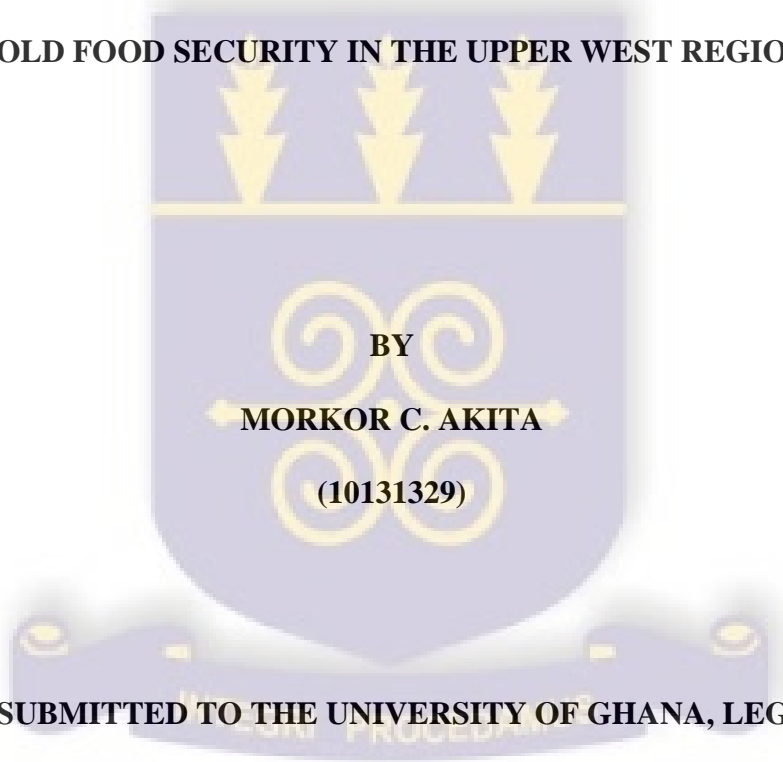


UNIVERSITY OF GHANA
CENTRE FOR MIGRATION STUDIES

**INTRA AND INTER-REGIONAL FEMALE MIGRATION AND THEIR EFFECTS
ON HOUSEHOLD FOOD SECURITY IN THE UPPER WEST REGION IN GHANA**

The watermark is a large, light purple crest of the University of Ghana. It features three yellow downward-pointing triangles at the top, a horizontal yellow line, and a central yellow emblem consisting of four interlocking swirls. Below the crest is a yellow banner.

BY
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**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR THE AWARD
OF DOCTOR OF PHILOSOPHY DEGREE**

JULY 2015

DECLARATION

I, Morkor Cecilia Akita hereby declare that except for references made to other works which have been duly acknowledged, this thesis is the result of my own research conducted at the Centre for Migration Studies, University of Ghana, Legon, under the joint supervision of Prof. Samuel Nii Ardey Codjoe, Prof. Agnes Budu,, Prof. Christine Nti and Dr. Badasu. I also declare that, this thesis has neither in part nor in whole been presented for another degree elsewhere.

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A journey through the changing academic landscape could not have been possible single handedly. I have had the privilege of being supported and encouraged by many people throughout this journey. Indeed, at the end of a phase of this journey, it is normal to feel as though it has been just some few weeks, but it has been years of hard work, determination, perseverance, self-denial, deprivation and sleepless nights. Through it all, this dream has become a reality. There cannot be enough words and space to express my appreciation to the numerous people who have helped me through this journey, from the beginning to the end. I say to all I am most grateful.

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“Ny~~on~~mo adjoo nye fee”!

ABSTRACT

The recent phenomenon of female migrants joining the migration stream has become a grave concern to many in the global world and Ghana in particular. Migration as a worldwide phenomenon continues to attract the attention of demographers and other social scientists. This study examined the extent to which intra and inter-regional migration of women affects household food security in the Upper West Region of Ghana. As a specific objective, this study examined household's food security, identified determinants of both female migration and household food security. To achieve these objectives, 240 female migrants' household heads were selected randomly from 12 communities in 4 districts and were interviewed. Both primary and secondary data were employed. Primary data was collected using interviews and focus group discussions. Secondary data was also collected from published and unpublished documents. Household food security was measured using the standard USDA 2007 scale. Those scoring less than six (6) out of the eleven questions were grouped under food secure and those scoring more than six (6) were classified as food insecure. The collected data was analysed using Statistical Package (SPSS Version 20). Regression model was used to reveal the factors influencing household food security. Out of the eleven variables, household income, household marital status, landownership, farm size, remittance and choice of migration were found to be significant at less than 5% probability level. Also the results from the hypothesis confirmed that households whose migrants go beyond the region (inter) are more likely to be food secure and contribute better to household food security as compared to those who go within the region (intra). The study revealed the push and pull factors of female migration in the selected communities and the category of women who migrate as well as the reasons for intra and inter-regional female migration; this included lack of economic opportunities, food shortages, erratic rainfall, and inadequate social amenities among others. The study concluded with some measures to mitigate migration as well as some recommendations to help reduce female migration from the study area and also ways to improve household food security.

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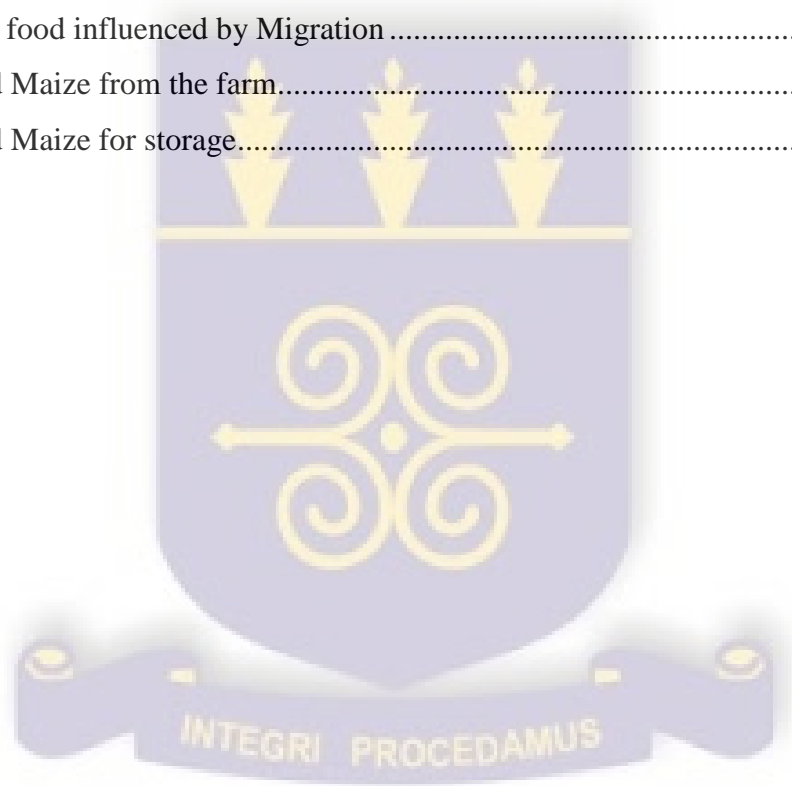


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CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Introduction

It is better to get drowned in the sea, than to get drowned in the pond. We all know that, the cities offer better opportunities than the rural areas hence the increase in population growth in different part of the world. All we need to do is to go out there and explore those opportunities on our own (Marian Huudu, 2014)

Migration has always been an important survival strategy to many and its effects have one way or the other shaped human history. Most developing world, have now accepted migration as a livelihood and adaptation strategy in response to a wide range of events. One of the most significant changes in the last half century is the increasing proportion of women migrating: today, they constitute half of the international migrant population, often migrating independently as the main economic providers for their families. Driven by economic, social and political forces as well as new challenges (such as environmental degradation, natural disasters or climate change impacts), migration can bring, both benefits and costs to the migrants themselves, their families, and their communities of origin and destination, depending on the migrants' profile and gender, and on labour market specificities.

Women and girls joining the migration stream as is the case with their male counterparts to distant destinations, has been a matter of grave concern to many Ghanaians including governments, chiefs, community elders, opinion leaders and other civil society organisation. Globally, a number of studies on migration indicate that men are the dominant migrants and the purpose of migration has been mainly economical (Yaro, 2008). Migratory movements have multiplied greatly for some time now, because of improved transport, communications and expansion in urban informal sector employment in most Sub-Saharan Africa countries (Chant, 1992). People are compelled to migrate from an area primarily in

response to un-conducive demographic, socio-cultural and economic conditions to other geographical locations perceived to be better endowed in opportunities.

Rapid population growth in the countryside coupled with the unavailability of farmlands, land degradation with its declining agricultural yields, lack of jobs and lack of basic social amenities such as potable water, entertainment facilities, health centres, electricity and schools among others encourage people especially the youth to migrate. The literature reveals that there are four types of internal migration, rural-urban, urban - urban, rural-rural, and urban-rural migration or intra and inter regional migration. The most important form of internal migration evident from the discussion is rural-urban migration (IOM, 2002; Sander, 2003). However, recently, more attention has also been paid to the other migration streams (Dao, 2002; Anh, 2003). Often, all these four types of migration patterns are present in a country, and can sometimes be observed within the same locality. Almost, all these types of migration patterns are undertaken mostly by men. There are, however, an increasing number of women also participating in migration and for that matter intra and inter-regional migration (IOM, 2005).

Intra and inter regional migrations are increasing in importance as a livelihood strategy for small scale farming households and the rural poor in many developing countries and Ghana for that matter. Previous studies (Mahama, 2012; Clavier, 2013; Potts, 2006; Deshingkar and Anderson, 2004) support the view that the number of households involved in these patterns of movement are rising exponentially in many developing countries including Ghana. The objective of such movement is often to improve household and individual well-being and income sources (Deshingkar, 2004 and Bigsten et al. 2003).

In Africa, women tend to move shorter distances than men. Women migrants are more likely to migrate internally or just across borders than migrant men. Internal migration is most commonly rural-to-urban, or rural to rural but migration from poorer to more prosperous rural areas is also significant and more

common in some countries, for example in India. Here, where rural workers travel to more prosperous green revolution states, it accounts for roughly 62 per cent of all movements in India 1999–2000 (Deshingkar 2005).

Internal migration is attracting increasing attention among researchers, academics, development practitioners, and policy makers, many of whom attribute the growth of migration to increasing unemployment and rural poverty in developing countries (Anarfi et al., 2001; Chant, 2002; Zhao, 2003). Afshar (2003) contended that, the inadequacy of incomes, food shortages/food insecurity, lack of gainful employment, coupled with poverty in the rural areas, have pushed people out of their villages in search of better sources of livelihoods in other parts of the country especially the urban areas.

Considerable research evidence is available on the implications of migration in general on national economic development. Other studies have also explained the impact of male migration on the household. For instance, Tanle (2003), examined differences in the physical background, social class and the culture of the various women migrants in Wa, whilst Sufian (1994) studied the migration of women from Northern Ghana to Accra, Synnove (1999) worked on female migrants in Accra. All of them studied female migration at the macro-level, and therefore did not look at livelihoods or food security at the household level. The need for studies on intra and inter-regional migration of females and its impact on household food security is long overdue and relatively unknown. This is possibly because females have not been the focus of migration studies until quite recently. The objective of this study is to fill this gap, by holistically examining the issue of female migration and its impact on household food security in the Upper West region of Ghana (UWR).

Coupled with the high level of poverty in northern Ghana, there is also an ever growing problem of food insecurity in most rural communities. A changing agro-ecology characterized by unpredictable rainfall

patterns and reductions in mean annual rainfall amounts has been reported to undermine agricultural production in the region making it one of the most food insecure areas in Ghana (Quaye, 2008).

Compared with other parts of the country, long dry spells and declining soil fertility due to soil erosion in the region have also rendered farming highly unviable such that communities now no longer rely solely on agriculture as a primary source of livelihood (Luginaah et al., 2009). Due to environmental stress and concomitant household food shortages over the past two decades, malnutrition has also increased especially among children (Quaye, 2008), food production has declined and accessing food at household levels are becoming more and more problematic.

Declining agricultural productivity in the UWR has also been linked to demographic changes in a context where there has been a steady increase in population in the region over the years. This describes Malthusian's theory on "An Essay on Population" (1914), where he talked about land becoming scarce, and people going round in search of new land. According him, there would not be enough land to support all human beings. A growing population would force people to use inferior land. The idea is that, agricultural productivity could not keep pace with the fast population growth. Meanwhile, Boserup's theory was different, she believed that, an increase in population would stimulate technologists to increase food production. She also mentioned that, the rise of technology and industries, food supply would come after the growth of human population. In other words, food supply will depend on the population size unlike Malthus's time where human population depended on food supply. Like any other theory, Boserup's own has some limitations, one being that, the act of immigration and emigration. Emigration for example, occurs in areas of over population and lack of globalization which supports Malthus' theory today. Also, the fact that overpopulation is occurring shows that food supply is not high enough and it is not distributed equally.

Set against finite amount of arable land, this somewhat moderate increase in the population has nonetheless led to increased pressure on agricultural land in some parts of the region, contributing to poor farming techniques and progressive loss of soil fertility despite Boserup's theory which talked about increase in technology will lead to increase in food production yet she failed to talk about the fact that there is abundant production of food will not necessary lead to equal distribution of food among people (Van der Geest, 2011).

A combination of widespread poverty and reliance on rain-fed agriculture in the face of a changing agro-ecological environment, as well as non-existent livelihood alternatives, leave many families with an enormous challenge to meet their basic needs including food. As a response, a trend of accelerated south-bound migration of both men and women from the region in the last three decades has been recorded (Van der Geest, Vrieling, & Dietz, 2010). This has several implications for households in that region. These complex impacts could be positive and/or negative, affecting not only the female migrant but other members of her household, especially, children and the aged (Tetteh, 2008).

