

[www.udsspace.uds.edu.gh](http://www.udsspace.uds.edu.gh)

**ACCESS OF WOMEN TO LAND, AND HOUSEHOLD FOOD SECURITY IN  
THE NANDOM DISTRICT OF THE UPPER WEST REGION OF GHANA**

**BY**

**OPHELIA ABAKISI (B.A INTEGRATED DEVELOPMENT STUDIES)**

**UDS/MIC/0030/12**

**THESIS SUBMITTED TO THE DEPARTMENT OF AGRICULTURAL  
EXTENSION, FACULTY OF AGRIBUSINESS AND COMMUNICATION  
SCIENCES, UNIVERSITY FOR DEVELOPMENT STUDIES IN PARTIAL  
FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF  
PHILOSOPHY DEGREE IN INNOVATION COMMUNICATION**

UNIVERSITY FOR DEVELOPMENT STUDIES



**APRIL, 2018**

**DECLARATION**

**STUDENT’S DECLARATION**

I hereby declare that this submission is my own work towards the award of a Master of Philosophy degree in Innovation Communication, and that to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

Student’s Signature..... Date.....

Name: Ophelia Abakisi

**SUPERVISOR’S DECLARATION**

I hereby declare that the preparation and presentation of this thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University for Development Studies.

Supervisor’s Signature..... Date.....

Name: Dr. Salifu Walata



## ABSTRACT

The study examined access of women to land and household food security in the Nandom District of the Upper West Region of Ghana. Land is identified as a key productive resource. In Ghana, it is estimated by Amu (2005) that women produce about 70-80 percent of the food consumed and are responsible for food security. However, women's access to and control over land is met with numerous challenges. Women in Ghana including those in Nandom have not been spared these challenges in their attempts to access land for various agricultural activities. The study was guided by objectives such as examining the extent of land ownership by women and general land ownership systems existing in the district among others. To achieve the research objectives, a cross sectional descriptive survey design was adopted. The population of the study consisted of all adults in all communities in the Nandom district although the major target group was women. A total of 200 women were sampled through a multi-stage sampling process. The survey data was presented in tables and charts using percentages. The study found that the main land ownership systems that exist in the district are communal, family and individual ownerships. It also found that the major mode of land access by women in the district is through acquisition from husbands. In addition, the study identified lower outputs due to small farm size and lack of secure land rights resulting in inability to access credit as some of the major effects of land tenure systems on food security in the district. The study therefore concluded that the customary practices which hamper women's access to land and tenure security would have negative consequences on household food security in the district, especially in the near future. The study recommended that innovative ways should be found to engage community leaders to encourage them to review their customs and allow women to own land as well as be able to access relatively large parcels of land for farming and other livelihood activities.



## ACKNOWLEDGMENT

The successful completion of my thesis was made possible through the efforts and contribution of many individuals, groups and family members who deserve commendation and appreciation. My first appreciation goes to the Almighty God for his special grace, favour, and love that took me through this programme. I wish to specially acknowledge my supervisor, Dr. Salifu Walata for his constructive criticisms, suggestions and advice that led to the completion of this thesis. I also wish to appreciate the work of all the Lecturers of the Innovation Communication programme of the University for Development Studies for their support in my academic life.

My appreciation also goes to West Africa Water Supply, Sanitation and Hygiene Program (USAID WA WASH) for the partial scholarship given me which indeed helped me to carry out the research work.

A person worth mentioning in my words of gratitude is my lovely husband, Adangabey Bonaventure, an inspirational and trusted friend, whose financial and moral support cannot be underestimated. Special thanks go to my family for their great amount of patience and respect. I would also like to thank all respondents in the Nandon district who willingly and voluntarily shared their personal stories with me during the interview section. I would therefore recommend the Nandon District with no uncertain terms as safe place for anyone who want to experience Upper West Region.



## **DEDICATION**

This work is dedicated to my lovely sons, Adangabey Awenyaami Ignatius and Awenbiik Bonaventure Adangabey Junior. I love you with all my heart.



## TABLE OF CONTENTS

DECLARATION .....	i
ABSTRACT.....	ii
ACKNOWLEDGMENT.....	iii
DEDICATION.....	iv
LIST OF ACRONYMS .....	x
CHAPTER ONE .....	1
INTRODUCTION .....	1
1.1 Background of the Study.....	1
1.2 Problem Statement .....	7
1.3 Research Questions .....	8
1.4 Research Objectives .....	8
1.5 Significance of the Study .....	9
1.6 Scope of the Study.....	10
1.7 Limitation.....	10
1.8 Organisation of the Study.....	12
CHAPTER TWO .....	13
LITERATURE REVIEW .....	13
2.1 Introduction .....	13
2.2 Theoretical Framework .....	13
2.3 Land and its Importance.....	19
2.4 Land Tenure System.....	22
2.5 Customary Land Tenure System.....	24
2.6 Modes of Land Ownership and Acquisition.....	27
2.6.1 Traditional Mode of Land Ownership and Acquisition.....	27
2.6.2 Modern Mode of Land Ownership and Acquisition.....	30
2.7 Access of Women to, and Control over Land in Ghana.....	33
2.8 General Barriers to Women Land Access .....	37
2.9 Food Security .....	40
2.10 Determinants of Food Security .....	46
2.10.1 Food Availability and Accessibility .....	47



2.10.2 Adequacy of Food Supply .....	48
2.10.3 Acceptability of Food .....	49
2.11 Food Security in Africa .....	50
2.12 Food Security in Ghana.....	52
2.13 Factors that Influence Household Food Security .....	58
2.14 Land Tenure Rights and Food Security.....	61
2.15 Women Land Access and Food Security .....	63
2.16 Coping Strategies against Food Insecurity.....	74
CHAPTER THREE .....	77
METHODOLOGY .....	77
3.1 Introduction .....	77
3.2 Profile of the Study Area.....	77
3.3 Research Design .....	82
3.4 Sources of Data .....	83
3.4.1 Primary Data.....	83
3.4.2 Secondary Data.....	84
3.5 Population of the Study.....	84
3.6 Sampling procedure and size.....	84
3.7 Research Instruments .....	86
3.7.1 Questionnaire.....	86
3.7.2 Interview Guide .....	87
3.8 Data Collection Procedure .....	87
3.9 Validity and Reliability .....	88
3.10 Method of Data Analysis.....	89
CHAPTER FOUR.....	91
RESULTS AND DISCUSSION.....	91
4.1 Introduction .....	91
4.2 Demographic Characteristics of Respondents.....	91
4.2.1 Age Distribution of Respondents .....	91
4.2.2 Marital status of respondents.....	93
4.2.3 Main Occupation of Respondents.....	94



4.2.4 Educational background of respondents .....	96
4.2.5 Household size of respondents .....	97
4.7 Main Ways by Which Household Food and Other Needs are Met.....	98
4.3 Access to Land .....	99
4.3.1 Land Tenure Systems .....	100
4.3.2 Most Suitable Land Tenure System for Agricultural Purposes .....	102
4.3.3 Reason for the Most Suitable Land Tenure System Selected.....	103
4.3.4 Modes of Land Access by Women.....	105
4.3.5 Land Size Distribution of Respondents .....	108
4.4 Women’s Constraints in Accessing and Using Land .....	109
4.5. Food Security Status of Households .....	113
4.5.1 Food Sufficiency.....	113
4.5.2 Periods of Food Insecurity in the Year .....	114
4.5.3 Households Coping Strategies.....	115
4.5.4 Effects of Land Tenure System on Household Food Security .....	119
4.6 Chapter Conclusion .....	124
CHAPTER FIVE .....	126
SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	126
5.0 Introduction .....	126
5.1 Summary .....	126
5.2 Conclusion .....	130
5.3 Recommendations .....	131
REFERENCES .....	133
APPENDICES .....	142





LIST OF TABLES

Table 2.1: Men and Women Participation in Agriculture.....	68
Table 3.1 Selected Communities Where Respondents Were Drawn.....	86
Table 4.1: Age Distribution of Respondents.....	92
Table 4.2: Marital status of respondents .....	93
Table 4.3: Type of Marriage .....	94
Table 4.4: Main Occupation of the Respondents.....	95
Table 4.5: Educational background of respondents .....	97
Table 4.6: Household Size Distribution.....	98
Table 4.7: Land Ownership Systems .....	100
Table 4.8: Most Suitable Land Tenure for Agricultural Purposes.....	102
Table 4.9: Reason for the Most Suitable Land Tenure System Selected.....	104
Table 4.10: Land Size Distribution of Respondents .....	108
Table 4.11: Women’s Constraints in Accessing Land.....	110
Table 4.12: Periods of Food Insecurity within the Year.....	115
Table 4.13: Households Coping Strategies against Food Insufficiency .....	116
Table 4.14: Effects of Land Tenure System on Household Food Security .....	119
Table 4.15: Effect of Land Tenure System in the District Most Likely to Affect Respondents’ Household Food Security.....	123



## LIST OF FIGURES

<i>Fig 2.1: Conventional Conceptual Links between Land and Food</i> .....	15
Figure 2.2: The Intricate Determinants of Food Security .....	46
Figure 2.3: Share of male and female landholders in main developing regions.....	71
Figure 3.1: Map of Nandom District.....	78
Figure 4.1: Other Activities Respondents engage in During the Dry Seaso.....	96
Figure 4.2: Main Ways by Which Household Food and Other Needs Are Met.....	99
Figure 4.3: Modes of Women’s Land Access.....	105
Figure 4.4. Household food sufficiency status.....	114



## LIST OF ACRONYMS

CFSVA	Comprehensive Food Security Vulnerability Analysis
ECA	Economic Commission for Africa
FAO	Food and Agriculture Organisation
GDP	Gross Domestic Product
GSS	Ghana Statistical Service
ISDR	International Strategy for Disaster Reduction
MoFA	Ministry of Food and Agriculture
UN	United Nations
UNDP	United Nation Development Programme
WFP	World Food Programme
WIAD	Women in Agricultural Development



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Land is an important resource for any production enterprise. It is particularly important for agricultural production and food supply for both human and animal consumption and survival. However, its access and usage for production purposes in recent times has become challenging across the world due to the rise in commodity price levels and increased large scale land acquisition for various economic activities (FAO, 2011). Its acquisition and usage by certain groups of people in society particularly women has become even more problematic and restricted. This situation confirms the wide held view that women suffer discrimination and inequalities in all spheres of life in society. Despite the wide spread discrimination and inequalities suffered by women they continue to play key roles in development at all levels especially at the household and community levels.

Thus, many world conferences such as the Global Food Security conference in Malaysia 2009, the 2008 food security conference in Rome and the Millennium Declaration held at United Nations Headquarters in New York from 6<sup>th</sup>-8<sup>th</sup> September, 2000, acknowledged the active participation of women in all sectors of the economies of nations. The Declaration resolved to promote gender equality and the empowerment of women as basic human rights. It maintains further that, giving women their fair share in an economy is the only way to effectively combat poverty, hunger and diseases and to stimulate development that is truly sustainable (UN, 2005). The achievement of gender equality is lauded within international development discourse as a key factor in achieving social and



economic development. It is seen as both a catalyst and outcome of just and sustainable social and economic policy (United Nation Development Programme [UNDP], 2010).

One of the sure ways of guaranteeing gender equality is on land ownership and use (FAO, 2008). Land provides rural households the basic means for subsistence and market production. It offers a secure base on which to shelter and nurture families and develop livelihood strategies. The importance of land as means of survival and a poverty reduction mechanism is seen in areas and communities that are largely agrarian (Cutula, Toulmin and Quan, 2006). Even in countries where rural income has become less dependent on agriculture, land continues to be an essential resource for rural populations (Policy Document FAO, 2010). Literature has again indicated that women involve themselves in land use, such as cultivation, tilling and farming, sometimes as much as men do or even more. In Uganda for example, women make up over 80 percent of the agricultural labour force, as World Bank in 1991 underscores the important role women play in that regard. Women play an essential role in the management of natural resources, including soil, water, forest and energy, and often have a profound traditional and contemporary knowledge of the natural world around them. Despite this yeoman's role, women fall behind the peaking orders in issues of land ownership. Not only do women have lower access to land than men, they are often also restricted to so-called secondary land rights, meaning that they hold these rights through male family members (FAO, 2010). Women thus risk losing entitlements in case of divorce, widowhood or their husband's migration. Evidence also shows that women's parcels of land are generally of smaller size and lower quality (FAO, 2010).



Meanwhile it is significant to mention that South Sudan, the newest nation in the world which attained her independence on 9th July 2011, has one of the most progressive Constitutions and a Land Act which recognizes equal rights of access of men and women to land. The Constitution, the Land Act and the newly adopted Land policy assert that women can own land, while customary law does not recognize women's property ownership. However, neither customary nor formal institutions enforce women's land ownership. Women's access to land and property has not been an issue in the past in South Sudan as it was considered that their access was guaranteed through marriage and family. However, as a result of the two decades of conflict between North and South Sudan during which a huge percentage of males died, 45-50 percent of the returnee households became female headed (Odhiambo, 2009). With the commencement of repatriation, resettlement and restitution programmes, the issue of women's access to land and property rights became a contentious one and needs to be addressed in the context of the prevailing customary practices in South Sudan. The major challenge is the implementation of these progressive provisions in the Constitution and in the Land Act 2009 to benefit women.



In Ghana, Article 35(1) of the 1992 Constitution enjoins the State to promote the integration of all peoples and prohibit discrimination and prejudice on grounds of origin, circumstances of birth, ethnicity, gender and other beliefs (Government of Ghana, 1992). Article 36(7) of the Constitution also requires the State to guarantee the ownership of property and the rights of inheritance of all. However, the land tenure and administration system in Ghana faces serious problems which undermine these Constitutional

guarantees. The Ghana National Land Policy has identified a number of difficulties relating to land tenure and administration including insecurity of tenure of certain groups (Government of Ghana, 1999). However, the interests and the impact of land administration and land tenure of women have not been mentioned. This creates a problem which needs to be addressed. Sarpong (2006) agrees with this assertion by arguing that there exists a plurality of systems regulating land in Ghana including constitutional and legislative sources, judicial decisions, and customary as well as Islamic laws. According to him, this plurality of systems presents special difficulties, particularly for the more vulnerable, including women and the rural poor, with regard to the practical enjoyment of their land rights, even where those rights are guaranteed under the law.

In the Ghana Food Security Research with focus on the Upper West Region, World Food Programme WFP (2012) stated that the primary constraints to improved food production in the region are a combination of poor access to land by women, low and erratic rainfall, high population densities, deforestation and, as a result, an accelerated deterioration in soil quality and crop yields. Poor market infrastructure and an unfavourable policy environment which leads to high and variable prices for inputs and low producer prices further undermine productivity in the region.

The unequal opportunities in land ownership is a contributing factor to the fact that poverty is disproportionately concentrated among women especially in rural agricultural areas since such people often cannot produce or buy enough (FAO, 2006). Sarpong (2006) confirms this claim by noting that feminization of poverty has been attributed mainly to the unequal access of women to productive resources (including land) and



economic opportunities. This explains why poverty in Ghana is extremely high among women farmers who form the bulk of food producers in the country. For instance, it is estimated that women account for 52 percent of the agricultural work force, 70 percent of subsistence crops production and 90 percent of the labour force involved in marketing of farm produce. Yet, women have more limited access to resources than their male counterparts, especially with regard to access to and control over land, education and credit (Sarpong, 2006). These limits, undoubtedly, restrict their ability to increase agricultural productivity and enhance their livelihoods. Women's inability to increase agricultural productivity and enhance their livelihoods due to limited access to land and other productive resources is not only causing poverty among them but also severely diminish their ability to contribute to food security especially at the household level.

Women play a significant role in African economies, and are highly represented in micro and small enterprises. The majority of women are engaged in small income generating agriculture and non-agricultural activities with low prospect for growth. In Ghana, over 60 percent of the agricultural GDP, particularly in Northern Ghana where majority of the population are in the Agricultural sector is achieved by women (Awumbila, 2009). However, a myriad of socio-cultural factors, beliefs and norms have inter-married to give birth to constraints that have undermined the efforts of women in contributing to economic advancements in the areas of land use and in micro businesses (Kabeer, 2003). Some external factors like ideological, cultural and economic reasons underlie the symmetries and asymmetries in the allocation of resources. These curtail women's access to land, farm inputs and credit and curb their potential to generate income which reinforces their poverty and hunger (Botei-Doku, 2000). The greatest factor that works to





limit women's access, control and use of resources for production, more especially in Africa including Ghana is the customary system. In view of this, SEND-Ghana (2014) notes that women's restricted control over land reflects deep-rooted land tenure customary practices and laws.

As a consequence, women encounter many unpleasant experiences like economic deprivation, lack of freedom of life choices (Botei-Doku, 2000). In fact, women marginalization stems from the household at the beginning of their infancy and afterwards; and has contributed to the low self-esteem and powerlessness among some women (Allanana, 2013). There is growing efforts to ensure women ownership of land and other properties through policy reforms, revision of the legal system and changing customary practices. A school of thought believe that when women have access to land, credit, farm inputs and information, household food security and nutrition, health and education would be improved (Todaro and Smith, 2006). This is in line with the argument by Landesa (2012) that secure rights to land are a critical factor in achieving household food security and improved nutritional status. Since, in Ghana including Nandom in the Upper West Region, women form the bulk of food crop farmers as well as the bulk of the labour force for agricultural production in general, it is extremely imperative that the issue of women access, control and use of land be critically examined and analysed if food and nutrition security which are fast becoming a canker in many parts of the country especially in Northern Ghana is to be addressed.



## 1.2 Problem Statement

Land is a key productive resource. It is a major source of improvement in livelihood. It has been identified as the source of reducing poverty levels (FAO, Economic and Policy Perspectives, 2010). Though women contribute very significantly to agricultural production in most African countries including Ghana, they are largely neglected in land ownership (Awumbila, 2009). This especially is the case in rural areas within the West Africa sub-region. According to Carmen and Magdalena (2003), women access to land is undermined by a lot of factors, including socio-cultural ones and worsened by the fact that women's ties to land are mediated by their relationship to men. Women's attempts to assert their rights in ways that challenge customary land tenure systems is often perceived as an attempt to disrupt culture and a challenge to the traditional status quo.

The use of Land for agricultural activities is of paramount importance since agriculture is the main stay of many communities in northern Ghana. Nandom in the Upper West Region of Ghana is one of the agrarian communities in northern Ghana where traditions and culture potentially curtail women's access to land. The inability of women in Nandom to access key livelihood assets such as land has resulted in their striving for household food sufficiency, affordability and balance diet, as well as all year round income security that agriculture offers rural folks. The situation also denies women overall access to lands. Inability to meet either of the stated conditions naturally truncates women access to farm lands for production. According to Apusiga (2004), considerable efforts have been given to women access to land in Ghana. There is however disconnection between the reality and these findings reported especially in the proposed location. The present study on 'women access to land on food security in Nandom is



designed to thoroughly find out how women access to land is impacting on food security and propose relevant and empirical solutions. Thus, research needs to be undertaken to document not just the sorts of barriers to women access to land but to establish the implications on agriculture as well. The need to address this, with particular stress on linkage between women land access on food security constitute the main thrust of this study.

### **1.3 Research Questions**

The general research question is: To what extent are women able to access land and how does that affect food security? The specific research questions include:

1. To what extent do women have access to land in the Nandom District?
2. What are the commonest forms of access to land?
3. What are the constraints that women face in land access?
4. What are the effects of the prevailing land tenure system in the area of household food security?

### **1.4 Research Objectives**

The main objective of the study was to examine the extent to which women access land and the effects of their access to land on household food security in the Nandom District of the Upper West Region of Ghana.

The specific objectives of the study were:

1. To examine the extent of land ownership by women in the district.
2. To assess the existing land ownership systems in the district.
3. To identify the constraints women face in accessing land.



4. To examine the effect of the various land tenure systems on household food security.

### **1.5 Significance of the Study**

This study constitutes a reference point on land access among women in the Nandom District and establishes the challenges to women land access and the impact it has on food security. As a result, the findings of the research is relevant to policy makers at the District level and beyond in the introduction and implementation of polices that would enhance women access to land in Ghana especially the Nandom district of the Upper West Region of Ghana. The findings would also further create awareness among the general public especially the chiefs, family heads and people of the Nandom district of the Upper West Region about the need to widen access of land to women for Agricultural purposes. Further, it would also lead to an improvement in food production which would bring about food security and improvement in the general quality of life.

The findings of the study will in no doubt contribute to baseline information about women access to land in the Nandom district which would serve as a source of knowledge on women contribution to the socio-economic development of rural areas.

This would help increase the awareness of women in Ghana especially in the Nandom district of the upper west region of Ghana on how they could access land for food production. It is also hoped that the study would inform women in other communities in the district and beyond why they have lower access to land.

The findings could serve as a basis for future research not just within the district but in other districts in the country. The study would open up discussions and in the future



researchers could look at some concerns that would emerge from it. Finally, a study of this sort would add up to the body of literature on the subject of women access to land in northern Ghana.

### **1.6 Scope of the Study**

The study geographically covered the Nandom District of the Upper West Region of Ghana. In terms of context, the study looked specifically at women access to land on household food security in the Nandom district. However, due to time and resource constraints only the major farming communities were selected for data collection. These communities included Duotange, Toyaga, Bu, Tome and Brutu.

### **1.7 Limitation**

Limitations of the study has to do with the factors or issues that served as a barrier in coming out with appropriate data for the study. These limitations included financial constraints, language barriers, timing of the research work and lack of cooperation on the part of some respondents

#### **Financial constraints**

Due to financial resource constraints to travel across many of the vastly dispersed communities in the district as well to hire the services of many research assistants, only the major farming communities were selected for data collection. Although selecting a few out of the many communities in the district could have led to loss of some vital and critical data, the use of random sampling technique to select the communities helped to minimize the effect.



### **Language barrier**

The people of the Nandom district are predominantly Dagabas and speak Dagari while the researcher hails from the Upper East Region and could not speak Dagari. This served as a little challenge since the majority of the people in the farming areas where data was collected were predominantly non-literates and could not speak English thereby resulting in a language barrier between the researcher and many respondents. However, the use of well educated natives who could speak both the local language (Dagari) and English fluently as research assistants and interpreters helped to minimize the language barrier effect.

### **Timing**

The timing of the research work was also a problem, conducting the research work while working for livelihood posed a huge challenge. There were many instances where the research work had to be suspended so as to enable the researcher to attend to certain schedules at the workplace. This really put a heavy burden on the researcher.

### **Inadequate co-operation**

There was no adequate co-operation on the part of some of the respondents. This actually made it very difficult for data collection because many of them did not understand the rationale behind the study and therefore thought that they were going to be exposed. Most of the women did not want to give out some “important information” which would mean exposing their husbands in public. They rather thought that their husbands should be the ones answering such questions. However, using some influential and respectable natives



in the communities to persuade and explain the rationale behind the study got them to participate in the study.

### **1.8 Organisation of the Study**

The study is organized into five chapters. Chapter one which is the introduction comprises the study background, the statement of the problem, research questions, objectives, significance, scope, limitations and organisation of the study. Chapter two consists of the review of existing relevant literature on the topic in line with the study research questions. Chapter three deals with the methodology of the study whereas chapter four focuses on presentation and discussion of results with reference to the literature reviewed. Finally, chapter five contains the summary, major findings and conclusion of the study. It further contains the recommendations of the study based on the findings.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter contains the literature reviewed for the study. The major areas covered in the review include theoretical framework; explanation of concepts including land, land tenure system and food security; modes of land ownership and acquisition in Ghana; women access to and control over land in Ghana; some general barriers to women land access; food security situation in Ghana; land tenure rights and food security; and women land access and food security.

#### 2.2 Theoretical Framework

It is widely believed that food security is dependent on food availability, access, and utilization. This point has been strongly made by Brown (2008) and the Economic Commission for Africa [ECA] (2004). They contend that food security is essentially built on three foundational pillars namely, food availability through production or markets, food access through market access and income, and food utilization. In the same vein, Fonjong et al. (2010) affirm that three fundamental ingredients of food security are adequate food production, economic access to available food, and nutritional security. Food availability and access, and to a large extent nutritional security (utilization), especially in developing countries whose economies are largely agrarian, hinge very much on agricultural production. Brown (2008) noted that Agriculture and food security are inextricably linked because agriculture, whether domestic or international, is the only source of food both for direct consumption and as raw material for refined foods.



