,000 tons of wheat to supplement domestic production of 71,000 tons per year. Food imports, however, increase during drought years. For example, in year 2003/2004 when there was food shortage due to drought, total food imports amounted to 698,668 tons comprising of 103,762 tons maize, 157,597 tons of rice and 437,309 tons of wheat grain. Out of the total imports, commercial imports amounted 607,600 tons comprising of 42,694 tons of maize, 135,597 tons of rice and 429,309 tons. Food aid amounted to 59,068 tons comprising of 29,068 tons of maize, 22,000 tons of rice and 8,000 tons.

The major factors affecting food availability are low production due to low productivity of land, labor and other production inputs, high incidences of crop and livestock pests and diseases, inadequate processing, storage and marketing infrastructure. This is caused mainly by inadequate finance to obtain productivity enhancing inputs or capital, limited availability of support services and appropriate technologies. In addition, many rural households are faced with labor shortage, due to the migration of young people to the urban areas in search of employment. The HIV and AIDS pandemic has also contributed to loss of labor for household agricultural production, since the infected and those caring for them cannot devote enough time and energy for agricultural

production. Other factors affecting food availability include high pre and post harvest losses due to pests, diseases and climatic conditions. Pre harvest losses account for over 30% of all crop losses in the country. It is estimated that postharvest losses range from 30%-40% for cereal grains and legumes, up to 45 % for roots and tubers and 40% - 80% for fresh vegetables and fruits. In addition, inappropriate food management at household level diminishes food stocks available for consumption (URT, 2014).

Accessibility to food

In Tanzania, physical access to food is affected by inadequate infrastructure, mainly transportation network. The spatial distribution of surplus food production areas is such that food production is mainly concentrated in the southern highland regions and peripheral areas of the country, while the traditional food deficit areas are located mostly in the central corridor and parts of northern areas. Given the fact that the country is vast and there are long distances between food producing and deficit areas with inadequate transportation network there are high costs of transportation involved. High cost of transportation lead to high distribution costs which in turn are reflected in high prices of food in deficit areas and therefore affecting access to food by low income rural as well as urban populations.

Poverty is still a common phenomenon among rural communities and the urban poor, where inadequate employment and lack of income generating activities lead to low purchasing power and hence affect access to food.

Food Utilization

According to the Tanzania Demographic and Health Survey, 1999 and Poverty and Human Development Report, 2005 about 38% of the children in Tanzania suffer from chronic protein energy malnutrition (stunting), indicative of chronic food insecurity. Underweight and wasting in children is 30% and 3% respectively, indicative of transitory. In adults, the prevalence of underweight Body Mass Index (BMI) less than 18 is about 12% in women. About 10% of the adult population in urban areas is obese. The prevalence of vitamin A deficiency is about 30% and that of anemia is about 32% for the adult population, 66% for children and 80% for pregnant women. Iodine deficiency affects 25% of the population.

The policies, strategies and initiatives implemented and their outcomes are also described below:

Firstly, The Government of Tanzania is in the process of finalizing the formulation of the National Food Security Policy and the National Food Security Strategy.

Evaluation of the Implementation of the Beijing Platform for action shows that there have been significant achievements in mainstreaming gender issues in various national policies, programmes, plans and strategies. The Government through the Ministry of Community Development, Gender and Children, has reviewed the Women in Development Policy of 1992, with a view to bring about gender equality. This resulted in the formulation of the Women and Gender Development Policy 2000. The policy emphasis on mainstreaming and integration of gender equality in policies, plans, development strategies and actions in all sectors and at all

levels in the development process. The policy also provides for women's empowerment by giving more opportunity to women in all spheres including politics, leadership positions, management and economic development (URT, 2014).

The Government has made the amendment of the National Constitution to provide an increase in women's representation in the Parliament on the basis of proportional representation. The number of female members of Parliament increased from 17.5 percent in 1995 to 30.4 percent in 2006. Likewise, women's representation at the Local Government levels increased from 25 percent in 1995 to 35.5 percent in 2004. According to the report on the implementation of the Beijing Platform for Action, 2004, number of female District Commissionaires increased from 19 in 2003 to 23 in 2004. There was a realizable shift in terms of female District Executive Directors from 14 in 2003 to 23 in 2004. On the other hand, the number of female Regional Administrative Secretaries increased to 5 in 2004 from 4 in 2003 and the number of female High Court Judges increased from 6 in 2003 to 7 in 2004 (URT, 2006).

In 2004, the Government through the Public Service Reform Programme sponsored 50 female civil servants in various institutions in the country, compared to 20 women in 2003, equivalent to an increase of 150 percent (URT, 2006). In 2005, form one enrolment for girls increased from 48.2 percent in 2003 to 49.1 percent. In addition, there was a slight increase in form five enrolments, from 35.3 percent in 2003 to 37.8 percent in 2005. Furthermore, a special programme aimed at increasing the number of female students at the University of Dar es Salaam (A major University in Tanzania) resulted into an

increase in female enrolment to 33 percent in 2004. Female students were 76 percent in 2004. A similar trend can also be observed in other higher learning institutions in the country.

The Government is making efforts to improve the girl child, especially through ensuring access to primary education. Efforts are based on the revision of the Child Development Policy and the preparation of a Strategic Framework for the development and protection of the girl child (URT,2006).

Second, Establishment of Food Security Information Team (FSIT) FSIT was established in May 2000 and is composed of members from Government Departments, International Agencies and NGOs. The FSIT is under the coordination of The Prime Minister's office (Disaster Management Department) and Ministry of Agriculture, Food Security and Cooperatives (The National Food Security Division). FSIT was instituted in order to harmonize different assessment methodologies among various stakeholders. The formation of FSIT has built confidence on the outcome of the assessments among stakeholders (URT, 2006).

- The FSIT is responsible with conducting Rapid Vulnerability Assessments in the country to establish vulnerable groups to food insecurity and advice the Government on necessary actions to be taken on short, medium and long term basis to mitigate food insecurity situation in the country.

- Since its establishment, FSIT has conducted six main assessments. The main objectives of which are:

- To understand clearly the general situation of the districts and identify key causes of food shortage.

- To identify the lowest geographical areas or administrative levels (ward, village or household), which are facing food shortage.
- To determine the magnitude of food shortages and characteristics of households facing food shortages in a particular areas.
- To define characteristics and number of households facing acute food shortages.
- To identify available coping strategies and their significance to the food needs of food deficit households
- Determine and Recommend appropriate interventions and support needed by affected persons to enable them cope, sustain their livelihood means and engage fully in their productive and reproductive activities.
- Recommend enhancement of short to long-term strategies to mitigate food insecurity in the country.

Cost-effective public works programmes for the unemployed and underemployed in districts of food insecurity in Tanzania include Tanzania Social Action Fund (TASAF) Agriculture Sector Development Programme through Participatory in Agriculture Development Programme (PADEP), Participatory Irrigation Development Programme (PIDP) and Food for Work Programme (FFW) by WFP.

The Government has not yet put a formal institution in place to deal with targeted social welfare and nutrition safety nets to meet the need of the food insecure, particularly needy people, children and the infirm (URT, 2006).