Females in rural areas especially in the northern part of the country and in the study areas specifically play major roles in food production, processing, storage and marketing thus assisting greatly their male counterparts in providing livelihoods to their respective families. Women take active part in the cultivation of family farms where a variety of crops are produced either for household consumption or for commercial purposes. They play a critical role during the sowing period as they are seen along their husbands or male counterparts actively involved in planting large hectares of family lands or assisting as farm labourers. They are also involved in other phases such as harvesting, cooking and weeding of the farms especially vegetable crops in a systematic way so as to ensure better yields.

Considering the very supportive role women play in these communities alongside their husbands or male counterparts in the food value chain, we can confidently state that they constitute the real agents for food security within the households in particular and in their communities in general. Their active involvement in food production, processing, preservation and marketing effectively guarantees food security for their households and the larger community. The time tested traditional practices of assisting their husbands in the production of food products have made it possible for them to be entrusted with the important role of securing and managing family food produce by their husbands who remain the owners of the lands nevertheless.

The absence of women from their communities therefore, will surely create a major vacuum that cannot be filled. For theirs is a shared responsibility within the family set up where as wives and mothers they are committed to ensure that, the livelihoods of their members are sustained through their contributions and singular efforts as managers of the family resources; a responsibility they share in common with other women through their community spirit by providing assistance to one another to get their tasks accomplished as neighbours without charging any fees.

Food production will be affected a great deal, because farmhands will be in short supply thus making it difficult for farming activities as usually practiced to be effectively undertaken. Processing and preservation methods peculiar to prevailing conditions in these communities which have been perpetuated over the years by women will gradually disappear leading to severe food losses at all levels, i.e. before, during and after harvest, considering their contributions at all these levels of food production.

Ultimately, their absence would mean the loss of the contributing partner whose critical role in food production, processing and commercialization within these communities and beyond will no more exist. Despite these, the migration literature remains relatively speculative on some aspects of female

migration. Specifically, the nexus between migration and household food security, household dynamics-structure, gender roles, relationships and functioning, just to mention a few, remain relatively speculative. It is therefore one of the objective of the study to fill this gap by identifying the root causes of female migration and the effects it has on household food security in the Upper West Region of Ghana.

1.2 Problem statement

The growing significance of migration as a component of population change has raised public concerns about the increase in the number of able-bodied, semi-skilled and unskilled persons in some cities in Ghana in recent times. Migration from regions and districts seen as naturally, economically and socially deprived or deficient in terms of economic activities and basic social amenities to other regions and cities perceived as economically and socially endowed continues all year round in Ghana. Although these forms of movement to other highly rated regions to seek greener pastures cut across all regions in Ghana, people may conclude that the northern region has a very significant rate of migration (Boakye-Yiadom and MacKay, 2007). Migration from the north to the south of Ghana is an old phenomenon, which according to Black et al. (2006, cited by Awumbila et al. 2008), is fuelled by infertile soils and the absence of social amenities and infrastructure in that part of the country.

A research by the Ghana Statistical Service estimated that about 80% of the combined Northern Ghana population is living in poverty (Ghana Statistical Service, 2007). Therefore the idea by a family member to migrate is a relief to the family. Moreover, the declining soil fertility, lack of access to arable agricultural land and the single farming season has also been a contributory factor. Again the smallholder farmer's nature of farming means low dispensable income for most families in the northern part of Ghana.

Whether rural-urban, urban-rural, rural to rural, out-migration has become a major problem in most parts of the contemporary developing world and for that matter, Ghana. The phenomenon is a bit complicated and requires a serious attention by all. Most cities in Ghana today are caught in the web of dealing with problems largely created by the presence of migrants from the rural areas because, migration has become a key component in the livelihood strategies of an increasing number of households across the developing world. Although these forms of movement to other highly rated regions to seek uncertain bright future cut across all regions in Ghana, one could conclude that the regions in the north seem to have a very significant rate of migration (Boakye-Yiadom and MacKay, 2007).

What then are the factors pushing the women away from the northern part of the country to other areas? Women during the colonial days, were known to be associational migrants, either accompanying their husbands as wives or as daughters tied to their families. Until recently, the traditional pattern of migration within and from Africa which was largely male dominated, is gradually increasingly becoming feminized due to economic and other related environmental factors.

This has come at a time when an increased emphasis has been placed on reducing hunger and alleviating poverty to achieve the Millennium Development Goals (MDGs) targets. While this is the case, there has been little attention on the interface between intra/inter regional migration of women and its impact on food security. Migration from the north to the south of Ghana in general, has been an issue of great concern, attracting the attention of governments, the academia, civil society and Non-governmental organizations but from the literature available, the focus is mostly on rural-urban migration. Most of the literature treats it as north-south migration which dwarfs the equally important but less noticed phenomenon intra/inter regional migration of women and its impact on household food security.

Much attention has been placed on the more visible migration of men and women together with girls in particular into the cities as head porters, truck pushers or domestic servants or garden boys probably because of its socio-economic implications on the urban centres. In doing so, the phenomenon is attributed to the issue of poverty as a causal factor with little details on the root causes of poverty itself.

It is in the light of this that this study seeks to increase the understanding of female migration and its impact on household food security and also establishes the link between migration of women and food security and to contribute to knowledge that draws attention to it as an issue that has several implications on the family and the households as well. It is, however, important to note that the problem of food insecurity among poor rural households in most developing countries and Ghana in particular, has its origin partly in the migration of people from rural to urban settlements in search of what they perceive to be better jobs and a good life.

1.3 Objectives of the Study

The general objective of this study is to examine the consequences of intra and inter regional migration of women on household food security. The specific objectives are:

1. To describe the socio-demographic characteristics of the female migrants and their households heads;
2. To identify the factors associated with the intra and inter-regional migration of women in the study areas;
3. To examine the consequences of intra and inter regional migration of women for household food security in the study areas;
4. To examine the factors influencing food security and differences, if any, in the contribution of intra and inter-regional migrants to household food security.
5. To make policy recommendations based on the findings of the study.

1.4 Research questions

1. What are the socio-demographic characteristics of the female migrants as well as the household heads?
2. What factors contribute to intra/inter regional migration of women in the Upper West Region of Ghana?
3. What are the consequences of intra and inter regional migration of women for household food security in the study areas?
4. What are the factors influencing food security and what are the differences between the contribution of intra and inter-regional female migrants to household food security in the study areas?

1.5 Significance of the study

Migration plays a key role in livelihood change in the Upper West region of Ghana (Awumbila & Ardayfio-Schandorf, 2008; Primevera, 2009; Van der Geest, 2011;) but the literature available indicates that, there has been very little focus in the relationship between migration of women and household food security in general among the people of Upper West region (Awumbila et al, 2008; Yaro, 2008; Van der Geest, 2011). On the other hand, attention has been focused on labour migration, environment factors of migration, economic and political migration to the neglect of food security which is the main factor for survival. This research will provide an in depth knowledge into the relationship between female migration and household food security and hence a crucial topic to consider in relation to rural livelihoods.

In Ghana, studies into intra-and inter regional migration of women and its impact on food security are virtually non-existent, although a lot of studies have been undertaken on rural-urban migration,

combination of these two types of migration has not been established. Furthermore, this research will provide the required information for the analysis and understanding of this phenomenon in the Ghanaian context and for that matter the Upper West region of Ghana which has been categorized as a region with food insecurity (World Food Programme, 2009).

In addition to the benefits itemized above, the study will help to identify effective strategies for policy makers to manage intra and inter regional migration and improve food security. And also provide empirical evidence on how migration of women affects food security in the study area for planners and policy makers in their overall effort to formulate and implement population redistribution or migration policy. Thus, its significance cannot be overemphasized. And finally, it will also contribute to knowledge in the area of inter and intra-regional migration of women in northern Ghana where researchers will have information to use as literature for future studies.

1.6 Organisation of the study

In order to adequately understand the extent to which female migration affects household food security directly or indirectly, this study has been divided into eight chapters. The first chapter provides a general overview of migration and its impact on household food security. By so doing, the statement of the problem, the objectives as well as research questions, significance of the study, scope of the study together with the limitation of the study were clearly stated.

Chapter two is devoted to a comprehensive review of the theoretical and empirical literature of the study. It draws from theories of the two main variables under discussions. To adequately account for the suitability of theories in these areas, efforts have been made to elaborate on various theoretical perspectives in these areas. The theoretical framework follows the literature review in order to draw some conclusions on them.

Chapter three focuses on the methods used for the study and further discussed the research design, population, study area, research instruments and method of data collection and analysis.

Chapter four discusses the socio-economic demographics of both the households and the female migrants. This includes the age, sex, marital status, educational background and socio-eonomic background of the households.

Chapter five focuses on the determinant factors of the female migrants, be it push or pull factors, definition of food security and food insecurity.

Chapter six explores the implications of female migration on household food security. It further discusses the consequences of intra and inter regional migration of women on food security; the food security situation, the role of the migrant in the household, the length of time food last after harvest and finally the effects of migration on all the four pillars of food security.

Chapter seven discusses the contributions made by intra and inter-regional female migrants towards household food security in all the four districts. The chapter explores the research objectives by ascertaining if indeed, there are differences in contributions made by the two categories of female migrants and finally tests the hypothesis that inter-regional female migrants contribute more than the intra-regional female migrants.

Chapter eight provides the conclusions of the study. It also talks about the summary of the key findings of the work and also offers some suggestions for policy formulation and further research.

1.7 Scope of the study

The study was confined to the Upper West region of Ghana. The scope of this study was based on intra and inter regional migration of women and its effects on food security (that is, availability, accessibility, utilization and sustainability) in northern Ghana; where intra-regional migration is defined as movements from one rural community to another community within the same region; and inter regional migration as the movement from one region to another region.

Definition of Concepts

Migration: Any movement into or out of the geographical and administrative boundary of one locality into another involving a change of usual place of residence. Thus anybody involved in such a movement within a minimum of six months duration of stay irrespective of the direction is regarded as a migrant.

Migrants: These are people who change their places of residence and when such movement cuts across international frontiers it is termed as international migration.

Intra-regional Migration: It is the movement of people from one community to the other within the same region.

Inter-regional Migration: It is the movement of people from one region to another region.

Remittances – In the literature, the term remittances is used to refer to money, goods and other non-material benefits like ideas, skill, knowledge, among other things (social remittances) that are sent by migrants from their destination country or community to their country or community of origin.

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

Smallholder Farmer: Refers to rural farm cultivators who mainly use family labour to produce their own subsistence and sell the extra for money to purchase those items that they do not produce themselves.

Household: It consists of one or more people who live in the same dwelling and also share meals or living accommodation, and may consist of a single family or some other grouping of people.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter starts by presenting some definitions and conceptualization of terminologies. An exact understanding of these terminologies is important in explaining the relationship between migration and food security of households in rural communities. The chapter also reviews literature on determinants of female migration and food security (availability, accessibility, utilization and sustainability). The literature reviewed mainly aims at getting some theoretical and empirical evidence of how female migration affects food security at the household levels in other part of the world, especially the Sub-Saharan Africa through migration, and an understanding of migration and how it affects food production, accessibility, utilization/consumption. Migration of people is generally regarded as an integral part of the process of socio-economic development. It ensures the mobility of labour and its associated human capital movement between regions and occupation (Leloup, 2006; LeFaist, 2008; Castles, 2009; de Haas, 2010; Braunvan (2010).

Both internal and international migration has seen increases in the few recent decades (Sanders, 2014; Czaika, 2013). The trends and patterns of migration have varied significantly over the last few decades with the active participation of women. Several explanations have been given for this trend. The explanations provided include globalization and the revolution in communication (internet/cellular phones) that inform would-be migrants of the opportunities available in other countries of the world, and also trade agreements between countries that contain provisions for free movement of persons particularly but exclusively in trade services, the growth of multinational companies who move their personnel across the globe and the growth in the number of persons with dual/ multi-national citizenship.

In the last two decades, female migration has become an important issue in migration both internationally and internally. Awumbila et al., 2014, Masanja (2012), Tetteh, 2009, have all confirmed in their studies that there has been an increasing amount of female migrating independently and as main income-earners rather than simply following their male relatives as it was in the past. Women's migration experiences often differ significantly from men's. The three northern regions have once served as a reservoir of labour (men in particular) to the southern part of the country for most of the twentieth century (Nabila, 1986). The seventh (7th) point of the 'laws of migration' published by the Social Geographer, Ernest George Ravenstein, in the *Journal of Statistical Society* in 1885 reads as follows: "Females are more migratory than males, they travel over short distances." Unfortunately, it took more than a hundred years before the turn of the 20th to the 21st century, when the law number seven was re-discovered and recognized (Morokvasic, 2003) cited by Masanja(2012).

Globally speaking, migration today has risen to an unprecedented level. According to the 2008 International Organization for Migration (IOM) report, about 192 million people lived outside their place of origin (IOM 2008, Ratha & Xu, 2008; Elcioglu, 2014). Over time, people have chosen the option of migration as a means of coping with the effect of environmental changes both of a sudden and disastrous nature and those of slow onset environmental deterioration. However, the root causes of migration is multitude, since a complex web of factors underlie the process. The literature on migration of people emphasizes the impact of economic crisis, natural and environmental related disasters on those directly affected. But conceptually there is no consensus among researchers on where to precisely place the so-called environmental migration in both the internal-international migration continuum and the voluntary-forced migration discourse (Oucho, 2009).