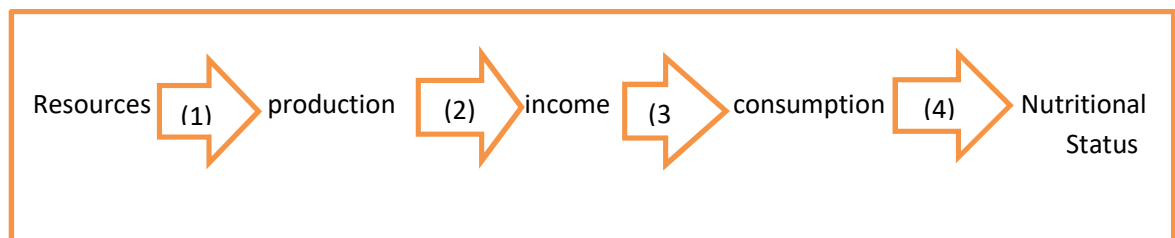


Furthermore, Center for Women's Land Rights – Landesa (2012) observed that increased agricultural productivity and production can enhance household food security and nutrition through two avenues: directly, through increased food production for consumption, and indirectly through increased incomes permitting the purchase of more and better quality food. Sanchez and others (2005) also contend that the role of agriculture in income generation for the poor, particularly women, is more important for food security than its role in food production. Thus agricultural production determines food availability and access and consequently food security. Agricultural production in turn is dependent on the availability of and access to, productive resources particularly land. Access to land is particularly critical for food production in sub-Saharan Africa where a large majority of the populations depend on small scale agriculture for their livelihoods.

This therefore implies that access to land is crucial to the attainment of food security in the developing world. This is consistent with Fonjong et al.'s (2010) argument that enhancing access to land, security of tenure, or sustainability of land resource use will ultimately enhance welfare, including food security. On its part, ECA (2004) argues that access to more productive land and control of natural resources by the poor offers the most stable form of security for poor households. It further points out that land emerges as the main source of human livelihood and accessing it becomes a prerequisite for human survival, and for that matter, attainment of food security.



The contention of food security being dependent on land access is supported by Maxwell and Wiebe's (1998) land tenure and food security analytical model. They note that solid evidence in literature show qualitative and quantitative links between land tenure and food security. They argue that a reduction in, or outright loss of, access to land in an agrarian society leads directly to a reduction in income and access to food leading to food insecurity as illustrated in Figure 2.1.



*Fig 2.1: Conventional Conceptual Links between Land and Food*

**Source: Adopted from Maxwell and Wiebe (1998)**

According to them, the most apparent qualitative link is that increased security of tenure in productive resources enables more efficient and profitable agricultural production and hence greater access to food through both own production and trade resulting in food security. They also stated secondary links as access to common property resources for livestock production and non-agricultural livelihoods, fuelwood and other forest products and wild foods.

Maxwell and Wiebe's (1998) analytical model as captured in Figure 1 is based on a causal relationship between resources (e.g. land), production, income, consumption and nutritional status. Thus some of the key questions represented in the model include: "How do individuals and households access resources such as land? How do different



forms of access to resources, or changes in tenure and property rights, affect opportunities to generate income or access to food?”

However, Maxwell and Wiebe (1998) argue that: access to resources is an essential determinant of access to food; food security is a function of food availability, access, and utilization; and access to food encompasses the three important dimensions of sufficiency, sustainability and vulnerability.

Although critiques of Maxwell and Wiebe’s (1998) model including ECA (2004) and Fonjong et al. (2010) argue that the linkages between land tenure and food security go well beyond simple, direct production and have suggested a more complex or circular process, the model in doubt does summarize the extent of the perceived or assumed connection between the two (land tenure and food security). The basic feature of the model which is a causal logic that flows from left to right, suggesting direct land policy opportunities to improve food security is an appealing notion in places like sub-Saharan Africa including Ghana where food security is a recurrent problem and tenure institutions are experiencing rapid transition. Therefore, the model is adopted with little adjustment to guide this study. The aspect of the model that needs adjustment in order for it to fit well into this study is its blindness on the differences in access of land by men and women as well as the differences in their contribution towards the achievement of food security especially in developing countries. ECA (2004) buttresses the differences in access to land by men and women by noting that although the agricultural activities and other livelihood options are affected by various factors (climatic conditions, markets, infrastructure, physical conditions), unequal access to land between men and women and



insecure land tenure have the most profound effect on the livelihoods and food security of smallholder farmers in Africa.

Women play a vital role across all three food security pillars of food availability, economic access and utilization or nutrition security. That is, they produce food for their households, they work in agriculture and other activities and use their earnings to buy food, health care, and resources for children, and they use food and other complementary resources to generate nutrition security. Women's ability to produce food, earn income, and generate nutrition security is conditioned on prevailing social constructs and norms governing their ability to access the necessary resources and services especially land which is the most critical factor for agricultural production (Committee On World Food Security [CFS], 2011).

It is well known that women produce a large part of the world's food. Karl (2009) observes that although exact data is very hard to come by, FAO estimates show that women are the main producers of the world's staple foods: maize, wheat and rice. Overall, women are responsible for about 50 per cent of the world's food production and, in some countries of sub-Saharan Africa, women provide between 60 and 80 per cent of the food for household consumption, mainly as unpaid labourers on family plots (Karl, 2009). She points out that while men are found more often in agricultural wage labour and cash crop production; women are mostly found producing food for their families and local markets. Lastarria-Cornhiel (2009) succinctly upholds Karl's (2009) argument by observing that women provide a large proportion of the labour that goes into agricultural production of which the current trend is that they are becoming increasingly more



involved in agricultural production. Lastarria-Cornhiel (2009) has thus identified two important trends which link women increasing involvement in agricultural production. According to her, the first trend is that more rural women are working off the farm as agri-business enterprises contract them both as field workers and processors while the second one is that women assume responsibility of the family farm when men take on wage work. The observations made by both (Karl, 2009) and Lastarria-Cornhiel (2009) implies that women play very crucial and varied roles in agricultural production, more especially in food.

Despite their immense role in food production as well as food access and utilization, women lack secure access to land. However, the Center for Women's Land Rights and Landesa (2012) argues that secure rights to land are a critical factor in achieving household food security and improved nutritional status. Women access to land is becoming increasingly challenging especially in the wake of land scarcity necessitated by population pressures, commoditization of land and commercialization of agriculture. The 'Evolutionary Theory of Land Rights' captures this point clearly. The theory posits that while population pressures increase on land, more people demand access to the scarce commodity. Agriculture then turns to be commercialized amid increasing land values. Individuals acquire rights in land leading to increasing uncertainty about their land rights while customary land owners make strategic moves to claim new lands or protect their access (Platteau, 1996; 2000). Such difficulties lead to the multiplicity of land disputes and a rising litigation cost, along with the need for more secured property rights.



This situation of increasing land scarcity, high cost of land, high cost of land litigation and high cost of securing land rights coupled with the already weak property rights status of women under the customary and statutory land tenure systems in Africa continues to limit women access to land and other productive resources. FAO (2010) cited in Anaglo et al. (2014) decries that women face several challenges, most importantly cultural restrictions in accessing land than men and the land they control is often of poorer quality and their tenure is insecure. This situation is unlikely to be any different in any part of Ghana including Nadom in the Upper West Region where this study was conducted. Thus women access to land in Nadom for agricultural production is likely to be very limited and bedevilled with numerous challenges. Therefore, in any debate on land tenure and livelihoods, gender requires special treatment, and any set of strategies for sustainable food security must address women's access to productive resources.

### **2.3 Land and its Importance**

Land is a precious resource and a key factor of production for agriculture. Land is at the basis of economic development on which farmers, pastoralists and other communities base their livelihoods as well as a significant component of business assets and a primary source of security for agricultural livelihoods (Lampkin, 2013). In supporting this view about the significance of land, Gerstter, Kaphengst, Knoblauch and Timeus (2011) note that land secures the production of food for people not directly involved in agriculture, and is needed for a myriad of other purposes, including infrastructure or human settlements. The Commission for Africa (2005) cited in Toulmin (2008) further affirms the view by noting that land contributes greatly to the agrarian backbone of most of sub-



Saharan African countries' economies and constitutes a substantial part of their Gross Domestic Product. Quan (2000) on his part, identified the link between land and livelihoods by stating that in rural areas land is a basic livelihood asset, the principal form of natural capital from which people produce food and earn a livelihood.

Beside its economic value, land also has strong social, political, cultural and religious importance for people in developing countries, especially in sub-Saharan Africa. This assertion has been corroborated by Agbosu et al. (2007) and Nidhiya et al. (2013). While Agbosu et al. (2007) notes that land rights do not seem to relate only to economic factors but also to political, social as well as religious aspects of the lives people in sub-Saharan African countries, Nidhiya et al. (2013) contends that beyond its importance for economic subsistence and its ties to politics, there is emotional importance to land as well as its closed link to culture and identity. For example, in Ghana, land is woven into the very fabric of society and many ethnic groups believe that land is an ancestral heritage and must therefore be judiciously applied and conserved for the benefit of present and future generations. Barnaba (2015) also concludes that land in rural communities is not just a means of livelihood but also a source of wealth, tribal identity, social peace, and sometimes a source of conflicts. Besides, Amu (2005:39) summarizes the significance of land as follows:

*Land to a large extent satisfies some of the most basic needs of humankind. It is the source of food, water and even shelter. It is also an important source of medicinal plants necessary for health delivery and among rural dwellers; it may be the only source of health delivery since access to orthodox medicine is highly inadequate and expensive.*



It is against the backdrop of these highly cherished values of land that many communities in developing countries including Ghana consider its use, management and conservation paramount and have placed it under a traditional legal arrangement otherwise known as customary land tenure system.

Access to land for the rural poor is essential for food security and economic development in developing countries. Takane (2007) affirms this by stating that, for most people in rural Malawi, to have access to and control over land is crucial for constructing their livelihood strategies. According to FAO estimates, almost 80 percent of the world's undernourished people live in rural areas and most depend on agriculture, including livestock, for their livelihoods (FAO, 2011).

Thus the basic assumption that access to land is an effective tool for poverty reduction is shared by international organizations, academic researchers and NGOs alike. For instance, the UN Special Rapporteur on the Right to Food recognizes access to land as a key means to realizing the Right to Food as set forth in Article 11 of the International Covenant on Economic, Social and Cultural Rights (De Shutter, 2010). In developing countries, most farms are relatively small (Gerstter et al., 2011). Reports from different countries indicate that the average size of a land holding in developing countries is between half a hectare and a dozen hectares (Arnold, 1990 and World Bank, 2010).

However, land is a finite resource. Consequently, there are frequent struggles over access to land and conflicts over the best uses to which land should be put. Fertile agricultural land is becoming scarcer as a result of environmental degradation, the impacts of climate change, urbanization and industrialization, to mention the most prominent. According to





the International Fund for Agricultural Development (IFAD), environmental degradation reduces agricultural land by 5 to 10 million hectares annually (IFAD, 2008). Additionally, 19.5 million hectares of farmland are converted each year to industrial and real estate use (FAO, 2011). All these activities contribute to loss of agricultural lands and reduction in the size of farm lands per person.

#### **2.4 Land Tenure System**

Land tenure is a derivative of the concept of natural resource tenure. Tenure simply means landholding. Land tenure has been variously defined by different authors, institutions and organizations. Lastarria-Cornhiel (1995) defined it briefly as a concept that determines who can use what land and how, while Bruce (1986) and Moyo (1995) cited in Fonjong et al. (2010) described it as the terms and conditions under which natural resources including land are held and used. Schlager and Ostrom (1992) also referred to the concept as systems that regulate the “bundle of rights” existing over each piece of land, including “operational” rights (right to access land, to cultivate it, to withdraw produce, etc.) and management rights (e.g. the right to allocate and transfer land) whereas Cotula (2006) viewed it as the body of rules and institutions governing the way land and natural resources are held, managed, used and transacted. On its part, the Economic Commission for Africa (ECA) describes the concept as a social construct that defines the relationships between individuals and groups of individuals by which rights and obligations are defined with respect to control and use of land (ECA, 2009). These definitions therefore imply that land tenure consists of the social relations and institutions governing access to and ownership of land and natural resources.



Two main types of land tenure exist across Sub-Saharan Africa. These include statutory and customary land tenure systems. This is affirmed by the notion that land tenure derives from both statutory and customary law regarding not only property rights and ownership, but also institutions of marriage, of power and control, and of inheritance. Tenure regimes, both customary and statutory, are rarely static. However, other types of land tenure have emerged in recent times. One such type is the private land tenure system. According to Kishindo (2004) cited in Takane (2007), land in Malawi can be classified into three categories: public (statutory), private, and customary land. He explains that public land is owned or held in trust by the government or Traditional Authorities which includes such areas as national parks, forest reserves and conservation areas while private land is held or owned under freehold title, leasehold title, or Certificate of Claim granted by early colonial governors to European settlers. He further notes that customary land is land held under the customary law of each ethnic group.

However, Gerstter et al., (2011) contend that the prevalent patterns of land access (or lack thereof) among small scale farmers in the developing world include state owned land and communal land. According to them, state owned land is characterized by the assignment of property rights to a public authority, such as a central or decentralized level of government while communal land which is quite common in the developing world, especially in rural Africa and parts of Latin America is land which a community shares, giving each member a right to use the land independently but the rights to the land that each family enjoys are usually regulated and enforced through the community authorities, such as elders or local chiefs. The state owned and communal lands are comparable to the



statutory and customary land tenure systems respectively. ‘Statutory allocations’ is a particular form of state land where such land, by virtue of some statutory provision, is allocated for the use of some legally constituted body.

## 2.5 Customary Land Tenure System

Customary law is a body of (usually unwritten) rules finding its legitimacy in “tradition”, i.e. in its claim to have been applied for time immemorial. It is also seen as a system in which tenure rights are ostensibly controlled and allocated according to traditional practice (ECA, 2009). Wily (2012) concludes that customary land tenure refers to the systems that most rural African communities operate to express and order ownership, possession, and access, and to regulate use and transfer of land. The content of customary law is extremely diverse, possibly changing from village to village. This diversity is the result of a range of cultural, ecological, social, economic and political factors. Also, customary rules are not static, but continually evolving as a result of diverse factors like cultural interactions, population pressures, socio-economic change and political processes.

Tenure research, especially the research that would be important to a consideration of food security, has tended to separate land into three categories: the agricultural holdings of a household (including individually managed plots); common land or common property resources (usually grazing and forest land); and state-reserved land (usually gazetted reserves for preservation of forest or wildlife resources). In commenting on land tenure system in Africa, Boon (2009) opined that:



*In Africa, land tenure and land rights are highly complex and sensitive social and political issues closely linked with poverty and land degradation. Traditional land tenure systems in Africa were developed in accordance with variations in physical conditions and cultures, although they were largely centred on communal access to resources and sharing of benefits. Tenure is largely recorded or registered, and land rights were largely allocated through inheritance or other regulatory and distributive mechanisms. Traditional systems offer more security of tenure than is often recognized by supporters of individual tenure systems, although women generally have lower status than men (p. 73).*

Similarly, according to Cotula (2007), the dominant view of customary resource tenure systems in Africa is that land is usually held by clans or families on the basis of diverse blends of group to individual rights, accessed on the basis of group membership and social status, and used through complex systems of multiple rights. He observes that in reality, customary resource tenure systems vary considerably depending on the context. Thus important differences exist, for instance, between pastoral and farming contexts. The former, he elucidates, tend to emphasise collective rights based on negotiated, flexible and reciprocal arrangements that enable herd mobility while the latter also usually entail collective rights, but typically involve the allocation of farming rights over specific plots by the land management authority (e.g. the “chief”) to smaller family units. The nature of these smaller units and of the farming rights they hold vary considerably from place to place. In many cases, farming rights are conditional upon the continued use of the plot. And, while such rights are often inheritable, Cotula explains, restrictions



usually exist on sales (especially to outsiders), although certain transactions may be allowed (gifts, loans, etc.) and some systems do allow land sales.

Besides differences in the application of customary resource tenure systems between pastoral and farming contexts, Cotula (2007) further notes that considerable differences also exist in application between patrilineal and (in Africa more rare) matrilineal systems. For example, under patrilineal succession systems property devolves through the male line (from father to son), and wives and daughters usually have no inheritance rights. Under matrilineal systems, property is traced through the mother's line but generally owned and controlled by men (i.e., sons inherit land from their mother's male relatives); however, women tend to have greater rights than under patrilineal systems, for instance enjoying stronger cultivation rights and being able to obtain gifts from their fathers (Lastarria-Cornhiel, 1997).

However, far from being the idealised "community-based" systems described by some, customary land tenure regimes (and elite manipulation thereof) provide the backdrop for processes of exploitation and social exclusion (Cotula, 2007). While the central role played by negotiation in those systems enables flexibility and adaptability, it can also lead to the marginalization of those with weaker bargaining power (Peters, 2004). And, while the position of women under customary tenure varies considerably, many such systems contain norms and practices that are gender discriminatory (Whitehead and Tsikata, 2003).



In supporting the view that women are at a disadvantage under customary land tenure, Fullerton (2011) opines that within a community those who gain the most from customary systems of land tenure and authority are those who control it, and authority vested in chiefs or other leaders can lead directly to private economic benefits derived from land accumulation, patronage and land transactions. In the same vein, Lastarria-Cornhiel (2009) explains that when societal changes occur, those who have traditionally controlled resources (in this case, men) are able to increase their own rights often at the expense of those with secondary rights (usually women). This, she further explains, happens because of market forces as well as social and economic upheaval and as a consequence, as land becomes a marketable asset, family and community members, who in the past would have respected a woman's access rights to land, may violate or ignore those rights, particularly in the case of vulnerable widowed and divorced women. Thus, since in almost all African communities men are the leaders and therefore control the use and management of land women are at a disadvantage in terms of access to land.

## **2.6 Modes of Land Ownership and Acquisition in Ghana**

In Ghana, like in most countries in Africa, two main modes of land ownership and acquisition exist. These include Traditional or customary mode of land ownership and acquisition and modern mode of land ownership and acquisition.

### **2.6.1 Traditional Mode of Land Ownership and Acquisition**

In ancient Ghana, the original settlers in an area as a result of migration, conquest and natural disasters became the owners. These 'original settlers' in some communities,



especially in the Northern parts of Ghana, are often referred to as the Tendanas and their leader as Tendana. The land is held in trust by their leaders and governed by the traditional norms and values of the settlers now owners. Thus, land could subsequently be acquired through negotiations with the Tendanas, skin/stool/clan heads or the chiefs. Therefore, customary lands are lands owned and controlled by stools (ethnic groups), clans or families where traditional and customary norms and practices govern their tenures and administration. As a result, customary lands are believed to belong to the past, present and future generations. The customary land sector controls roughly 80% of the land holdings in Ghana (Fiadzigbey, 2006).

Under this system, women are believed to have limited or no rights over land due to customary beliefs. As Duncan and Brants (2004) put it, “women had not played a traditional role in original land acquisition since land was commonly appropriated under the leadership of a stool or lineage head...” This meant that, customary law created no such haven for women’s land access since they had no chances of ascending a stool or occupying a skin or even becoming a family head unless occasioned through the death of all males in the family line, which is very rare.

Traditionally, land is not sold due to its sacred nature and as such, for an individual to obtain a parcel of land, items such as cowries, cola nuts, fowls, sheep and some drinks are presented for the negotiation. These items are not ends in themselves but means of calling upon the ancestors to protect and bless the land to be more fertile and fruitful. Indeed, what pertains, generally, at the moment in the Upper West Region is that, land is controlled through family ownership which is a further development of the communal



ownership of land that existed from pre-colonial times (Songsore and Denkabe, 1995). This form of family ownership of land in modern times, however, does not promote investment and large scale commercial production.

Most of the land litigation cases in the courts of Ghana can be attributed to the family or communal form of land ownership and usage especially when it comes to issues of inheritance.

Generally, a peculiar feature of land tenure practices in Northern Ghana including the Upper West Region is that women do not own land. They, however, have the right to collect fuel wood and gather the fruits of economic trees, barks, roots and foliage on well-established fallow lands ... (Songsore and Denkabe, 1995, p. 35). Women should therefore be encouraged and given the right based on the above assertion to engage in more productive economic ventures to stimulate development.

According to Fiadzigbey (2006), customary land is governed by customary law, and the rights and interest range from allodial (free-hold), through usufruct to tenancy, and explained them as follows:

- Allodial/freehold implies full ownership of land in English law, providing the owner with the largest bundle of rights (fee simple absolute). In addition, customary land can be held by inheritance, gift, and purchase pledge/mortgage.
- Usufruct applies to land holding arrangements where the right to use land is one of the essential elements of land ownership. The usufruct may endure for life, or it may be for a specified number of years. In the latter case it is terminated upon the death of the beneficiary. In some communities, the rights may be transferable.





- Tenancy implies the right to use land for a specified period of time (lease). The tenant has a bundle of rights as benefits. Share Tenancy is the most familiar customary tenancy in Ghana. Land rental is also widespread and found in the cocoa frontiers areas as an emerging system of conditional tenancy. Share tenancy is based on two principles of “abunu” and “abusa”. It involves sharecropping such as abunu which is a sharing on 50:50 bases between the land owner and tenant; and abusa which is sharing on a 1:2 between the landowner and tenant. Some years ago, the application of any of these principles and what a tenant or his landowner could get from tenanted land depended on each party’s relative contribution to the farming operation. If the landowner provided part of the farm inputs and capital in addition to his land the basis of sharing was abunu. However, if the land owner’s contribution was only the land, leaving the remaining resource investment to the tenant, “abusa” was applied in favour of the tenant, another 1/3 went to the landowner for his land (Aidoo, 1995 cited in Fiadzigbey, 2006).

Although this kind of tenancy is prevalent in the Southern part of Ghana, especially in the cocoa growing areas, it is also practiced in Northern Ghana including the upper West Region in some instances.

### **2.6.2 Modern Mode of Land Ownership and Acquisition**

The modern mode of land ownership and acquisition emerged from colonial regimes and newly independent governments’ perception of traditional tenure and access systems to be insecure and poorly suited to commercial, settled agricultural development and



conventional economic growth. According to Boon (Boon, 2009), many African governments like colonial regimes have taken the view that only Western-style tenure systems and property rights could stimulate agricultural intensification and improve economic efficiency, and that indigenous land tenure systems were inherently considered to be insecure and inefficient, and so acted as a brake on productivity. Earlier on, McGranahm et al. (1999:108) stated that this kind of thinking especially by colonial regimes “had been carried forward into the post-independence period, with proponents claiming that when private land ownership is clearly established, farmers are more likely to grow perennial crops, invest in land management practices that benefit the agro-ecosystem in the long-term, and improve their overall productivity.”

Ghana is not left out in this kind of thinking. Thus, in the modern democratic dispensation of the country, subject to the provisions of article 257(1) of the 1992 Fourth Republican Constitutional provision states that, “all public lands shall be vested in the president on behalf of and in trust for the people of Ghana”. Furthermore, clauses 3 and 4 states that for the avoidance of doubts, all lands in the Northern, Upper East and Upper West regions of Ghana after the coming into force of the Constitution shall be given back to their original owners. The Lands Commission of Ghana, which is also established under article 258 (1) of the constitution is the body solely responsible for the appropriation of lands in Ghana in collaboration with other relevant public agencies and governmental bodies.

In recent times, individuals seeking to obtain a piece of land for an economic activity do not need to perform only the traditional rites. There is interplay of both traditional and



modern elements of land acquisition in the process. After one has undergone all the traditional processes, there is still the need to verify and obtain relevant documentation from the Lands Commission and the other coordinating agencies. Other works of Songsore and Denkabe (1995:34-35) indicated that:

*Increasingly, the emergence of commodity production as opposed to subsistence production has left a mark on the land tenure system in the region ..., it has not led to the development of sharecropping patterns as obtains in the cocoa growing areas of southern Ghana. Neither has it led to the buying and selling of land.*

Over a decade, the above situation has changed dramatically since buying and selling of land is now a common phenomenon in most towns in the region. This still has the tendency of affecting women's land access, especially in the open market as their income levels are mostly inadequate for them to also acquire some parcels of land. Some authors seem to confirm the concern that women land access is likely to be affected further under the shift from communal land tenure to private or individual land ownership system. For example, McGranahm et al., (1999) notes that the shift from local communal or lineage-based property towards a combination of private property and state property, in which claims to property are legitimated by the state, rather than by the community and/or communal group, holds further risks for the poor. Boon (2009) agrees with the assertion by contending that McGranahm et al.'s (1999) statement is especially true for women and pastoralists, who face the prospect of loss of all land rights as a consequence of having few resources to finance the costs of formal land registration. This change of tenure,



Boon (2009) further explains, also affects the capacity of local groups to adapt to their particular environmental circumstances and technological options.

## **2.7 Access of Women to, and Control over Land in Ghana**

There is an increasing recognition that ownership, access and, control over resources constitutes critical elements in the determination of the well-being of households. Globally, women hold title to approximately two percent of land and are frequently denied the right to inherit property (Steinzor, 2003 cited in Anaglo et al., 2014). In Ghana for example, Deere and Doss (2006) indicated that women held land in only 10% of Ghanaian households. This situation is crucial to the understanding of their subordinate position in society in order to explain gender inequality in Ghana. Women's lower access to land has affected their ability to practice sustainable environmental management, thus impacting negatively on agriculture and biodiversity on their farms (Ardayfio-Schandorf and Awumbila, 2000 in Anaglo et al., 2014). This gender gap hinders women's productivity and reduces their contributions to the agricultural sector and to the achievement of broader economic and social development goals including food security.