- The Ministry of Agriculture Food Security and Cooperatives (MAFC) through its National Food Security Division monitors the availability and adequacy of food supplies and reserve stocks both in the Public and Private sectors. Particular attention is also given to areas at high risk of food insecurity.
- Tanzania Bureau of Standards, apply measures in conformity to Codex Alimentary to ensure quality and safety of food supply.
- The Government through MAFC is making efforts to promote production and utilization of indigenous crops such as drought tolerant crops like sorghum, millet, cassava and sweet potatoes.
- The Government through the Ministry of Agriculture Food Security and Cooperatives in collaboration with the Ministry of Industry, Trade and Marketing is promoting improved food processing, preservation and storage technologies so as to add value to agricultural food crops and reduce post-harvest losses.

Primary Health Care Institute under the Ministry of Health (PHCI), Family Planning Association (UMATI), various Community and Faith Based Organizations are promoting and implementing primary health care services to the community with particular attention to the vulnerable groups. The Government through the National Strategy for Growth and Poverty Eradication (NSGRP) is making efforts through the Ministry of Water guided by the National Water Policy of 2002 to empower the community to have safe and clean water (URT,2006).

According to PHDR 2005 and Basic Education Statistics in Tanzania, 2005,primary education has registered substantial improvement following the

implementation of Primary Education Development Program (PEDP) by the Government of Tanzania. The Gross Enrollment Ratio increased from 106.3 percent in 2004 to 109.9 percent in 2005. Net Enrollment Ratio (NER) increased to 94.8 percent in 2005 from 90.5 percent in 2004. The proportion of girls in 10 primary schools has also increased to 48.9 percent of all students in 2005 from 48.8 percent in 2004. In drought prone areas where prevalence of food insecurity is high, WFP and World Vision International (Tanzania) have been in the forefront to support the Government Education Sector Programme through school feeding programme in primary schools to enable equitable provision of education opportunities to children especially in rural communities, with special emphasis on girls' access (URT, 2014).

The Government in collaboration with other stakeholders including the private sector working towards sensitization and provision of health education, environmental sanitation and the use of safe and clean water. Nutrition services including the provision of Vitamin A drops to children under five years and pregnant women and education on care and use of foods with vitamin A, continues. In addition, education on improving traditional methods to preserve vegetables and fruits without losing Vitamin A is being provided. Large and small-scale salt producers were facilitated by being trained and supplied with equipment and iodine. Machines to examine iron minerals in the body were also supplied to some hospitals (URT, 2014).

- The Government in collaboration with WFP has strengthened the coordination and efficiency of international emergency assistance to ensure rapid, coordinated and appropriate response, particularly by improving communications amongst the international community.

- Adequate supervision and control of emergency operations in Tanzania has been possible through the use of Community Managed and Targeting Distribution (CMTD) methodology which has been instituted by the Government in Collaboration with WFP, Save the Children Fund, Oxfam, Norwegians peoples Aid and Tanzania Catholic Relief Services (RCRS) and adapted by the Government as a standard methodology to ensure community ownership in the Whole process of Emergency operations in the country (URT, 2014).
- Triangular food aid operations are such that the Government during serious food shortage receives food aid from Donor countries through WFP coordination.
- The CMTD methodology identifies a woman ,a mother or wife in a targeted household as a recipient and overseer of the household beneficiaries. Only where¹¹ a household does not have a woman that a man is considered as a recipient of beneficiaries' food aid at household level.

The standard for the nutritional adequacy of food assistance in Tanzania to disaster-affected population is 400 gm per person per day as per UN (WFP) standards (URT, 2014). To ensure that emergency operations foster the transition from relief through recovery to development, the targeted food aid populations are also supplied with seed aid as an immediate measure to ensure that they do not become food relief dependence. Other programs like Food for Work by WFP, Cash for Work by Tanzania Social Action Fund (TASAF). The Agricultural Sector Development Programme (ASDP) is being implemented through various projects like Participatory Agricultural Development and Empowerment Project (PADEP), Special Project for Food

Security (SPFS), District Agricultural Sector Development Programme (DASIP) in supporting the Government to ensure that emergency operations foster the transition from relief through recovery to development. Other National programmes are like the National Strategy for Growth and Reduction of Poverty (NSGRP). NSGRP and ASDP endeavor to eradicate poverty among the community through sustainable development programmes on a participatory basis (URT, 2014).

Chapter Summary

In this chapter, we have reviewed literature about food insecurity, security and how the Tanzanian government policies are involved on the issue of food insecurity. The aim has been to highlight the gaps in research which this study seeks to address. We have identified also other authors, theorists and academicians that talked about food insecurity on their point of views on the impacts of food insecurity.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Chapter Overview

This study aimed to assess the impacts of food insecurity on women's participations on income generating activities in rural areas in Tanzania, A case of women at household level in Chamwino District. This chapter discusses the methodology used in the study that were adopted under the following parts that are the study area, study design, sampling procedures, sample size, data collection procedures and data collection and analysis.

3.2 Research design

A Cross sectional Qualitative study was used in which one stage survey was conducted to generate data on food insecurity. This design was considered to be favorable because of time limit and resources for data collection (Casley & Kumar, 1988). The research design allows data to be collected at a single point in time and can be used for descriptive purposes as well as for determination of relationship between variables (Kothari, 2012).

3.3 Study Area

Chamwino district is one of the seven district of Dodoma region. Dodoma is the capital of Tanzania and is among the regions in Tanzania that are semi-arid areas for a long period of years obtaining an average amount of rain of 500mm per year. Chamwino district is bordered to the North by Chemba district to the East by Manyara region ,Kongwa district and Mpwapwa district , to the south by Iringa region and to the west by Singida region, Bahi district and Dodoma

district. Its administrative seat is the town of Chamwino . It consists of wards such as,Dabalo, Iringa mvumi, Chamwino village, Chamwino village 11 and Mwegamile village and according to 2012 population census, Chamwino district population was 330,543 people.

The study was conducted on women in Chamwino district in Dodoma Region. It covered two wards namely Iringa Mvumi and Dabalo. Chamwino district was chosen for the study due the high presence of food Insecurity in the area to the extent that people in the household survive with only one meal a day and also being among the list of food insecure districts in Tanzania to a large extent.

3.4 Sampling Methods

3.4.1 Sampling procedures

In this study two sampling procedures were used. The sampling procedure started by identifying Dodoma as a region where the study could be conducted. Purposive sampling was used to select the Dodoma region and Chamwino where the study was carried out. Convenience sampling method . Purposive sampling was used to select 4 groups of research participants. Each of the 4 groups consisted of 10 women, of different age, who were selected as participants of the focus group discussions. Both purposive and convenience sampling techniques were used because Chamwino district is known to be suffering from food insecurity; and has been listed as one of the food insecure places in Tanzania. Women who took part in this study were chosen because they reside in rural areas of the country and most of them are involved in small and medium income generating activities and take care of their families that are

usually affected by food insecurity. In addition, 10 key informants were selected using convenience sampling method (Kothari, 2012).