In Africa, and particularly sub-Saharan Africa (SSA), over 60 million people are predicted to migrate from rural to urban areas in the decade after 2011, leading to the doubled growth of most African cities

(Parnell 2011; Satterthwaite 2008). In Ghana for example, about 40% of the total population move within the country, and out of this number, about 70% of migrants come mostly from the three northern (Northern, Upper East and Upper West) and Volta regions towards the cocoa growing and mineral deposits areas in the southern parts of the country (Awumbila, 2014). However, the rest moves within urban centres and outside the country for better living conditions.

It is often argued that the North-South migration system was initiated by colonial coercion in the first decades of the 20th century (Songsore & Denkabe, 1995). In pre-colonial times, before the advent of the modern migration system, people from the Upper West region moved over shorter distances mainly in search of fertile land and to escape conflict, oppressive rulers and slave raiders (Claver, 2013). Human mobility in this era has been described as a tradition of local migration by many and long-distance migration by a minority of warriors and traders.

There are many factors that drive people to migrate, especially from the three northern regions (Mahama, 2013;Kweku, 2013; Awumbila, 2014). While some are common to several countries, such as regional inequality, under-employment in rural areas and the spread of labour intensive industries, other factors differ depending on the history, culture, policy, environment and social structure of the country. Some of the main drivers of internal migration that appear to be common to Ghana are economic, environmental, conflicts, food shortages and adventurism. Migration is thus an important part of livelihood strategies people adopt, as there are limited possibilities of securing a decent life in the area.

Ghana as a developing country is characterised by uneven development between the north and the south, as well as between some urban areas. Additionally, spatial inequalities are highly visible. The argument has been made that dramatic improvement in communications, services, construction, manufacturing and transport facilities has been a contributing factor that has created the conditions for the large-scale

internal movement of people at unprecedented levels within Ghana (Balisacan and Ducanes 2005; Kanbur and Venables 2010).

Migration has received much academic attention in recent decades. A vast body of literature on migration theory has been formulated from diverse disciplinary perspectives, as reflected in the different theoretical stances, focus points and methodologies used (Brettell & Hollifield 2000). Many still assume that migration is a gender-neutral process in which men and women have similar motivations and migration experiences. As far as the reasons for migration are concerned, regardless of the theoretical stance taken, economic reasons play a prominent role in many explanations of both male and female migration (Ryan 2002).

The origins of internal and particularly rural-urban migration trends in sub-Saharan Africa (SSA) can be found in the colonial era, starting in the 1880s and early-1900s (Yaro 2008). During this time, most Africans practiced internal migration mainly for the purpose of providing forcible and cheap labour to colonies or to earn money to pay the taxes required by some colonial governments (Yaro 2008; DfID 2004).

Northern Ghana has long been characterized by outmigration. Rural households in these communities send out internal migrants for prolonged periods, primarily to the large urban centres in the south (Wouterse, 2010). Recently a new dominant north-south migration stream has emerged involving that of females moving independently of their families to urban centres such as Accra and Kumasi (Awumbila and Ardayfio-Schandorf, 2008). This has serious implications for agricultural production as well as food security since most of the farming activities are done by both males and females. De Brauw and Rozelle (2003) found that, the loss of household labour from migration negatively affects household crop income leading to food insecurity.

2.2 Conceptualization of some key terminologies

This section defines and/or conceptualizes the key terminologies at the heart of the current study: overview of migration, intra and inter regional migration; feminisation of migration, determinants of female migration and food security. Different perspectives on these terminologies will enhance our understanding of the issue under discussion.

2.2.1 Defining migration

Many definitions and conceptual models on migration have been presented. The United Nations (UN, 2002) defined migration as “*a form of geographical or spatial mobility between one geographical unit and another*”. It involves *a change in residence from the place of origin or departure to the place of destination or arrival*’ (Kainth - 2010). Further, National Sample Survey Organization (NSSO, 2008) defined migration as “*A household member whose last usual place of residence (UPR) was different from the present place of enumeration was considered as a migrant member in a household.*” While, in population studies: “*migration implies a permanent or at least a semi-permanent change in the place of residence of an individual from one location to another.*” (Dugbazah, 2012). According to 2001 Census of India. “A person is considered as a migrant by place of last residence, if the place in which he is enumerated during the census is other than his place of immediate last residence.” On the basis of the above definitions, one can say that migration is related to long term phenomenon (Korah, 2011).

De Haan (2002) in his attempt to define migration, said, migration is seen as a social process. According to him, migration is related to social identities which include gender, culture, age, ethnicity, position in the family hierarchy which have consequences for people’s lives. It is this same social identities which determine whether one is allowed to migrate or not, the type of migration and the outcomes of

migration. He concluded by saying that migration change social identities and reinforce or affirm social identities. This may imply that migrants actively try to avoid adaptation of their identity to the local people's identity. Cultural identity is an important issue among many migrant groups. Although De Haan mentioned the social process, he did not consider the wage differential or the income of the households which allows households to access basic needs for its members. When the purchasing power is missing, it can lead to the migration of its members.

Migration, until recently, has been assumed to be male dominated, with women joining up later with their male counterparts either as wives, maids or as members of the extended family. Some of the numerous studies that hold or reinforce this view include Little (1973), Songsore (2003), Hance (1970), Kasanga (1988), Brydon and Chant (1989).

According to Bilsborrow (2002) and Cornwell and Inder (2004), several motives drive people to migrate from places of origin to final destinations. These include:

(i) socio-cultural issues where people are forced to migrate to avoid numerous social problems at their place of origin (Ewusi, 1986), (ii) community neglect where people, out of frustration and lack of recognition tend to move to other areas where they believed they would be accorded social recognition (Nabila, 1986), and (iii) infrastructural development and urban expansion in another area that motivates people to move from places of origin to final destinations (Chopra, 1997; Ewusi, 1986 cited in Mahama, 2013). The literature also highlights easy access to transportation, road networks and communication as factors which motivate people to migrate from places of origin to final destinations (Gimba and Kumshe, 2001; Beals, 1999;). The author's assertion that migration is a result of social problems, he didn't take into consideration the economic context of contemporary society. Also the study failed to

give out the sociological insight into the determinants and characteristics of migration and the kind of social group which migrate.

Modern additions to migration studies may be attributed to the concept of intervening opportunities formulated by Stouffer (1940; 1946). He attempted a “Rational Economic Man” interpretative explanation of migration by postulating the theory of intervening opportunities. The theory of intervening opportunities states that, the number of persons going a given distance is directly proportional to the number of intervening opportunities. That is, if there is perceived availability of jobs at a destination, people will tend to move to such areas. This theory, however, did not consider actual distance between place of origin and destination, but sees it in the light of ‘economic distance’. That is, if perceived income at destination is comparatively higher than income or origin, then distance is not a hindrance to migration.

Ackah *et al.* (2010) in their studies on migration found out that, migration is a response to opportunities available to individuals and constraints faced by communities. Their study further revealed that once people complete a secondary or tertiary education, their probability to migrate rises significantly. Their study showed that at the household level, however, migrants are less likely to come from households with a more educated head. The more educated household head may serve as a proxy for opportunities available to the migrant at home. Thus, the more educated the household head, the better-off the household, which reduces the economic incentives to migrate (Ackah and Medvedev 2010).

The educational background of a migrant also determines the propensity to migrate. Most studies of on international migration revealed that increase in schooling stimulates migration. The more educated people tend to move more compared to less educated (Richter and Taylor, 2007). Ackah and Medvedev (2010) have reported that in Ghana a migrant’s educational attainment is correlated with an increased probability to migrate.

Numerous researchers have brought forward considerable knowledge on migration patterns and process of migration. These include causes, pattern of such movements and also characteristics of migrants. Different migrants, thus, have different motives, reflecting different opportunities. At one end of the extreme, skilled international migrants tend to have clear views of bettering their positions and that of their families, while rural-to-rural migration tend to have survival strategies – often in the context of seasonal opportunities – as a main motive (de Haan - 2008). Considering the characteristics of these migrants, migration is said to be a selective process in the sense that, migrants generally have demographic, educational and economic characters, which distinguish them from population of origin.

In Ghana, knowledge of characteristics of migrants is demonstrated by the work of Asare (2012), Wouterse (2010), Ackah (2010) and Caldwell (1967), which indicated that a high proportion of men dominate the rural-urban migration stream than their female counterparts. However, there is a shift in that assertion. Recent literature confirms that the proportion of women in relation to men has increased considerably and almost account for half of the migrant population. Invariably, it has been identified that highest propensity to migrate occurs in the ages of 15 to 55 years, (Anarfi *et. al*, 2003; Caldwell, 1969). Migration affects the livelihood of rural households in different ways and this thesis discusses how migration and for that matter, rural to rural migration of women affects positively and negatively, the household food security.

Over the past four decades permanent migration has increased, data constraints have considerably limited the available information on the magnitudes and patterns of temporary and seasonal migration. According to GSS (2010), over 52 percent of Ghana's adult population are migrants, with the corresponding percentages for men and women being roughly the same (51.4% and 52.2% respectively). In view of the fact that these figures do not include temporary and seasonal migration, population mobility in Ghana is seen on the high side (Boakye-Yiadom, 2008).

To Boakye-Yiadom (2008), migration is a response to opportunities available to individuals and constraints faced by communities.

The literature also shows that the size of the population and its density can have an influence on the individual choices to migrate (Orlina and Recio, 1978). Indeed, a migrant will be able to choose to settle in an area with weak population/density (in order to avoid competition) or to settle in an area with large population/density (in order to profit, for example, of a vast market or existing cooperatives). Of course, the final choice to migrate will depend on all these factors (push and pull, spatial inequalities, distance, population size) as a package. Therefore someone will migrate on his/her knowledge about the region of origin, about the host region and on basis of personal factors (Pickbourn, 2011; Black et al, 2008; Lee, 1966; Ravenstein, 1885).

Portes and Boroc (1989) critique the ability of traditional push-pull theories to explain the determinants of contemporary migration. According to them, the disadvantaged persons from unattractive homeland to another region cannot be explained by only cause and effect. Rather the repeated pervasion of lack of socio-cultural resources creates an environment for migration.

2.4 The Gender and Migration Linkage

Despite its significance and growing proportion, the issue of female migration is not sufficiently explored in migration studies. The neglect of research on women's migration is attributed to a number of factors including the emphasis placed on existing economic theories of migration where migration is seen as motivated by economic opportunities, i.e. male migration for economic reasons and female migration for social and family-related reasons rather than economic considerations. Several researchers

have concluded that migration of females is largely caused by marriage or as dependent (Bose, 1973; Premi, 1979; Nangia *et al*, 1990; Rele, 1969). This kind of gender bias in the analysis of migration patterns is often explained in the context of historical, institutional and socio-cultural norms that characterize women playing economic and social roles as secondary to those of men. Due to this male-centric preference, the dynamics underlying female migration remains unexplored.

Migration, as explained by Anarfi (1982) Sabot (1988) has been seen as gender-neutral because it deals with the process of movement of persons. Although, migration is seen as a gender-structured because both men and women migrate for different reasons, use different channels and more so, migration has different consequences for men and women in both sending and receiving communities (Chant & Radcliffe, 1992; Silberschmidt, 1999; Potts, 2000). For those leaving, internal migration can result in either war/conflict, empowerment or, on the contrary, increased vulnerability and even victimization (FAO/UNFPA, 1991). Whilst, those who remain, the departure of men and/or women from the household have a specific influence depending on the migrant's status and role within the household prior to migrating, such as being main wage earner, spouse, parent or young daughter or son (Fadoyomi, 1980 cited in Dugbazah, 2009).

Gunilla Bjerén (1997) stressed the gender relationality of migration. In her words 'the mobility of men will be misunderstood if not seen in relation to the mobility of women' – and also, of course, vice versa. Whilst men and women often migrate for fundamentally different reasons and under different conditions, it is also important to understand to what extent, if any, migration itself reshapes gender relations. Migration can lead to a measure of empowerment for women, but it depends on the particular migration context they are embedded in. Despite considerable progress in 'bringing gender into the core of migration studies' (Mahler and Pessar 2006), much remains to be done, not least in moving beyond

the ‘gender equals women’ mindset and inscribing into gendered studies of migration the neglected angle of masculinities and migration.

Another trajectory of Ghanaian migration research in the last decade of the 20th century relates to gender and migration, especially gender selective migration (Chant, 1992). The feminization of migration is illustrated in studies on both internal and international migration of Ghanaians. In the past, women moved in their capacity as accompanying spouses and these movements were over short distances. For instance, Surdakasa (1977) observes that, until the 1970s, the size of the female component of Ghanaian migration was small. The focus was on male migrants who had migrated to coastal Ghana for fishing or from the north to the south for farming. Any reference to female migrants, according to Surdakasa (1977), related to wives left behind to tend the farms, care for the children and maintain village cohesion.

In contemporary times however, women move independently within and outside the country for economic as well as other reasons such as education and career development. Amankwah (1984) and Anarfi (1989) documented this movement of women to Nigeria and Cote d’Ivoire while Abrefa-Gyan (2002) documents this movement internally. While some earlier studies (Sudarkasa, 1977; Oppong and Abu, 1987) draw attention to the effect of women’s migration on their lives and reproductive roles, most current studies emphasis the economic and social independence and reproductive role of women and the young female (Brydon, 1992; Appiah, 2000; Tanle, 2003; Wong, 2006, Awumbila and Ardayfio-Schandorf, 2008).

A comprehensive analysis of migration and livelihoods along gender lines will bring to bear the fact that there are differences, sometimes significant, in the ways in which women and men can benefit from new

opportunities, or, indeed, suffer from economic constraints, which are further compounded by the consequences of migration (Brydon, 1997).