According to Amu (2005), access to land is seen as critical for the total economic emancipation and integration of women into economic and social spheres of life in the Ghanaian economy. As an agrarian country where it is estimated that women produce about 70-80percent of the food consumed (Amu, 2005) and are responsible for food security, women access to and control over land becomes even more crucial. There are constitutional provisions that protect the right of women as well as other groups of



society with regards to land in Article 35 (1). However, the land tenure system and its administration are embroiled in a complicated maze of family/stool/tribe/clan holdings where land is held in trust by the leaders of the stool/family, who more often than not, are men (Amu, 2005). Even among ethnic groups where matrilineal inheritance is practiced and women are supposed to be leaders of the families, it is common practice for a man to be appointed to take care of the stool/family lands. This is so because in the traditional setting, men are perceived as natural leaders (Duncan, 2004). Within the context of patriarchal society as pertains to the situation in northern Ghana, cultural values tend to subordinate women by vesting leadership and control over resources in men.

Thus the traditional heritage that pertains in the country to a large extent is disadvantageous to women's access to and control over land. In principle, all stool/skin subjects and lineage/family members irrespective of sex have usufructory rights (inherent rights) of access to stool/skin and lineage/family lands. Lineage/stool members seeking land to farm or for any other purpose ask the lineage/stool/skin head and in some parts of northern Ghana, the "Tendana" to assign them a piece of the land. Discrimination against women in this allocation is a common phenomenon. This stems from the historical cultural view that women in the primordial days did not partake in the acquisition of the ancestral lands. Songsore and Denkabe (1995) quoting from Manu et al. (1993:74) concurs this notion: "it was men not women who founded clans, fought for land or in the process of hunting, discovered the village boundary..., established permanent use rights on any piece of clan land by being the first to cultivate it". Similarly, Duncan et al, 2004 cited in Aasoglenang, Kanlisi, Naab, Dery, Maabesog, Maabier, and Naa-Obmuo (2013) also argues that women have not played any traditional role in original land acquisition in



primordial times, when land was commonly obtained through conquest or appropriation under the leadership of a stool or lineage head who were men. Thus the International Food Policy Research Institute (IFPRI) contends that the marginal nature of women's rights, especially in land, is a historical problem in Africa.

Therefore, fewer women are able to obtain land under the traditional land tenure system and even those who are able to obtain land do not have secure rights over them. Amu (2005) emphasizes that due to the traditional land tenure system in Ghana women in most part of the country, with few exceptions in parts of Ashanti and Brong Ahafo regions, do not have titles to the land they work on. She further elucidates that even where women are granted land, they are often allocated less fertile land or smaller parcels of land.

One important source of access to land for women is through marriage but when the marriage breaks down, they lose this access irrespective of the development they have made on the land because customary law does not recognize marital property or non-monetary contributions to the acquisition of property during marriage (Abantu for Development, 2004 cited in Amu, 2005). According to Amu (2005), women are also discriminated against in the allocation of lineage lands for reasons that are associated with marriage because their control over their rights to land tends to diminish upon marriage for the following reasons:

- Marriage and its attendant domestic obligations reduce women's chances of acquiring land or comparatively larger portions than men. A wife is by tradition under obligation to help her husband on his own farm or business and they tend to



respond to this by abandoning their own farms/business or by acquiring smaller portions of land.

- Gender patterns in division of labour place land clearance in the hands of men, which gives them the priority in original acquisition and possession of the usufruct.
- Land is normally given on the basis of ability and means to develop such as ownership of financial resources, which many women tend not to have.

One other way of acquiring land is for the individual to buy or lease from the original owners. However, this requires huge sums of money, which also limits women's access, especially poor women. Apart from this, the problem of land administration complicates the purchase of land. This is because some landowners can sell one piece of land to two or more people, which tend to have violent outcomes.

The difficulties of acquiring land can scare away women even when they have funds to acquire and will therefore buy through a male member of her family – brother/husband/father etc. The difficulty in acquiring land by women particularly impacts negatively on women farmers who derive their livelihood from the land. When their access to land is hampered by cultural and economic constraints, their participation in economic activity is impaired and thus reduces their own efforts at improving themselves economically and socially. They thus end up as farm labourers or become workers on their husbands land and therefore are economically dependent on them. Difficulties in acquiring land especially by women farmers may lead them to farm on abandoned plots with relatively low fertility and this contributes to the lower productivity of women's agricultural productivity.



Furthermore, problems of land scarcity, environmental and land degradation that has come about as a result of the growing population have deepened the difficulties of land access for women. It has also contributed to the indiscipline and conflicts in land markets, which sometimes result in loss of lives and property. However, Boon (2009) observes that women produce 75 percent of Africa's food and therefore raising agricultural productivity and output, and improving household food security demands a greater emphasis on women farmers by donors and governments alike, including policy reforms to improve women's access to land and credit, their ability to contract labour and their willingness to adopt technology and utilise technical assistance. Besides, Lastarria-Cornhiel, (2009) notes that even economic production theory stipulates that if smallholder women are to produce efficiently, they should have control over the resources they need to produce not only for themselves and their families but for local and regional markets as well.

## **2.8 General Barriers to Women Land Access**

Despite the critical role women play in agricultural food chains, they continue to face obstacles in gaining secure rights to land (Lampkin, 2013). Even in sub-Saharan Africa, where fully one-third of the population is undernourished and 31 per cent of households are headed by women (Oxfam, 2013), and where women form the majority of small-scale food farmers responsible for the production of the bulk of the food for household consumption, they continue to face challenges in accessing, retaining or expanding the lands that they are already cultivating. This situation can be blamed on the erosion of





customary tenures which has resulted in women experiencing loss of land in conditions of scarcity.

Systematic differences in land tenure rights between men and women contribute to structural inequality and to poverty for women. Access to land and control over its use are the basis for food and income production in rural areas, and, more broadly, for household wellbeing. Women who become heads of household are particularly vulnerable: when their access to land is through their husbands and fathers, they often lose their property rights as a consequence of widowhood, divorce, or desertion (Lastarria-Cornhiel, 2009). Therefore, differences in property rights of women and men, and lack of direct access to and control of land, may place constraints on women's productive roles and diminish their power and influence in the household and the community.

Some of the factors that undermine women's access to land under the eroded customary tenures include the fact that buying and leasing land are not easy options for them because of transaction costs, women's poorer access to resources, the insecurities and inequities of customary tenancies and gender discrimination in the treatment of potential land purchasers (Awumbila and Tsikata, 2010).

The World Bank (2008) also suggests that some of the basic barriers faced by women especially in agriculture are the transaction cost of credit, well-defined property rights and being poorer than men. Even though men also face these barriers, those faced by women are more acute in rural agricultural communities. On the issue of women's



challenge in accessing credit, Mehra and Rojas (2008) cited in Anaglo et al. (2014) observed that women are able to access only one percent of credit in agriculture. Poor access to credit facilities prevents women from purchasing the needed inputs including land for agricultural purposes. Therefore, poor access to credit also serve as a major barrier to women's access to land since they are generally poor and cannot afford to purchase, rent or pay for the cost of title registration to secure their lands.

Another factor that limits women access to land especially in rural communities in Africa including Ghana is the growing interest in and expansion of, cash crop farms especially by men. This development has resulted in men seizing lands which were being used by women for food crop cultivation for household consumption. In validating this statement, Oxfam (2013) observes that just as it was the case with sisal, tobacco, and tea in the past, today's private investors in soya, jatropha and eucalyptus crops who are mainly men continue to dismiss small-scale food production by women as unimportant and irrelevant and therefore takeover their lands. Oxfam further alludes that small-scale women food farmers (estimated roughly at about 1.6 billion [Theobald, 2010]) are the backbone of rural livelihoods and are responsible for producing more than half of all the food grown in the world, yet many of them are now at risk of losing their lands due to a huge surge in commoditization and commercialization of land especially in the form of large-scale corporate agricultural investments.

This development is threatening food supply of rural people and consequently household and national food security in developing countries as men who are leaders and wield power in society continue to annex lands that are being cultivated by small-scale women



food farmers. This point is succinctly emphasised by Oxfam (2013) and supported by Guendel (2009). Oxfam opines that when competition for land escalates, rural women are often subjected to exclusionary pressure from male relatives or community members while Guendel (2009) affirms the assertion by noting that as soon as a natural resource gains commercial value on the international commodity market, control and decisions over that resource including land, pass swiftly from rural women into the hands of men.

It is therefore abundantly clear that commercialization and commoditization of natural resources including land have negatively affected and continues to affect women access to land and consequently limiting their contribution to the attainment of household, community and national food securities.

## **2.9 Food Security**

Food Security, at the individual, household, national, regional, and global levels, is achieved when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for a healthy and active life (FAO, 2001 and CFS, 2011). Food security is essentially built on three foundational pillars namely food availability through production or markets, food access through market access and income, and food utilization (CFS, 2011). The “at all times” element of the definition adds in the concept of stability for all the pillars. The three pillars of food security outlined by CFS is a corroboration of the three dimensions of food security identified earlier by the United Nations Environmental Programme (UNEP). According to UNEP (2002:288), the three dimensions include:



- ❖ availability of sufficient quantities of food of appropriate quality, supplied through domestic production and imports;
- ❖ access by households and individuals to appropriate foods for a nutritious diet; and
- ❖ Optimal uptake of nourishment, thanks to a sustaining diet, clean water and adequate sanitation, together with healthcare.

Yaro (2013) on his part argues that food security dimensions or pillars go beyond three as proposed by UNEP (2002) and (CFS, 2011). He has therefore identified a fourth component as food systems stability in addition to the three proposed by UNEP (2002) and (CFS, 2011). Yaro's (2013) four main components of food security thus include: availability, accessibility, utilization, and food systems stability. He alludes that these four dimensions have linkages with different impacts of climate change, and that a food system is generally considered vulnerable when one or more of these components is uncertain or insecure. Furthermore, he notes that factors such as poverty, unavailability of employment, lack of education, increase in food prices, climate and environment conditions and poor access to market have a direct correlation with food security. These factors expand the vulnerability bracket beyond the social to include economic and environmental dimensions in explaining the implications of climate change on food security. Thus FAO (2008) observes that climate change is not the single most important cause of food insecurity but particularly important driver of food system performance at the farm end of production-related income. Consequently, Yaro and Hesselberg (2010) argues that food security is dependent more on socioeconomic conditions than on agro-climatic ones, and on access to food rather than the production.



Food security exists at various levels of which the important ones include the global, national, household and individual levels. National food security requires both the production and the ability to import food from global markets to meet a nation's consumption needs while household food security refers to the ability of a household to assure all its members sustained access to sufficient quantity and quality of food to live active healthy lives (Kabeer, 2003). In other words, household food security denotes year-round access to an adequate supply of nutritious and safe food to meet the nutritional needs of all household members (men and women, boys and girls). At the household level, women play a vital role across all three pillars. They produce food for their households, they work in agriculture and other activities and use their earnings to buy food, health care, and resources for children, and they use food and other complementary resources to generate nutrition security just as argued by Anaglo et al. (2014) that, when incomes of women increase, they may have more access to resources and invest in their children's education, health care and nutrition.

In addition, women's ability to produce food, earn income, and generate nutrition security is conditioned on prevailing social constructs and norms governing their ability to access the necessary resources and services (CFS, 2011). CFS further argues that women, in most societies, have the prime role in translating available food into nutrition security, particularly for young children, and that their ability to do this is conditioned on complementary inputs such as access to health care, water, energy, their own human capital, the environment they live in including sanitation and the competing demands on their time.



Individual food security on the other hand, refers to the ability of an individual to have access to sufficient food of the right dietary mix (quality) at all times. Individuals who do not have sufficient quality food at all times are said to be food insecure. Two forms of food insecurity exist. Individuals whose access to adequate diet is conditioned by seasonality are food insecure and are generally called seasonally food insecure. In the same vein, 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 said to be transitorily food insecure.

Related to food security is nutritional security which requires that household members have access not only to food, but also to health care, a hygienic environment, and knowledge of personal hygiene. This means that food security is a necessary but not sufficient condition for attaining nutritional security. FAO (1996) cited in Boon (2009) identified two interrelated variables that can be used for tracking trends in food security. The first variable is the per caput availability of food for direct human consumption (also called per caput food supplies) which can be used to construct the pattern of world distribution of food supplies while the second variable concerns the distribution of the food supplies within each country, which implies given the national average of the preceding variable, what proportion of a country's population has access to any given level of per caput food supplies. Per caput food consumption is measured at the national level by the average dietary energy supply (DES) in Calories on the basis of national food balance sheets (FBS) and population data.



Thus, according to Boon (2009), one relevant level for food security analysis is that of per caput food supplies (Calories/day) equal to 1.55 times the basal metabolic rate (BMR). He explained that if a person's access to food is below this level, that person may be classified as chronically undernourished. Based on this level of food security analysis, Boon (2009) reports that from 1969 to 1971, 900 million people in developing countries representing 35 percent of their total population were classified as chronically undernourished but the figure dropped to about 800 million undernourished people constituting 20 percent of the total between the period 1988-1990. On this score, Boon concluded that food security implies the provision of safe, nutritious, and quantitatively and qualitatively adequate food, as well as access to it by all people.

It is therefore crystalline clear that food insecurity leads to malnutrition. Malnutrition occurs largely due to hunger and may result in deficiency in key macro and micro nutrients such as vitamin A, iron, and iodine leading to poor immune function, increased morbidity, poor growth and intellectual development, and ultimately a lifetime of lowered potential. Malnutrition can also cost individuals 10percent of their lifetime earnings and nations 2 to 3percent of gross domestic product (GDP) in the worst-affected countries (Alderman, 2005 cited in CFS, 2011). According to Smith et al. (2003), a study of 39 countries, found that women's empowerment status is a key factor in child nutritional status especially in South Asia and Sub Saharan Africa where hunger is high because more empowered women have better nutritional status themselves, are better cared for, and provide better care for their children. They have therefore suggested that



equalizing women and men's status in South Asia and Sub Saharan Africa would reduce the numbers of malnourished children by 13.4 and 1.7 million respectively.

FAO (2006) argues that the world has enough food to feed everyone, yet an estimated 854 million people worldwide are still undernourished. Improvements in agricultural productivity are necessary to increase rural household incomes and access to available food but are insufficient to ensure food security. Food security not only requires an adequate supply of food but also entails availability, access, and utilization by all. Agriculture and food security are inextricably linked because whether domestic or international, agriculture is the only source of food both for direct consumption and as raw material for refined foods. Women are crucial in the translation of the products of a vibrant agriculture sector into food and nutritional security for their households. They are often the farmers who cultivate food crops and produce commercial crops alongside the men in their households as a source of income. When women have an income, substantial evidence indicates that the income is more likely to be spent on food and children's needs. Women are generally responsible for food selection and preparation and for the care and feeding of children. Women are the key to food security for their households (Quisumbing and others 1995). This explains why there seem to be a general consensus in Sub-Saharan Africa that the persisting food crisis is the consequence of a long-run neglect of women's food farming roles in a subcontinent where women perform 70% of labour in food production. Therefore, to ensure food security and nutrition at the household, national and global levels requires investment in nutrition sensitive agriculture, protecting women's rights and improving their social and nutritional status.

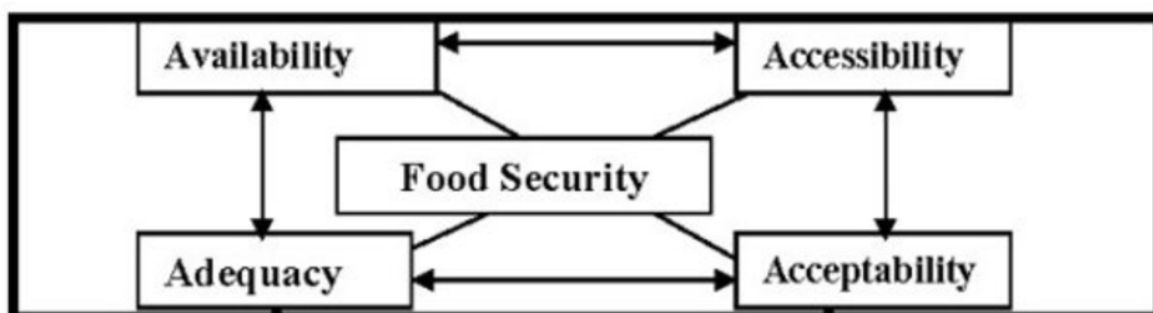




According to CFS (2011), long-term investments in the role of women as full and equal citizens through better nutrition, education, economic, social, and political empowerment is the only way to deliver sustainable improvements in food security and nutrition.

### 2.10 Determinants of Food Security

According to Boon (2009), food security is determined by four important factors which are directly and indirectly interrelated. These factors include availability, accessibility, adequacy and acceptability. Thus, available food must not only be accessible to all members of the populace but must also be adequate and the populace must be willing to eat it; that is what is available must be accepted as a preferred food. Figure 2.2 shows the intricate determinants of food security as proposed by Boon (2009).



**Figure 2.2: The Intricate Determinants of Food Security**

**Source: Boon (2009)**

The various ways the determinants affect food security is described as follows:



### 2.10.1 Food Availability and Accessibility

Ability to access food when it is available is critical in achieving food security. Therefore, more food production does not necessarily mean more food for those who need it because those who need it might not have the means to access it. Thus food production is not the same as food availability which constitutes total production minus exports plus imports. Again, aggregate availability and the ability to acquire food (food entitlements) are very different things. Boon (2009) notes that whilst food production in no small way influences food entitlements, the connections are complex and there are also other matters involved. He explained that people's *access to food* depends both on the purchasing power of their income, and on their non-market entitlements, such as rights to land for subsistence farming and foraging purposes. He further clarifies the complexity between food availability and entitlement or ability to access as following statements:

*The market economy is not expected to grow rapidly, and many non-market entitlements are in danger of decline. Food entitlements for urban dwellers are most often mediated through the market, whereas for rural dwellers in general and subsistence farmers in particular, these entitlements tend to depend more on the local production.*

*Clearly, food insecurity is basically a problem of poverty, affecting those social groups with the weakest or most fragile food entitlements, both in terms of access to social networks and safety nets or productive assets (capital, land, agricultural inputs).*



*Malnutrition can thus be a threat to urban and rural dwellers at different times and for different reasons. Urban-rural links are often created in the pursuit of food security, and hence urban dwellers will maintain rural contacts, or even land, to provide food security in case their purchasing power is disrupted, whilst rural dwellers will maintain urban contacts, in part to ensure against the loss of local food entitlements. (Boon, 2009:4)*

Aside economic ability, food access in the event of its availability may also be affected by other factors such as transportation and distribution challenges. Boon (2009) observes that practically, a food glut in the rural communities may not necessarily be reflected on the market due to problems relating to accessibility such as poor road and transportation networks and more market distributors not willing to move into the hinterland to cart food to the urban centers.

### **2.10.2 Adequacy of Food Supply**

The Food and Agricultural Organization (FAO, 2008) states that agricultural production is immensely essential in two crucial ways: first, because it provides a means of survival through the production of adequate food for consumption, and it employs 36 per cent of the world's workforce and 40–50 percent in agriculturally dependent Sub-Saharan countries. Hence, any minor deviations of food production patterns created from increase global warming could harm millions of people who solely rely on agricultural production for their means of economic livelihood. Food production has steadily decreased by 10 per cent in the last 20 years in the horn of Africa whilst acute famine has increased (Devereux and Edwards, 2004).



Agricultural output in Africa has been lagging behind population growth since the 1960's. Between 1965 and 1990, agricultural production grew at an annual rate of 1.7 percent, while there was annual population growth average of 2.8 percent. Food imports including food aid in the African region have increased substantially to offset the deficiencies, and in early 1994 represented about 10 percent of the food consumed. At the current growth rates, the food gap is projected to increase to more than nine times the present gap by 2020 (Agyare-Kwabi, 2003). This implies the world and Africa in particular will continue to experience inadequate food supply and consequently, food insecurity among millions of people.

### **2.10.3 Acceptability of Food**

Availability, adequacy and easy access of food are necessary conditions for food security but not sufficient enough to guarantee food security at all cost to a group of people at a specific location at a particular time. This is because the available food which the people might have the ability to access may not be their staple food and therefore not acceptable to them for use. Boon (2009) cites an example that a glut of cassava and plantain may not necessarily be that important to the Ghanaian non-Akan ethnic groups who do not necessarily accept or prefer to eat “Fufu” or “Ampesi” which are normally made from cassava and plantain.

However, women have distinctive roles to play in determining the acceptability of food basically because of their traditional role as wives and mothers who cook for their families. According to Boon (2009:5), transforming food from its raw state into



processed or cooked food has long been the preserve of women and as preparers of food, women can get whole households to accept one menu over the other ensuring that family members accept one available food over the other. In Africa, a wide variety of staple foods exist due primarily to its agro-ecology which are acceptable to diverse groups of people. Boon (2009) contends that this is a great advantage in terms of food security because many consumers will substitute among the broad categories of staple foods such as cassava, yams and tubers, plantain, millet, maize and rice according to national and tribal taste preferences and changing relative prices.

### **2.11 Food Security in Africa**

According to UNEP (2002:189), stretching 7,680 km from north to south and 7,200 km from east to west, Africa is the second largest region in the world, accounting for 20 percent of the world's land mass which represents 2, 963, 313,000 hectares. It further notes that approximately 22 percent of Africa's land area is under forest (650 million ha), 43 percent is characterised as extreme deserts (1,274 million ha), and 21 percent (630 million ha) is suitable for cultivation; and that by 1999, it was estimated that about 200 million ha (32 percent of the suitable area) had actually been cultivated with an estimated 30 percent of the total land area (892 million ha) used as permanent pasture.

However, Africa's land is currently suffering from degradation and reduced productivity thereby affecting food security in the region. The causes of land degradation in the region are climatic variability and management practices, in addition to physical factors, such as the slope of the land and soil structure (Boon, 2009). As a result of pressures to increase



production, marginal land is being brought under cultivation or grazing; fertilizers and pesticides are widely used by commercial operations; and fallow periods are being reduced. According to him, these activities result in exhaustion of the production capacity of the land, manifested as declining yields; vegetation and soil degradation and loss; and in extreme cases, desertification.

UNEP (2002:192) reported that as a result of climatic variability and change, in addition to inappropriate land use or land tenure policies, approximately 22 percent of vegetated land in the region (494 million ha) has been classified as degraded, and 66 percent of this classified as moderately, severely or extremely degraded. These developments have undoubtedly impacted negatively on food security situation in the region. Thus in the area of food security, the African continent faces special challenges. Figures for 1997-1999 show that about 200 million people (28 percent of Africa's population) are chronically hungry compared to 173 million in 1990-1992 (Boon, 2009). According to Sasson (2012), the number of people who suffered from hunger in the continent increased to 925 million in 2010. Although the proportion of the population living in hunger in the continent is dropping slightly, the absolute numbers are rising.

In sub-Saharan Africa, food insecurity is even much more a major concern. For example, citing Van Eeckhout (2010) Sasson (2012) decries that, of the 925 million people who suffered from hunger in 2010, 239 million and 37 million were in sub-Saharan Africa and North Africa respectively. This implies that a total of 276 million people suffered from hunger and for that matter, food insecurity in the region in 2010.



According to the World Food Programme cited in Sasson (2012), some 720,000 inhabitants in Madagascar constituting about 40percent of the population of the three regions of Atsimo-Andrefana, Androy, and Anosy were suffering from starvation. Similarly, FAO in July 12, 2011 announced that stricken by the worst drought in the past 60 years, about 12 million people were suffering from starvation in the Horn of Africa (comprising Somalia, Ethiopia and northeastern Kenya). The hunger and food insecurity situations are not only present in Madagascar and the Horn of Africa but also in many other countries in the region including Ghana except that they are relatively less prevalent.

### **2.12 Food Security in Ghana**

In Ghana, the three northern regions have continuously exhibited higher incidences of household food insecurity. The food security challenges in these regions are confirmed by the results from the Comprehensive Food Security Vulnerability Analysis (CFSVA) conducted by the World Food Programme (WFP) which indicated that more than 680,000 people were considered either severely or moderately food insecure at the time of the survey and of these, 140,000 had a very poor diet, subsisting on staple foods, some vegetables and oil, and little else (WFP, 2012). The WFP further reported that the highest proportion of food insecure households is found in the Upper East Region where about 28 percent of households are either severely or moderately food insecure compared with 10 percent of households in the Northern Region and 16 percent in the Upper West Region.