3.4.2 Sample Size

The sample size used in the study is 50. In this sense, 20 women from each ward were purposively selected. From the Dabalo ward 20 women were selected where by 10 were from Dabalo A village and 10 from Igamba village. and 20 from Iringa mvumi ward where by 10 from Chita village and 10 from Iringa mvumi mpya village. The other 10 were from the key informants that were 10 key informants.

3.5 Data collection procedures

3.5.1 Focus Group discussion was one of the data collection procedures used to collect information.

The focus group discussion involved 10 participants where by two groups in two different wards. The groups included 10 women who were involved in participation in casual talks on the issue of the impactss of food insecurity, how they understand food insecurity, there awareness on food insecurity and also the causes and how they are highly affected. The discussions were taken in a place where by the researcher and participants found appropriate. The women in the discussion were able to give their views on food insecurity highly on its impactss depending on how well the understood food insecurity as a concept. The views from the participants in the focus group discussion were written down by the researcher in the diary so that the information will be provided in the study in order to understand the impactss of food insecurity on women in income generating activities.

3.5.2 Observation

The researcher used this method in trying to verify, what is known and how things were done by women in Chamwino on food insecurity and also observation was done to observe how food insecurity was the main problem in Chamwino and how people were struggling to overcome it in many different ways. The researcher in the study indirectly observed the situation in Dabalo and Iringa Mvumi wards in Chamwino in terms of food insecurity, how the impacts of food insecurity affected the women in income generating activities, and how they work to sustain the daily needs. This method was quite difficult but favorable in rural areas though it was a best way because other process like interviews was not favorable because many of the respondents were avoiding interviews and any kind of open conversation and also the majority in rural areas are uneducated they believed on superstition. The researcher observed women in their income generating activities such as collecting fire woods from a very far distance for business purpose that contributed in their income. Also it was observed that women were trying so hard in engaging in agriculture although the climate condition was not favorable in Chamwino and also lack of water sources.

3.6 Data Analysis

Data is analyzed theoretically according to the main topics of this study. Data analysis began early in the data collection process in order for the researcher to inform and direct subsequent experiences appropriately. This was particularly relevant for the discussions with the women's groups where each views and experiences provided valuable insight for improving the experience of the next group visit during the focus group discussion. This can be argued as "in much

qualitative research the analytical process begins during data collection as the data already gathered are analyzed and shape the ongoing data collection” (Mays, Pope & Ziebland, 2000:114).

From conducting the focus group discussions, observation and interview to the keyinformants, data was clustered together according to the major themes. From these clusters, significant sub-themes emerged and were analyzed in relation to the main themes in order to address the relevant research questions.

3.7 Validity and Reliability

In order to strengthen the reliability of the data collection tool for the focus group discussion, the same questions was used for each group. At the side of the focus group discussion, the discussions were carried out smoothly where by the women from the groups and other women as the community members provided breadth of opinion and personal experiences and stories about the impactss of food insecurity in their areas to a large extent. Also the triangulation of data is achieved by including the key informants who could give information or speak from their observation of issues related with food insecurity in rural chamwino especially in Dabalo.

Also, a necessary procedure for data collection was the recording of the group discussions. On every occasion, permission was requested and granted from the groups to record the conversation. In the focus group discussion, I used my phone in recording the conversation and it was given permission from the women or the participants in the discussion.

However, there were challenges faced during data collection in the process of focus group a discussion is the place where discussions were to take place.

One of the groups' regular meetings was outside the house of the village chairman whereby it happened a funeral in that area. In this sense we had to postpone the discussion for some time. Also it was difficult in a part whereby some women could not understand the main aim of the discussion and also the language. We overcame this challenge through the confidence of the translator in politely explaining to the members on the notion of food insecurity.

These discussions were turned out to be perfect due to the help of the translator and the willing of the women in participating and sharing their views to a large extent and also the agenda presented was all the same to all groups in way that it made helped in getting clear and particular information needed for my study to a large extent.

3.8 ETHICAL CONSIDERATION

This study followed all the values and principles of conducting research without any wrong doings during collecting information and all the identities and information of the respondents are kept hidden for their own safety and security and also some names of the respondents were not mentioned at all for the better security.

During conducting the research, in every point of the focus group discussion, the women or representatives were given a form to read and some were given explanation to those who could not read or write, on the issue and the topic in order to earn their trust and consent so that they can participate willingly and comfortably to a large extent. Also the privacy of the focus group discussions and the location was ensured in order to enable the participants to speak freely.

In addition to that, the risk-benefit analysis considered the time frame within which to complete the focus group discussion. In every after 45 minutes which was the time set for the discussion reached and still there were more things to be discussed and more questions were available, the participant's permission was asked to them and kindly requested politely in order to continue and to finish the discussion. The group discussion mostly exceeded 45 minutes but on no occasion was this objected to by the participants. Permission was also required to record through my phone and a clear explanation was provide when requested.

Also, when asking personal questions in the group discussion, and also questions on their experiences appropriate therapy was available. Vulnerable participant's example the old women over 60, the sick women and cripples and also the pregnant women required particular sensitivity in ensuring the interviewing environment was proper enabling them to participate comfortably. Also, as outsiders from the women facing food insecurity, ale participants provided valuable insight into observations and experiences from their perspective.

3.9 Limitation of the study

Some women who were aimed as the members of the focus group discussions were mostly involved in off-farm activities, mostly as doing casual labor. Since the discussions was conducted during (day time), when they were at work, the discussions had to be rescheduled for late hours in the evening, after work time as a result, data collection timeframe had to be prolonged.

Language barrier, this was one the most difficult part as Many respondents had problems in understanding Kiswahili language, this required translation of Kiswahili language to Gogo language by the person who is competent in both languages (Kiswahili and Gogo) in the study area. The translation may sometimes become difficult to express the meaning of questions exactly, hence may lead to unclear answers from the respondents.

3.10 Chapter Summary

In this chapter the researcher set out to explain the research design and methodology. The researcher has provided an outline of sampling, data collection and data analysis methods, together with explanation about verifying the reliability of data and ethical considerations. In the next chapter will be given according to the objectives of this study.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Chapter Overview

This chapter presents data on the impacts of food insecurity on women's participation in income generating activities in rural areas in Chamwino. The results were obtained from information and /or data collected from four FGDs and ten KIs. These results are based on the objectives of the study and are presented in a narrative way. Also, this chapter consists of discussions from other authors, researchers and from other theorists basing on the findings from the study.

4.2 Women's perceptions on the impacts of food insecurity in income generating activities.

The Chinolwa group from Dabalo perceived the notion of food insecurity as "lack of food". *"One of the women was noted saying that food insecurity means no food"*. Also, another from Chita village group said that food insecurity *"absence of food"*. This is as far as their definition of food insecurity goes. The way food insecurity is perceived by all the groups is the same in both wards and in the villages to a large extent. When the women from Butele village were asked about the impacts of food insecurity they talked about their production, that food insecurity slows their production in the sense that they fail to work and earn their living. Some women from Iringa mvumi mpya village were noted saying that food insecurity has affected our works; *"we do not work to earn our basic needs due to food insecurity"*. All the groups on the impacts of food insecurity they had same views that they fail to work, they lose strength to work

in their income generating activities in order their basic needs example food, shelter and clothes. In addition, during the group discussion women gave their views on production whereby it involved agriculture, collection of fire woods and other small business. The absence of food from their views in their villages affected their productions, they fail to engage themselves in agriculture due to lacks of capital, manpower, also land, and also due to lack of food they fail to practice their daily income generating activities like the collection of fire woods and selling them and they fail to practice their other small business to a large extent. Food from their views is the substance that gives them strength to work and also enables them to engage in production in various sectors in their community in order to earn their living and to have the basic needs such as food, shelter and clothes.