Theoretical formulations of gender as relational, and as spatially and temporally contextual have begun to inform gendered analyses of migration (Donato *et al.* cited in Carling, 2005). Men and women show differences in their migratory behaviours, face different opportunities and have to cope with different risks and challenges, such as vulnerability to human rights abuses, exploitation, discrimination and specific health risks. Therefore, it is becoming increasingly obvious that migration is not a gender-neutral phenomenon. From the very moment they decide to migrate, women's experience as migrants differs from that of men.

2.5 Social Networks Theory

The Network theory attributes the migration process to personal, cultural and/or other social ties. In receiving countries, immigrant communities often help their fellow men and women to migrate, find a job and help them to adjust to the new environment. These networks reduce the cost of migration for newcomers which acts to induce further migrants to leave their country (Tetteh, 2009). The network theory explains migration in Ghana because the decision to travel to a large extent depends on the availability of friends or relations (networks) in the destination area. Thus, networks (relations or friends abroad) make it possible for one woman to travel and impossible for another, despite the fact that these women might all dwell within one historical and socio-economic context. The model has also been employed extensively to explain internal rural-urban migration decision processes in Ghana (Bartle, 1971). Most youths who travel to urban centres take that decision based on information about the opportunities and/or received from the network of friends, relations in the destination areas.

Literature on empirical studies show the likelihood to migrate includes presence of friends or relatives in the destination locality, i.e. migration networks. The importance of networks in migration decisions in Ghana (Lucas 1997), appears to be crucial in most migration decisions (Caldwell, 1968; and Tutu, 1995). It is believed that the establishment of networks often reduces the migration costs. On the basis of data from the Ghana 1991 Migration Survey, Tutu reports that most of the times, when people want to migrate, they have friends or relatives residing in the destination locality, so when they arrive, it does not take them long to adjust and move on with their chores.

The above was buttressed by Caldwell (1968) in his study on rural to urban migration, he found a very strong statistically significant association between the presence of rural household members in the destination locality and the likelihood of other members visiting (or migrating to) the town. As observed by Tutu (1995), the role (in migration decisions) of access to destination-based kinship and other networks is closely linked to the cost-reducing effect. Migration to an area where one knows people (i.e. has a network) thus reduces costs, uncertainty and risks. First of all, migrants may provide information on jobs and housing-markets to non-migrants in the home area. Secondly, earlier migrants may help new migrants with finding a job and housing. Thirdly previous migrants make adaptation to a new environment, culture and language easier for new migrants (Ek-Iem, 2001; Lapthananon, 2001). Social networks thus offer many ways of support for migrants and those wishing to migrate. In exchange for this help, a migrant may also have to do the 'helper' a favour.

There is a strong relationship between social networks and return migration. Many migrants maintain close contacts with their family and community at the area or origin. If migrants have strong ties to the village of origin they are more likely to engage in repeat or return migration instead of settling down in

the place of destination (Ek-Iem, 2001). There is considerable evidence of the influence of networks on migration flows. Previous colonial bonds continue to have an impact on migration flows, in part due to common language and well-established networks (Hearing and van der Erf, 2001). The network theory binds migrants, former migrants and non-migrants in the place of both origin and destination also helps to explain the reasons why migration patterns are not evenly distributed across countries, but rather how they tend to form so-called migration regimes (Faist, 2000). On the contrary, the network theory of migration fails to look at the determinants which initiate migration but rather looks at what perpetuates migration in time and space (Massey *et al.*, 1993).

Furthermore, the network theory according to the literature, is closely affiliated to another approach known as migration systems theory, pioneered by Magobunje (1970). This theory's main assumption posits that migration alters the social, cultural, economic, and institutional conditions at both the sending and receiving ends and that it forms an entire developmental space within which migration processes operate (de Haas, 2009). While migration systems theory has its roots in geography, migration network theory is of sociological and anthropological origin (Castles and Miller, 2009). Whereas network theory mainly focuses on the vital role of personal relations between migrants and non-migrants, migration systems theory goes further and stresses that migration restructures the entire societal – or “developmental” – context of the concrete spaces in which it takes place, both at the receiving and at the sending end (de Haas, 2008). It suggests that migratory movements arise in response to prior existence of links between sending and receiving states, such as colonial ties, trade or investment flows (Castles and Miller, 2009).

2.6 Factors Determining Female Migration

Over the past 40 years, female migrants have been almost as numerous as male migrants (Awumbila, 1997). In 1960 there were 35 million female migrants and 40 million male migrants. By 2000, the gap between females and males remained about the same, 85 million female migrants versus 90 million male migrants (<http://www.mpi.Org>).

Whilst many females in times past accompany or join family members or spouses, increasing numbers of females now migrate on their own. A significant number of these females are forced to migrate. They may be fleeing conflicts, persecution and violence, forced marriages, female genital mutilations and environmental degradation that affect their homes and livelihoods (Awumbila, 1997; Songsore & Dekabe, 1995; Adepoju, 2001; Sorensen, 2004). Most female migrants however migrate voluntarily, often in search of employment opportunities because they may be the principal and sole wage earner for themselves and their households (Oppong, 1997; Adepoju, 2001). The desire and search by many females for job opportunities in cities and other countries is one of the causes for the emergence of smuggling and trafficking. Women and children are often the victims of trafficking. Many trafficked persons are sold into virtual slavery, forced labour, domestic servitude and sexual exploitation (U.S State Dept, 2003).

Many poor rural households see migration to urban or other rural areas, or abroad, as a strategy to escape poverty or improve the quality of their lives. Migration patterns vary by continent and even countries within continents, and change over time. Furthermore it is important to recognise that the causes driving migration and the contextual circumstances surrounding it can, and often do, change over the course of development of the migration stream. These changing circumstances can manifest themselves in different ways at different timescales, for instance between different historical or

genealogical generations, or over an individual's life-span. Migration is not always, by any means, a one-off event which ends in settlement, but an ongoing process that is re-evaluated several times over the life-course (King, 2012).

One of the most significant changes in the last half century is the increasing proportion of women migrating. Today, they constitute half of the international migrant population, often migrating independently as the main economic providers for their families. Driven by economic, social and political forces as well as new challenges (such as environmental degradation, natural disasters or climate change impacts), migration can bring, both benefits and costs to the migrants themselves, their families, and their communities of origin and destination, depending on the migrants' profile and gender, and on labour market specificities (ILO, 2010).

Recent migration studies have shown a new trend and remarkable renaissance in the interest in female migration both at the internal and international fronts (Adepoju, 2004; Martin, 2005). Young females who now form the majority in internal migration, moved from northern Ghana to urban centres in the south. They mostly work as '*kayayei*' (porters) in market centres and lorry stations in Accra (Tanle, 2003; Anarfi & Kwankye, 2003; Awumbila, 2005; Awumbila & Ardafo-Schandorf, 2008; Manuh, Quartey, Tagoe & Bosiakoh, 2008). The Migration literature has demonstrated that women who migrated independently and autonomously did so for socio-economic reasons contrary to the earlier assertion that defined women as associational migrants. Adepoju (2004) described migration in Sub-Saharan Africa including Ghana as feminising. More women are showing interest in both internal and international migration simply to improve upon their economic earnings.

Gender relations are defined as a set of social representations, roles, perceptions, ideologies, and behaviours of women and men (Veron, 1997, cited in Boyle, 1998). They determine the roles of women

and men, as well as the opportunities and the constraints specific to each sex which can influence their migration behaviours (Bidet, 2001). Therefore, gender relations determine who migrates and for which reason he/she does so. According to Bouchoucha (2012), Thomas, migration of women and men is influenced by the tradition and the social values that determine the roles of women and men. These social stereotypes influence the migratory behaviour of both sexes and determine their reasons for migrating. The migration of women and men is impregnated by their responsibilities and social roles. According to their reproductive role, women migrate for family reasons, while men migrate mainly to work, as they are responsible for their families. Women, especially those who are married, migrate mainly to join their families or their husbands. However, migration for economic reasons as well as for studies concerns mainly the unmarried.

The main reason for migration is an indicator of social roles of women and men. According to the traditional division of male and female roles, men migrate to find a job, and women eventually join them to assume their roles as wives. Women also migrate for the purpose of marriage. Arranged marriages are quite common in some cultures, especially among emigrants from the Indian subcontinent, where both men and women migrate for this purpose. For many, arranged marriages can lead to a lifelong supportive partnership, but some of them can be accurately described as forced. Moreover, mail-order bride businesses can act as facades for recruiting and trafficking women (INSTRAW, 2007).

According to the literature, other factors that may contribute significantly to the decision of women to migrate are increasing labour demand on the service market in countries of destination, family obligations, unemployment, low wages, limited social and economic opportunities and the desire to expand their horizons (Lucas, 2004). Women generally face more drastic decision-making and financial restrictions than do men, which can pose obstacles to freedom of movement. Yet income-earning opportunities can empower women and loosen traditional constraints on female mobility.

All major studies on migration agree that economic disparities between developing and developed countries continue to be a key determinant of cross-border movements for poor countries (UNDP, 2005). The increase in female migration has several explanations, among them is the trans-globalization of economies, which has created a labour demand in low paying service sectors of developed economies (Sassen, 2003). In many developed countries, the combination of demographic change, growing participation of women in the workforce and reduced social services for child and aged care has led to a dependency by rich countries on the care offered by people from poor countries (Ehrenreich and Hochschild, 2003).

Economic and social upheaval can also provide the impetus to leave. Educated women unable to overcome employment discrimination in their own country migrate in search of an opportunity to find work that is more likely to better utilize their skills and that is better paid. Female migration is also motivated by other non-economic factors, including surveillance by communities and patriarchal traditions that limit opportunity and freedom, getting out of a bad and abusive marriage, fleeing from domestic violence, and desiring equal opportunities (reference).

Most of the literature highlights poverty and economic hardships as being key to migration. Households' members thus migrate to either alleviate or escape poverty at individual or household levels (United Nations, 2007). This line of thinking has been empirically captured in SSA (Tacoli, 2002), specifically in Ethiopia (Morrissey, 2007) and Ghana (Akrofi, 2006).

According to the World Migration Report (2010), 214 million people worldwide were on the move and 49% were women. Out of 190 million or so migrants in the world today, almost 50% are females, majority having migrated from and within developing countries (Omelaniuk, 2005). Stressful economic

conditions, poverty and unemployment, protracted ethnic conflicts, income disparities and living standards, landlessness, effect of environmental change, technological revolution, social network amongst other factors have been cited as motivation to inform the households decision to migrate (Adu-Gyamfi, 2001; Adepoju, 2005; 2006; 2008; Anarfi & Kwankye, 2005; UNDP, 2005). Under these conditions, migration remains an important livelihood strategy for migrants to deal with declining socio-economic conditions (Manuh, 2001:19).

The involvement of women in the migratory process was long identified by Ernest George Ravenstein, when he published “Number Seven laws” in the *Journal of the Statistical Society* in 1885 which states “Females are more migratory than males”. Ravenstein further maintained that women migration was over short distances. However, this research never received further research attention until recent times. In apparent support of Ravenstein’s work, the expression “*feminisation of migration*” was first coined by Castles and Miller (1993) in migration literature to show the increasing numbers of women in the migratory process. Feminisation of migration simply means more women are engaging in migration process contrary to the traditional notion of male-dominated pattern of migration. Similarly, evidence suggested women outnumbered men (Zlotnik, 2003; GCIM, 2005; Carling, 2005; Yinger, 2006). Most significant is the increase in female migration as autonomous migrants in recent times. The reasons behind women movement are complicated and may include both economic and non-economic reasons (Deshingkar & Grimm, 2004).

Carling (2005) argued that, statistics under-represented the number of women who migrated in the past. Twum-Baah, Nabila and Aryee (1995) explained that absence of statistics on women migration emanated from earlier researches which focused on male and described women as associational or

secondary waves migrants. Contrarily, studies on existing migration literature demonstrated convincingly increasing numbers of females in migratory process. Women are migrating in higher numbers independently to look for economic opportunities which do not exist in their home regions (Omelaniuk, 2005; IOM, 2010).

Feminist researchers like Watterer (2002) argued that, the dominance of women in migratory process was due to “feminisation of work sector” in domestic and care work in the informal sector. Majority of women are confined to low wage and low status feminised work. The demand of women in the feminised labour market has led to feminisation of migration ((Zlotnik, 2003; Sassen, 2003).

Contemporary studies have shown that, more young women are migrating independently and autonomously from the northern Ghana to engage in low paying jobs including headportering and domestic work in the commercial cities of Accra and Kumasi to make a living (Opare, 2003; Tanle, 2003; Anarfi and Kwankye, 2005; Awumbila, 2007; Awumbila and Ardayfio-Schandorf, 2008;). Unemployment, poverty, desire to acquire household cooking utensils, marital-related issues, desire to invest, protracted conflicts and climatic change have been cited as reasons behind north-south migration streams (Opare, 2003; Yeboah, 2008; PPVA Ghana, 2011). These northern migrants in cities work as “*kayaye*” (porters) in commercial centres and bus stations (Anarfi and Kwankye, 2005; Awumbila, 2007).

Studies on women out-migration particularly from the north have been ascribed to the implementation of Structural Adjustment Programmes (SAP) in 1983. The economic crisis resulting in poor harvest in 1983 drove the Provisional National Defence Council (PNDC) government under Chairman Rawlings to adopt SAP from IMF and World Bank. As highlighted by Ramirez, Dominguez and Morais (2004), the adoption of SAP by developing countries (Ghana included) resulted in the collapse of small and medium

public enterprises, increased mass unemployment and a cut in government expenditure on social services. This phenomenon forced men and women to adopt alternative survival strategies including migration to make a living.