Many studies have explored the causes of food insecurity in the three Northern regions of Ghana. The study by the WFP (2012) also reported that poverty is one of the main causes of food insecurity in northern Ghana, especially in the Upper East Region where more than half (56 percent) of households fall into the poorest segments of the population (compared with around a third in the Upper West Region and in the Northern Region). Poor households were found not only to have a limited means of purchasing food, but have smaller harvests, greater vulnerability to shocks due to reduced coping capacity and lower levels of education, which all together increased their food insecurity and vulnerability. In their study, poor households were defined with proxies such as households with no or few assets and poor housing conditions. According to their study, close to half of the households in the poorest wealth groups (the two lowest wealth quintiles) were not able to secure a healthy daily food intake versus only 15 percent of the wealthiest (highest quintile) families at the time of the survey. The poorer the household, the more likely it is to have poor food consumption. Not only do poorer households eat less, they also have a less diverse diet, consuming meat, fish, sugar and dairy products less regularly than their wealthier counterparts. In addition, poor and food insecure households often purchase food on the local market, making them highly vulnerable to food insecurity when food prices increase. Unfortunately, in some instances women are generally the first to sacrifice their food consumption, or their diet quality, when shocks hit, protecting the food consumption of the rest of their families. But this sacrifice can come at very high costs, aside from the direct impact on their own health. For instance, reduced energy intake and compromised dietary diversity during pregnancy and lactation



compromises the nutritional conditions, growth and well-being of the next generation (UNSCN, 2010).

The WFP (2012) also linked poverty and limited economic opportunities in the three northern regions to food insecurity in these regions which prompts widespread migration to the southern parts of the country. The WFP study found that 30 percent of households identified not having enough food throughout the year as the main reason for migrating. The Ministry of Food and Agriculture (MoFA) (2010) cited in WFP (2012) has identified food security as an outcome of the livelihood strategies adopted by households. Since majority of Ghanaians earn their livelihoods in agriculture, it is important to target the sector and design support for the sector players especially women to improve their activities in order to enhance household food security.

According to the Ghana Statistical Service (2012) almost half of the households (46 percent) in northern Ghana acquire their income from crop cultivation while close to a third (29 percent) rely on agro-pastoralism, a combination of income from livestock (49 percent) and crops (43 percent). Together, these two groups represent 75 percent of the population, which underline the importance of agriculture in sustaining the livelihoods of households in northern Ghana. The GSS further stated that a quarter of the households in these two livelihood groups have inadequate food consumption.

In the same vein, the Daily Graphic's 7<sup>th</sup> June, 2013 issue reporting on a dissemination workshop on comprehensive food security and vulnerability analysis organised by the Ministry of Food and Agriculture (MOFA) in collaboration with the World Food



Programme (WFP) held in Tamale on Tuesday 4<sup>th</sup> June, 2013 and funded by the Bill and Melinda Gates Foundation and AusAID also said the three northern regions are the worst affected by food insecurity in Ghana. The paper indicated that the report presented at the dissemination workshop said 16.08 percent of the 4,228,116 population of the three northern regions are still considered as severely or moderately food insecure. This means they are unable to access nutritious food which is enough for their needs due to insufficient production and poverty.

The report, according to the Daily Graphic, also stated that despite an overall increase in Ghana's wealth and development in recent years, the three regions have continued to record higher incidences of poverty, food insecurity and malnutrition. And that, while about 98 per cent of food insecure households are highly reliant on maize and millet, those who were found to be food secure consumed a wider variety of staples including rice, wheat, cassava, tubers and plantains. The findings further indicated that 88 per cent of households in northern Ghana relied on crop cultivation as their main livelihood activity, while food insecurity appeared more prevalent in rural than in urban areas.

According to the findings as captured in the report, even though the causes of food insecurity could be said to be broad, it identified poverty, agricultural limitations, seasonal challenges and high costs of food as some of the major challenges. Furthermore, the Deputy Country Director of the WFP in Ghana, Ms. Magdalena Moshi who was present at the workshop, observed that, the main challenges to food insecurity revolve around issues of inequitable distribution as opposed to unavailability.



World Food Programme Comprehensive Food Security and Vulnerability Analysis Report of 2012 also indicated that 22.3 per cent of households in the Upper West Region were moderately food insecure while 1.4 per cent was severe food unsecured. This means that a total of 23.7 per cent of households suffered from one level of food insecurity or the other. All these reports show that food insecurity continuous to be challenge in Ghana, particularly in the three northern regions including the Upper West Region where this study was conducted.

As widely noted, Ghanaian women just like their counterparts elsewhere in developing countries are responsible for food security in the home as they are responsible for food production as well as the important actors in the food chain sub-sector. It is estimated that women produce about 70-80percent of the food consumed and are responsible for food security (Amu, 2005). However, due to numerous challenges women face in their food production for household consumption role, most households in Ghana are food insecure. Besides the evidence stated earlier, Njuki, Kruger, and Starr (2013) attest to the food insecure nature of households in Ghana by decrying that the vast majority of Ghanaians, constituting 74 percent households, reported food insecurity in their Baseline Assessment Survey conducted in six countries in Africa and Asia. This implies that food insecurity remains a big challenge in Ghana. Therefore, women as food producers for household consumption and as people responsible for household food security must be supported especially in the area of land access and rights to facilitate their agricultural production and consequently enhance their ability to minimize, if not eliminate, household food insecurity.



It is important to note that women's own nutritional status has a direct impact on children's nutritional status, their learning capacity and their productivity later in life. Therefore raising women's nutritional status not only benefits them but is a powerful way to improve the human capital of the next generation, thereby sustainably increasing food security and nutrition. This reveals the importance of focusing directly on women's role in food, health and care in households as these play a critical role in determining child nutrition outcomes.

The heart of the gender challenge in food security and nutrition is the intra-household inequities in labour allocation, resource access, ownership, and control in the household economy, which is intimately linked to the market economy (CFS, 2011). While men have their key focus on the market economy, women are constantly juggling multiple roles sustaining the household and reproductive economy, providing community services, and engaging, where possible, with the market economy. The market economy depends on the household economy but most national accounts completely fail to recognize the household economy and, as such, public policy often neglects it and the key role played by women. While much policy is gender blind, it is not gender neutral in its impact due to the differing roles, resources, mobility and constraint sets facing men and women. Thus, in a society where gender analysis and mainstreaming especially in the area of property rights and agriculture, policy can inadvertently have a negative impact on food security and nutrition by further compromising women's roles in the different spheres (CFS, 2011).



### **2.13 Factors that Influence Household Food Security**

A study by the World Food Programme (WFP) in 2012 in the three northern regions found that the size of land cultivated has a strong correlation with household food security. This implies that the smaller the size of land cultivated, the higher the likelihood of household food insecurity. Female headed households are more likely to have inadequate food consumption and be poorer than their male counterparts. A study by the GSS (2012) found that female-headed households make up 8percent of all households in northern Ghana with about 15percent having the worst food consumption and wealth indicators.

Duncan and Caroline (2004) reported that there are several social and economic reasons why households that are headed by a woman struggle more than others to feed their family. First of all, their lack of access to larger farms restricts their ability to feed their households from their own production. Thus poor access to land by women may make their households experience food insecurity. Women household heads also reported lack of skills and education which often prevent them from finding good income-earning opportunities. This has been reported by Duncan and Caroline (2004) to influence the food security situation of their households. Another characteristic of female-headed household is that, majority of the female household heads are widows, which means they could have fewer income earners and agricultural workers. Generally, women and in particular widows and women-headed households as reported by IFAD (n.d.), tend to be denied, or are assigned weaker, land rights and as a result are often amongst the most



vulnerable in the society. This can bring about a cumulative effect on the entire household especially in the area of food security. In the three northern regions of Ghana, the WFP (2012) found that 30 percent of households headed by widows were either severely or moderately food insecure compared with 15 percent of households headed by widowers.

Differences have also been observed in household food security among rural and urban dwellers. According to Abdullahi (2002) food insecurity appears to be more prevalent in rural than in urban areas. However, a study by the Ministry of Food and Agriculture, Ghana (MoFA) in 2010 stated that close to one fifth of urban households do not eat adequately (per the asset based wealth index) than rural households but the fact that urban households are more likely to be engaged in regular employment partially explains why some are more protected against seasonal food changes in access. Thus seasonal changes also have influence on food security. The WFP (2012) further found that households in the northern part of Ghana have seasonal difficulties in accessing enough food, with the gravest difficulties occurring during the peak of the lean season in June/July. As a result of the seasonal changes, food prices rise dramatically, in part due to low food production levels in the lean season.

Global economic trends, trade policies, bioenergy production and climate change are yet other factors that affect food security. For instance, bioenergy production leads to a reduction in the size of farm lands used for food crop production resulting in the production of less food crops, food shortage, high prices of food and consequently food



insecurity. In the same vein, climate change leads to bad weather conditions such as poor rainfall patterns, and high temperatures and humidity which may result in poor harvest or total crop failure and hence food insecurity. CFS (2011:11) confirms global economic trends, trade policies, bioenergy production and climate change as factors that affect food security as follows:

*Global economic trends, trade policies, bioenergy production and climate change can affect local food and commodity prices and, in turn, can induce rural households to reorient their livelihood strategies. This reorientation can require mobility, often limited for women. It can result in changes in the intra-household division of labour and associated earnings. Policies that favour crops sold by men for cash may nevertheless increase female labour burdens. The increased labour input to male controlled crops may reduce the available labour for female controlled crops and associated earnings.*

CFS (2011) therefore recommends that gender analysis should always be carried out by governments, development partners and stakeholders to ensure that macro policies do not shift the intra-household labour allocation pattern in such a way that male income increases at the expense of women's, damaging food security and nutrition at the household level.

Another important factor that can affect food security on a large scale at a higher level like global, regional or national levels but will ultimately have a severe effect on household food security is adverse climate change and variations. According to FAO (2008), the possible impacts of climate change on food security have tended to be viewed with most concern in locations such as Sub-Saharan Africa where rain-fed agriculture is



still the primary source of food and income. Although this view falls short in considering other factors which acts in combination with climate change such as social and economic factors which are equally important in determining food security of a region and consequently for a household, climatic variations still remains the most significant factor affecting household food security particularly in developing countries where food production continuous to be dependent on rainfall. According to Yaro (2013), significant regional shifts in food production due to climate change is likely to negatively affect developing countries in the tropics because the changing climate has implications for the nature of agriculture and income earnings, as well as affects cropping systems, distribution, domestic food mix, and livelihood diversification and migration patterns. Yaro (2013) further argues that the ability to ensure household food security is highly dependent on effectiveness and efficiency of agricultural production, capacity to import food, food prices, transport systems and distribution, local markets and eventually household purchasing power. However, the purchasing power of farm households is low when farm production is affected by climate variability and hazards.

#### **2.14 Land Tenure Rights and Food Security**

Turner and Adams (2004) define land tenure right or security as securing access and rights for people who wish to hold land for diverse purposes. Thus land tenure security can simply be referred to as secured access to land. Access to land can have several meanings that go beyond the strict legal definitions of land tenure. In this study, access to land will be defined as: “the right or opportunity to use, manage, and control land and its resources. It includes the ability to reach and make use of the resource. This definition





indicates that access to land is mediated by various political, economic, social, technical and legal factors. Access to land also can include access to the benefits of land – such as the income streams generated through productive land-based activities (Daudelin, 2003).

Secure access to land, whether through formal, informal, customary or other means, is necessary for rural households to enjoy sustainable livelihoods (Barnaba, 2015) the core of which is household food security. People who have extensive rights to land are generally more able to enjoy a sustainable livelihood than those who have only limited rights to land; those who have limited rights are, in turn, often better off than those who are landless. In supporting this notion, Quan (2000) provides a general link between access to land and livelihoods as follows:

*In rural areas land is a basic livelihood asset, the principal form of natural capital from which people produce food and earn a livelihood. Access to land enables family labour to be put to productive use in farming, generates a source of food and provides a supplementary source of livelihood for rural workers and urban poor.*

Thus, since the main thrust of livelihood is food security it means access to land contributes significantly to the attainment of household food security. The extent to which individuals and families are able to be food secure depends to a large extent, on the opportunities they have to increase their access to assets such as land, as well as access to markets and other economic opportunities.



## **2.15 Women Land Access and Food Security**

Women are key to translating a vibrant agricultural sector into both food and nutrition security especially in developing countries by engaging in food crop production, providing labour on farms, transporting farm produce, marketing food stuffs, processing farm produce and converting (cooking) foodstuffs into suitable forms for consumption. For instance, in the area of agriculture and food production, Mehra and Rojas (2008) cited in Anaglo et al. (2014) contend that women feature prominently in agriculture as they are believed to produce more than half of all the food that is grown, specifically, up to 80percent in Africa. The numerous roles women play implies that they need to be strong and healthy in order to be able to continue to play these roles for the achievement of food and nutrition security, particularly at the household level. Thus CFS (2011) contends that improving women's nutritional status is a powerful way to improve the health, longevity, mental and physical capacity and productivity of women as well as improving food security and nutrition of the next generation. Similarly, the United Nations System Standing Committee on Nutrition's (UNSCN) Sixth Report on the World Nutrition Situation in 2010 observed that a renewed effort to invest in maternal nutrition in a sustainable and holistic manner is the main means to achieve improved nutritional status and human development for the next generation.

However, the ability of women to play their key role in attainment of food and nutritional security at levels is not only predicated on the need for them to be strong and healthy but also on the need for them to have easy access to productive resources, particularly land. This is more importantly critical in less developed countries especially in Sub-Sahara Africa where customary practices serve as barrier to women's property rights. In



supporting this view, Lampkin (2013) notes that the recognition of the importance of women's land rights in developing nations, where land rights for women continue to be weak and unprotected, extends far beyond the issue of need for improved gender equality.

Land tenure system itself has serious implications on women's right to land, food security and sustainable development. This is because in most patrilineal societies which are predominant in Africa, land tenure system favours the male to the total neglect of the female in some cases. This is particularly the case in the rural areas where land is the basis of livelihood for over 80 percent of the rural population (Fonjong et al., 2010). For example, in Ghana, a survey conducted on gender and access to agricultural resources by smallholder farmers in the Upper West Region by Anaglo et al. (2014) found that men had more access to land than women. This, they explained, was as a result of the inheritance system in the region which does not allow females to inherit land for the fear that when women inherit family lands, those lands may be transferred to other families on the death of a husband or when the female goes out to marry from another family. This confirms Quisumbing and Pandolfelli (2010) assertion that men are given preference over women in accessing land in patrilineal systems.

Similarly, literature available shows that Cameroon, like many other African countries including Ghana, has numerous formal legal provisions that purport to grant both men and women equitable access to land, but it still remains a male-dominated society in which men are privileged by custom, and, occasionally, even by law in terms of land ownership, inheritance of land and property, access to credit, the right to grow cash crops,



the right to determine who can use family lands, family planning, the right to enter areas where women are excluded by taboo, and the right to take multiple wives (Guya 1984; Fonjong 2001; Endeley and Sikod 2007; Fonjong and Markham 2008 all cited in Fonjong et al., 2010). This situation, according to Fonjong et al. (2010), is happening in spite of the fact that Cameroon's economy, like the majority of the Sub-Saharan countries, is predominantly agricultural, with a heavy emphasis on production of food carried out by women for family consumption or for sale in local or regional markets.

Although many land titling programmes in the past reinforced men's land rights CFS (2011) reports that over the last decade, many African countries have adopted new land laws to strengthen women's land rights, recognize customary tenure when appropriate, and make non-conventional forms of evidence on land rights admissible. According to the World Bank, FAO and IFAD (2008), CFS contends that between 2003 and 2005, Ethiopia issued certificates to about 6 million households (18 million plots), which documented inheritable land use rights, while still restricting market transfers thereby improving women's land rights situations.

Thus, leveling the playing field with regard to secure access to land is a first step to enabling women to move beyond subsistence production and into higher value and market oriented production, an important element of successful agriculture for development. However, as women enter more commercial levels of production it is important that they have access to rural finance services, both to access working capital and to save their earnings, through their own accounts which do not require counter signatures of husbands or fathers (CFS, 2011).





As a result of women's role in food production and household food security, how land is owned, managed and exploited becomes an important development question in rural communities in developing countries which populations are largely rural. Rural communities are made up of men and women with different gender needs and different access rights to resources. It pre-supposes that agrarian reforms should be designed and implemented in such a way that they are able to address the specific needs of each gender group.

Unfortunately, the agrarian reforms implemented from the 1950s through the 1970s, just like those of the colonial era in Africa, were gender blind (Fonjong et al., 2010). These reforms were based on the assumption that assets allocated to the typical male-headed households will be equitably distributed and beneficial to all household members (Razavi 2005 cited in Fonjong et al., 2010). Despite all these constraining factors, global research points to the key role of women as food producers, food providers, and contributors to household nutrition security in Sub-Saharan Africa (Quisumbing et al. 1995: V). In corroborating the assertion that research points to the key role of women in achieving household food and nutrition security, Nidhiya et al. (2013) emphasised that an increasing body of research recognizes a relationship between secure property rights for women and improving household food security and nutrition. They further contend that women with secure land rights are considered to have greater bargaining power within the family and influence over agricultural activities like the types of crops to be grown on the land, as well as contributing to a lower household vulnerability to poverty and food insecurity.

Lastarria-Cornhiel (2009) contends that women in most continents tend to be ultimately responsible for children and other dependents, and that female-headed households are on the increase because of migration and male parental abandonment. According to her, women's increasing responsibility in reproducing and maintaining the family has increased over the last decades for a number of reasons including:

- people are simply more mobile, and when men migrate away from their families women are often left with sole responsibility for their families;
- societies and resource-poor households become more economically vulnerable to global market forces as traditional foods become less economical to produce, rural incomes decline, commercial agriculture becomes more input intensive, and productive resources are dominated by agri-business;
- Local and regional crises such as civil war and AIDS affect men and women, but it is the women who are often left to care for orphaned dependents.

The above stated reasons led Lastarria-Cornhiel (2009) to conclude that food security and family well-being are important reasons for protecting or enhancing women's rights to land. Other studies have also shown that resources controlled by women are more likely to be used to improve family food consumption and welfare, reducing child malnutrition and increasing overall wellbeing (Blumberg 1991, Von Braun et al 1994, Hirschmann 1984 cited in Lastarria-Cornhiel, 2009).



The issue of women's contribution to household food security cannot be over emphasised. For instance, it is reported that women in Sub-Saharan Africa are responsible for 80percent of food production and 60percent cash crop production thereby necessitating a further development of their potentials in the land sector (Fonjong et al., 2010). Statistics around the globe indicate that women are key players in the farming sector especially in food production, and hence are actively engaged in the market economy not only Sub Saharan Africa but also in many regions in the World. The evidence for this assertion as cited in CFS (2011) report is provided in Table 2.1.

**Table 2.1: Men and Women Participation in Agriculture**

Region	Agriculture Self Employment % of adults		Agriculture Wage Earner % of adults		Total in Agriculture % of adults	
	Male	Female	Male	Female	Male	Female
<b>Sub Saharan Africa</b>	56.6	53.5	4.0	1.4	60.6	54.9
<b>South Asia</b>	33.1	12.7	21.8	11.4	54.9	24.1
<b>East Asia/Pacific</b>	46.8	38.4	9.4	5.7	56.2	44.1
<b>Middle East and N. Africa</b>	24.6	38.6	9.4	1.0	34	39.6
<b>Europe and Central Asia</b>	8.5	6.9	10.1	5.4	18.6	12.3
<b>Latin America, Caribbean</b>	38.4	22.8	20.9	2.3	59.3	25.1

Source: Extract from WDR (2008) Table 9.2 cited in CFS (2011)

Table 2.1 provides that in Africa, more than 50percent of women work in agriculture while more than 44percent participate in agriculture in East Asia and the Pacific region. In the Middle East and North Africa, a higher percentage of women work in agriculture than men.

Women's role in food production within agriculture is even greater in many societies especially in developing countries because women supply most of the labour for food



crops production, and often control use, transportation, processing or sale of the food produce. Hence, women's ability to maximize their incomes from farming, and other activities is crucial to food security and nutrition. This is because who brings the additional money into the household is vital in terms of how it is spent. For example, according to CFS (2011), a study in Ivory Coast revealed that significantly more money is spent on food and education and less on alcohol and cigarettes when a high share of household cash income accrues to women. In contributing to the subject, Allendorf (2007) notes that increasing the share of income under women's control or their asset holdings can also empower women more broadly within households, increasing their influence on other spheres of decision-making, including farming and labor choices, expenditure decisions, and other factors related to food security and nutrition. He buttressed his point by citing an example that strengthening land ownership by women in Nepal resulted in better health outcomes for children.

Therefore, women do not only need land, but power in the form of security over the land they work on. This implies that the issue of women's rights to land is not an end in itself, but hinges on community and national survival especially in Africa where they are the majority engaged in food production for household consumption.

Unfortunately, despite this wide recognition of women's role in food production and household food security, women access to land especially secure tenure is fraught with challenges. IFAD (2008, p. 2) explains women's weak and vulnerable land rights as follows:

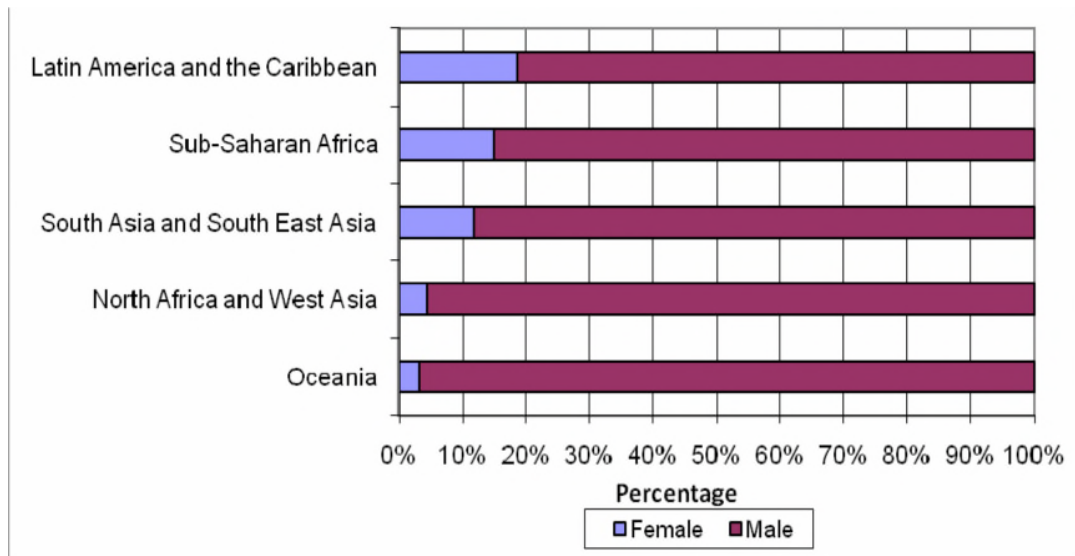




*In rural societies throughout developing regions, those with insecure tenure rights typically constitute the poorest and most marginalized and vulnerable groups. The rights of these groups tend to be secondary and rarely extend beyond use rights. Furthermore, these rights are often unprotected and weak, especially for women.*

Like many African countries, a typical case of women weak land rights can be found in Kenya. It is reported that in Kenya, women account for the vast majority of producers of food for local or regional markets as well as food for consumption (Lampkin, 2013) yet they only hold about 5percent of registered land titles together with their husbands, and just 1percent in their own name (Ellis et al., 2007). In confirming the weak land rights by women in Kenya and other developing countries, Deere and Doss (2006) cited studies which indicate that women represent just 5percent of registered landholders in Kenya, 15.5percent in Nicaragua, 22.4 percent in the Mexican *ejidos* and 10percent of households in Ghana. They contend that men are not only the registered owners of land in 23percent of households but, on average they own almost 3 times the amount of land that women own. Figure 2.1 shows that, women are less than 20percent of the landholders in all the developing regions.





**Figure 2.3: Share of male and female landholders in main developing regions**

**Source: SOFA 2011**

In contributing to the debate on women’s weak access to land, Quisumbing et al. (1995) also posit that generally, women cannot own land in their own right in Sub-Saharan Africa and therefore tend to have small farm plots or be allocated poor-quality land which easily deteriorates with intensified cultivation. CFS (2011) confirms Quisumbing et al.’s (1995) statement by arguing that land is less likely to be owned by women, and usually use rights, mediated through a

Male relative, are prevalent in most societies in developing countries. This therefore partly explains why many studies have shown that women’s farm plots have lower yields than those controlled by men (Undry, 1994). This situation of women’s small farm plots and lower yields ultimately affects their ability to achieve enhanced livelihoods and for that matter household food security.