Women in all the groups were complaining on the food insecurity that caused family separation, the men run from their families due to lack food and also the children have been wondering around from one place to another in a sense that this decreased the manpower, man capital, the women have been working themselves to provide for the family and hence the food turns out not to be enough for the family at large. In addition to that, food insecurity slows down the strength to involve themselves on the income generating activities such as firewood collection and agriculture that it is the main activities done in the area for their economic growth.

Also. The women from Chinolwa when asked about the impactss of food insecurity, they said that there health is mostly affected. One of the women was noted saying that their health was affected that they become so weak and also diseases from hunger and sexual transmitted diseases because they tend to

sell their bodies in order to earn their living. The other women from other villages, butele group, chita and Iringa mvumi also discussed on the same point on health. Women discussed on their health that has been affected due to food insecurity to a large extent. Due to lack of food the people lacks some vitamins, lack strength to work and also some tend to go and search for food by using their bodies in another way it is practicing prostitution or by selling their bodies as one of their income generating activities. Hiv/Aids affects most of the women in Dabalo and Iringa Mvumi that slows down their production they cannot work or taking care of their families to a large extent.

In addition to that, from other researches and books they also talk about the impacts of food insecurity with same views and points as the women from Dabalo and Iringa Mvumi. According to Chen & Janet, (2009) on the impacts of Hiv/Aids that caused by food insecurity states that, HIV/AIDS has created a sub-population made up of extremely vulnerable households suffering from high rates of morbidity and mortality among their most economically active and productive members. Specific crises within affected households arise with the onset of the disease, the incidence of opportunistic infections, the debilitating effects of chronic illness, and the death of family members, particularly income earners, all of which contribute to imperil the household's livelihood and food security.

The impacts of HIV/AIDS on the household's livelihood and food security depends on a variety of factors, including the household's demographic structure, the timing of illness or death, the number of people infected, and the household's asset endowment. Regardless of its specific impacts, however,

HIV/AIDS makes the vulnerability context in HIV-affected households fundamentally different than in non-affected households.

HIV/AIDS can be either a stress or a shock, or both, depending on the way in which the disease progresses within the household or in its social network. Unlike most other stresses and shocks, HIV/AIDS is not transitory but is generally long-term in nature with a continual and cumulative impacts on the household's livelihood and food security that require ongoing coping or adaptation by affected households to meet their basic needs. HIV/AIDS disproportionately affects adults in the prime of life, at times disabling or killing the most productive household members, thereby reducing the household's labor productivity, income, food production, and caring capacity and impairing the inter-generational transfer of knowledge and skills. At the same time, healthy family members (more often women) are forced to care for sick relatives, further reducing income available for food and other basic needs.

The disease and the opportunistic infections that accompany HIV/AIDS also tend to make affected households less resistant to other stresses and shocks. In the 'typical' situation, a stress or shock temporarily impairs livelihood activities and food consumption, requiring households to cope as best they can until the situation returns to normal. In HIV/AIDS-affected households, however, a quick return to normalcy is often not possible, and what might have otherwise been a transitory bout with livelihood and food insecurity risks becoming a chronic one.

Food utilization among members in HIV/AIDS-affected households is adversely affected by insecure access to a nutritious diet; difficulty accessing health care services; inadequate knowledge about appropriate child feeding and care

practices; inability to breast feed; the lack of resources for appropriate replacement feeding; discrimination in controlling assets; and increased susceptibility to food and water borne infections. At the same time, HIV/AIDS increases the nutritional requirements of people living with HIV/AIDS in the household, while diminishing the ability of caregivers to prepare nutritionally adequate food, including replacement feeding. The quality of child feeding suffers as mothers sicken and die and children are cared for by fathers, grandparents, other relatives, or foster parents who may not possess the knowledge or resources to provide or prepare nutritious foods.

HIV/AIDS and its opportunistic infections further impose a number of demands on the affected household's scarce (and often diminishing) financial assets due to the costs of medical care—including fees, medicine, and transport—caregiving of infected persons, and funerals. Affected households may also have difficulty tapping into their social assets or may be reluctant to seek assistance due to social stigma.

In sum, HIV/AIDS adversely impacts all aspects of a household's livelihood, directly affecting its income generating activities, labor productivity, production, and income through chronic illness, death, and social stigma, and indirectly affecting them by its impacts on food utilization and the widening gap between food needs and food access. HIV/AIDS, moreover, adversely affects the household's stock of human, financial,

Chen & Janet, (2009) continues to say that ,the relationship between HIV/AIDS and livelihood/food insecurity is bi-directional: HIV/AIDS can increase the vulnerability of households and communities to livelihood and food insecurity, while livelihood and food insecurity can also increase the risk of a person

becoming infected with the HIV virus. The modes of HIV infection including sexual transmission, mother-to-child transmission, transfusions, and intravenous drug use are diverse (Barnett and Whiteside, 2002) and reflect an equally diverse set of circumstances and conditions that determine the risk of infection. These range from immediate micro-biological factors, such as the prevalent HIV virus sub-type in an area and the nutritional status of the population, to much broader factors, such as the prevailing culture and policy environment.

This context are coping behaviors, such as the following, that put household members at greater risk of contracting HIV

- Household members migrate to take wage labor where they become isolated from their families, friends, and familiar socio-cultural norms and become more likely to engage in sex with multiple partners.
- Female migrant workers are subjected to exploitation and/or physical and sexual violence.
- Household members engage in transactional sex in exchange for basic necessities for themselves and their children.
- Household members engage in commercial sex as an income-generating activity.
- Children are sent to live with relatives, friends, or acquaintances where they are sexually exploited by caregivers or other power figures.
- Younger household members who have lost parents may be more likely to begin sexual activity at an early age and engage in risky sexual behaviors.
- Food insecurity leads to micronutrient deficiencies that increase the likelihood of moth

According to Chen & Janet,(2009) on the impactss of food insecurity and health states that, inadequate nutrition is significantly correlated with food insecurity. In turn, prolonged inadequate nutrition that may derive from food insecurity can have serious health implications example poor nutrition in children can affect the development of the intellectual, social and emotional skills needed to function in society. During infancy and childhood, poor nutrition is related to growth retardation and impaired psychomotor development. Inadequate nutrition has also been associated with decreased ability to concentrate and poor school performance.