Another strand of literature discussed the effects of the structural adjustment programme introduced in Ghana caused over 300,000 workers to be retrenched (Konadu-Agyemang, 2000). This, one way or the other affected a lot of households including women, those who could not cope had to migrate to look for jobs in the informal sectors in cities. Similarly, it was confirmed by Bortey-Doku (2000), that, the negative impact of Structural Adjustments Programmes (SAP) resulted in more women migrating in search of income-generating work to offset their husbands' retrenchment and also improve their food security situation at the household levels.

2.7 Consequences of Migration

The consequences of migration are numerous. These include economic, social, culture, demography, just to mention a few. Studies of consequences of migration are of equal importance as those of the causes of migration. The effects of migration are viewed from two directions. On one hand, migration causes excessive urbanization, unemployment, income inequalities, ecological stress and population maldistribution. On the other hand, migration is a necessary part of economic growth, equilibrating tendencies, facilitating industrialization, improving income distribution and introducing technological change in agriculture. Lewis (1982:1) and Standing (1984:1) generalize that migration is the human right ensuring choosing one's destination to improve welfare and economic benefit. In general, Rural-urban migration has a number of economic, social, cultural, mental and demographic impacts to both receiving and sending areas. In many cases of migration, economic gain has been the prime objective. The economic gain acquired by rural migrants from their place of destinations could be an important

asset to be transferred to their places of origin (home area or village) in the form of capital, technology, learning awareness, knowledge, trade, goods or services, etc. A survey in Jakarta shows that almost two-thirds of the male and female migrants reported to be better off after migration than before; and their success increased with the duration of their stay (Sethurman, 1976:12). Tiffen (1995:48) describes the positive value of migration as any work outside the district that/which brings in capital and information as well as investment which in turn can facilitate agricultural profitability. There are also usually positive effects in areas of origin. One such aspect is remittances which migrants send home (Dasgupta, 1981:47; Adepoju, 1981:324; Oucho, 1998:109). Hence, migration of a family member is used as a means of income diversification against risks (Lall *et.al*, 2006). In general, migrants are everywhere doing all kinds of jobs mostly in the service and informal sectors. They are mainly engaged in the 3-D jobs; difficult, dirty, and dangerous (Ma & Xiang 1998:547); jobs that the urban population does not want because they are too hard or disgracing.

The consequences of migration according to Andersson (2002) cited by Dugbazah (2009), depends on the socio-cultural and economic context, that is, gender and age of migrant, position of migrant within the household, the agro-ecological environment, the type of migratory movement, whether it is temporary or permanent, the employment possibilities and self-sufficiency of migrant, and the ability to send adequate remittances to maintain the level of farming prior to migration.

This study is therefore an attempt to fill this gap by identifying new information and also putting together the scattered bits and pieces of existing data on the subject.

2.8 The Role of Remittances:

The findings of Gold Schneider (1983) in his comparative studies in Korea, Sri Lanka and Mali indicates that migrants experience in urban living contributes to raising their socio-economic status by enabling them to attain more education, acquire better skills and above all bring back money to the rural community.

Adepoju cited in (Journal of International Economics, 1985) is of the view that remittances of money have become an institutionalised feature of migration in Africa. He added that, remittances are not only from urban- rural but also from rural to rural and also to rural to urban. Lending support to the significant role remittances play in the development of migrants places of origin. Caldwell cited in Twum-Baah (1978) indicates that about two-thirds of urban migrants in Ghana expected to return to their communities would have made at least housing arrangements.

Oucho and Mukras (1987) sums up the role of remittances in rural development as survival, developmental and social functions. Survival function helps in emergencies and income for consumption and maintenance. Whilst the developmental has to do with capital for education, small business, housing and agricultural development and community development projects like irrigation/water supply, health centres, just to mention a few. Finally, the social maintenance function is normally receipt of food and cash to family members left behind. However, Adepoju (1985) questioned the role of remittance in rural development, he argues that, “remittances also exert contradictory effects on migration in rural areas”. He states further that remittances end up educating children and relatives at home and given the nature of rural educational structure, they are inadvertently prepared for urban jobs. Upon completion of school, they migrate to the city resulting in a no-win situation for the home community. He concludes that, investment at home by successful migrants usually serves as the “last

straw” for younger potential migrants to also go in search of similar opportunities in the cities. The conclusion is that, irrespective of the contradictory effects, remittance on a whole contributes immensely towards improvement of standard of living and general development of the migrant’s places of origin.

2.9 Defining Food Security

One major challenge facing the world today is how to reduce poverty and ensure food security. This challenge is necessitated due to the increasing population of the world, coupled with worsening climatic conditions as well as the high poverty rate among people. Though the world has made significant stride in the area of improved farming technology leading to the improvement in food production and food storage, this has not translated to ensuring food security to all people (FAO, 2009).

The concept of food security has been explained by Holben (2004) as having access to enough food, including the ready availability of nutritionally adequate, safe foods for an active, healthy life and the ability to acquire these foods in socially acceptable ways. When individuals and families have limited access to food or if their ability to obtain food is limited or uncertain, then they are food insecure.

A number of studies have been carried out to depict and conceptualize food security at the household level, at the national level, increase food security as well as improvement of access to food (Hoddinott, 1999; Maxwell, 1996; FAO, 1996; Sen, 1981). Whilst some emphasize poor access to food as the main threat, others reveal the relationship between food insecurity, vulnerability and migration. Past knowledge is essential in providing sound fundamental understanding of the situation under investigation.

Addressing food security in Africa, and in Ghana in particular, includes a complexity of foci, including past and current government agricultural policies, the role of food import, sustainable agricultural practices to facilitate Ghana's potential ability to amply feed its people, education and gender imbalance.

Studies of people who suffer food insecurity across different countries and health systems have consistently found that it is closely related to limited household resources, low disposable income and poor socioeconomic status (Cook and Frank, 2008; Else, 1999; Press, 2004; Rush and Rusk, 2009; Rychetnik et al., 2003; Parnell and Smith, 2008). Single parent families especially those with young children, indigenous communities, unemployed people, and those with chronic illness or disability are more likely to be food insecure.

The World Food Summit (1996) defined food security as existing “*when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life*”. Food security the world over is increasingly becoming a global concern. With the continuous food shortages leading to price hikes, migration/mobility of humans, malnutrition, hunger and even deaths in some parts of the world. More than 925 million people globally were undernourished. Meaning they did not have access to food (FAO, 2010).

This definition is based on four dimensions: *the availability* of sufficient quantities of food of appropriate quality; *access* by individuals to adequate resources for acquiring appropriate foods for a nutritious diet; *utilization* of food through adequate diet, clean water, sanitation and healthcare to reach a state of nutritional well-being where all physiological needs are met; and the ability of populations, households and individuals *to store* and have adequate food at all times (FAO, 2006).

However, this definition does not tell us whether what individuals consumed is enough or not. Apart from this, it fails to show to what extent the consumed food has nutritional value for active work.

Realizing the aforementioned gap, in 1986 the most influential definition of food security concept was introduced by the World Bank which broadened the emphasis from food availability to include access to food and narrowed the focus from the global and national to households and individuals, thus access by all people at all times to enough food for an active, healthy life (World Bank, 1986).

The right to food was acknowledged in 1948 as part of the universal declaration of human rights, but the concept of food security appeared for the first time in the global arena of development in the mid-1970s (Tetteh, 2011). This period was a difficult one characterized by low grain reserves, escalating prices of oil and agricultural inputs and natural disasters. This instigated the food security discourse being introduced at the UN World Food Summit of 1974 with the motive of mobilizing international support and to reach agreements that would ensure that sufficient food is produced accompanied by the stability of supply and prices.

On the other hand, less than a decade later, it has become obvious that making food available in enough quantities alone did not necessarily translate into making people food secure (FAO, 2003). Once food availability failed to eliminate the problem of hunger, the discussion on food security was adapted to integrate access to food in the early 1980s. The concept was once again expanded at the World Food Summit of 1996, and food security was universally agreed to exist when “*all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life*” (ODI, 1997:2). This definition serves as the reference to food security in contemporary discussions as well as addressing the concept throughout this thesis.

Food security has been defined in several ways by researchers and international bodies over the years. There are close to 200 definitions of food security (Hoddinott, 1999). Since the World Food Conference of 1974, definitions evolved from viewpoints ranging from emphasis on national food security or an

increase in supply, to those calling for improved access to food in the 1980s (FAO,1983). In the 1990s, improved access was redefined by taking into account livelihood and subjective considerations (Maxwell, 1996).

Bickel *et al.* (2000) define food security *as access by all people at all times to enough food for an active, healthy life*. Households are food secure when they have year-round access to the amount and variety of safe food for their members to lead active and healthy lives. “At the household level, food security refers to the ability of the household to secure, either from its own production or through purchases, adequate food for meeting the dietary needs of all members of the household” (Ewumbu, 2011).

The definition by International Fund for Agricultural Development (IFAD, year) is based on “*the capacity of a household to procure a stable and sustainable basket of adequate food.*” However, some of the terminologies used are difficult to operationalize. Adequacy may be defined in terms of quality and quantity of food, which contribute to a diet that meets the nutritional needs of all household members. Stability refers to the household’s ability to procure food across seasons and transitory shortages, the more traditional definition of food security. Sustainability is the most complex of the terms, encompassing issues of resource use and management, human dignity, and self-reliance, among others (IFAD, 1992). Under this assumption, it is clear to state that, even though one may have adequate food supply, there is no guarantee that it will meet the nutritional needs of all the household members.

A World Food Programme (WFP) report from (in) 2009 on food security and vulnerability in Ghana uses the following definition of food (in) security which was defined at the World Food Summit in 1996: “*All people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life*” (WFP, 2009). The

report argues that “food security is highly complex in that it is determined by a range of inter-related agro-environmental, socioeconomic, and biological factors, all of which have to be addressed to conclude whether food security exists or not” (WFP, 2009). Other literature confirms that the best methods of measuring this concept are the need to capture or factor in every possible factor that can influence it (Radimer, Olson, and Campbell, 1990 as stated in Hoddinott, 2006 and Maxwell, 1996).

Again in the literature, in an attempt to explain food security, Sen (1981) demonstrated that hunger and starvation are not an inevitable consequence of a decline in the availability of food but, rather, reflect the circumstances of people not being able to secure access to food. He argues that understanding people's entitlement relations on the basis of their initial endowments in land, other assets, and labour power, a person has entitlements to his own production, the sale of labour for wages or the exchange of products for other goods (e.g. food). Under ‘normal’ conditions these entitlements provide the basis for survival. But new circumstances may unfavourably impact upon them, such as the occurrence of drought. Here, with the prolonged failure of rains and in the absence of irrigation, field crops simply shrivel and die. For local people who ordinarily earn wages by working in those fields and whose labour is no longer needed, at least until the return of the rains, their main entitlement to food (their wages) collapses and they become highly vulnerable to hunger. A similar predicament confronts those with a few livestock. In the absence of adequate grazing, animals weaken and their value drops. Meanwhile, under the law of supply and demand (exacerbated by the opportunism of intermediaries) grain prices soar, and the exchange rate of grain for animals deteriorates rapidly. This is a situation faced by all who must purchase their food needs and who experience a collapse in their entitlement relations. In short, if the purchasing power does not exist, feeding one's family becomes a problem. There could be food alright but what shows it is nutritious enough to feed the family members and make them healthy?

To confirm what has been stated above by Sen, Smith *et al.* (1986), in their discussions stated that, for a household to be food secured, they need to have access to food (i.e. vulnerability and entitlement). To them, entitlement relations are determined by what one owns, what one can trade in, what one can inherit or is given.

Nonetheless, others have the assertions that the interest in whether and how individuals and households acquire food has a longer history and is firmly rooted in nutrition planning. Security is the secure access to enough food (Tetteh, 2011).

Literature also shows that food availability decline is not a necessary condition for a food entitlement decline. Devereux (1988), for instance, pointed out that, the entitlement relation cannot be centred only on the household alone, because the unequal distribution of food among household members receives no attention. This came about as a result of one's failure to embed the entitlement relations of the household into the social and political fabric of the wider community.

Crush (2012) in his study on "Linking migration, food security and development", looked at the relationship between cross-border migration and food security. These include (a) how international migrants address their own food and nutrition needs in the destination country and (b) what happens to the income that they earn while away from home. He concluded that cash remittances are not the only way in which migration contributes to household security as many migrants also send food back home as part of their in-kind remittance "package". He further stressed that, the primary determinant of food insecurity in African cities is not production shortfalls but the lack of access to food and that means the absence of a regular and reliable income with which to purchase it.

There are also a number of studies that have documented that most household members use remittances for consumption of food, education and health care with very limited investment in production (Rivera -

2009; Cuong - 2009, Quartey, 2006; O'Neil, 2003; Chami et al., 2003; Newland, 2003; Taylor et al, 1996b). Which means that, their survival lies in the hands of the migrants, if a time comes and they are no more receiving assistance from those migrants in terms of remittances, their well-being will be affected badly. In their attempt, justifying the usage of remittances, other scholars (Shakhotska, 2003; Docquier, 2006; Atamanov, et. al, 2009) argued that., it is not in all cases that remittances are used only for consumption of food, others have used it in various areas such as improving of housing conditions, and facilities, purchase of durables, clothes, recreation, help other relatives and other business related issues and also serves as an important source of foreign exchange and financing for many developing countries (Vargas Silva, 2012).