The recent wave of land titling programmes both nationally and international which started in the 1980s aimed at promoting privatization of public and customary land as well as formalization of land rights as the optimal means for securing tenure rights also seems to have contributed to the weak land rights and access by women in Africa and other developing countries. Lastarria-Cornhiel (2009:7) endorses this claim by noting that:

*A principal criticism, therefore, of titling programmes and property rights institutions (such as property registries), therefore, is their tendency to grant title for family/household property (land or housing) to just one person in the family/household, usually the head of household who in the great majority of cases is male. While titling programmes are generally gender-neutral in the sense that they usually do not have gender requirements or exclusions, they are in practice gender biased because they do not take into account constraints, particularly those based on social and cultural norms, faced by women in claiming their legal rights. The result is that women are not perceived as property owners by those implementing the programmes and consequently very few women are given title to land. In addition, women's customary rights (access or use rights for example) to land are not legally recognized, and women may therefore run the risk of losing those rights in practice.*

This criticism therefore means that although land titling programmes are important tools to grant legal ownership rights (both use and access rights) over a parcel of



land, usually to an individual, it has served as a barrier to women's access to and control over land in most instances because in the great majority of cases the ownership right is awarded to the household head who is usually the male, especially in Sub-Saharan Africa.

As key players in food production, it is important to strengthen women's land rights since it is vital and critical in all efforts towards the attainment of food security. This is because women's roles in agriculture and the production of food are critical in increasing available quality food while their roles in the domestic and reproductive economy are even more important when it comes to translating that available food into food security and nutrition. According to CFS (2011), this is because men's crops are produced with a commercial orientation and are often sold almost immediately after harvest while women tend to store their crops for home use or process their crops, adding value through grinding, processing and other activities.

Evidence exist that shows that increased women's access to land will lead to increased food production and consequently improved household food security. For example, Rugadya (2000) cited in Fonjong et al. (2010) reports that in Uganda, household output could be increased by 10 to 20percent by reallocating currently-used agricultural inputs, of which land is core, more evenly between men and women. Similarly, Rao (2006) citing the World Bank (2001) also notes that in Burkina Faso, an analysis of household panel data suggests that farm output could be increased 6 to 20percent through a more equitable allocation of productive resources between male and female farmers.



In lieu of the recognition of the weak land access by women in society and its effects on food production and household food security, greater emphasis has been placed in recent years, on the gender gap between land rights and the push for secure property rights (through gender equitable land titling) as a solution to women's unequal access to land, female poverty and women's subordination (Razavi, 2003).

Development policies and organizations have begun to target the role of women in the area of food production and have focused their efforts on increasing women's rights to land arguing that with secure tenure, the holder will have greater incentives to long term sustainable investment in the land as well as greater bargaining power in the family (IFPRI, 2005). At the household level, rights to land will subsequently lead to greater nutritional security as women will have the ability to control decisions such as what crop to grow, what techniques to use and the decision as to what to consume and what to sell (FAO, n.d.).

### **2.16 Coping Strategies against Food Insecurity**

In the event of food insecurity, households usually adopt certain mechanisms or strategies to cope with the situation until such a time that enough food is available or has been acquired. Boon (2009) opined that households seeking to preserve food security levels may resort to a number of coping strategies to gain access to food. These, he said, include maintaining normal income generating patterns; adaptation by means of innovative use of available resources or some divestment of liquid assets; divestment of productive assets, such as stock or land; and out-migration and destitution. He further alludes that macro-economic stresses, such as the transition to cash economies, and the penetration by global



markets into local economies and the attendant structural changes, serve to weaken the efficacy of traditional coping mechanisms, and exacerbate vulnerability to food insecurity in developing countries especially in Sub-Saharan Africa. According to him, natural hazards and armed conflict in Sub-Saharan Africa present two of the greatest obstacles to achieving necessary coping objectives; that is increasing agricultural output while seeking additional security through alternative forms of income and stability.

However, increasing the supply of food from large-scale commercial agriculture or imports and lowering food prices are more likely to improve food security among urban than rural dwellers, and this is one of a number of issues around which urban and rural interests can come into conflict (McGranaham et al., 1999). Thus interventions that depress urban prices are not, however, likely to prove an efficient means of improving urban food security. Moreover, some of the most vulnerable urban dwellers rely on rural links to ensure their food supply.

In contributing to the discussion on coping mechanisms against food insecurity, Sasson (2012) reports that under the threat of starvation, the populations living in the deep south of Madagascar (Malagasy) are adopting survival strategies, such as eating seeds to be sown for the following harvests. This coping strategy which is not limited to only the people of Malagasy in Madagascar but to many groups of people in the continent is very dangerous because it has the likelihood of further deepening future food insecurity and extreme hunger due to lack of planting materials.



In some rural communities in Ghana, wild foods are consumed in times of food insecurity to mitigate the effects of hunger. In his paper on Building Resilience and reducing Vulnerability to Climate Change: Implications for Food Security in Ghana, Yaro (2013) reported that food in poor regions in developing countries includes wild foods, which are particularly important to households. He elucidated that wild foods are not only an important source of food but also a source of income for those with less access to land and other production requirements for engaging in normal agricultural and other non-farm activities. This therefore confirms that wild foods are sometimes consumed as a coping mechanism against food insecurity by poor households.

According Nyanteng and Asuming-Brepong (2003), some coping strategies to sustain food security in Ghana include shifting to less expensive and less preferred foods, borrowing food or money to buy, purchasing food on credit, seeking assistance from friends and relatives and purchasing street food. In his study, Quaye (2008) also identified quite a number of coping strategies adopted by households during periods of food insecurity in the three northern regions of Ghana: The Upper West, Upper East and Northern. He listed them as: Reduce the number of meals served each day; reduce the portion/ sizes of meals; eat less preferred foods; eat wild vegetables and fruits; sell chicken and other fowls; sell livestock (goats, pigs, sheep); send certain members of household to live elsewhere; sell durable household possessions (small items); sell personal valuables; seek food from relatives/Friends; and household members work for pay in food.



## CHAPTER THREE

### METHODOLOGY

#### 3.1 Introduction

This chapter outlines how the study was conducted. It is discussed under the following sub-headings: Study area, research design, study population, sampling technique and sample size, data collection instruments and procedure, issues of validity and reliability and methods of data analysis.

#### 3.2 Profile of the Study Area

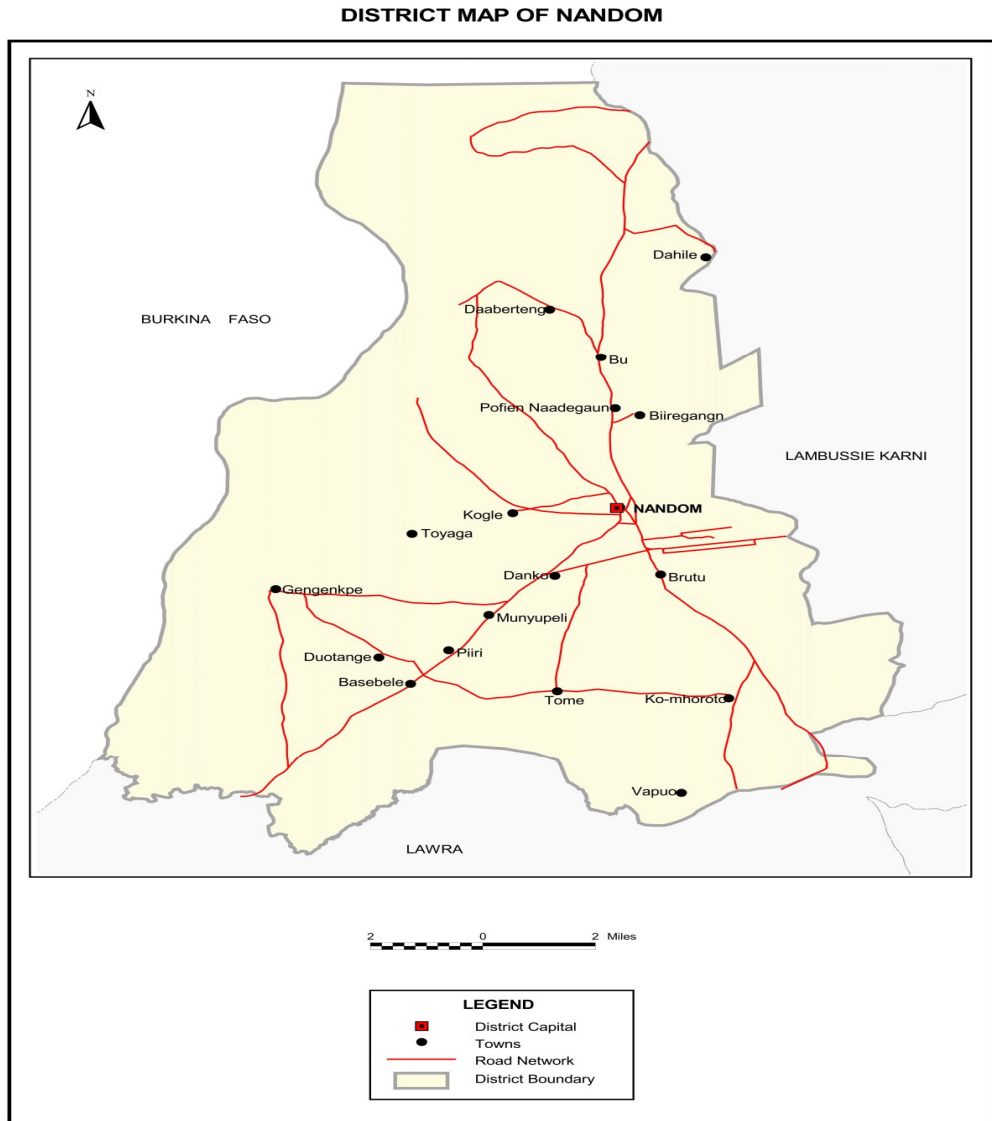
The Nandom District is one of the eleven Districts that make up the Upper West Region. The District Assembly was established by LI 2102, with Nandom as the district capital. The District was carved from Lawra and forms part of the new districts and municipalities created in the year 2012. The District however was inaugurated on the 28th June, 2012.

The District lies in the north western corner of the Upper West Region of Ghana between Longitude 2°25 W and 2°45W and Latitude 10°20 N and 11°00 S. It is bounded to the East and South by the Lambussie and Lawra Districts respectively and to the North and West by the Republic of Burkina Faso. The total area of the District is put at 404.6 square km. This constitutes about 3.1percent of the Region's total land area. The District is constituted by 84 communities with 86percent of the inhabitants living in rural areas. The population density is approximately 114 per square kilometer. It is the most densely





populated District in the region. Figure 3.1 is a map showing the location of the District in Ghana.



**Figure 3.1: Map of Nandom District**

Source: GSS, 2014



Its closeness to Burkina Faso offers it a strategic location for international interactions and exchanges. It however poses a challenge related to the influx of Fulani herdsmen into the district from the Sahel (GSS, 2014).

The population of Nandom District, according to the 2010 Population and Housing Census, is 46,040 representing 6.6 percent of the region's total population (GSS, 2012). Males constitute 48.4 percent and females represent 51.6 percent. About 85.0 percent of the population live in rural localities. The district has a sex ratio of 93.9. The population of the district is youthful (under 15 years) (37.3percent) depicting a broad base population pyramid which tapers off with a small number of elderly persons 60 years and above (10.7percent).

In terms of vegetation, the district falls within the Guinea Savannah vegetation belt. The vegetation consists of short grasses with scattered fire resistant trees such as the Shea trees, acacia and Baobab trees. The vegetation is very congenial for livestock production, which contributes significantly to household incomes in the district. Human activities particularly indiscriminate tree felling for fuel wood, charcoal and other purposes, early torrential rain and poor animal husbandry practices have continuously decreased the vegetation cover and increasing soil erosion and depletion of soil fertility. Moreover, inappropriate farming practices such as shifting cultivation, road construction, sand and gravel winning increase land degradation.





Climatically, the District is tropical continental as experienced in the northern regions of Ghana. Throughout the year, temperatures are high with a minimum of 23°C at night and a maximum of 42°C during the day. This favours plant growth. The mean monthly temperature ranges between 21°C and 32°C. The highest monthly maximum temperature rises up to 40°C before the rainy season usually in May with lowest minimum temperature falling to about 12°C in December when the Harmattan winds from the Sahara dry up the vegetation. As a result of the single maximum rainfall season prevailing in the district, crop production is mostly done during the rainy season (May to September/October). The district experiences a long dry season which leads to migration of the youth to the southern sector in search of menial jobs.

The topography of the district could be described as gently undulating. Generally, the district is located about 180 meters above sea level with a few isolated hills. The relative plain topography is suitable for road construction, distribution of utility lines and general construction works. The District is poorly endowed with water bodies. The only natural water bodies are a few interconnected streams flow into the Black Volta which cuts through the district. The Black Volta River is considered by the district as a potential for aquaculture. There are a number of dams and dugouts which provide water for irrigation, domestic chores, construction, and animals.

The Nandom District Assembly, which is the highest political and administrative body in the District, is charged with the responsibility of formulating and executing plans, programme, projects and strategies for the overall sustainable development of the people

in the District. The Nandom District is made up of Thirty-eight (38) Assembly persons. Out of this figure, there are only six (6) females and thirty-two (32) males. The district administratively has one (1) Town Council, Three (3) Area Councils and Twenty-two (22) Unit Committees.

Alongside the decentralized governance system is a supportive traditional governance system which appears to be in harmony with the District Assembly System thereby promoting development in the local area. The District has only one paramountcy which is the Nandom Paramountcy headed by the Nandom Naa. He is supported by Seventeen Divisional Chiefs and several Sub-Division Chiefs.

In the area of religion and ethnicity, a greater majority of the population (85.7 percent) in the district profess the Christian faith with only a small proportion of the population being Muslims (6.6 percent). On the other hand, Traditionalists constitute (1.0 percent) of the population while 2.0 percent of the population belonged to no religion at all. Generally, more females (86.4 percent) than males (85 percent) reported Christians (GSS, 2014). The most predominant tribe in the District is the Dagaaba. There are other minor tribes such as the Hausa, Mossi, Sissala, and Asante among others. The most significant tourism potential in the Nandom District is the *Kakube* Festival. The rich cultural heritage of the people exhibited during this festival (*Kakube*) has the potential to bring in a lot of foreigners and investors.

In the field of economic activities, agriculture, which is the major activity that engages about 80 percent of the population is centred on crops and livestock production. The crops mainly grown by the farmers are corn, millet, maize, cowpea and groundnut; of



these the District has comparative advantage in groundnuts and cowpea production. The massive extension works in the area of electricity has greatly opened up economic opportunities, especially for the youth, as the facility is being used for other industrial works such as carpentry shops, blacksmithing, welding, vulcanizing, fitting shops and agro processing (Shea butter and groundnut extraction).

### **3.3 Research Design**

This is a process that deals with the arrangements and the procedures involved in the data collection and analysis in a manner that aims to combine relevant techniques and tools in conducting the study. A research design is a basic framework outlining the interrelationships between the various research activities required in order to effectively address the central stages of a study to ensure that the research questions will be addressed. It is a plan which guides the investigator in the process of collecting, analysing and interpreting observations in a logical model of proof that allows inferences to be drawn concerning the variables under investigation. The main objective of the research design is to ensure that the facts collected address the research questions and the objectives. Considering the nature of issues that this study set out to investigate, a cross sectional descriptive survey design was deemed appropriate.

Survey involves the collection of primary data to measure variables and to answer questions concerning the immediate status of the subject matter under focus. Survey also asks many people called respondents about their beliefs, opinions, experiences, characteristics, knowledge and past or present behaviour (Neuman, 2007). This survey design was adopted because it enabled the researcher to gather primary data from a large number of people by asking them questions to tap their opinions, experiences and



knowledge to measure the extent of women access to land and its effects on food security.

The adoption of the descriptive survey is further consistent with Fraenkel and Wallen's (2003) notion that descriptive survey method is the most appropriate means of obtaining data on personal and social facts when studying large populations and when the study involves selecting and studying samples chosen from the population to discover the relative distributions and interrelations of variables. The survey design therefore enabled the researcher to generalize the findings obtained from the sample to the whole Nandom district population.

### **3.4 Sources of Data**

The main source of data for the study was basically from primary sources. Some secondary data were also sourced for the study for the purpose of literature review.

#### **3.4.1 Primary Data**

Primary data was gathered from the field through the use of a structured questionnaire (Appendix A) and key informant interview guide (Appendix B). Thus, women were contacted to obtain first-hand information on women's access to land for agricultural purposes since they are directly involved in farming. Individual farmers irrespective of their sex but with emphasis on women as the target population were contacted. This is important since it enabled the researcher ascertain the extent of access to agricultural land across both sexes. Key informants were also contacted so as to get their views on the



extent of women access to agricultural land amidst cultural constraints since they are the custodians of the land.

### **3.4.2 Secondary Data**

Secondary data was collected from different sources and levels so as to enable the researcher gain insights into current practices and findings from researchers that could be used to affirm or dismiss some of the assertions regarding women access to agricultural land. The sources that were relied on included published books, magazines, and relevant journals. Other materials were also sourced from departments and agencies such as the planning unit of the District Assembly, the Gender desk officer of the District, and officer for Women in Agriculture and Development (WIAD) of the Ministry of Food and Agriculture.

### **3.5 Population of the Study**

The population of the study is considered as the total number of all units of the phenomenon to be investigated that exists in the area of investigation (Kumekpor, 2002). The target population for this study consisted of all adult women (18 years and above) in the Nandom District.

### **3.6 Sampling procedure and size**

According to Babbie (2007), sampling is the process of selecting a few (a sample) from a bigger group or sampling population to become the basis for estimating or predicting the prevalence of an unknown piece of information, situation or outcome regarding the



bigger group. This therefore implies that a sample is a subgroup of the population of interest. Probability sampling design was employed to draw the study sample for data collection. This is because in a survey study probability sampling is more likely to yield a sample that truly represents the population (Neuman, 2007) in order to allow for generalization. Specifically, the multi-stage random sampling technique was adopted. The multi-stage sampling involved selecting a sample for investigation in stages where more units of the population were excluded at each stage thereby making the final sample less scattered for easy reach (Kumekpor, 2002). The multi-stage sampling technique was used because the population of the study area was large and scattered over a large geographical area. It was also selected to help reduce distance between samples in order to reduce transport cost and travel time.

For the purpose of this study, the district was zoned into five. Therefore, the first stage of the multi-stage sampling process involved the random selection of one (1) community from each zone. At each zone, the names of all the communities were compiled and serially labeled on pieces of paper. The pieces of paper were put into a container and shuffled, and then one community was picked. The process therefore yielded a total of five communities that were randomly selected.

The second stage of the multi-stage sampling process involved the random selection of households. Thus, at each community, a list of households was compiled with the help of the assembly members' in-charge of the selected communities and used as sampling frame. Similarly, the simple random process described earlier was applied to select 40 households. The third and final stage of the multi-stage sampling process involved





purposive sampling of adult women from each household. Thus 40 respondents were selected from each community, giving a total sample size of 200. The 40 respondents per community was selected for convenience and enable the researcher the research deadline.

Table 3.1 shows the five communities that were selected.

**Table 3.1 Selected Communities Where Respondents Were Drawn**

Zone	Community	Sample
1	Duotange	40
2	Toyaga	40
3	Bu	40
4	Tome	40
5	Brutu	40
Total		200

### 3.7 Research Instruments

The main instruments for data collection for the study were questionnaire (Appendix A) and an interview guide (Appendix B). The structured questionnaire was used to collect data from the women respondents. The interview guide on the other hand was used to collect data from three key informants in three separate in-depth interviews. Interview is a formal or informal conversation between an interviewer and interviewee which generates qualitative information.

#### 3.7.1 Questionnaire

The questionnaire (Appendix A) was structured into five sections – A, B, C, D and E in line with the objectives of the study. Section A dealt with the demographic characteristics



of the respondents. Section B focused on the land tenure systems that exist in the study area whilst section C touched on modes of women acquisition of land. Section D dealt with the constraints women face in accessing land and finally section E contained the effects of the various land tenure systems on household food security.

The questionnaire was constructed to consist of both closed and open-ended questions. The closed-ended questions enabled respondents to give straight-forward answers by selecting from a list of options provided by the researcher. It also made it easy to code and analyse. This is consistent with the assertion by Fraenkel and Wallen (2003) that surveys rely on closed-ended questions to measure opinions, attitudes and knowledge of people for easy quantitative analysis. The open-ended questions on the other hand afforded respondents the opportunity to express their opinions on some key issues.

### **3.7.2 Interview Guide**

The interview guide (Appendix B) was used to conduct in-depth interviews with three key informants including a chief, a tendana (Earth Priest) and a community women's leader popularly known as Magazia. The interviews took the form of questions and answer sessions and lasted for one hour each. The key informant interviews gave the researcher in-depth information about women's access to land in the study area.

### **3.8 Data Collection Procedure**

Permission was granted by the Nandom District Assembly for the researcher to go into the communities and collect data after she presented a request letter to the assembly. The



chiefs, assembly members and opinion leaders in the selected communities were also contacted with the help of some natives for permission before data was collected. This gave the researcher the privilege to have easy access to data from the people in the communities.

After the selection of the respondents they were located individually in their homes to respond to the questionnaire. An introduction was first made by the interviewer in a way as to establish rapport with the respondent. After establishing the rapport, the questions in the instrument were read to the respondent in the local language (Dagare) for her to answer while the interviewer recorded the answers. Due to lack of time, five research assistants who were fluent in Dagare were recruited and trained to assist in the data collection.

With regards to the in-depth interviews with the key informants, all courtesies were observed while conducting the interviews and interviewees were told the exercise was optional and they could withdraw at any time they deemed necessary.

### **3.9 Validity and Reliability**

The validity of the data collection instruments was achieved by ensuring that the self-questionnaire instruments were clearly interpreted to respondents to understand very well before responding. In addition, the researcher ensured that the research assistants recruited were adequately trained in the concepts used in the instrument which enabled them to interpret the questions appropriately to the understanding of the respondents to illicit the right responses. They were also trained on how to record responses from



respondents. Furthermore, very simple language was used in wording the questions to facilitate easy understanding by both the interviewers and the respondents. This ensured that the instrument elicited responses that measured variables that it intended to measure.

The instrument was also given to colleagues and experts for editing and later, to the supervisors of the study for final editing and confirmation of its suitability. In addition, the instrument was pre-tested in a community in the adjoining district, Lawra with similar characteristics as those in the study areas. The results of the pre-test were used to rephrase difficult, vague and ubiquitous questions in other to make the instrument more reliable to illicit the desired responses from the respondents.

The reliability of the results was also ensured by subjecting the field data to thorough editing to remove contradictions, errors and inconsistencies before analyzing. The variety of data collection methods used such as questionnaire and interview also assisted in cross-checking and editing wrong answers from respondents which enhanced the reliability of the results.

### **3.10 Method of Data Analysis**

The primary data from the field was edited to remove errors and inconsistencies before coding. The coded data was then fed into a computer and processed using the Statistical Package for Social Sciences (SPSS) SPSS version 20 and MS excel. Some of the data sets were exported to excel to enable the researcher generate pie charts and bar charts. Descriptive statistics were generated on the various objectives and the results obtained were presented using tables and charts.



The descriptive narrative method was used to analyze the qualitative data obtained from the key informant interviews. The responses were analyzed after transcribing them by grouping them into themes and sub-themes. Major findings from the analysis were noted and used for discussions in chapter four.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter focuses on data presentation, analysis and discussion of results obtained from the field work. The results and discussion are presented under the following headings:

- Demographic characteristics of the respondents
- Access to land
- Forms of women access to land
- Women's Constraints in Accessing and Using Land
- Food security status of households
- The Effects of Land Tenure System on household Food Security

#### 4.2 Demographic Characteristics of Respondents

In this section, the demographic characteristics of the respondents are presented and discussed. These include age, marital status, occupation, educational status and household size.

##### 4.2.1 Age Distribution of Respondents

The age distribution of the sampled respondents is provided in Table 4.1.



**Table 4.1: Age Distribution of Respondents**

Age	Frequency	Percent
18-25	21	10.5
26-35	56	28
36-45	65	32.5
46-55	37	18.5
56-65	15	7.5
66 and above	6	3
Total	200	100

**Source: Field survey, 2015**

From Table 4.1, the highest number of respondents (65) representing 32.5 percent were within the age bracket 36-45 followed by those who fell within the age group 26-35 with a total of 56 respondents constituting 28 percent. The youngest age group, 18-25 was just 10.5 percent of the total respondents while the oldest age group of 66 years and above registered the least percentage of three percent.