At any age, insufficient consumption of fruits and vegetables can put individuals at greater risk of chronic diseases such as cancer and cardiovascular disease. A deficiency in nutrients such as zinc, copper, selenium and vitamins A,C and D can compromise the immune system and increase susceptibility to infections. In the notion of Dabalo and Iringa Mvumi as the study is about is that seniors are at a particular risk. Malnutrition in older people results in loss of muscle mass and strength, which can lead to disability and loss of independence. A compromised immune system also leaves elderly people more susceptible to pneumonia and other infections that may be life threatening just like what happens with the women in Dabalo and Iringa Mvumi.

The impactss of food insecurity as perceived by the women in Dabalo & Iringa Mvumi have also been discussed by other researchers and authors to a large extent. The other author states that Tanzania experiences the presence of severe food insecurity in places such as Dabalo in the yearv 2016 people lived in serious condition that affects their daily production to sustain their living. Dabalo ward has serious food shortage to the extent that families do not get

adequate food all the time (Oforo, 2017). And also it reached a point in 2016 that famine severely affected the population in the district to the extent of forcing the majority to survive on roots and armyworms (Oforo, 2017). In Dabalo Ward some 80 kilometres from the district headquarters, the situation is more pathetic as most residents lament over serious scarcity of food. The prices of maize has catapulted drastically in a way that formerly a tin of maize was sold for TZS 12,000 but the same now goes for up to TZS 28,000 (Oforo, 2017).

In this sense, food insecurity affects women mostly as most of the food producers are women. Women are abandon with their men and left behind helpless wives and children on empty stomach and with no any assurance of getting daily meal, engages in agriculture, women cook, women takes care of the family in all sectors where by this makes them the victims of the circumstance (Oforo, 2017).

The women's perceptions on the impactss of food insecurity in their rural area and the arguments from the researchers in the same agenda shows how the women are highly affected by food insecurity to a large extent, and how affects their daily income generating activities that In one way or another enables them to survive to earn their living. The situation in Dabalo and Iringa Mvumi with food insecurity is very bad that, people are suffering from the outcomes, poor health and also from the observation the women are struggling to earn their living through their critical condition of food in security to a large extent.

4.2 Women's knowledge on the factors influencing food insecurity at household level

The women were asked to give their views on factors that influence food insecurity at their household level. The women in Chinolwa and Butele were very active and aware of the causes or factors to some points that they said that one common factor is *poverty*. Poverty is one of the major problems in Dabalo rural, whereby they lack enough capital to start a business or to engage in agricultural production in a way that they lack food as a result of food insecurity. Also, in the household in the rural areas it contains more than 8 people in one household and that adds on a large number of dependency ratio in a way that the small amount of food produced turns out to be inadequate to a large extent. However, the women from chita village and Iringa mvumi had a common idea that one of the factor for food insecurity is *lack of capital*. Their ideas are practically the same but the way they presented them, speaking of poverty, we also talk about lack of capital. The women were well aware that they lack money to support them to run their income generating activities. One of the women from Butele was noted saying that "*there is no money to buy seeds for cultivations*".

Also, from the observation, the factors contributing to food insecurity is that of lack of knowledge on food security and also on the production that in both Dabalo and Iringa Mvumi they still they use primitive ways in production in a sense that they use local equipment's like the hoe, plough for productions in agriculture whereby it slows the production and in return the absence of enough food and surplus profit to earn a living. Also, lack of knowledge in a sense of balanced diet, people in the rural area just eat food, consume food without

knowledge on what food to be taken on that particular time in order to strengthen their health to a large extent.

Also women talked about how they are denied the rights to own large part of land for their own agriculture activities. In Dabalo, women are mostly discriminated in a way that men mostly are the owners of the land. The women just work to produce but are not given chance to own the land. This really discourages women in Dabalo in production to sustain their daily living.

This can also be argued by other authors that Women face numerous obstacles to access productive inputs, assets to land and services required for rural livelihoods. These include access to fertilizers, livestock, mechanical equipment, improved seed varieties, extension services, agricultural education and credit. Women receive for example only 5 percent of agricultural extension services worldwide. As rural women often spend a large amount of their time on additional household obligations they have less time to spend on food production or other income opportunities. Women also have less access to markets than men which hamper their opportunities to earn an income even further, and thus their possibilities to be able to buy food. With fewer assets and heavier burdens, women are more vulnerable to shocks and less well positioned to respond to e.g. the impacts of climate change or other rapid changes in the environment (FAO ,2006).

Social and economic inequalities between men and women result in less food being produced, less income being earned, and higher levels of poverty and food insecurity. If women farmers had the same access to re-sources as men, the agricultural yield could increase by 20 to 30 percent. This could raise total

agricultural output in developing countries by 2.5 percent, which could reduce the number of hungry people in the world by 12 to 17 percent (FAO, 2006).

In addition to that, another factor contributing to food insecurity from my observation as a way of data collection it is that of adverse climatic conditions (droughts and floods). Droughts and floods are extraordinary threats to the food security in Chamwino. Droughts have been the major destruction of the crops, plantations and all the food production systems in Chamwino and hence the community faces hunger and starvation to a large extent. This can be argued that, The rapid onset drought frequently found to threaten thousands of lives, to displace population, to damage properties and to disrupt the provision of basic necessities that households were accustomed to acquire through the existing economic and social infrastructure (SADC, 2001). This shows how climate change in terms of lack of rainfall and droughts and massive floods cause extensive harm to the people in terms of destruction of their properties such as farms, livestock and food crops used as food hence food insecurity.

Another factor contributing to food insecurity in rural Chamwino is that of poor governance and mismanagement is another cause of food insecurity in Chamwino at large. Mismanagement and poor governance are reflected in the inappropriate food security strategies adopted at a national level. In this sense, this section sets out to define the inappropriate food security strategies of Tanzania which entails waiting for natural disasters before requesting help from the international community hence people suffer from lack of food. The failure of governance is that lack accountability and financial mismanagement and wide spread of corruption. The Tanzanian government at large, the government officials tend to benefit themselves first and the citizen later example on

financial management, the budget does not ensure availability of food to those poor areas where people starve and die of hunger. In this sense this cause food insecurity in Tanzania to a large extent.

Furthermore, another factor contributing to food insecurity is the increase or growth of population. As the population grows daily their rise high demand of food example in Chamwino we have arable land but not all the areas In Tanzania, so as the population grows people tend to use the land, they fight over the land so that to produce food in a way that the land turns out to be not enough for the population. According to Anandh, (2011), says that, as the population grows it has been suggested as the major cause of reduced land are and mostly the arable land loose annually through degradation in soil erosion. In addition to that, through increase of the population even water supply turns out to be unevenly distributed to a large extent. People get affected through lack of water so they cannot produce and cultivate and also absence of land for cultivation hence food insecurity.

Also, food insecurity can be caused by lack of education or ignorance. Food insecurity is not only about lack of food but also the availability of food but poor diet due to lack of knowledge in balanced diet. Food is important but it should be taken on a right way so that one can acquire vitamins from certain food, other minerals that needed for the human body to survive against diseases and also the children to grow well by avoiding malnutrition diseases that can lead them to death and sever pain. Therefore through this food insecurity occurs to a large extent. Semi-autonomous boards, appointed by the Ministry of Agriculture, Food Security and Cooperatives (MAFSC), issue agricultural

licenses to administer the cashew nut, coffee, cotton, pyrethrum, sisal, sugar, tea and tobacco sub sectors.