Food security at the household level is also taken as the ability of the household to secure, either from its own production or through purchases, adequate food for meeting the dietary needs of all its members, with the nutritional status of each member depending on the following conditions: the food available must be shared according to individual needs; the food must be of sufficient variety, quality and safety; and each household member must have a good health status in order to benefit from the food consumed.

Food availability emphasizes the physical presence of food in a country, region, local area or household in sufficient quantities on a consistent basis. It means that food is physically present because it has been grown, manufactured, imported and/or transported there. For example, food is available because it can be found on markets, because it is produced on local farms, land or home gardens, or because it arrives as part of food aid. This is food that is visible and in the area (IFRC, 2006).

Food access emphasizes having sufficient resources to obtain appropriate foods for a nutritious diet. It is the way different people can obtain the available food. Normally we access food through a combination of home production, stocks, purchase, barter, gifts, borrowing or food aid. Food access is ensured when communities and households and all individuals within them have adequate resources, such as money, to

obtain appropriate foods for a nutritious diet (IFRC, 2006). Access depends normally on income available to the household, distribution of income within the household, the price of food, and other factors such as individuals' access to market, social and institutional entitlement/rights. On the other hand, households seeking to preserve food security levels may resort to a number of coping strategies to gain access to food. These 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 (Boon, 2009). Food access can be negatively influenced by physical insecurity such as conflict, loss of coping options such as border closure preventing seasonal job migration, or the collapse of safety net institutions that once protected people with low incomes (IFPRI, 2008).

Food utilization emphasizes the appropriate use of food based on knowledge of basic nutrition and care, as well as adequate water and sanitation (WHO, 2011). Food utilization is dependent on the quality of the food, its preparation and storage method, nutritional knowledge, and the health status of the individual consuming the food (IFPRI, 2008). Certain diseases do not allow for the maximum absorption of nutrients and growth requires increased intake of certain nutrients. Food utilization is often reduced by endemic disease, poor sanitation, lack of appropriate nutrition knowledge or culturally prescribed taboos that affect access to nutritious food by certain groups or family members according to age or gender.

Food insecurity also refers to the inability of a household or individuals to meet the required consumption levels in the face of fluctuating production, price and income ((Bokeloh *et al.*, 2009; Moharjan and Chetri, 2006). The effects of food insecurity on individuals and a nation cannot be over emphasized since no country can develop with food insecure citizenry. Scientific evidence linking food insecurity to the deterioration in human, social, cultural and political wellbeing has been established in

the literature. For instance, food insecurity is linked with wide range of poor health and nutritional outcomes in adolescents, adults, and Children (Campell, 1991; Pinstруп-Andersen, 2009; Belachew *et al.*, 2011). Food insecurity also affects both psychosocial and physical health outcomes (Hadley and Patil, 2006; Hadley *et al.*, 2008) and leads to overall poorer health among members of food-insecure households (Hadley *et al.*, 2008; Chilton *et al.*, 2009), poor pregnancy outcomes, including low birth weight and gestational diabetes (Borders *et al.*, year)

Food insecurity in Ghana is concentrated in the rural areas. Majority of the Ghanaian rural population chronically suffer from mass poverty in more severe situations than the urban dwellers. In 2009, according to the report by Comprehensive Food Security and Vulnerability Analysis (CFSVA), 19% of rural households were food insecure as compared to 10% of urban households. Undernourishment and malnutrition are common in rural Ghana and very large proportion of peasant farmers live under the absolute poverty line (MoFA, 2013).

2.10 Linking Migration and food security

There are multiple and multi-dimensional linkages between female migration and food security; each can act to drive or prevent the other, and each can also influence the outcomes of the other. Migration can be a reaction to chronic food insecurity or a transitional food security or a strategy to improve food security. A number of studies including on female migrants from the northern part of Ghana are all results of hardship and food shortages in their places of origins. There was nothing for them to do, the only thing they could do was to migrate to areas where they can find food to survive; migration has become a coping mechanism for most households to enable them to survive with difficult economic conditions (Awumbila et al, 2011, Kwankye and Anarfi 2011). Food security relates to the availability

of food, access to food, and the use and stability of food supplies. There is strong consensus that climate change will negatively impact all these aspects of food security in Africa. Floods, drought, shifts in the timing and amount of rainfall, and high temperatures associated with climate change could directly affect crop and livestock productivity. Soil erosion caused by more frequent heavy storms, and the spread of pests and diseases affecting crops and livestock caused by warmer temperatures and other changes in climatic conditions, could indirectly affect food security.

Access to food could be affected by the impacts of climate change on productivity in important cereal-producing regions, which in combination with other factors could raise food prices and erode the ability of the poor in Africa to buy food. Extreme events that affect transport and other food system infrastructure could also threaten access to food. Changes in climate could affect the use of food by allowing the spread of diseases that prevent the human body from absorbing nutrients. Warmer and more humid conditions caused by climate change could affect the availability and quality of food as fresh foods may spoil, and pests and pathogens may damage food in storage (e.g. cereals, pulses, tubers). The stability of food supplies could be affected by changes in availability and access linked to climatic and other factors. Threats to food security in Africa stem from entrenched poverty, environmental degradation, rapid urbanisation, rapid population growth, and changes in climate and climatic variability.

“There is a growing consensus in migration studies literature that migration is a complex phenomenon, rarely explained by one single factor and the diversity of thematic areas of study is well appreciated, yet the specific relationship between migration and food security is a relatively more recent area of study” (CARE, 2010: 5). Although no well documented empirical link has been established between migration and food security, in Ghana, one could hypothesize a positive relationship between the two, considering

the food security dynamic in combination with the magnitude of migration and remittance flows. There is a general consensus that migration and remittances reduce rural poverty and contribute to the improvement of household living standards.

Recent evidence suggests that remittances, the portion of a migrant's income sent back to the family members left behind, are helping to improve the livelihoods of households in many low income countries (FAO, 2013; Tinajero, 2009; Kiawa & Jones, 2013; Banga & Sahu, 2010, Williams *et.al.* 2013).

Migrant households (especially those receiving remittances) normally have higher levels of income and consumption than non-migrant households (Taylor and Mora 2006; Airola 2007; Schmook and Radel 2008; Wouterse and Taylor 2008). In terms of consumption patterns, several household survey-based studies showed that migrant households with remittances tended to spend more than non-migrant households on durable goods and productive activities (Zarate-Hoyos, 2004; Adams 2006; Taylor and Mora, 2006; Airola, 2007).

Most people would agree that remittance has the potential to alleviate poverty, increase food security and eventually promote development, especially for the rural poor who are isolated, undereducated and lack the means to gain greater access to local resources (Yang, 2011, Frost *et al.*, 2007, Adams *et al.*, 2005, Thieme *et al.*, 2005). But, it is difficult to measure the access to sufficient dietary needs (Barrett, 2010) because the determinants of household's subjective experiences on food access are context specific (Coattes *et al.*, 2007).

Just as women's economic contribution to their families and communities has become increasingly significant, so too has women's presence in migration flows. This is reflected in increasing percentages of women in migration flows to all world regions (UN, 2002).

Dugbahah summarizes that women in rural Ghana are the main socio-economic backbone of the economy. Despite their contribution, gender imbalance continues with regards to the division of labour and access to resources, which compel women to take greater responsibilities and heavier workloads than men (Dugbahah, 2007). Women's and men's economic roles within the household differ according to seniority and marital status (Pickbourn, 2011). The household head is responsible for providing shelter and staple foods for three meals per day. However, based on a study by Al-Hassan and Poulton (2009), Pickbourn (2011) described that household heads increasingly provide food for the evening meal only. Consequently, married women with children are expected to provide food for the family for the other meals. Gender ideology assigns women the responsibility to ensure that their children have enough food and do not starve. Married women with children are also often responsible for children's clothing, educational expenses and other needs (Pickbourn, 2011). When men are not able to meet their food supply obligations, women are primarily responsible for making up for the household's food shortages.

In order to meet all above-mentioned obligations, married women with children in northern Ghana engage in several economic activities that are mostly low-return, small-scale production activities, such as pito brewing, a sorghum beer, or Shea processing. In times of crisis, women's income earning activities are crucial for the household's well-being. Men and women do not pool their income, thus granting women full control over their cash income (Pickbourn, 2011).

The movement of rural farmers into either the rural or urban areas with fractured and weak infrastructure often has negative consequences for the health of the migrant individuals exposing them to a new set of hazards. Overcrowded cities or hostile communities have difficulty absorbing the influx of new migrants trying to earn an income to help pay their land taxes, government loans on fertilizer, or other farming inputs. The families of these migrants who have stayed at home in the villages are similarly struggling with having enough food, water, or health care as they await remittance. Thus the “push” and “pull” mechanisms that are influencing migration or movement to other sub-Saharan regions in Africa are increasingly important to understand as the global population increases, and as the climate and environmental trends continue to threaten rural livelihoods.

Migration has been identified as one of the major coping strategies by some communities under studied (CARE, 2012). It was in the past described as a thing of pleasure and sight-seeing (in their words, “travel and see”) and as Abdul-Korah (2004) puts it “to see the world.” However, according to recent studies, many people now migrate because they need to earn money to support their families and acquire basic needs before getting married (Primavera, 2005).

Other research on environmentally induced migration in Ghana (van der Geest, 2011; Schraven, 2010) highlighted the different push and pull factors of migration, among them prominently economic reasons due to livelihood or food insecurity. Some authors mentioned small-scale irrigation for dry season tomato gardening as local livelihood adaptation has become an alternative to seasonal migration in parts of the Upper East Region (Schraven, 2010).

Another important issue worth mentioning is that the degree of economic diversification and dependence on rain fed agriculture are important factors shaping migration patterns in farming communities within northern Ghana especially. Whilst households with enough resources were using migration as a risk management strategy sending their members out, those with lack of resources are unable to do so.

Various forms of population mobility and its impacts on source and destination communities have been extensively studied. However, despite food security being a global concern, empirical evidence on how migration can influence household food and nutritional security outcomes seems to be scanty in the existing literature (Choithani, 2013). Agricultural production, including access to food, in many African countries and regions is projected to be severely compromised by climate variability and change. The area suitable for agriculture, the length of growing seasons and yield potential, particularly along the margins of semi-arid and arid areas, are expected to decrease. This adversely affects food security and promotes migration (Hirsch, 2009).

Whilst people ponder over the relationship between food security and migration, Matiza *et al* (1989) in their studies in Malawi point out that, it is often not possible to differentiate between migration which occurs regardless of the household food supply situation, and migration specifically brought about food insecurity. To them, there may be other factors, but then food insecurity serves to hasten the decision to migrate in search of employment or better living conditions and that migration aimed specifically to mitigate food insecurity. It further went on to say that, people migrate whether there is food insecurity or security. The perception is that, there are other opportunities out there, not until one moves out, one will not find them.

Other case studies provide evidence of the link between migration and food security. For example, Blare (1994) observes that when food requirements are not satisfied, households pursue intensification of farming strategies, income-generating strategies and off-farm employment or agricultural wage labour, and migration to other rural areas in search of better and/or more land. Depending on who migrates, the effects on the household vary, the impact may be slight if young single women migrate but if married women with young children migrate, the remaining relatives (especially mothers, sisters and grandmothers) are overburdened with childcare and household work as well as work on the farm. Nonetheless, migration can be empowering: migrant women's increased earnings, skills, social identity and networks can boost their self-confidence and decision-making power in the household and community, making them important agents for cultural change (INSTRAW, 2006).

Finally, there is a common view that migrants differ significantly from non-migrants in terms of resource use behavior, resource extraction technologies, and knowledge of local ecosystems in rural areas of destination (Browder, 1995; Garland, 1995; Pichon, 1997; Perz, 2003). However, consistent support for such differences between migrants and non-migrants in natural resource use is not always found in empirical research. Although it is often claimed that settlement of agricultural migrants in or near environmentally sensitive areas such as rainforest and wetlands leads to serious deforestation and environmental degradation (Bilsborrow, 2002), some studies have shown that environmental degradation is not particularly associated with migrant households (Sierra, 1999; Cassels *et al.*, 2005). In addition, several studies relevant to the environmental consequences of migration in rural areas revealed that rural out-migration led to local labor shortage, which in turn disrupted traditional resource conservation practices (Collins, 1988; Garcia-Barrios and Garcia-Barrios, 1990; Zimmerer, 1993). Thus,

we may expect to find significant differences between migrant and non-migrant households regarding resource use and management in rural areas of origin.

In summary, research on migration and rural livelihoods compares the agricultural production, agricultural technology use, income and consumption, and asset accumulation of migrant and non-migrant households in migrant-sending areas, while research on the environmental impacts of rural migration focuses on the differences between migrants/migrant households and non-migrants/non-migrant households in resource use and conservation in areas of destination. This study contributes to the existing literature by examining the migration effects on household food security between migrants who travel short distances (intra-regional migration) and migrants who travel long distances (i.e. inter-regions).

The differing views on the link between migration and women point to the fact that it is difficult to determine the overall impact of migration of women on food security since there are other factors causing migration (Castles, 2002; Black and Sessay, 1997; de Haas, 2001; Perez-Veyna *et al.* 2007). Migration is used by most rural dwellers as an adaptive strategy; through remittances they are able to improve their food insecurity situation. Therefore, effective management of migration include positive transformation in society (Castles and Delgado-Wise, De Haas, 2005; 2008; IOM, 2006). These transformation include land reforms, access to credit, new technology, improvement of health, education and other social facilities (Portes, 2006; Castles and Delgado-Wise, 2008). Migration can influence food security and at the same responsd to food security (Chilimampung, 2002, Crush - 2007; Ginn - 2012).