The results show that majority (32.5 percent) of the respondents were within the age bracket 36-45 followed by those within 26-35 and 46-55 with 28 percent and 18.5 percent respectively. The results further reveal that a large majority (71 percent) of the respondents were within the age bracket of 18-45. This implies that majority of the women in the district are in the economic active age bracket and when given the needed resources, particularly land, would be able to contribute tremendously to the agricultural sector especially in the area of food production. When this happens, it would in no doubt have a positive impact on household food security in the district. This is because



available literature shows that in most parts of Africa including Ghana, women form the bulk of food crop producers and are responsible for household food security. For instance, Fonjong et al. (2010) reported that women in Sub-Saharan Africa are responsible for 80 percent of food production and 60 percent cash crop production. Similarly, Amu (2005) contends that women are estimated to produce about 70-80 percent of the food consumed and are responsible for food security.

#### 4.2.2 Marital status of respondents

The respondents were asked to indicate their marital status and the result is presented in the Table 4.2.

**Table 4.1: Marital status of respondents**

Marital status	Frequency	Percentage
Single	4	2
Married	159	79.5
Widowed	31	15.5
Divorced	6	3
Total	200	100

**Source: Field survey, 2015**

Table 4.2 revealed that majority (79.5 percent) of the respondents were married, 2.0 percent were single, and 15.5 percent of the respondents were widows whereas 3 percent were divorced. In most cultural groupings of northern Ghana, lands titles are held by the males as a result, women can only use the lands through permission from the male





counterparts. This means that the married women have a greater chance of accessing land than those who are not married.

A follow-up question was posed for respondents who said they were married to indicate whether they were into a monogamous or polygamous marriage. Analysis of their responses indicated that out of the 159 married women, 98 of them were involved in marriages where women shared their husbands with other women (polygamous marriages) while 61 were monogamous. These represented 61.6 percent and 38.4 percent respectively (See table 4.3)

**Table 4.3: Type of Marriage**

Marriage type	Frequency	Percentage
Monogamy	61	38.4
Polygamy	98	61.6
Total	159	100

**Source: Field survey 2015**

This result implies that polygamous marriage (system of marriage in which two or more women are married to one man) is dominant in the study area. This system of marriage is most likely to reduce the size of land available to each individual in the household, especially the women. This is because there would be pressure on the family land which has to be divided among many people in the family thereby reducing the land size per head. This can lead to low output, low income and increased food insecurity.

#### **4.2.3 Main Occupation of Respondents**

On the issue of respondents' occupation, majority of the women constituting 76 percent were engaged in farming as their main occupation, 18 percent engaged in petty trading



and 6.0 percent of the women were however involved in other occupations either such as dress making (See Table 4.4 for respondents' responses on their main occupation). This means that the women were mainly operating in the informal sector and are therefore likely to be earning lower incomes which usually characterize the informal sector.

**Table 4.4: Main Occupation of the Respondents**

Occupation	Frequency	Percent
Petty trading	36	18
Farming	152	76
Others	12	6
Total	200	100

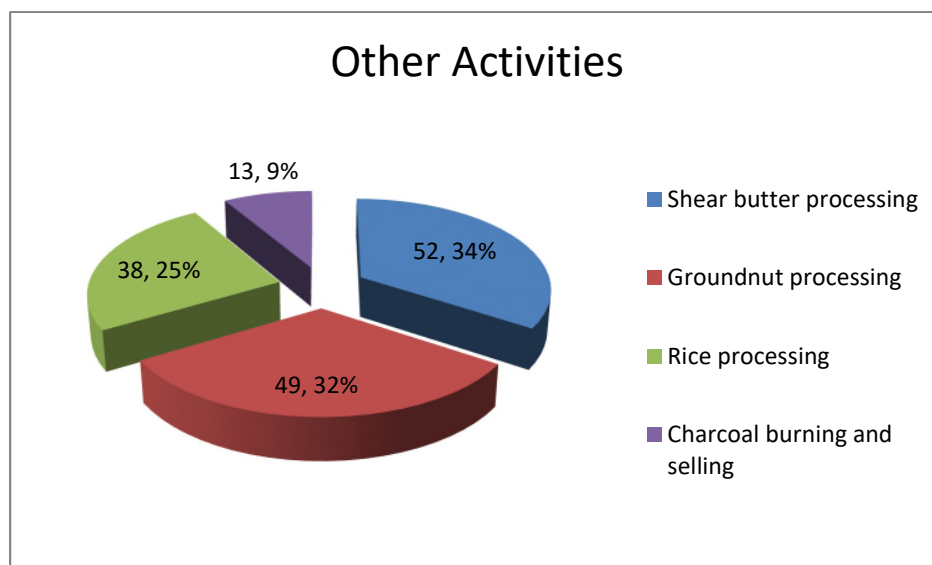
Source: Field survey, 2015

The results as revealed in Table 4.4 imply that farming is the dominant occupation among women in the Nandom District. This finding is consistent with the contention that women now constitute the majority of smallholder farmers, providing most of the labour and managing a large part of the farming activities on a daily basis (Saito, 1994). The dominance of the women in farming also justifies the need to examine their access to land and how that access helps in contributing to household food security.

Another question was posed to respondents who indicated farming as their main occupation to state other activities that they engaged in during the dry season. Out of the 152 women who said farming was their main occupation, 52 women representing 34.2 percent revealed that they engaged in Shea butter processing whereas 32.2 percent 25 percent and 8.6 percent said they engaged in groundnut processing, rice processing and charcoal burning and selling respectively during the dry season as shown in Figure 4.1.



**Figure 4.1: Other Activities Respondents engage in During the Dry Season**



Source: Field survey, 2015

The women explained that they engaged in these economic activities in the dry season to generate income to support the family as well as to keep them busy.

#### 4.2.4 Educational background of respondents

Education is an essential feature that has been acclaimed and adopted by most people to be a necessary condition for an individual to adequately meet the basic needs of life. As a result of this fact, the study tried to find out the educational status of the respondents since the perceptions, thoughts and outlook of a literate may differ from that of an illiterate. The educational status of the respondents is shown in Table 4.5.



**Table 4.5: Educational background of respondents**

Educational status	Frequency	Percent
No formal education	102	51
Basic education	88	44
Secondary education	8	4
Others	2	1
Total	200	100

Source: Field survey, 2015

Table 4.5 revealed that as many as 51 percent of the respondents have never had any formal education while 44 percent achieved only basic education. 4.0 percent of the total respondents attained secondary education and only 1.0 percent of the respondent progressed to the tertiary level. This means that there is a very low level of education among women in the district. The low level of formal education among the women in the district explains why majority of the women are engaged in farming and petty trading. It further means that there are very few opportunities for diversification from agriculture and petty trading.

#### **4.2.5 Household size of respondents**

The household size of a respondent is the total number of people in a respondent's household, sharing and pooling their resources together for a common purpose. Considering the fact that agriculture is the mainstay of the people (GSS, 2012) and land a necessary resource, it is true that larger household size would affect the land holdings or distributions in the family. However, in a typical farming and informal sector worker



households, large household size is an important production access, especially in providing readily available labour. In this study, the average household size was 11.6 as shown in Table 4.6 which is far above the national and Upper West regional average household sizes of 4.4 and 6.2 respectively (GSS, 2014). The majority of the respondents however have household sizes of between 6-10 members, while 6percent had household size between 21-30 members. Another 6percent of the respondents reported household size of less than 6 members.

**Table 2.6: Household Size Distribution**

Household size	Frequency	Percentage
1-5	12	6
6-11	106	53
12-15	39	19.5
16-20	31	15.5
21-25	6	3
26-30	6	3
Total	200	100
Mean	11.6	

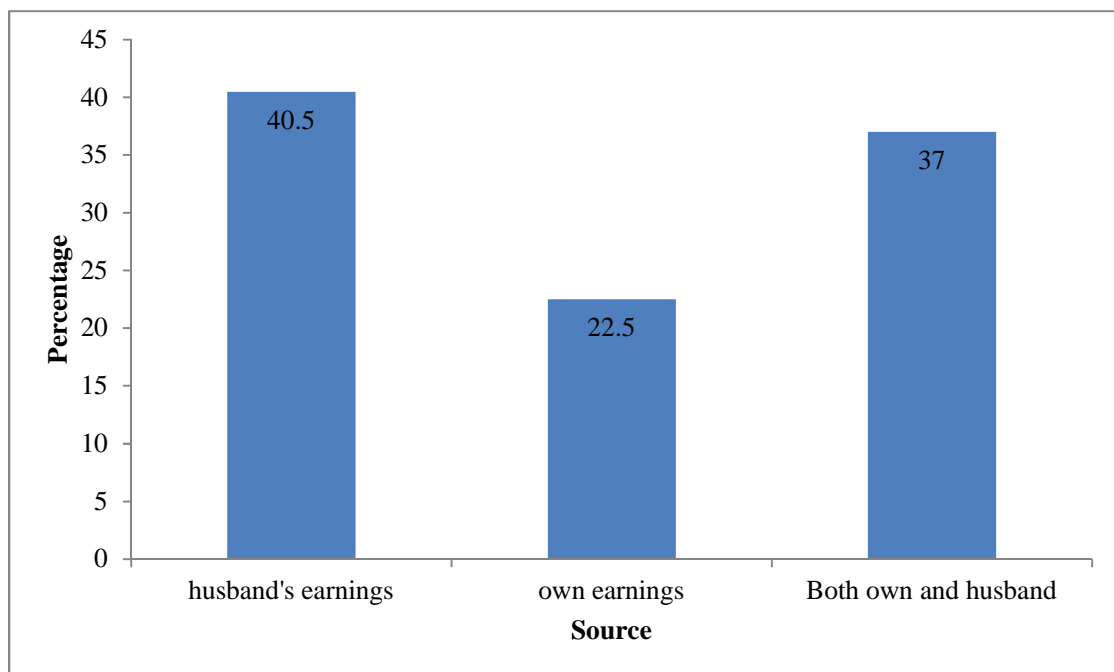
**Source: field survey, 2015**

#### **4.7 Main Ways by Which Household Food and Other Needs are Met**

In the figure below, 40.5 percent of the respondents indicated that the main way by which their household food and other needs are met is through their husbands' earning. This implies that majority of the respondents' households depend entirely on their husbands' earnings. This is consistent with observations in the district where household needs are



always provided for by the males. Ironically, as high as 22.5 percent of the women indicated that their households depend mainly on their income. This perhaps needs further interrogation since it does not depict the cultural conditions of the people. Perhaps, this group of people are the widowed or divorced women who have no husbands to take full responsibility of the family needs. From the figure, the remaining 37 percent of the respondents indicated that their households depend on both their own and husbands earnings.



**Figure 4.2: Main Ways by Which Household Food and Other Needs Are Met**

**Source: Field Survey, 2015**

### **4.3 Access to Land**

Access to land involves the acquisition and use of lands. In the sections that follow, the study provided a discussion on the various aspects of access to land in the district.



### 4.3.1 Land Tenure Systems

The study examined the land tenure systems that exist in the study area. These systems involved the type of land ownership systems in the district. Therefore, a question was posed for respondents to outline the land tenure systems in the district. Their responses are captured in Table 4.7.

**Table 4.7: Land Ownership Systems**

<b>Land ownership</b>	<b>Frequency</b>	<b>Percent</b>
Communal land ownership held by chiefs and tendanas	200	100
Family land ownership held by family heads	200	100
Individual land ownership acquired through inheritance	192	96

**Source: Field survey, 2015 \* NB. Frequencies are in multiple responses**

From Table 4.6, three main land ownership systems exist in the Namdom district as reported by the respondents. All 200 respondents who gave multiple responses reported that land in the district was communally owned as well as by families which are held in trust by chiefs/tendanas and family heads respectively. In addition, 96 percent of the respondents further noted that individuals also own land which they have acquired through inheritance.

The finding that land in the district is communally and family owned seems to confirm the general belief that in patriarchal societies as it is the case in the study area, land is owned by the community or clans/families and held in trust for the members by the chiefs or clan/family heads. For instance, in the opinion of Cotula (2007), the dominant view of customary resource tenure systems in Africa is that land is usually held by clans or families on the basis of diverse blends of group to individual rights. In addition, Songso



and Denkabe, (1995:34) allude to the finding by stating that: “Indeed, what pertains, generally, at the moment in the Upper West Region is that, land is controlled through family ownership which is a further development of the communal ownership of land that existed from pre-colonial times....”

In order to validate the land ownership systems that exists in the district and other related issues as reported by the respondents, an in-depth interview was conducted with three key informants who were not part of the 200 respondents. The three key informants comprised a renowned family head, a tendana (earth priest) and a magazia (community women’s leader). All three key informants confirmed the three types of land owned reported by the respondents but gave further explanations to clarify the nature of the various ownerships. They were unanimous in their explanation that communal lands in the district are lands that exist in communities that either have cultural or ancestral significance like those housing shrines as well as lands that have never been inhabited or cultivated by any family. They however, noted that lands that have never been inhabited or cultivated by any family no longer exist due to population explosion which has come along with its wake, increased demand for land for farming. This implies that communal lands that currently exist in the district are only those housing shrines and other cultural places of importance which are managed by the tendanas and chiefs.

The key informants further explained that the family lands are currently the most viable land ownership system that members can access land. The individual land ownership which individuals acquire through inheritance on the other hand, they said, are such that the individuals only have user rights but cannot sell them. Hence, in the event that the





individuals die without a male heir to inherit, the land reverts back to the larger extended family. This confirms the assertion by Cotula (2007) that under customary land tenure system, land rights are often inheritable but restrictions usually exist on sales (especially to outsiders), although certain transactions such as gifts and loans may be allowed.

#### 4.3.2 Most Suitable Land Tenure System for Agricultural Purposes

A question was posed for respondents to identify amongst the existing land tenure systems in their communities the one that they believe would be most suitable for land access for agricultural purposes. Table 4.8 captures their responses.

**Table 4.8: Most Suitable Land Tenure for Agricultural Purposes**

Most Suitable Land Tenure for Agriculture	Frequency	Percent
Individual land ownership acquired through inheritance	125	62.5
Family land ownership held by family heads	73	36.5
Communal land ownership held by chiefs and tendanas	2	1
Total	200	100

**Source: Field survey, 2015**

From Table 4.7, a significant number (125) of the respondents representing 62.5 percent identified individual land ownership acquired through inheritance as the land tenure system that they believe would be most suitable for land access for agricultural purposes in their communities. This was followed by 36.5 percent respondents who suggested that family land ownership held by family heads would be most suitable for land access for agricultural purposes in their communities. However, only two respondents representing 1 percent indicated communal land ownership held by chiefs and tendanas as land tenure



system that would be most suitable for land access for agricultural purposes in their communities.

The results show that majority (62.5 percent) of the respondents believed that individual land ownership acquired through inheritance is the land tenure system that is most suitable for people in their communities to be able to access land for agricultural purposes. Although Boon (2009) observed that in Africa land rights are largely allocated through inheritance or other regulatory and distributive mechanisms this result is quite surprising. This is because communal land ownership held by chiefs and tendanas and family land ownership held by family heads have been confirmed as the dominant land tenure systems in most parts of the Upper West Region. For example, according to Songsore and Denkabe (1995) land in the Upper West Region is generally controlled through family ownership which is a further development of the communal ownership of land that existed from pre-colonial times. One can therefore suggest that the communal and family land ownership systems are no longer effective in granting land user rights to people especially women for agricultural purposes like they did in the past.

#### **4.3.3 Reason for the Most Suitable Land Tenure System Selected**

A follow-up question was asked for respondents to give a reason for selecting the land tenure system in their communities that they considered the most suitable for land access for agricultural purposes. Table 4.8 shows respondents' reasons for their answers.



**Table 4.9: Reason for the Most Suitable Land Tenure System Selected**

Land Tenure Suitable for Agriculture	No. of Responses	Reason for Answer	Frequency	Percent
Individual land ownership acquired through inheritance	125	Land can be used to cultivate any crop of one's choice	50	25
		Male relatives can easily give women land to farm	75	37.5
Family land ownership held by family heads	73	It is the main way land can be acquired for farming in the community	68	34
		No reason	5	2.5
Communal land ownership held by chiefs and tendanas	2	If available land can be accessed by everybody	2	1
Total			200	100

**Source: Field survey, 2015**

Table 4.9 reveals that out of the 125 respondents who said individual land ownership acquired through inheritance is the land tenure system that is most suitable for people in their communities to be able to access land for agricultural purposes 50 of them representing 25 percent stated that they said so because under that system the individual can use the land to cultivate any crop of his/her choice. The remaining 75 respondents (37.5 percent) on their part indicated that their reason for saying so is the fact that the individual land ownership acquired through inheritance allows male relatives such as husbands, brothers and fathers among others to give women land for farming easily.

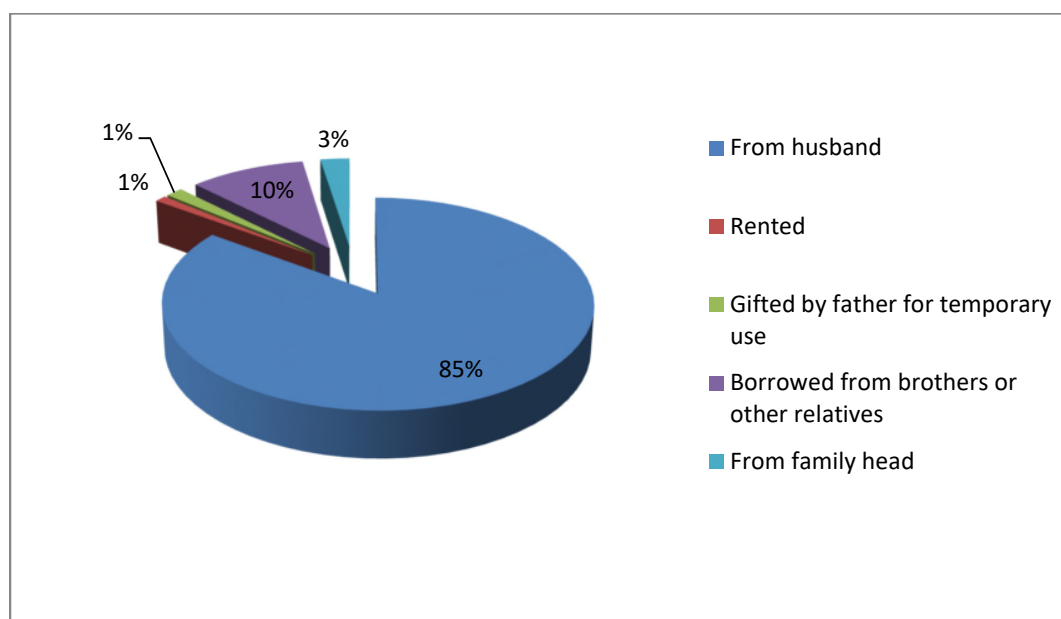
However, majority (68) of the 73 respondents who said family land ownership held by family heads is the land tenure system that is most suitable for people in their communities. Their reason is because it is the main way land can be acquired for farming



in their communities in recent times while the remaining five (5) said they had no reason for their answer. The implication for the respondents' reasons is that individuals and family heads who own and control land can be targeted by civil society organizations and other formal institutions which advocate for women's rights for sensitization on the need to increase the size of farm lands for women as well as give women land to own permanently.

#### 4.3.4 Modes of Land Access by Women

The ability of women to obtain land for economic activities particularly farming defines their land access. Figure 4.3 presents the modes of women access to land in the district as indicated by the respondents.



**Figure 4.3: Modes of Women's Land Access**

Source: Field survey, 2015



Figure 4.3 depicts that women in the Nandom district acquire land for farming purposes through several means. As indicated in figure 4.3, 85 percent of the women acquire land through their husbands, 10 percent borrowed from brothers and other relatives. The other less popular women land access modes in the district as stated by the respondents include acquisition from family head (3.0 percent), gift from father for temporary use (1.0 percent), and rent (1.0 percent)

This result implies that the major mode of land access by women in the district is through acquisition from husbands which constitutes about 85 percent followed by borrowing from brothers or other relatives which comprises 10 percent.

The result that the predominant mode of women land access in the district is from their husbands is quite consistent with general view that women in the upper west region access land mostly through their husbands. This is affirmed by the finding of Aasoglenang et al. (2013). In their study on land access and poverty reduction among women in Chansa in the north western region of Ghana, they found out that women in the Chansa community only have access to land on request from their husbands and other landlords. However, their study did not mention women land access by borrowing. This means women land access through borrowing seems quite unique to the Nandom district. However, this needs to be verified.

The three key informants in their interview validated all but one of the modes of women's land access in the district as reported by the respondents. They admitted that women access land predominantly from their husbands and other times from family heads or through borrowing or gifts from their fathers. They however emphasised that



land rental or purchase by both men and women is not permissible because the custom of the people is that land is a free gift from nature and should not be transacted in monetary terms like a commodity. The researcher found this statement quite revealing because the issue of land grabbing through sale, purchase and rental is now a growing phenomenon across Africa including Ghana. The Tendana key informant in particular made this point clear: “You see; our tradition does not allow us to sell or rent land here.” The case of land rentals, as reported by two respondents, therefore means that some people in the district are clandestinely engaging in the commoditization of land in the district against the norms of the land.

The Tendana went further to explain how land can be acquired in the community. He noted that, for someone to obtain a parcel of land, items such as kola nuts, local drink (pito) and some token of money are sent to the family head to make the proposal. The Tendana added that, upon the receipt of these items, the contract is initiated and the request is thus granted if free family land is available. Also, a woman seeking to use a piece of land outside the control of her husband has to inform the husband who intends initiates the process as stated above on her behalf. “Women per our tradition cannot not make direct request to family heads for land”, he cautioned. This statement means that marriage plays a very crucial role in women land access in the district. It further means that women cannot own land and therefore do not have secure land rights in the district. This is consistent with the general view that women cannot own land in their own right in Sub-Saharan Africa (Quisumbing et al., 1995). This finding has serious implication on women livelihoods and consequently household food security.



The Tendana as well as the two other key informants, however, stated that due to increased population, women's access to family lands is becoming rare because the lands are not enough to go round the men who are regarded as the bread winners. Perhaps, this explains why only 3 out of the 200 respondents were able to accessed land from family heads.

#### 4.3.5 Land Size Distribution of Respondents

The size of land women are able to access under the prevailing land tenure systems is indicated in the table below.

**Table 4.10: Land Size Distribution of Respondents**

Land size	Frequency	Percent
None	0	0
0.1-0.5	81	40.5
0.6-1	99	49.5
1.1-1.5	18	9
1.6- 2	2	1
Total	200	100

**Source: Field survey, 2015**

From Table 4.10, all the respondents were able to access some size of land for farming or other related purposes. The table further reveals that the land size accessed by majority (49.5 percent) of the respondents was between 0.6-1 acres followed by 40.5 percent who accessed between 0.1-0.5 acres. Only 9.0 percent and 1.0 percent of respondents accessed between 1.1-1.5 acres and 1.6-2 acres respectively.



This result means that no woman was able to access land up to one hectare which is equivalent to 2.47 acres. The result further implies that a large majority of women in the district representing 90 percent are only able to access land of sizes ranging between 0.1-1 acres. Thus 90 percent of the women in the district are capable of accessing land of sizes less than half (0.5) hectare. The small land holding of the women in the district is quite consistent with the argument made by several researchers regarding the small land size nature of majority of women in Africa and Ghana. For example, while Quisumbing et al. (1995) posit that generally, women cannot own land in their own right in Sub-Saharan Africa and therefore tend to have small farm plots or be allocated poor-quality land which easily deteriorates with intensified cultivation, SEND-Ghana (2014) and Amu (2005) argue that with only a few exceptions, women in Ghana are less likely to own land, and in cases where they own it, the lands are usually small in size. Furthermore, SEND-Ghana (2014) observed that the average value of land holdings for women is three times lower than that of men. Above all, Gerstter et al. (2011) contend that in developing countries, most farms are relatively small. These views clearly confirm the finding that the size of land accessed by women is relatively very small.

#### **4.4 Women's Constraints in Accessing and Using Land**

One of the objectives of the study was to examine the constraints to land acquisition by women in the district. Table 4.11 shows the respondents' views on the constraints to land acquisition and use by women.





**Table 4.11: Women’s Constraints in Accessing Land**

*Constraints	Frequency	Percent
Customary belief that women cannot own land	200	100
Men’s belief that women are weak and cannot cultivate large parcels of land	200	100
Men’s belief that women would not work on their husbands farms when they are given large parcels of land	200	100
Men’s pride that they would not accept weakness and allow women to farm and feed them	191	95.5
Allocation of infertile lands to women	91	45.5
Allocation of infertile lands to women	91	45.5
Poverty of women	81	40.5
Men’s belief that women will challenge the position of men if they have access to land	175	87.5
Spontaneous taking back of land by husbands/owners	148	74

Source: Field survey, 2015

\*NB: Constraints are in multiple responses

As evidenced in Table 4.11, all the 200 hundred respondents stated in multiple responses that the main constraints of women’s access and use of land in the Nandom district include:

- Customary belief that women cannot own land
- Men’s belief that women are weak and cannot cultivate large parcels of land
- Men’s belief that women would not work on their husband’s farms when they are given large parcels of land



Other important challenges also identified by large majority of the respondents representing 95.5 percent were men's pride that they would not accept weakness and allow women to farm and feed them; 87.5 percent of men belief that women will challenge the position of men if they have access to land while 74 believed that there will be spontaneous taking back of land by husbands/owners.