They co-ordinate each sub-sector, enforce quality standards, provide inputs and facilitate Research and Development (R&D) funding. While they play a valuable role in convening stakeholders and monitoring quality, the regulatory restrictions to trade imposed by some boards may increase the costs and the uncertainty for investors. Agricultural trade is also hindered across borders because of long goods clearance at customs offices. In addition, periodic export bans on maize and rice can prohibit access to larger and often closer regional markets and may thus reduce farmers' incentives to increase production (OECD, 2013).

Also. Another cause of food insecurity in Chamwino is that there is limited access to finance in agriculture to a large extent. While the financial sector has developed quickly over the last few years, it remains highly concentrated and dominated by over-liquid banking institutions. 56% of the population, and in particular small businesses in rural areas, remains excluded from any financial service. In 2011, only 8% of the rural population had access to formal financial institutions (banks and insurance companies). According to the Global Competitiveness Report 2013-14, access to financing is cited as the most problematic factor for doing business in Tanzania, closely followed by infrastructure (WEF, 2013). Credit from commercial banks has increased significantly over the last five years but only 12% of this credit went to agriculture. Only 8% of the domestic lending to agriculture went to agricultural production, with the rest channeled to agricultural trading.

Despite the considerable support given to microfinance in recent years, the impacts of microfinance on access to financial services has been negligible. Microfinance institutions have been lending at higher interest Rates than commercial banks, averaging 30%. Savings and Credit Cooperative Societies (SACCOS) may have the greatest potential to expand credit supply to agriculture. While their number has been growing, it remains too limited to meet demand in rural areas. Furthermore, they remain largely unregulated, resulting in high variations in service quality and management practices. The lack of collateral represents a critical issue to access both formal and semi formal credit. Commercial banks require a legal collateral covering 125% of the credit amount (OECD, 2013).

Efforts to facilitate access to credit have had limited impacts (FAO,2006). The Tanzania Investment Bank has an agricultural window offering concessional loans and an agricultural input trust fund (AGITF) has been issuing short term soft loans since 1994, in particular to farmers and farmers' groups for farm machineries and to stockiest for inputs. The Tanzania Agricultural Development Bank (TADB) is also being established. However, these scheme mainly target medium-scale farmers who have collateral, and do not reach most smallholders. Consequently, the informal financial sector remains the major source of financial service for smallholders, but its scope and coverage are limited.

4.3 What income generating activities done by the women in Dabalo and Iringa Mvumi?

Through the focus group discussions and observations, it is proven that large number of women in rural chamwino engage on various income generating activities to enable to earn a living. The income generating activities that takes place in Dabalo and Iringa Mvumi are agriculture in which mostly are small scale farmers, firewood collectors, local brewing which is the most common business in Dabalo, handcrafts business, local midwife and generates income through their bodies in a modern days it is called prostitution due to hardship of life to a large extent.

The income generating activities has also been part of discussion with other researchers and theorists and authors to a large extent. The similar activities found in the study are well discussed by other researchers as well. This can be proven through the following other publications where by shows that agriculture, local brewing, fire wood collectors is so common in the rural areas as their income generating activities to a large extent.

4.3 Women awareness on the effects of food insecurity on their income generating activities in rural areas in Dabalo and Iringa Mvumi.

The dabalo and iringa mvumi women in Dabalo and Iringa mvumi are quite aware of the effects of food insecurity in a way that during the group discussion they gave their views and experiences and how they are affected by food insecurity although to them food insecurity was defined simply as lack of food as the women were saying “ni kukosa chakula” in Swahili language while the

definition goes far beyond that includes, availability, safety, access, nutritious at all times in all places.

Lack of power to work, the women are aware that they get power and strength to produce with the ability of enough food but due to hardship of life in dabalo and iringa mvumi villages they both had same opinion on the loss of manpower. To them, power to work was from food therefore loss of manpower is one of their indicators that they are facing food insecurity with in their area and hinders their development economically through absence of production.

Also, the women are quite aware that food insecurity contributes more into eruption of absolute poverty in their communities as people due to food insecurity fails to provide themselves with basic needs such as food, shelter and clothes to a large extent. They are aware of destruction poverty makes but they have nothing to do due to the absence of capital to run small business and also money to buy food, money to buy food crops, money to run agricultural activities and also the general condition of the life status in the community whereby there is totally hardship in making a living.

The decline of the business, the women who engaged themselves in small business for instance the firewood collectors, local brewing, handcrafts their business have been declining because there are no enough customers in the community due to poverty and also due to hunger people lacks enough man power to work and produce so they lack money to trade with the business women in the community to a large extent.

4.4 key informants awareness on the impactss of food insecurity on women on income generating activities in rural communities in Dabalo and Iringa Mvumi.

The chairman of the chinolwa village in Dabalo also gave his views and experiences on food insecurity that takes place in the community that affects the women income generating activities.

He said that, the women are the main producers in the village but are badly treated by the men, they are not given a chance to own lands but still are asked to produce for the family whereby they work in very small lands and hence the productions turns out not to be enough to feed the entire household and hence they get affected economically with no strength to produce more for surplus and for consumption and also destruction of their health to a large extent as some engage in selling themselves to satisfy men in order to have income to support themselves and their families.

Also, the key informants mentioned on the size of the household as factor causes food insecurity and leads to higher impactss on income generating activities. The size of household may affect the food security situation within a household. The village chairman was asked to indicate the number of household members, including sex, age and the findings was that the household had h size ranges from 8 – 12. This observation implies that large household sizes were common in both groups. This is due to the fact that “many people in the study area practise polygamous (more than one wife) marriage especially people with many cattle herds which enable them to have more women and children, hence more household members” as reported by one of the key informants. Furthermore, the study reveals. This figure is higher than the one found during population census of 2012, which average household

size was 5.86 and 5.52 for FS and NFS households, respectively. This figure is higher than the one found during population census of 2002, which was 4.5 for Dodoma region and 4.2 for Dodoma Rural which includes Chamwino district (URT, 2009). It was observed that large household size with able bodies provide labor for Production but only women were mainly involved in the production.

The Agricultural officer as one of the key informants also gave his views on the causes of food insecurity in Chamwino rural that affects women particularly on their income generating activities. He first said, one of the most activities done for their income is agriculture, agriculture is the main activity that is done to earn their living and to sustain their basic needs like food, shelter and clothes.

The agricultural officer was asked to give factors contributing to each of the causes of food insecurity and said Low crop production was among the major factors reported by respondents in the group discussion to cause food insecurity in the study area. Major factors leading to low crop production as stated by HHs respondents include inadequate rainfall and limited use of improved technology.

According to FGDs, inadequate rainfall in the study area is caused by environmental destruction, farming on water sources, clearing natural forest, climate change (low/excessive rains) and traditional beliefs (belief on supernatural power to stop rainfall). It was further noted during FGDs that limited use of improved technology is due to increased price of farm inputs and implements, unavailability of these inputs and implement, as well as lack technical knowhow. Generally, smallholder farmers are aware of the causes of food insecurity in their area. Therefore, they should be facilitated so as to

access credit for improved farm inputs and implements to increase production and trained on the appropriate farming methods.