2.11 Role of Women in Ensuring Household Food Security

Many studies show that although there is a wide diversity in household production patterns, women in all regions play a predominant role in household food security through agricultural and food production. The pooling of incomes of household members is not often a precondition for survival as neither female nor male members alone tend to receive adequate incomes to support all household members. The relative share of income that a household member contributes to particular items of essential expenditure are often a function of societal traditions. However, the direct responsibility for household food provision largely falls on women, and that the improvement of household food security and nutritional levels is associated with women's access to income and their role in household decisions on expenditure.

Women produce more than 50 percent of the food grown worldwide, according to FAO estimates (FAO, 1995). While there is still insufficient gender disaggregated data to give exact figures on women's contributions to agricultural production everywhere in the world, disaggregation of data is increasing. Women's contributions to farming, forestry and fishing may be underestimated, as many surveys and censuses count only paid labour. Women are active in both the cash and subsistence agricultural sectors and much of their work in producing food for the household and community consumption, as important as it is for food security, is not counted in statistics.

The roles that women play in agriculture vary from region to region and country to country. Men and women often have complementary roles, sharing or dividing tasks in crop production, livestock raising, and fishing and in care and use of the forests. In other cases, women and men have distinctly different tasks and responsibilities for certain crops and livestock, fish and forests. Where large-scale cash cropping has been introduced, the tendency remains for men to become involved in this sector, especially when it is highly mechanized, with women becoming increasingly responsible for household

food production and small-scale cash cropping with low levels of technology. Women also supply a significant proportion of the agricultural labour on plantations.

In developing countries, rural women and men play different roles in guaranteeing food security for their households and communities. While men grow mainly field crops, women are usually responsible for growing and preparing most of the food consumed in the home and raising small livestock, which provides protein.

Rural women also carry out most home food processing, which ensures a diverse diet, minimizes losses and provides marketable products. Women are more likely to spend their incomes on food and children's needs - research has shown that a child's chances of survival increase by 20% when the mother controls the household budget. Women, therefore, play a decisive role in food security, dietary diversity and children's health. But gender inequalities in control of livelihood assets limit women's food production.

In Ghana, studies found that insecure access to land led women farmers to practise shorter fallow periods than men, which reduced their yields, income and the availability of food for the household. In Sub-Saharan Africa, diseases such as HIV/AIDS force women to assume greater caretaking roles, leaving them less time to grow and prepare food.

Women are crucial in the translation of the products of a vibrant agricultural sector into food and nutritional security for their households. When women have enough 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 for the care and feeding of children. Women are the key to food security for their households (Quisumbing, Brown, Feldstein, Haddad, & Peña, 1995).

In rural areas the availability and use of time by women is also a key factor in the availability of water for good hygiene, firewood collection, and frequent feeding of small children. In Sub-Saharan Africa, transportation of supplies for domestic use, fetching fuel wood and water is largely done by women and girls on foot. Fields dedicated to food crops are often farther from home than those related to cash crops. Because women must also perform domestic tasks, they must spend a considerable amount of time travelling between their home and the fields (Alderman, 2005). In addition to their crucial roles in food production, women contribute to food security in other significant ways.

Given women's crucial roles in and contributions to food security, any efforts to reduce food insecurity worldwide must take into consideration the factors and constraints affecting women's ability to carry out these roles and make these contributions, with a view to removing the constraints and enhancing women's capacities.

2.12 Theoretical Underpinnings

While theories and models on migration are numerous, determining which of them effectively tackles migration patterns and factors reflects a challenge due to the complex and context-specific nature of migration. Therefore, this section has reviewed a number of migration theories in order to provide a more comprehensive and analytical arena in collecting and analysing data concerning migration of women and its effects on household food security.

The literature shows that there are many theoretical connections which can be found in migration research. From early times, migration research in Ghana, for that matter, has been employing neo-classical equilibrium perspective, particularly in analyzing labour migration to mining, ports and cocoa growing areas of Ghana. The neo-classical equilibrium perspective on migration postulates that, migration movements have propensity to follow definite spatial economic equilibrium, i.e. people move

from relatively low to high income areas or from densely to thinly populated areas (de Haas, 2008). A rise in employment opportunities (on farms), the development of industry and higher wages (mines and ports) in certain areas of Ghana made such areas economically attractive and therefore induced migration from other deprived or resource poor areas (Agarwal, 1997; Anarfi *et al*, 2000).

Ravestein's work on migration has become the logical starting point in the discussion of "laws" and theories on migration. Using data from the 1881 censuses of England and Wales, Ravestein postulated that people migrate mostly because of economic reasons and that distance related to migration. According to Ravenstein, most migrations occur over short distance in which case, the number of migrants tends to decline as distance increase. The second postulates that village dwellers tend to move first towards nearby towns and from there towards the cities, giving rise to step-wise migration. The streams and counter-streams of migration show that each main current of migration produces a compensating counter stream. In essence, to every stream of rural-urban migration, there is always a counter-stream of urban-rural migration. This undoubtedly offers a partial explanation for the return migration to rural areas (Bogue, 1969).

This hypothesis still holds even today in view of the fact that most rural areas are still economically deprived compared with the urban centres, and since the main motive of rural-urban migration in Africa is largely economic, rural dwellers continue to move to seek improvement in their economic status. The view that females dominate in short distance migration can be explained in terms of patrilocal marriage arrangements, especially in the northern parts of Ghana, where a wife must move and stay permanently in the husband's home. While maintaining that economic motives are the most dominant causes of migration, his laws further indicate that technological development invariably increased the tempo of migration (Tanle, 2003; Adepoju, 1995; Bogue, 1969).

The literature also highlights some migration researches in Ghana which are found within the ‘Push-Pull’ theoretical framework postulated by Ravenstein’s (1889) work on ‘Laws of Migration’. Ravenstein concludes that unfavourable conditions in one place ‘push’ people out and favourable conditions in an external location ‘pull’ them in and that the primary cause of migration is economic in nature, are still valid and have been observed in many studies conducted in Ghana.

Synnove (1999) in a case study of female migration to Accra observes that girls from all socio-economic classes move over longer distances, and move more directly to Accra compared with what obtain some thirty years ago. Synnove (1999) also has noted that some girls move over longer distances in recent times. This finding is contrary to the view that most females migrate over short distances. Moreover, much doubt has been expressed in recent times as to whether village dwellers actually move first to smaller towns and later, to the cities (Synnove, 1999).

The theory of intervening obstacles by Lee (1966) also features in many migration research and findings which have indicated that, the distance factor as proposed by Ravenstein (1889) as a determinant of migration could be overcome by factors such as a person’s education and knowledge of potential receiving population or family ties. Lee divided these factors into “push” factors (factors associated with the area of origin), “pull” factors (factors associated with the area of destination), intervening obstacles and personal factors (Lee, 1966:50). He further went on to hypothesize that both area of origin and destination have positive forces which hold people within the area or pull others to it, negative forces which repel or push people from the area, and zero forces which has no effect (Ibid). Lee hypothesized that factors associated with origin area conditions would be more important than those associated with destination areas. To him, migration is selective, human beings are not a random sample of the population in the origin. Something needs to push you out or attract you at the other side. Meanwhile the theory does not explain why some people despites the deteriorating factors in their places

of origin do not migrate. Is it because they are comfortable with the situation or they do not have what it takes to move out?

However, theories under the neo-classical economic school of thought generally perceive migration patterns as resulting from physical factors and rational judgement and indeed reflect a matter of cost-benefit analysis. It justifies migration mainly as a development process that moves labour in places where it is needed. This also confirms Tutu's assertion that, the presence of relatives and friends in destinations accelerate the migration's decision and process (Tutu, 1995).

In an effort to understand migration patterns and factors, (Ravenstein, 1889) argues that migration often occurs in a chain manner. First, a migrant moves from the rural area to the nearest small town and subsequently to a larger town. Moreover, migration declines as the distance increases, with people who move over a long distance tending to move to a commercial or industrial centre.

Ravenstein further adds that migration always occurs in both directions (i.e. rural-urban as well as urban-rural migration), meaning that migration is rarely unilateral. Furthermore, the rural population is more eager to move than the urban population, while migration increases due to technological change and the movements made by migrants over time (Ravenstein, 1889).

Drawing mainly on Ravenstein's laws of migration, Lee (1969) proposes that rural-urban migration exists due to certain push factors in the sending areas, notably fewer life opportunities concerning social services, such as, education, health and employment, as well as natural calamities such as droughts, famine political, insecurity and poor social services. On the other hand, pull factors, particularly the presence of employment, better living conditions, political and religious freedom and better social services attract migrants to urban centres (Lee, 1969).

Using the ‘principle of least efforts’ by Zipf (1945), he hypothesised that the number of migrants from one city to the other is a function of the distance separating these localities (Adepoju, 1985 cited in Tanle, 2003). To him migration varies inversely with distance or the propensity to migrate diminishes with distance. The difference between Zipf’s theory and that of Ravenstein is that, distance for Zipf, is interpreted in economic, physical and cultural terms. However, Stouffer’s theory (1963), stressed that, the volume of inter-area migration is a function of intervening opportunities, the number of people in each area and the number of competing migrants. The theory highlights the influence of economic opportunities between places of origin and destination, and the effects on the choice of final destination. Yet, the socio-cultural factors that are important determinants in female migration were not considered. Unlike the systems theory which embodies the background variables such as the physical environment, social institutions, culture, kinship systems, job opportunities and government policies at both places of origin and destination.

The Harris-Todaro migration model (1970) considers the migration scenario as a result of an individual’s cost benefit analysis, according to which an individual migrates based on the likely benefits accrued from the destination area [urban area] in comparison to the current place [rural area] (Todaro and Smith, 2006). Todaro’s model is strongly supported by the New economics of labour migration (NELM) theory, which views migration as being determined by households and communities, given that these units play important role in the migration decision-making process (Taylor, 1999). In this case, migration is not only determined by the desire to maximise benefit, but is also catalysed by “needs to minimise risks and loosen constraints threatening individuals, families and communities” (Mafukidze 2006: 7).

On the other hand, the Dual economy migration model (Lewis, 1954) maintains that modern [industrial] society [urban] attracts workers from traditional society [rural areas] due to attractive wages

[employment] that guarantee migrants and households a higher quality of life as opposed to remaining in the rural areas. This generates surplus and savings in the sending households' [rural] area, while redirecting labour in the urban areas where it is needed (Lewis, 1954).

However, neo-classical migration theories have been criticised for not paying sufficient attention to the diversity and internal stratification of societies in relation to migration. Specifically, push or pull factors may work out differently for different individuals and societies (Haas, 2008). Moreover, they narrowly consider economic factors and rationality aspects as the only determinants of migration, neglecting other non-physical, economic or rationality aspects such as the role of institutions, individuals' skills and aspiration (Haas, 2008). The models fail to acknowledge the social environment of the migrants' origin, while they also neglect unfavourable structural or institutional circumstances (Mafukidze, 2006).

2.13 Conceptual Framework of the Study

The study draws from the conceptual issues discussed to derive a conceptual framework within which the research process can be described. The purpose of the framework is to provide a synoptic view of the study and have a pictorial representation that can succinctly describe the study. Thus, the conceptual framework of this study attempts to link all the aspects of the study and shows clearly in a simplified format, the processes involved in the study to achieve its objectives.

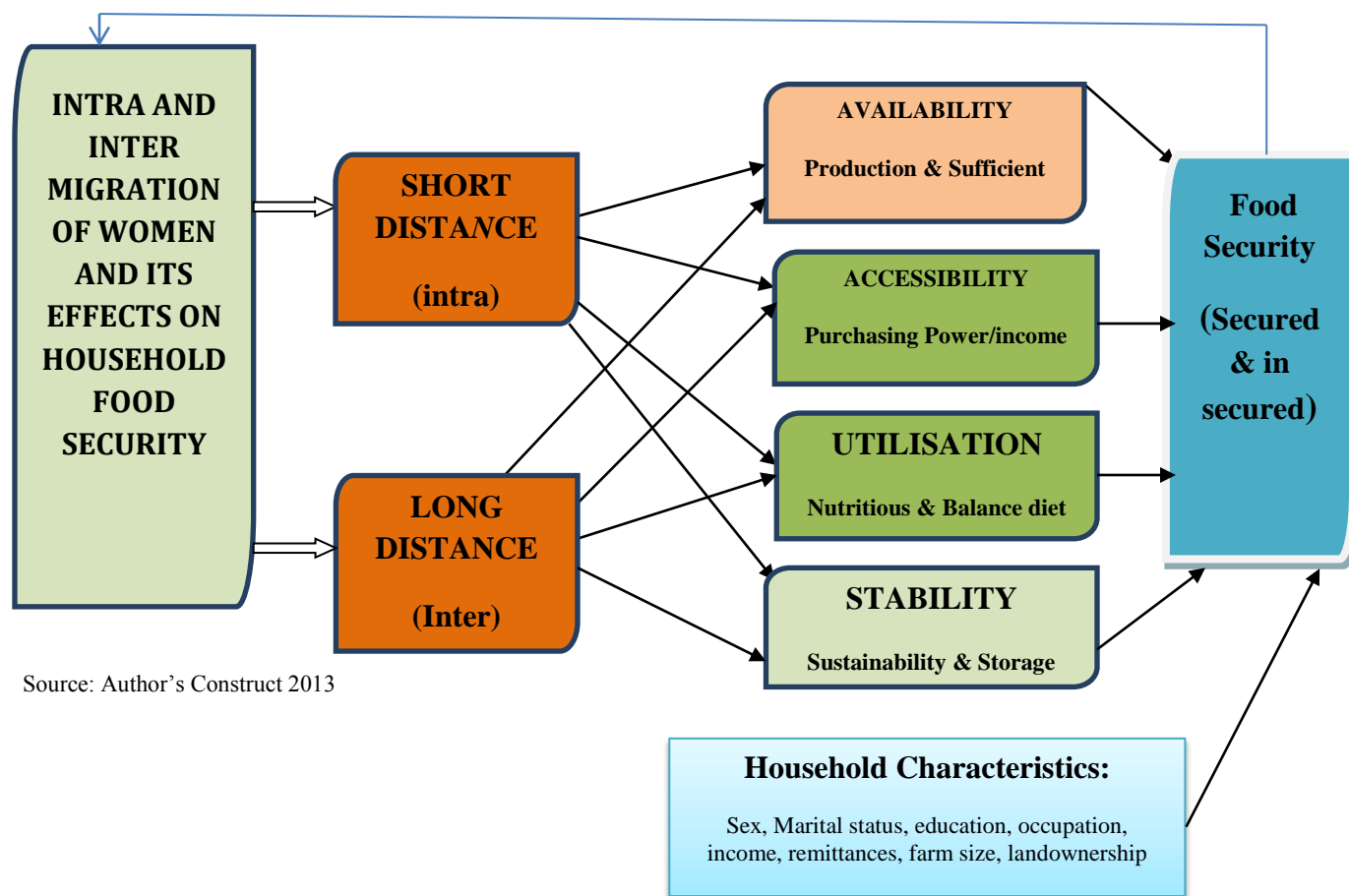
Fig 2.1 : Conceptual Framework of the study