The above stated results, except the notion that men in the district pride that they would not accept weakness and allow women to farm and feed them and for that matter would not grant them large parcels of land, quite reflects what is available in Ghana. For instance, SEND-Ghana (2014) studies found out that women's restricted control over land in Ghana reflects deep-rooted land tenure customary practices and laws. In the same vein, Oxfam (2013) also notes that the challenges faced by women in accessing, retaining or expanding the lands that they are already cultivating can be blamed on the erosion of customary tenures which has resulted in women experiencing loss of land in conditions of scarcity. Finally, Quisumbing et al. (1995) posited that generally, women cannot own land in their own right in Sub-Saharan Africa.

The finding that men in the study area pride that they would not accept weakness and allow women to farm and feed them and for that matter would not grant them large parcels of land is quite strange and does not match the general view of women's role in food production for household consumption. Fonjong et al. (2010) adequately affirms women's role in food production by reporting that women in Sub-Saharan Africa are responsible for 80 percent of food production and 60 percent cash crop production thereby necessitating a further development of their potentials in the land sector. He



further reported that in Cameroon where the economy is predominantly agricultural, a heavy emphasis is placed on food production which is carried out by women for family consumption or for sale in local or regional markets. In addition, Lampkin, (2013) found out that in Kenya, women account for the vast majority of producers of food for local or regional markets as well as for household consumption. These literature sources which points to the fact that in most places in Africa women are given the opportunity to engage in food production for both household consumption and for the markets makes the finding that men in the study in not allowing their women to farm and feed them quite strange and needs to be interrogated further.

Other results which were very significant but did not quite reflect what is available in literature were the fact that majority of the respondents constituting 59.5 percent and 54.5 percent did not think that poverty and allocation of infertile lands to women respectively are major constraints to women's land access and use. That is, only 40.5 percent and 45.5 percent of the respondents alluded to poverty and allocation of infertile lands to women respectively as major constraints to women's land access and use. Perhaps, these results may be due to the customary belief of the people in the study area that land is not for sale or rent. All the same literature supports poverty as one of the major constraints to women's and other vulnerable group's land access and use. IFAD (2008) makes this point by explaining that in rural societies throughout developing regions, those with insecure tenure rights typically constitute the poorest and most marginalized and vulnerable groups especially women. Similarly, Amu (2005) argues that land is normally given on the basis of ability and means to develop such as ownership of financial



resources, which many women tend not to have. These sources clearly points to the fact that women's poverty status limits their access and use of land.

On the other hand, while Quisumbing et al. (1995) agrees that women in Sub-Saharan Africa tend to have small farm plots or be allocated poor-quality land which easily deteriorates with intensified cultivation, majority (54.5 percent) of the respondents did not see allocation of poor-quality of land to women as a major constraint in the study area.

#### **4.5. Food Security Status of Households**

Globally, food security is a major concern to all countries. In most countries including Ghana, women involvement in agriculture cannot be overemphasized. Women are involved in direct production or indirectly, providing labour in many forms to their male counterparts. Most farming activities are generally performed by the women. For instance, in rice cultivation, women are involved in seeding, fertilizer application, threshing and winnowing. The males are only mainly involved in land preparation and harvesting. This means that women's role in food security cannot be compromised. This is discussed in the sections that follow.

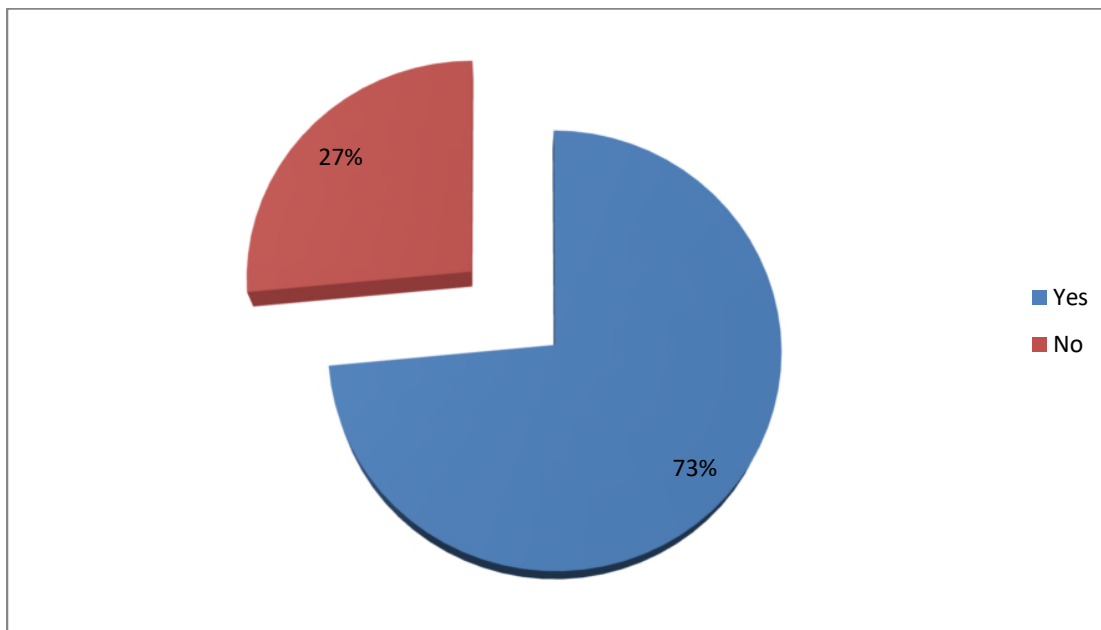
##### **4.5.1 Food Sufficiency**

During the field work, the women were asked to indicate the food sufficiency status of their households. This is shown in the Figure 4.4. From the result, the majority (73 percent) of the respondents indicated that their households were food sufficient. Thus, they are able to feed their families throughout the year without a shortage. However, the



remaining 53 respondents representing 27 percent who indicated non sufficiency of food in their homes warrant attention.

**Figure 4.4. Household food sufficiency status**



*Figure 4.4: Household Food Sufficiency Status*

**Source: Field Survey, 2015**

#### **4.5.2 Periods of Food Insecurity in the Year**

Respondents who indicated household food insufficiency were asked to indicate months within the year in which they recorded food insufficiency. Table 4.12 shows the responses.



**Table 4.12: Periods of Food Insecurity within the Year**

Month	Frequency	Percent
January-April	17	32.1
May-August	30	56.6
September-December	6	11.3
Total	53	100

**Source: Field Survey, 2015**

The result as shown in Table 4.12 indicates that food shortages were experienced by respondents between May and August as reported by the majority (56.6 percent). This is not surprising since this is the main cropping season where most of them might have used their reserved farm produce as planting materials and are awaiting harvest. Similarly, 32.1 percent of the respondents indicate that foods are in shortage during January to April. This is surprising because food is generally abundant during this period as these are the months which follow immediately after crops harvest, and food prices are lower. Perhaps, the households of those respondents experienced crop failure or might have used their harvest to perform funerals. Another possibility could be that they sold their harvest to pay school fees or settle debts. Only 11.3 percent of the respondents indicated that they experience food shortage between September and December.

#### **4.5.3 Households Coping Strategies**

Table 4.13 depicts respondents' household coping strategies during the periods of food insecurity. The table reveals that during periods of food insecurity 28.3 percent of the 53 respondents who reported to have experienced food insufficiency adopted the strategy of eating



only dinner in a day in order to contain the problem of food shortage, 15.1 percent each of the respondents said they applied the strategies such as selling fowls and small ruminants to buy food; eating wild foods such as fruits, vegetables and bush meat; and engaging in petty trading to get money to buy food respectively to cope with the food insecurity situation.

**Table 4.13: Households Coping Strategies against Food Insufficiency**

Household Coping Strategy	Frequency	Percent
Selling firewood/charcoal in nearby urban centres to buy food	3	5.7
Consumption of planting stock meant for next season	5	9.4
Sale of fowls and small ruminants to buy food	8	15.1
Migration of young male adults down south to do menial jobs	6	11.3
Eating wild foods such as fruits, vegetables and bush meat	8	15.1
Cooking only dinner for the household a day	15	28.3
Doing petty trading to get money to buy food	8	15.1
Total	53	100

**Source: Field Survey, 2015**

Other coping strategies applied by respondents to deal with food shortage situations during certain periods of the year included migration of young male adults down south to do menial jobs (11.3 percent); consumption of planting stock meant for next season (9.4 percent); and selling firewood/charcoal in nearby urban centres to buy food (5.7 percent).

The results shows that majority (28.3 percent) of the 53 respondents who experienced food insecurity adopted the mechanism of skipping two meals a day to cope with the problem until the next harvesting season. This coping mechanism could lead to some



negative consequences not only on the affected households but also the district and the nation as a whole. For example, skipping breakfast and lunch for a long time could result in poor health conditions such as ulcer, malnutrition, lack of energy to work and weak immune system which could consequently expose the body to opportunistic diseases especially in children. Similarly, although selling firewood/charcoal in nearby urban centres to get money to buy food was the least (5.7 percent) survival mechanism adopted against food insecurity in terms of responses, it also has some serious implications on the environment. If the practice continues it would lead to deforestation, loss of wildlife, environmental degradation, desertification and consequently climate change.

On the whole most of the coping strategies adopted by the respondents have some backings in literature. For instance, coping strategies adopted by respondents such as consumption of planting stock meant for next season, migration of young male adults down south to do menial jobs and doing petty trading to get money to buy food corroborates Boon's (2009) observation that households seeking to preserve food security levels may resort to a number of coping strategies to gain access to food including maintaining normal income generating patterns; divestment of productive assets, such as stock or land; and out-migration and destitution. In the same vein, the issue of consuming planting stock meant for the next season as a coping strategy has been confirmed by Sasson (2012). In his study, he found out that under the threat of starvation, the populations living in the deep south of Madagascar (Malagasy) were adopting survival strategies such as eating seeds to be sown for the following harvests. However, it is important to emphasize that this coping strategy is more likely to further deepen food





insecurity in the near future and for that matter extreme hunger because of lack of planting materials.

Yaro (2013) study also seems to confirm the finding that wild foods are eaten as a coping mechanism against food insecurity by reporting that food in poor regions in developing countries includes wild foods, which are particularly important to poor households. He went further to explain that wild foods are not only an important source of food but also a source of income for those with less access to land and other production requirements for engaging in normal agricultural and other non-farm activities; thereby confirming that wild foods are sometimes consumed as a coping mechanism against food insecurity by poor households.

The findings of Quaye (2008) study on coping strategies adopted by households during periods of food insecurity in the three northern regions of Ghana also approves respondents coping strategies against food insufficiency such as selling fowls and small ruminants to buy food; eating wild foods and eating only dinner in a day. According to Quaye (2008), the coping strategies adopted by households in the three northern regions of Ghana during periods of food insecurity include reducing the number of meals served each day; reducing the portion/ sizes of meals; eating less preferred foods; eating wild vegetables and fruits; selling chicken and other fowls; selling livestock (goats, pigs, sheep); sending certain members of household to live elsewhere; selling durable household possessions (small items); selling personal valuables; seeking food from relatives/friends; and household members working for pay in kind such as food.



#### 4.5.4 Effects of Land Tenure System on Household Food Security

Table 4.14 reveals respondents' perspectives regarding the effects of land tenure systems in the study area on food security. Almost all the respondents in multiple responses identified the following as the key effects of land tenure systems in the district on household food security:

- ❖ Lower income due to inadequate land for cash crop production (100 percent)
- ❖ Lower outputs due to small farm size (100 percent)
- ❖ Small farm size per person due to land fragmentation (100 percent)
- ❖ Poor fertility of lands given to women resulting in lower yields (100 percent)
- ❖ Lack of secure land rights resulting in inability to access credit (96 percent)

**Table 4.14: Effects of Land Tenure System on Household Food Security**

Effect	Frequency	Percent
Small farm size per person due to land fragmentation	200	100
Lack of secure land rights resulting in inability to access credit	192	96
Lower outputs due to small farm size	200	100
Poor fertility of lands given to women resulting in lower yields	200	100
Lower income due to inadequate land for cash crop production	200	100

**Source: Field Survey, 2015 NB: Effects are in Multiple Responses**

The perspective of all the respondents that small farm size per person due to land fragmentation and lower outputs due to small farm sizes as major effects of land tenure systems on food security as revealed in Table 4.14 has been endorsed by several



researchers. For example, Arnold (1990) and World Bank (2010) note that reports from different countries indicate that the average size of a land holding in developing countries is between half a hectare and a dozen hectares while Gerstter et al. (2011) concur by reporting that in developing countries, most farms are relatively small. SEND-Ghana (2014) explains that the small land holdings, particularly women's restricted control over land reflects deep-rooted land tenure customary practices and laws. The Center for Women's Land Rights and Landesa (2012) links the issue to food security by arguing that secure rights to land are a critical factor in achieving household food security and improved nutritional status. Similarly, Aidoo et al. (2013) ascertained that larger farm holders are more likely to be food secured due to resource pooling implying that small farm holders are also more likely to be food secured whereas Abubakari (2008) found that poor access to land, particularly by women, make their households experience food insecurity. These pieces of evidence imply that land tenure practices as they exist in the study leads to smaller land holdings which in turn result in lower farm outputs thereby leading to limited availability of food and lower incomes, and consequently household food insecurity and weak livelihood.



The result that lack of secure land rights results in inability to access credit as reported by 96 percent of the respondents has also gained some support in literature. Farmers without secure land rights cannot use such lands as collateral security to access credit from financial institutions. This situation affects women farmers more than men especially in patriarchal societies like Nandom where customary norms stipulate that women have no land rights. Tenaw, Islam and Parviainen (2009:8) citing other sources summarised the

effects of secure land rights on access to credit and consequently on agricultural productivity and food security as follows:

*The title of land or secure land right makes it easy for farmers to use the land as collateral for credit. It is hypothesised that farmers who have collateral can easily get access to financial market and increase the supply of credit available to them (Feder and Noronha, 1987 and The Economists, 2001). Access to credit enables the farmers to make durable investment in one hand and intensify the production systems in inputs in the other hand and thereby boosting the agricultural productivity (Platteau, 1993). Increased agricultural productivity brings about increased food availability and consequently enhanced food security (p.8).*

It is important to extend Tenaw et al.'s (2009) argument that increased agricultural productivity brings about increased food availability because it does not only lead to increased food availability but also brings about increased farmers' income through sale of surplus farm produce which strengthen their economic access to food items that they do not produce, thereby further enhancing their food security attainment ability. However, it is equally important to note that the reverse of Tenaw et al.'s (2009) argument would also lead to farmers' weak ability to attain food security.

Commenting on the effects of women's limited access to credit due to insecure land rights, SEND-Ghana (2014) observed that even where land is available for smallholder women farmers to cultivate, limited access to credit and finance due to insecure land rights can impede efforts to increase productivity on the farm. The organization added that without access to loans at low interest rates, women farmers are unable to invest in future production or to take a risk and diversify into producing new crops. SEND-



Ghana's (2014) comments imply that inability to access credit leads to inability to secure the right farm inputs such as fertilizer and technology which have proven by research to be yield improving inputs. Thus, lack of access to credit due to insecure land rights especially women would lead to low investments on farms and consequently low productivity. As stated earlier, low productivity means less availability of food for household consumption and lower incomes to access food and as a result inability to achieve food security.

Poor fertility of lands given to women resulting in lower yields was also stated by all respondents as a major effect of land tenure systems on food security in the study area. FAO (2010) cited in Anaglo et al. (2012) supports the poor nature of lands given to women as a result of customary practices by stating that women face several challenges, most importantly cultural restrictions in accessing land than men and the land they control is often of poorer quality and their tenure is insecure. Amu (2005) also emphasises that due to the traditional land tenure system in Ghana women in most part of the country, with few exceptions in parts of Ashanti and Brong Ahafo regions, do not have titles to the land they work on and even where they are granted land, they are often allocated less fertile land. This situation where women farmers are granted less fertile lands for farming have negative implications on household food security. This is because it is estimated that women produce about 70-80 percent of the food consumed and are responsible for food security (Amu, 2005). If women produce about 70-80 percent of the food consumed and are responsible for food security and yet due to customary practices they are given lands to farm on, their households are mostly likely to experience food insecurity because they are likely to get lower yields which would lead to low availability



of food for household consumption and less income to access food from the market. This ultimately would result in food insecurity.

Respondents were tasked to identify one effect of land tenure systems they perceive exist in the district that is most likely to affect their household food security in the district. The result is shown in Table 4.15

**Table 4.15: Effect of Land Tenure System in the District Most Likely to Affect Respondents' Household Food Security**

Land Tenure Effect Most Likely to Affect Food Security	Frequency	Percent
Lack of secure land rights resulting in inability to access credit	16	8
Lower outputs due to small farm size	164	82
Poor fertility of lands given to women resulting in lower yields	20	10
Total	200	100

**Source: Field Survey, 2015**

Table 4.15 indicates that 82 percent of respondents perceived lower outputs due to small farm size as land tenure systems' effect that is most likely to affect their household food security in followed by poor fertility of lands given to women resulting in lower yields (10 percent) and lack of secure land rights resulting in inability to access credit (8.0 percent).

The results imply that overwhelming majority (82 percent) of the study population believe that lower outputs due to small farm size is the effect of land tenure systems in the Nandom district that is most likely to affect household food security. This therefore means that those who matter must, as a matter of urgency, engage stakeholders to ensure



easy access to land for agricultural purposes especially by women in order to avert possible occurrence of food insecurity in the very near future in Nandom.

#### **4.6 Chapter Conclusion**

This chapter focused on the presentation of results generated from the analysis of the field data as well as the discussion of the results. The results were largely presented in tables and complemented with a few pie and bar charts. The discussions were done largely by relating the results to the literature reviewed for the study which yielded very interesting findings. Some of the findings that emerged from the discussion of the results include the fact that farming is the dominant occupation among women in the Nandom District. In addition, the study found out that the three main land ownership systems that exist in the Nandom district include communal ownership, family lands and individual land ownership. Others included:

- The major mode of land access by women in the district is through acquisition from husbands, brothers or other relatives.
- The main constraints of women's access and use of land in the Nandom district are customary belief that women cannot own land; men's belief that women are weak and cannot cultivate large parcels of land; and men's belief that women would not work on their husbands' farms when they are given large parcels of land.
- Majority (73.5 percent) of families in the district are food sufficient with only 26.5 percent not enjoying food sufficiency in their homes throughout the year.



- The key effects of land tenure systems in the district on household food security were identified as lower income due to inadequate land for cash crop production; lower outputs due to small farm size; small farm size per person due to land fragmentation; poor fertility of lands given to women resulting in lower yields; and lack of secure land rights resulting in inability to access credit.





## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter covers the summary, conclusion and recommendations of the study. The summary entails brief statements of the background of the study, statement of the problem, research objectives, and review of related literature, methodology and results of the study. The conclusion and recommendations were also made based on the major findings of the study.

#### 5.1 Summary

The study identified land as a key productive resource. It is a major source of improvement in livelihood and a tool for reducing poverty levels. Thus the use of land for agricultural activities is of paramount importance. Land particularly is of immense importance to women especially in rural areas where a large majority are involved in agricultural production. In Ghana, it is estimated that women produce about 70-80 percent of the food consumed and are responsible for food security. However, despite their role in food production and contribution to household food security, women in most African countries including Ghana are largely neglected in land ownership. Their access to and control over land is met with numerous challenges.

Nandom in the Upper West Region of Ghana is one of the agrarian communities in northern Ghana where traditions and culture potentially curtail women's access to land. The inability of women in the district to access key livelihood assets such as land has



resulted in some of them striving for household food sufficiency. However, women's contribution to agriculture in the district is quite immeasurable. Most crops in Ghana and for that matter, in the Nandom district are cultivated by women. Ghanaian women also double as labour providers on men's farms contributing about 70 percent of the labour requirements on men's farms mostly as wives.

Although considerable efforts have been given to women access to land in Ghana there is disconnection between the reality and these findings reported especially in the Nandom district. The study on 'women's access to land and its effects on household food security in Nandom district was therefore designed to thoroughly find out how women access to land is impacting on their livelihoods including most especially household food security so that relevant and empirical solutions could be proposed. Thus the need to address the problem, with particular stress on linkages between women land access and food security constituted the main thrust of this study. The following research questions were posed to guide the conduct of the study: To what extent do women have access to land in the Nandom District? what are the commonest forms of women's access to land? what are the constraints that women face in land access? and what are the effects of the prevailing land tenure system in the area on food security?

These research questions were posed to reflect the study objectives which included: To examine the extent of land ownership by women in the district; to assess the land ownership systems existing in the district; to identify the constraints women face in accessing land; and to examine the effects of the various land tenure systems on household food security. To answer the research questions, a cross sectional descriptive



survey design was adopted. The population of the study consisted of all adults in the Nandom district although the major target group was women. A total of 200 women were sampled through a multi-stage sampling process for the purpose of collecting quantitative primary data. Another three key informants made up of two men and a women's leader were purposefully selected for the conduct of key informant interview. Thus, in terms of data collection, both quantitative and qualitative methods were employed. The survey data was analysed using SPSS version 17. The data was presented in tables and charts using percentages. The qualitative data on the other hand, was transcribed, analysed and presented concurrently in a prose description where necessary to validate responses or otherwise given by the survey respondents.

The discussions of the field data yielded very interesting findings. The major findings of the study included the following:

- Majority of the woman in the district were in the economic active age bracket and when given the needed resources, particularly land, would be able to contribute tremendously to the agricultural sector especially in the area of food production. This is because majority of the respondents were within the age bracket 36-45 followed by those within 26-35 and 46-55 respectively, implying a large majority of the respondents were within the age bracket of 18-45.
- Farming is the dominant occupation among women in the Nandom District since majority of the women were engaged in farming as their main occupation.
- There is a very low level of education among women in the district because as high as 51percent of the respondents have never had any formal education while 44percent achieved only basic education.



- Three main land ownership systems exist in the Nandom district such as communal ownership, family lands and individual ownership.
- The major mode of land access by women in the district is through acquisition from husbands followed by borrowing from brothers or other relatives.
- Ninety (90) percent of the women in the district are only capable of accessing land of sizes less than half (0.5) hectore since a large majority of women in the district are only able to access land of sizes ranging between 0.1-1 acres.
- The main constraints of women's access and use of land in the Nandom district were identified as customary belief that women cannot own land; men's belief that women are weak and cannot cultivate large parcels of land; and men's belief that women would not work on their husbands' farms when they are given large parcels of land.
- Majority of respondents indicated that their families were food sufficient while 26.5 percent indicated non-sufficiency of food in their homes.
- Food insecurity situations were experienced by majority (56.6 percent) of respondents between May and August while 32.1 percent reported their food shortage periods as occurring between January and April.
- Almost all respondents in multiple responses identified the following as the key effects of land tenure systems in the district on household food security: Lower income due to inadequate land for cash crop production; lower outputs due to small farm size; small farm size per person due to land fragmentation; poor fertility of lands given to women resulting in lower yields; and lack of secure land rights resulting in inability to access credit.



- Eighty-Two (82) percent of respondents perceived lower outputs due to small farm size as land tenure systems' effect that is most likely to affect household food security in the Nandom district

## 5.2 Conclusion

The study discovered that women in the Nandom district access land for farming purposes through various modes of which the major ones include acquisition from husbands and for land use from brothers. Unfortunately, these modes of land access do not confer ownership rights on women but only user rights. This was confirmed by the assertion that women in the district per customary rules cannot own land. The assertion further reflected in land holdings of women in the district which was far below half of a hectare. This therefore means that women in the Nandom district are not part of the 10percent of women in Ghana that research has said own the lands that they work on.

The study therefore concludes that the customary practices which hamper women's access to land and tenure security were unfortunate and would have negative consequences on household food security in the district especially in the near future. One of the constrains of women's land access identified in the district which was even more unfortunate was the fact men pride themselves never to be weak as to allow women or wives to farm and feed them and their households. This particular constrain has several negative implications. First, men as husbands who are the main sources of land for women in the district would continue to deliberately give small poor quality land holdings to women – their wives. Secondly, they would continue to deny women large parcels of land so that they could continue to keep them on their farms to provide unpaid



labour. Finally, women would continue to experience lower outputs on their small land holdings and therefore would have weakened ability to contribute effectively to household food security especially during the lean season like their counterparts elsewhere do. This therefore calls for a careful and serious examination of the peculiar constraints confronting women's access to land in the district and subsequently finding innovative ways of addressing them in order to enhance women's participation in household food security as well as livelihood empowerment.