CHAPTER SUMMARY

This chapter has managed to explain and to show the findings and results from the study according to the objectives of the study both the general objectives and the specific objectives to a large extent.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.0 Chapter overview

5.1 Conclusion

This study set out to assess the impacts of food insecurity on women in income generating activities in rural communities. The main aim was to assess the impacts of food insecurity on women in income generating activities. In order to achieve this, the researcher investigated and explored the impacts of food insecurity and other factors that led to food insecurity in the rural communities.

From the findings; food insecurity has been one of the major calamities that affects the rural communities especially the women as the main producers or as the people who engage mainly in the income generating activities. It is noted that, the government in one way or another has forgotten the rural communities. The policies established are not well implemented example on agriculture, the policy example KILIMO KWANZA still the poor farmers suffers a lot in the villages. There is poor health condition in Dabalo and Iringa Mvumi that affects the capability to work. Family separation due to food insecurity, women tend to be the head of the family and works alone to sustain their basic needs for the households.

Due to food insecurity, the sexual transmitted diseases transmit in high speed as the women engage themselves in prostitution as their income generating activity.

Education from the observation is one important factor for food insecurity. The majority of the community members (women) are ignorant. The women as the main producers, they use primitive ways in agriculture and not the modern ways due to poverty. In addition to that, there is lack of government support in the villages hence the income generating activities like small business fails due to lack of good infrastructures and communication.

5.2 Recommendations

There are various obstacles for dealing with food insecurity in Tanzania. One of the biggest challenge or obstacle of dealing with food insecurity in Tanzania is the presence of large number of uneducated or ignorant people or in other way due to the presence of lack knowledge in food security. This can be argued through the diet people take. A lot of people with in the country they have no knowledge on how to have proper diet and proper vitamins, they just eat what is present and prepared hence some lack some important vitamins and minerals in the bodies and hence they develop dangerous diseases caused by lack of proper food that is required by the human bodies to a large extent. Also a lot of people in Tanzania due to lack of knowledge they can't access food through agriculture, because it takes ones knowledge to cultivate food crops example cassava, potatoes, wheat so that can be used for food instead people do not have knowledge to do that and hence they go hungry ad starve to a large extent (World Health Organization, 2011).

Education is the most important factor for reducing the spread of food insecurity in order to help the people in rural communities such in chamwino so that they can work best on their income generating activities. Education should be given to the villagers on how to do production for instance in agriculture in

modern ways by using machines and fertilizers to ensure good production to sustain their basic needs such as food, shelter and clothes and also not only for consumption but also for subsistence to a large extent. In addition to that, the women should be given knowledge on storage system so that they can keep some crops for future use in case drought occurs or any other natural calamity in which will serve them to have sufficient food at all times in all places hence food insecurity will be reduced to a large point.

In addition to that, the women as the main household producers and the care takers, should be given knowledge on balanced diets, they should learn to eat proper food at a proper time in order to have vitamins and other minerals needed for their bodies and to ensure strength to work on their income generating activities.

The Tanzanian government should well implement the policies such the agricultural policies example the kilimo kwanza policies as it was introduced to help both the small scale farmers and large scale farmers but to a large point the people in rural areas are suffering from absence of capital, poor agriculture facilities due to poverty but if the government supports them well enough through provision of capital, seeds, machines, pesticides they can enable them in their production and hence heavy production that can sustain them in their households and for surplus production as an income generating activity. In addition to that, lack of government support is one of the greatest in elimination of food insecurity in one way or another. The government support to the poor farmers is mainly needed. The government of Tanzania does not give much support the farmers in terms of capital and loans that can be used for the

farmers to buy crops to buy good facilities and equipments and also pesticides for the cultivation of crops so that they can produce much food for the Tanzanian community at large and also food for themselves. In the absence of loans and capital to support the farmers to produce, the farmers and the people who depend food from the farmers faces food insecurity.

Building of infrastructure, the rural areas needs good infrastructure to enable transportation of goods from the rural areas to the urban and also for communication so that the women engaging on income generating activities such as agriculture, local brewing, charcoal selling to expand their business and to enable to reach the urban markets in the sense that will add on their income and will build a better life from poverty. Hence reduction of spreading of food insecurity.

In addition to that, women empowerment is highly needed in rural Tanzania for instance in Chamwino. Women as the largest producers, they need to be empowered, they need to be given strength and to be supported on different sector politically, socially and economically. Women are very strong and hardworking most especially in the rural areas like Chamwino, if the government supports them in their productions, in extension of markets for their products and also by been given education on other income generating activities rather than to be engaged on prostitution will help not only the women economic affairs but also the country at large politically, socially and economically.

The key informants in some way during the conversation mentioned the effects of food insecurity in the study area and the most affected groups by food insecurity problem. According to the informants the mostly affected group by

food insecurity includes old age, pregnant women, lactating mothers and children under five years. Since these groups require much attention on special diets according to their body requirements. The effects of food insecurity were given as poor education, health problems such as malnutrition, low income and purchasing power, death especially for children and women at old ages, out migration of people especially of youth and men, increased poverty, low production and family conflicts that leads to marriage breakdown and divorces. The FGDs and the from my observation as a process of data collection also provided the same opinions. Therefore, the government should establish the policy to reduce the effects of food insecurity in rural communities, which favors the vulnerable groups, particularly under-five year's children, pregnant women, old aged people and who are disabled.

It was noted that inappropriate uses of food such as using food for local brewing, ceremonies and selling food for income as well as poor storage methods and facilities lead to food insecurity. It could be concluded that improper use of the available food and poor storage methods and facilities contribute to household food insecurity in the study area. Therefore, it is advisable that awareness on proper use of food and good storage methods such as an establishment of food banks (*benki mazao*) to be used during farming season should be given to smallholder farmers in the study area.

The Tanzanian government should implement the sustainable development goals such as poverty in order to be able to reduce the spread of food insecurity not only on rural communities but in Tanzania at large. The sustainable development goals (SDG'S) aims on the end of extreme poverty in all forms by 2030. Yes, it's an ambitious goal but we believe it can be done. In

2000, the world committed to cutting the number of people living in extreme poverty by half in 15 years and they met this goal. However, more than 800 million people around the world still live on less than \$1.25 a day that's about the equivalent of the entire population of Europe living in extreme poverty. Now it's time to build on what we learned and end poverty altogether and by doing so food insecurity will be eliminated to a large extent.

Also the government should emphasize on elimination of hunger and starvation as stated on the sustainable development goals. In the past 20 years, hunger has dropped by almost half. Many countries that used to suffer from famine and hunger through the sustainable development goals can now meet the nutritional needs of their most vulnerable people. It's an incredible accomplishment. Now we can go further and end hunger and malnutrition once and for all. That means doing things such as promoting sustainable agriculture and supporting small farmers. It's a tall order. But for the sake of the nearly 1 out of every 9 people on earth who go to bed hungry every night, we've got to try. Imagine a world where everyone has access to sufficient and nutritious food all year round. Together, we can make that a reality by 2030 through the sustainable development goals.