### **5.3 Recommendations**

The following recommendations are made based on the findings of the study:

1. Based on the finding that women by custom cannot own land in the district, it is recommended that government and the district assembly through the lands commission, as well as NGOs and other civil society groups should find innovative ways to engage community leaders to encourage them to review their customs and allow women to own land especially through inheritance. This would not only help women to increase their land holdings and outputs but would also grant them the opportunity to use their lands as collateral security to access credits for further investments on their farms and other livelihood activities.
2. Similarly, since the major mode of land access by women in the district is through acquisition from husbands, NGOs and other civil society groups should develop community educational programmes to educate and encourage men in the district to release relatively large parcels of land to their wives and other women around



them to enable them expand their farms and outputs. This would ultimately help improve food security needs of the district.

3. NGOs working in the district should role out an educational campaign to help step-down their ego on the notion that it is a mark of weakness to allow women or their wives to farm and feed them and their households. The educational campaign must be vigorous and repeated severally until the message is well received to enable the men to disabuse their minds of the erroneous notion since the notion is a contributory factor to the small parcels of land given to women in the district.
4. Training and educational programmes that would provide more information on land policies and administration should be organised for both men and women in the district. This would enable both men and women to understand land issues well so that they can engage each other better in the area of land acquisition, use and ownership.
5. Lastly, government and the district assemblies in Ghana should work to ensure that laws and policies guarantee equal rights for men and women to own and control assets such as land, and to receive services such as health, education, extension and credit. Their actions should ensure that legislation does not discriminate against women in areas such as inheritance, wages and property ownership. A first stage to this process should be to carry out auditing of all existing laws and policies for possible discriminations against women and where discriminations are discovered, such laws and policies should be reviewed and gender mainstreaming carried out on them.



## REFERENCES

- Aasoglenang, A.T., Kanlisi, S. K., Naab, F. X., Dery, I., Maabesog, R., Maabier, E.B. & Naa-Obmuo, P. (2013). Land access and poverty reduction among women in Chansa in the North Western Region of Ghana. *International Journal of Development and Sustainability*, 2 (2), pp. 1580-1596.
- Abantu for Development (2004). *Women's Manifesto for Ghana*.
- Abgosu, L., Awumbila, M., Dowuma-Hammond, C. & Tsikata, D. (2007). *Customary and Statutory Land Tenure and Land Policy in Ghana*. Accra: Institute of Social Statistical and Economic Research (ISSER).
- Abudulai, S. (2002). Land Rights, Land-Use Dynamics and Policy in Peri-Urban Tamale, Ghana. In Toulmin, C., Lavigne Delville, Ph. and Traore S. (eds.). *The Dynamics of Resource Tenure in West Africa*. London/Paris/Oxford/Portsmouth: GRET/IIED/James Currey/Heinemann, pp. 72-85.
- Adams, M., & Turner, S. (2005). *Land Tenure Experience and Legal Pluralism in Eastern and Southern Africa*. Presented at the workshop, "Land Rights for African Development: From Knowledge to Action".
- Agyare-Kwabi, P. (2003). Women and Food Security in West Africa. A paper presented at a seminar on Women, Integrated Farming Systems and Food Security in West Africa, Accra, Ghana from 25 – 28 November 2003, pp. 17
- Allanana, M. G. (2013). Patriarchy and Gender Inequality in Nigeria: The Way Forward. *European Scientific Journal*, 9 (17).
- Allendorf, K. (2007). Do women's land rights promote empowerment and child health in Nepal? *World Development*, 35 (11), pp. 1975-1988.
- Amu, N. J. (2005). *The Role of Women in Ghana's Economy*. Accra, Ghana: Friedrich Ebert Stiftung.
- Anaglo1, J. N., Boateng, S. D. & Boateng, C. A. (2014). Gender and Access to Agricultural Resources by Smallholder Farmers in the Upper West Region of Ghana. *Journal of Education and Practice*, 5 (5).
- Arnold, J.E.M. (1990). Tree components in farming systems. *Unasylva*, 41(160), pp. 35–42.
- Apusigah, A. (2004). Engendering social change in Ghana: Understanding the complexities of Ghanaian women's Lives. *Legon Journal of Sociology*, 1(1), 1-18.





- Awumbila, M. & Tsikata, D. (2010). Economic Liberalisation, Changing Resource Tenures and Gendered Livelihoods: A Study of Small-Scale Gold Mining and Mangrove Exploitation in Rural Ghana. In Tsikata, D. and Golah Pamela (eds.) (2010). *Land Tenure, Gender and Globalisation: Research and Analysis from Africa, Asia and Latin America*. ZUBAAN, New Delhi, India and International Development Research Centre, Ottawa, Canada.
- Babbie, E. (2007). *The Practice of Social Research*, (11<sup>th</sup> ed.), Thomson Learning, Inc.
- Barnaba, B. J. E. (2015). *A Policy Paper on How Land Tenure Systems and the Access/Utilization of Land Could be Addressed to Facilitate Rural Development in Africa*.
- Boon, E. K. (2009). Food Security in Africa: Challenges and Prospects. *AREA STUDIES - AFRICA (Regional Sustainable Development Review)*, 1.
- Bortei-Doku Aryeetey, E. (2000). The participation of women in the Ghanaian economy. In E. Aryeetey et al. (Eds.), *Economic reforms in Ghana: The miracle and the mirage* (pp. 321-341). Oxford, England: James Currey.
- Brown, L. (2008). Gender and food security: Module 1. In *Gender in agriculture sourcebook*. Washington, DC: World Bank.
- Carmen D. D. and Magdalena L. (2003). "The gender asset gap: Land in Latin America." *World Development*, 31 (6), pp. 925–947.
- Center for Women's Land Rights –Landesa (2012). *Land rights and food security. The Link Between Secure Land Rights and Food Security and Nutrition*. Issue brief, Seattle, WA.
- CFS (2011). *Policy Roundtable: Gender, Food Security and Nutrition. Committee on World Food Security, Thirty-Seventh Session, Rome, 17-22 October 2011, Item V*.
- Cotula L. (ed), (2007). *Changes in "Customary" Land Tenure Systems in Africa*. ISBN: 978-1-84369-657-5
- Cotula, L. (ed), (2006). *Land and Water Rights in the Sahel – Tenure Challenges of Improving Access to Water for Agriculture*, London, IIED, Issue Paper 139.
- Cotula, L., Toulmin, C. & Quan, J. (2006). *Better Land Access for the Rural Poor. Lessons From Experience and Challenges Ahead*. IIED, FAO.
- Daily Graphic (7<sup>th</sup> June, 2013). *Food insecurity threatens 3 northern regions. Regional News of Friday, 7 June 2013, Issue*. Accra, Ghana.



- Daudelin, J. 2003. *Land and violence in post conflict situation*. North-South Institute: World Bank.
- De Shutter, O. (2010). *Report of the Special Rapporteur on the Right to Food*. United Nations General Assembly.
- Deere, C.D. and Doss, C. R. (2006). *Gender and the distribution of wealth in developing countries*. UNU-WIDER Research Paper No. 2006/115. Helsinki.
- Devereux, S. and J. Edwards (2004). Climate Change and Food Security. *IDS Bulletin*:23-30.
- Duncan, B. A. (2004), *Women in Agriculture* (2nd ed.). Osu – Accra: Friedrich Ebert Foundation, Printright publications.
- Duncan, B. A. and Brants, C. (2004). *Access to and control over land: From a gender Perspective. A study conducted in the Volta Region of Ghana*. Accra: The Printer Press.
- ECA (2009). *Land Tenure Systems and their Impacts on Food Security and Sustainable Development in Africa*, Economic Commission for Africa, Addis Ababa, Ethiopia.
- ECA (2004). *Land Tenure Systems and their Impacts on Food Security and Sustainable Development in Africa*. Economic Commission for Africa, Addis Ababa, Ethiopia.
- Ellis, A., Cutura, J., Gillson, I., Manuel, C., Dione, N. and Thongori, J. (2007). *Gender and Economic Growth in Kenya: Unleashing the Power of Women*. The World Bank, Washington, DC. Retrieved from: <http://hdl.handle.net/10986/6810>
- FAO (2001). *The State of Food and Agriculture*, Rome.
- FAO (2006). Energy and Gender Issues and Rural Sustainable Development. FAO, Rome.
- FAO (2006). *Food Security, Policy Brief, Issue 2*, Rome: FAO.
- FAO (2008). Land Access in Rural Africa: Strategies to fight gender inequality. FAO-Dimitra workshop Report: 22-26 September 2008 – Brussels, Belgium.
- FAO (2008). *Climate Change and Food Security: A Framework Document*. Rome: Food and Agriculture Organizer.
- FAO. (2010). *The State of Food Insecurity in the World 2010. Addressing Food Security in Protracted Crisis*. Rome: FAO



- FAO (2011). *Land Policy and Planning, Land Resources Home*. Accessed on February 5th, 2011, available online at: <http://www.fao.org/nr/land/land-policy-and-planning/en/>.
- FAO (2011). *The State of The World's Land and Water Resources for Food and Agriculture: Managing Systems at Risk*. FOA, Rome & Earthscan, London.
- FAO (nd). *Women, Land Tenure and Food Security*.  
<http://www.fao.org/docrep/x0171e/x0171e07.htm>
- Fiadzigbey, M. E. (2006). *Customary Land Administrator in Ghana – Challenges and Prospects*. A Commissioned Paper Presented at the XXIII FIG Congress, Munich, Germany, October 8-13, 2006.
- Fonjong, L., Sama-Lang, I. and Fon, F. L. (2010). *An Assessment of the Evolution of Land Tenure System in Cameroon and its Effects on Women's Land Rights and Food Security*. PGDT 9 (2010), 154-169.
- Fraenkel, J., R. and Wallen, N., E. (2003). *How to Design and Evaluate Research in Education*. McGraw Hill Companies Inc., New York, USA.
- Fullerton, J. S. (2011). *Where there is no government: enforcing property rights in common law Africa*. Oxford: Oxford University Press.
- Gerstter, C., Kaphengst, T., Knoblauch, D. and Timeus, K. (2011). *European Parliament, Directorate-General For External Policies Of The Union, Directorate B, Policy Department Ad-Hoc Briefing*.
- Government of Ghana (1992). *Constitution of the Republic of Ghana*, Assembly Press, Accra
- Government of Ghana, (1999). *National Land Policy*, Ministry of Lands and Forestry, Accra
- Ghana Statistical Service (2012). *2010 Population & Housing Census: Summary Report of Final Results*. Ghana Statistical Service, Accra.
- GSS (2014). *Nandom District 2010 Population and Housing Census Report*. Ghana Statistical Service, Accra.
- Guendel, S. (2009). *What are women's crops, and why?* Rome: FAO. Retrieved from [http://www.fao.org/gender/gender-home/gender-insight/genderinsightdet/en/?dyna\\_fef%5Buid%5D=36003](http://www.fao.org/gender/gender-home/gender-insight/genderinsightdet/en/?dyna_fef%5Buid%5D=36003)



- IFAD (2008). *Improving access to land and tenure security*. Rome: International Fund for Agricultural Development.
- IFAD, (2009). *Smallholder Agriculture and Food Security in the 21st Century*. Proceedings of the Governing Council of Round Tables. Retrieved from: <http://www.ifad.org/events/gc/32/roundtables/proceedings.pdf>
- IFAD (n.d.). Women's access to land in sub-Saharan Africa. International Fund for Agricultural Development. Retrieved from: [https://www.ifad.org/documents/women\\_factsheet.pdf](https://www.ifad.org/documents/women_factsheet.pdf)
- IFPRI (2005). *Women Still the Key to Food and Nutrition Security*. International Food Policy Research Institute, Washington, DC.
- Karl, M. (2009). *Inseparable: The Crucial Role of Women in Food Security Revisited*. Women in Action Features, No.1.
- Kabeer, N. (2003) Assessing the 'wider' social impacts of microfinance services: concepts, methods and findings. *IDS Bulletin*, 34 (4), 106-114
- Kumekpor, T. K. B. (2002). *Research methods and techniques of social research*. Accra, Ghana: Son Life Press & Services.
- Lampkin, N. (2013). *The Challenges of Securing Land Rights for Women and its Implications for Food Security: A Focus on Rural Female Farmers in Kenya*, December, 2013.
- Landesa (2012) *Land Rights and Food Security: the linkages Between Secure Land Rights, Women and Improved Household Security and Nutrition*, Issues Brief, Seattle, WA: Landesa, [www.landesa.org/wp-content/uploads/Landesa-Issue-Brief-Land-Rights-and-FoodSecurity.pdf](http://www.landesa.org/wp-content/uploads/Landesa-Issue-Brief-Land-Rights-and-FoodSecurity.pdf)
- Lastarria-Cornhiel, S. (1997). Impact of privatization on gender and property rights in Africa. *World Development*, 25(8), 1317-1333.
- Lastarria-Cornhiel, S. (2009). *Women's Role in Agriculture and in Rural Welfare: Access to Land and Resources*. Expert paper presented at the United Nations' Expert Group Meeting on "The impact of the implementation of the Beijing Declaration and Platform for Action on the achievement of the Millennium Development Goals", United Nations Office, Geneva, 11-13 November, 2009.
- McGranaham, G. (1999) *Environmental Change and Human Health in Countries of Africa, the Caribbean and the Pacific*, Stockholm Environment Institute. Stockholm, pp. 214



- Maxwell, D. and Wiebe, K. (1998) *Land Tenure and Food Security: A Review of Concepts, Evidence and Methods*. Research Paper No 129, Madison: University of Wisconsin.
- Neuman, W. L. (2007). *Social Research: Qualitative and Quantitative Approaches*. Second Edition, Pearson Education, Inc. USA
- Nidhiya, M. (2013). “*Land Rights and Economic Security for Women in Vietnam*” April 2013.
- Njuki, J., Kruger, E. and Starr, L. (2013). *Increasing the Productivity and Empowerment of Women Smallholder Farmers: Results of a Baseline Assessment from Six Countries in Africa and Asia*. CARE International Baseline Assessment Report, October 2013.
- Nyanteng, V. K and Asuming-Brempong, S. (2003). The Role of Agriculture in Food Security in Ghana. Paper prepared for the Roles of Agriculture International Conference, FAO, 20-22 October, 2003 – Rome, Italy.
- Odhiambo, M., (2009). *Southern Sudan Land and Property Study and Workshops: A Synthesis of Policy and Legal Issues*, Southern Sudan Land Commission, Norwegian Refugee Council, Food and Agriculture Organization and UNHCR. <http://kk.convdocs.org/docs/index-35600.html>
- Oxfam (2013). Promises, Power, and Poverty: Corporate land deals and rural women in Africa. 170 Oxfam Briefing Paper, 9th April, 2013.
- Peters, P., (2004) “Inequality and Social Conflict Over Land in Africa”, *Journal of Agrarian Change*, 4 (3), 269-314.
- Platteau, J.P. (2000). *Institutions, social norms, and economic development*, Routledge: Amsterdam.
- Platteau, J.P. (1996). The Evolutionary Theory of Land Rights as Applied to Sub-Saharan Africa: A Critical Assessment. *Development and Change*, 27, 29-86.
- Platteau, J.P. (2000). “Does Africa Need Land Reform?” in Toulmin, C. and Quan, J. F. (Eds) *Evolving Land Rights Policy and Tenure in Africa*, DFID/IIED/NRI, London.
- Quan, J. (2000). Land tenure, Economic Growth and Poverty in Sub Saharan Africa. In C. Toulmin & J. Quan. 2000. *Evolving land rights, policy and tenure in Africa*. DFID – IIED.
- Quaye, W. (2008). Food Security Situation in Northern Ghana: Coping strategies and related constraints. *African Journal of Agricultural Research* 3 (5), 334-342.



- Quisumbing, A.R.; Brown, L.R., Feldstein H.S., Haddad, L. and Peña, C. (1995) *Women: The Key to Food Security*, Washington, DC: IFPRI
- Quisumbing, A.R. and Pandolfelli, L. (2010). Promising approaches to address the needs of poor female farmers: resources, constraints, and interventions. *World Development*, 38, pp. 581–592.
- Rao N. (2006). Land Rights, Gender Equality and Household Food Security: Exploring the Conceptual links in the case of India, Food Policy, Elsevier.
- Razavi, S. (2003). Agrarian Change, Gender and Land Rights. *Journal of Agrarian Change*, 3 (2), pp. 2-32.
- Saito, A. Katrine et al (1994). Raising the Productivity of Women Farmers in Sub-Saharan Africa, World Bank Discussion Papers, Africa Technical Department Series, No. 230.
- Sanchez, P., Swaminathan, M. S., Philip D. and Nalan Y. (2005). *Halving Hunger: It Can Be Done*. New York: Millennium Project.
- Sarpong, G. A. (2006). *Towards the Improvement of Tenure Security for the Rural Poor in Ghana: Some Thoughts and Observations*. LEP Working Paper # 2 presented at Workshop for Sub-Saharan Africa in Nakuru, Kenya in October 2006 organised by Food and Agriculture Organization (FAO) of the United Nations.
- Sasson, A. (2012). *Food security for Africa: an urgent global challenge*. *Agriculture & Food Security*, 1:2.
- Schlager, E., Ostrom, E., (1992). Property Rights regimes and Natural resources: A conceptual Analysis. *Land economics* 69 (3), pp. 249-62.
- SEND-Ghana (2014). *Women and Smallholder Agriculture in Ghana*. Policy Brief, No. 4, October, 2014, Accra.
- Smith, L., Ramakrishnan, U., Ndiaye, A., Haddad, L. and Reynaldo, M. (2003). *The importance of women's status for child nutrition in developing countries*. Research Report 131. Washington, DC: International Food Policy Research Institute.
- Songsore, J. and Denkabe, A. (1995). *Challenging Rural Poverty in Northern Ghana: A Case study of the Upper West Region*. University of Trondheim, Centre for Environment and Development Unit – SMU.
- Takane, T. (2007). *Customary Land Tenure, Inheritance Rules, and Smallholder Farmers in Malawi*. Discussion Paper No. 104, Institute of Developing Economies, JETRO, May, 2007, Japan.



- Tenaw, S., Islam, K. M. Z. and Parviainen, T. (2009). *Effects of land tenure and property rights on agricultural productivity in Ethiopia, Namibia and Bangladesh*. Discussion Paper No. 33, Sustainable Rural Development with Emphasis on Agriculture and Food Security within the Climate Change Setting (SARD-Climate) Deliverables Project, Helsinki 2009.
- Theobald, M. (2010). *Female Farmers Overcome Barriers to Feed Africa*, World Watch Institute and IFAD, <http://www.worldwatch.org/node/6431>.
- Todaro, M. & Smith, S. (2006). “*Human Capital: Education and Health in Economic Development*”. In *Economic Development* (9e): London. Pearson, pp 363-421
- Toulmin, C. (2008). *Securing Land and Property Rights in sub-Saharan Africa: The Role of Local Institutions*, International Institute for Environment and Development (IIED), London
- Turner, S. and Adams, M. (2004). A note on food security and land tenure security in Lesotho. Report from Southern African Regional Poverty Network.
- United Nations (2005). *National Trends in Population, Resources, Environment and Development Country Profiles*, United Nations Department of Economic and Social Affairs Population Division.  
<http://www.un.org/esa/population/publications/countryprofile/profile.htm>
- UN Special Rapporteur on the Right to Food (2010). *Pressures on Access to Land and Land Tenure and their Impact on the Right to Food: A review of submissions received (December 2009–March 2010) and of letters of allegations and urgent appeals*.  
[http://www.srfood.org/images/stories/pdf/officialreports/20101021\\_access-to-land-report-appendice\\_en.pdf](http://www.srfood.org/images/stories/pdf/officialreports/20101021_access-to-land-report-appendice_en.pdf)
- UNDP (2010) *2010 Human Development Index. The Real Wealth of Nations: Pathways to Human Development*, New York: UNDP.
- Udry, C. (1994). *Gender, Agriculture and the Theory of Household*. Evanston, IL Northwestern University.
- UNEP (2002). *Africa Environment Outlook: Past, Present and Future Perspectives*, UNEP, Nairobi, pp 422.
- UNSCN (2010). Sixth report on the World Nutrition Situation. United Nations System Standing Committee on Nutrition, UN.
- Whitehead, A. and D. Tsikata, (2003). “Policy Discourses on Women’s Land Rights in Sub-Saharan Africa: The Implications of the Re-Turn to the Customary” *Journal of Agrarian*



*Change* 3(12), 67–112.

Wily, L. A. (2012). *Customary Land Tenure in the Modern World Rights to Resources in Crisis: Reviewing the Fate of Customary Tenure in Africa*. The Rights and Resources Initiative (RRI) Brief Paper #1, January, 2012.

World Bank (2008). *Gender and Agriculture Sourcebook*, Washington, DC. The World Bank.

World Bank (2010), 'Rising Global Interest in Farmland: Can it Yield Sustainable and Equitable Benefits?' Washington, D.C.

WFP (2012). *Comprehensive Food Security and Vulnerability Analysis: Focus on Northern Ghana*. Executive Brief, World Food Programme, Ghana.

Yaro J. A. (2013). *Building Resilience and reducing Vulnerability to Climate Change: Implications for Food Security in Ghana*. Friedrich Ebert Stiftung, Accra, Ghana.

Yaro, J. A., and J. Hesselberg. 2010. The Contours of Poverty in Northern Ghana: Policy Implications for Combating Food Insecurity. *Research Review of the Institute of African Studies* 26 (1).







2. Marital status

- a) Single [ ] b) Married [ ] c) Widowed [ ] d) divorced e) Others  
(Specify.....)

3. Kindly tick the appropriate box to indicate your household size

- a) 1-5 [ ] d) 16-20 [ ]  
b) 6-11 [ ] e) 21-25 [ ]  
c) 12-15 [ ] f) 26-30 [ ]

4. Please indicate your level of education

- a) No formal education [ ] b) Basic education [ ] c) Secondary education [ ]  
d) Tertiary [ ] e) Others (Specify.....)

5. Kindly state your main occupation.....

6. If your main occupation is farming, state other activities that you engage in during the dry season to generate income.....

7. State the main ways by which household food and other needs are met.....

.....  
.....  
.....  
.....



**Section B: Access to Land**

- 8. Do you have access to land for food cultivation? Yes [ ], No [ ]
- 9. If YES to question 8, do you own the land? Yes [ ], No [ ]
- 10. If No to question 9, how do you access the land?

.....

.....

.....

.....

**Section C: Modes of Land Access by Women**

- 11. What are the main modes of women access to land in your community?

.....

.....

.....

.....

- 12. Kindly outline the land tenure systems that exist in your community

.....

.....

.....



13. Kindly explain the land tenure systems outlined in question 11

.....  
.....  
.....

14. In your opinion, which of the land tenure systems outlined in question 11 above would you say is most suitable for land access for agricultural purposes in your community?.....

.....

15. Give one reason for your answer in question 13 above.....

.....

16. What size of land are you able to access under the prevailing land tenure systems?

(Tick as appropriate)

No land accessed	[ ]
0.1-0.5 acre	[ ]
0.6-1 acre	[ ]
1.1-1.5 acres	[ ]
1.6- 2 acres	[ ]
Others (specify)..... .....	



**Section D: Constraints to Women Land Acquisition**

17. Does your custom and tradition allow women to own land? Yes [  ], No [  ]

18. If No to question 17, what is the reason?

.....  
.....

19. In your opinion, what do you think are the major constraints to land acquisition by women in your community? Please, state as many as are applicable.

.....  
.....  
.....  
.....  
.....

**Section E: Effects of Land Tenure Systems on Household Food Security**

20. Please, is your household food sufficient? Yes [  ] No [  ]

21. If No to question 14 above, indicate months within the year in which your household record food insufficiency.

.....

22. What one major strategy does your household adopt to cope with the food insufficiency situation during the period(s) mentioned above?

.....  
.....  
.....



.....  
.....

23. In your opinion, what do you think are the effects of the existing land tenure systems or ownerships in your community on household food security in the district? .....

.....  
.....  
.....

24. Which one of the effects mentioned in question 23 above do you think is most likely to affect your household food security?.....

.....  
.....  
.....

**Thank you for your cooperation and participation**



## APPENDIX B

### Interview Guide

#### Interview Guide for Key Informants

Dear Interviewee,

This interview is meant to elicit your views on women's Access to Land and its Effects on household Food Security in the Nandom District. The study is purely an educational venture and is conducted in partial fulfilment of the requirements for the award of Master of Philosophy Degree in Innovation Communication at the University for Development Studies, Tamale. Your co-operation and frank responses are needed for the success of this exercise. Your responses shall be accorded the highest degree of confidentiality that they deserve.

Please, kindly express your views and knowledge on the following questions as I pose them to you.

1. What are the land tenure systems that exist in this district?
2. How do women access land for agricultural activities?
3. Do women in this district own land and why?
4. In your opinion, what do you think are the main constraints to women's land access in this district?
5. What do you think are the effects of the existing land tenure systems or ownerships in your community on household food security in the district