The Tanzania government should try to improve the health sectors in the rural communities in order the health of the people to be good for production and for their income generating activities whereby they can meet their daily basic needs. We all know how important it is to be in good health. Our health affects everything from how much we enjoy life to what work we can perform. That's why there's a Goal to make sure everyone has health coverage and access to safe and effective medicines and vaccines. Since 1990, we've made big strides

preventable child deaths are down by more than half, and maternal mortality is down by almost as much. And yet some other numbers remain tragically high, like the fact that every year 6 million children die before their fifth birthday, or that AIDS is the leading cause of death for adolescents in sub-Saharan Africa. We have the means to turn that around and make good health more than just a wish.

In conclusion, this study has shown the impacts of food insecurity on women on income generating activities in rural areas to a large extent. It has been discovered that women suffer a lot from the impacts of food insecurity mainly as the main producers in the rural areas. Women suffer discrimination as are not able to be titled in lands but still have to work for the household to have something to eat and to ensure their basic needs that is food, shelter and clothes. In Tanzania and in Africa at large, women should be recognized; women are the mother of the nation and also should be acknowledged as strategic vehicles for sustainable community development. In addition to that, there are lot of researches have been done on food insecurity but not on the impacts mostly on the causes. The rural communities are mostly affected by food insecurity. The government should work together with the rural communities in order to eliminate the problem of food insecurity not only for the bitterness of the rural communities but also for the nation to a large extent.

LIST OF REFERENCES

- Anandh, P.(2011). "Factors affecting food security and contribution of modern technology in sustainability". In Journal of the Science of food and agriculture. DOI:10.1002/jsfa.4666.
- Baldwin, S. (2006). Food Security in Developing Countries, the Parliament Office of Science and Technology, Millbank, London
- Barrett &Sahn,D.E. (2001)."Food Policy In Crisis Management". SSRN 611067.
- Casley, D.J. and Kumar, K. (1988). The Collection Analysis and Use of Monitoring and Evaluation of Data. (Edited by Malhotra, R.C.) The International Bank for Reconstruction and Development. Washington DC. 174pp.
- FAO (2003). The Special Programme for Food Security: Rationale, Objective and Approach. [<http://www.fao.org/spfs/objec-e.html>] site visited on 22/05/2006.
- FAO (2006). The State of Food Insecurity in the World: Monitoring Progress Towards the World Food Summit and Millennium Development Goals. FAO Press, Rome, Italy. 30pp.
- FAO (2012). The State of Food Insecurity in the World 2004: Monitoring Progress Towards the World Food Summit and Millennium Development Goals. FAO Press, Rome. 40pp.

- FAO (2006). *The State of Food Insecurity in the World 2006*. FAO Press, Rome, Italy. 13pp.
- Kavishe, F.P. and Mushi, S.S. (1993). Tanzania Food and Nutrition Centre 20th Anniversary, 1973-1993 Nutrition–Relevant Actions in Tanzania. *Tanzania Journal of Food Science* 45(4):23 - 56.
- Kilombero Sugar Company Limited (KSCL) (2008).5 Annual Report, Livelihood and Food Security Technical Assistance, (2009). Annual Report. New York.
- Lorri, W.S.M. and Kavishe, F.P. (1990). Household Food Security and Relation to Nutrition. In: Proceedings of National Workshop on Household Food Security. TFNC Report No.1277. 11 - 13 June 1990, Dar es Salaam, Tanzania. pp7 - 34.
- Maxwell, S. (1990). *Food Security in Developing Countries: Issues and Options for the 1990s*. UNICEF and IFAD. Rome
- SADC. (2001). "Strategy for Floods and Drought Management in the SADC region". SADC water sector co-ordinating Unit.
- Oforo,V (2017). Households now survive on a meal a day in Chamwino. Retrived Saturday, February 18, 2017.www.thecitizen.co.tz
- Sen, A.K. (1981). "Poverty and Famine": An Essay on Entitlement and Deprivation. Oxford: Claredon.

Sen, A. (1981). *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford University Press, Oxford. 257pp.

UNDP (1998). *Human and Development*. Dar es Salaam, Tanzania. 27pp.

United Nations Development Programme. (2012). "Toward a Food Secure Future". New York. U.S.A.

United Nations Development Programme. (2006). "Toward a Food Secure Future". New York. U.S.A.

U.S DEPARTMENT OF AGRICULTURE & DEVELOPMENT, (2012). New York.

United Republic of Tanzania, (2006): Ministry Agriculture Food Security and Cooperatives. "Follow-up of the Implementation of the World food summit plan of action". Tanzania.

UNDP, (2016). "Sustainable Development Goals". New York

United Republic of Tanzania, (2009): Ministry Agriculture Food Security and Cooperatives. "Follow-up of the Implementation of the World food summit plan of action". Tanzania

THE WORLD ECONOMIC FORUM, (2013). The Global Competitiveness report 2013-2014. www3.weforum.org

World Health Organization. (2011). "Global Database on Child Growth and Malnutrition". Geneva.

World Food Program, (2009). "Food Security". New York.

World Health Organization. (2011). "Global Database on Food Insecurity".
Geneva.

APPENDIX A

FOCUS GROUP DISCUSSION: CHECKLIST GUIDELINES

- NAME OF THE WARD
- NAME OF THE VILLAGE
- NAME OF THE RESPONDENTS

A. What are the impacts of food insecurity on women's participation on income generating activities?

- What is food insecurity
- What are the causes
- What are the impacts of food insecurity on women in income generating activities.

B. What are the factors influencing food insecurity?

C. What income generating activities practiced in the village?

D. Are you aware of the effects of food insecurity?

APPENDIX B

CHECKLIST FOR THE KEY INFORMANTS

- 1 NAME OF THE INFORMER
- 2 NAME OF THE INSTITUTION
- 3 NAME OF HIS/HER STATUS
- 4 QUESTION
 - WHAT IS FOOD INSECURITY?
 - WHAT CAUSES FOOD INSECURITY?
 - WHAT ARE THE IMPACTSS OF FOOD INSECURITY ON WOMEN IN INCOME GENERATING ACTIVITIES?

APPENDIX C

CONSENT FORM

STUDY TITLE: THE IMPACTS OF FOOD INSECURITY ON WOMEN'S PARTICIPATION IN INCOME GENERATING ACTIVITIES IN RURAL AREAS IN TANZANIA. A CASE OF WOMEN AT HOUSEHOLD LEVEL IN CHAMWINO, TANZANIA.

RESEARCHER: HAPPINESS .M. MAHANGA

I confirm that the researcher has explained the elements of Informed consent to the participant. The participant knows that their participation is voluntary, no force will apply at any cost and they do not need to answer all questions. The purpose of the research as well as the risks and benefits have been explained. The participants know that they can withdraw from participating any time they feel uncomfortable without any harm. The participants understand issues of confidentiality and all data provided by him or she will be well protected.

PARTICIPANT NAME.....

PARTICIPANT SIGNATURE.....

WITNESS NAME.....

WITNESS SIGNATURE.....