Figure 1 above illustrates intra and inter-regional migration as a response to household food security as well as an influence on household food security. Intra and inter-regional migration flow are the traditional push-pull factors. “Push factor” refers to the deteriorating conditions at home that compel the migrants to leave home. Examples include unemployment, food shortages, low agricultural productivity, erratic rainfall among others. Whilst “pull factor” refers to those attracting opportunities found elsewhere that attract migrants. There are many factors that cause voluntary intra and inter-regional migration, such as job opportunities, depletion of soils, better income opportunities just to mention a few (Kinuthiab, 2003; Awumbilia, 2008; Yeboah, 2008). All these factors enable one to enjoy a better lifestyle, coupled with the provision of social amenities such as electricity, schools among others. Meanwhile, the choice

of destinations is very important to migrants. These would-be migrants hear stories about improvements of lives of those who had left and returned, yet they refuse to think about the risks involved in such movements. The diagram above (Fig 1) illustrates the effects the choices of destinations have on the four pillars of household food security, namely: food availability, food accessibility, food utilization and food stability. Irrespective of the choice one makes in terms of movement, those four pillars are affected and when they are affected, it leads to households being either food secure or food insecure. There is no doubt that, apart from these factors, the controlled variables are also likely to influence a household being food secure or not food secure.

Migration from the rural areas causes changes in the four pillars of food security as well as the food security situation of the households. The changes in the four pillars affect the food situation of these households. The choice of out-migration in a particular community also has direct impact on agricultural performance of that community as well as food security. The intra and inter-regional migration impacts on the rural areas are perceived to be both positive and negative. Positive in the sense that, when the women leave, if all things be equal, they are able to send remittances back home which replaces the loss in labour and agricultural productivity which are seen as the negative effects. These have negative consequences on the well-being of the members of the households. Migration also affects the livelihoods of people in places of origin through remittance from migrants. Where remittances are flowing, the food security status is likely to improve and vice versa (see Figure 1).

Intra and inter-regional migration are therefore perceived to bring the following changes in the household food security situation: changes in availability of labour, changes in availability of production as well as availability of land. Therefore, the perceived effects on the four pillars of food security in the household resulting from the intra and inter regional migration of these women affect agricultural output

in general as well as food security. Consequently, food insecure households would be tempted to migrate elsewhere in search of better livelihoods.

2.13 Conclusion

This chapter has critically reviewed the literature pertinent to the context of this study in the light of the key research questions and theoretical frameworks guiding this thesis. Extensive literature on migration patterns, types and factors were highlighted, as well as the determinants of female migration and household food security. In addition, gender analysis on migration and relationship between migration and food security were all reviewed.

However, the literature is silent on the impact of female migration on household food security, how members of the households cope with loss of female migrants and whether coping with migration increases or depletes households' resilience. The literature stipulates patterns and trends of migration together with determinants of migration, however, it did not discuss the role men play when the women leave. The extensive review of the literature suggests that not much has been explored on rural to rural migration, for that matter intra and inter migration of women and its impact on household food security.

Both migration and food security are becoming increasingly important in public and political agendas, and in research. Nevertheless, the gender perspective is almost completely absent in this discussion. In the analysis conducted on the relationship between migration and food security, the consequences of female migration on food security, has not been addressed thus far. It is for this reason that the researcher wants to contribute to the debate. It is hoped that the findings would give a better understanding of the phenomenon and can inform policy makers in the country. The last part of the chapter has presented the theoretical underpinnings of the study as well as the conceptual framework guiding the study. The next chapter will discuss the methodology used for the study.

CHAPTER THREE

METHODOLOGY

3.0. Introduction

This chapter gives an account of the methods used for the study. The methodology is an important part of the study, as it reflects on the quality of the data collected, findings and interpretation of the data. The chapter details the study tools and techniques employed for data collection. The study population, and how the study sample was selected are also described and details of study variables are provided. Both data handling and ethical considerations are indicated in this section followed by data analysis. The weaknesses and limitations of the study design are acknowledged in this chapter.

3.1. Study Design

The study employed the mixed method approach using both qualitative and quantitative methods. The quantitative method was used to measure the consequences of female migration on household food security and also to check the contribution made by both intra and inter-regional female migrants. The qualitative explored the community knowledge and perceptions about female migration, the reasons for female migration, the consequences of female migration on household food security as well as the financial contribution by migrants.

3.2. Study Area

3.2.1 Description of the sites

The study was conducted in twelve communities in four districts in the Upper West region in Ghana. The Upper West region is located to the north-western corner of Ghana with a total size of 18,478 km²

forming about 12.7% of the proportion of the country (GSS,2010). The region shares borders to the north with Burkina Faso, to the east with the Upper East Region, to the south with the Northern Region and with Côte d'Ivoire to the west. The region covers a geographical area of 18,476 square kilometres, which is about 12.7% of the total land area of Ghana. The region is located in the Guinea Savannah belt. Among the trees commonly found in this region are shea, baobab, dawadawa and neem, which are able to withstand drought. These trees provide fuel for domestic use as well as wood for the construction of houses (GSS,2010).

The climate of the Upper West Region follows a general pattern identified with the three northern regions. It has a single rainy season from April to September, with average annual rainfall of about 115 cm. This is followed by harmattan, a prolonged dry season characterized by cold and hazy weather from early November to March, and an intense hot weather that ends only with the onset of early rainfall in April. The mean monthly temperature ranges between 21°C and 32°C. Temperatures rise to their maximum (40°C) in March, just before the onset of the rainy season, and fall to their minimum (20°C) in December during harmattan which is brought about by the north-east trade winds (GSS,2010).

The region has an almost entirely flat topography, especially west of the capital Wa and around Lawra, better referred to as the Wa-Lawra plains. The height of the land is generally between 275m and 300m above sea level, except eastwards of Wa where the land rises over 300m above sea level. Further eastwards, the land falls to about 150m above sea level.

Many types of soil are found in the region. They include the Savannah ochrosols, tropical brown yeast, terrace soils found along the banks of rivers and streams, and groundwater laterites. These soil types favour the cultivation of a variety of grains, pulses and tubers and cotton. One crop commonly cultivated on the terrace soil type is tobacco (GSS, 2010). The inhabitants of present day Upper West region were

already quite mobile in pre-colonial times, but they migrate over shorter distances they moved in search of fertile land and bountiful hunting grounds and also to escape slave raiders (Lentz, 2006). Apart from the short distance migration, there was also some forced migration flow of captured slaves were sold to traders and sent to Ashanti, the Gold Coast and the Americans (Der, 1998).

The Upper West Region is one of the poorest regions in Ghana (GLSS, 2005). It lags behind other regions in terms of development especially in education, health and infrastructure. The poverty trends of the Upper West Region further leans credence to this assertion. It is a further demonstration that the socio-economic nature of the Upper West Region is poor and needs improvement through concrete evidence such this research (GSS, 2010). The population of the UWR in 2000 was 576,583, but this increased to 702,110 in 2010. This increase (GSS, 2000, 2011) represents an annual growth rate of about 1.8%. While this figure is certainly below the national annual population growth rate of 2.4%, it has considerable implications for agriculture productivity and land use given already extreme environmental stress which the UWR is currently experiencing (Van der Geest, 2011). Subsistence agriculture constitutes the main economic activity of the region employing over 72% of the region's economically active population. Crops commonly cultivated in the region include maize, guinea corn, millet, yam, rice, soya beans and cotton, in addition to the rearing of cattle, goats and sheep. Besides agriculture, there are limited opportunities for employment in other sectors of the economy.

The area is generally well drained. The main rivers are the Kulpawn and the 'Black Volta and their tributaries. The mean monthly temperatures vary from 32° C in March to 24° C in August. Relative humidity is high during the rainy season (70 to 90 per cent) but can fall to as low as 20 per cent during the dry season(GSS,2010). The region has an annual rainfall average of about 1000mm and 115 centimetres and most of this falls during the rainy season months of June–August, compared with the southern half of the country which averages over 1250mm annual rain almost evenly distributed over the

entire year (Rademacher-Schulz & Mahama, 2012). Rainfall is seasonal and lasts from May to October and there is a long dry season from November to April.

However, the five-month rainfall period in the UWR conceals the reality that the pattern of rainfall is highly sporadic and spatially variable within different areas of the region. Compared to the rest of the country, rainfall and moisture conditions in UWR and the two other regions located in the north of Ghana are unfavourable for all-year rain-fed agricultural activities. The predominant form of vegetation in the UWR is guinea savannah, also referred to as the dry savannah. This comprises mainly grasslands with some shrubs interspersed with short trees generally less than 30m high. The land is generally bare during the dry season. High evapo-transpiration during the long dry season makes crop cultivation extremely unviable without the aid of irrigation. The region generally lacks irrigation facilities, significantly limiting the ability to engage in agriculture during the dry season.

The most common economic trees are the '*Adansonia digitata*', '*Parkia bicolor*', '*Acacia confusa*' and the '*Butyrospermum parkii*', (Dickson and Benneh, 1988).

3.2.1.1 Demographics

The population of the region as enumerated in the 2010 Population and Housing Census (PHC) is 702,110, with 48.6 percent (341,182) males and 51.4 percent (360,928) females. The population below 15 years constituted 41.7 percent of the total, while those aged between 15 and 64 constituted 52.3 percent. The rest (6.0%) were persons 65 years and older. The proportion of the urban population was 16.3 percent in 2010. The regional population density was 38.0 persons per square kilometre, an increase from 31.2 persons per sq. km. in 2000. The region is divided into nine administrative districts, as follows: Wa West, Wa Municipal, Wa East, Sissala East, Nadowli, Jirapa, Sissala West, Lambussie/Karni and Lawra (Table 3.1). Among the nine districts in the region shown on the table

below, Wa Municipal had the highest share of 15.3 percent of the population, while Sissala West District had the lowest share of 7.1 percent.

Table 3.1: Population by district

Population by district:

District	Population	Share of district population (%)
Total	702,110	100.0
Wa West	81,348	11.6
Wa Municipal	107,214	15.3
Wa East	72,074	10.3
Sissala East	56,528	8.1
Nadowli	94,388	13.4
Jirapa	88,402	12.6
Sissala West	49,573	7.1
Lambussie Karni	51,654	7.4
Lawra	100,929	14.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

3.2.1.2 Political and Administrative Structure

Since its creation in 1983, the Upper West Region has had Wa as its capital and seat of government and administration. The Local Government Act of 1993 establishes and regulates the local government system in accordance with the 1992 Constitution. The Act stipulates the maintenance of districts in

existence immediately before the coming into force of the 1992 Constitution (GSS, 2010). The main administrative structure is the Regional Coordination Council (RCC), headed by the Regional Minister. Other members of the RCC include representatives from each District Assembly, regional heads of decentralized ministries, and representatives of the Regional House of Chiefs.

3.2.1.3 Economy and Living Conditions

The economy of the Upper West Region is mainly agrarian, with the people engaged in the cultivation of food crops (grains such as millet, sorghum and maize; roots and tubers, particularly yams and legumes, including groundnuts and beans. Households in the region are also actively engaged in rearing livestock, including cattle and ruminants. The majority of the people of the Upper West Region are peasant farmers. The average farm size is 25 acres per farmer and farming is mostly done on family basis as a daily activity except for rest days. Farming is both on subsistence and commercial basis. The population depends largely on rainfall to cultivate crops like guinea corn, maize, millet, rice, soya beans, groundnuts, cotton, yam, cowpea, and sorghum. While maize, guinea corn and groundnuts are cultivated for domestic consumption – with Guinea corn also used for the pito beverage – cotton and cowpea are mainly produced as cash crops.

The people are also engaged in spinning, weaving and smock designing. They produce musical instruments such as the xylophone and are involved in pottery, blacksmithing and carving. Tourist attractions in the region include the Wa Na's Palace and Dondoli Sudamic (Larabanga) Mosque, the Jirapa Na's Palace, the all-stone Gothic art church in Nandom and the hippopotamus sanctuary at Wechiau. Other attractions are the Gwollu Slave Defence Wall and slave site caves as well as George Ekem Ferguson's tomb (GSS, 2010).

3.2.1.4 Illiteracy/ Education level in Upper West region

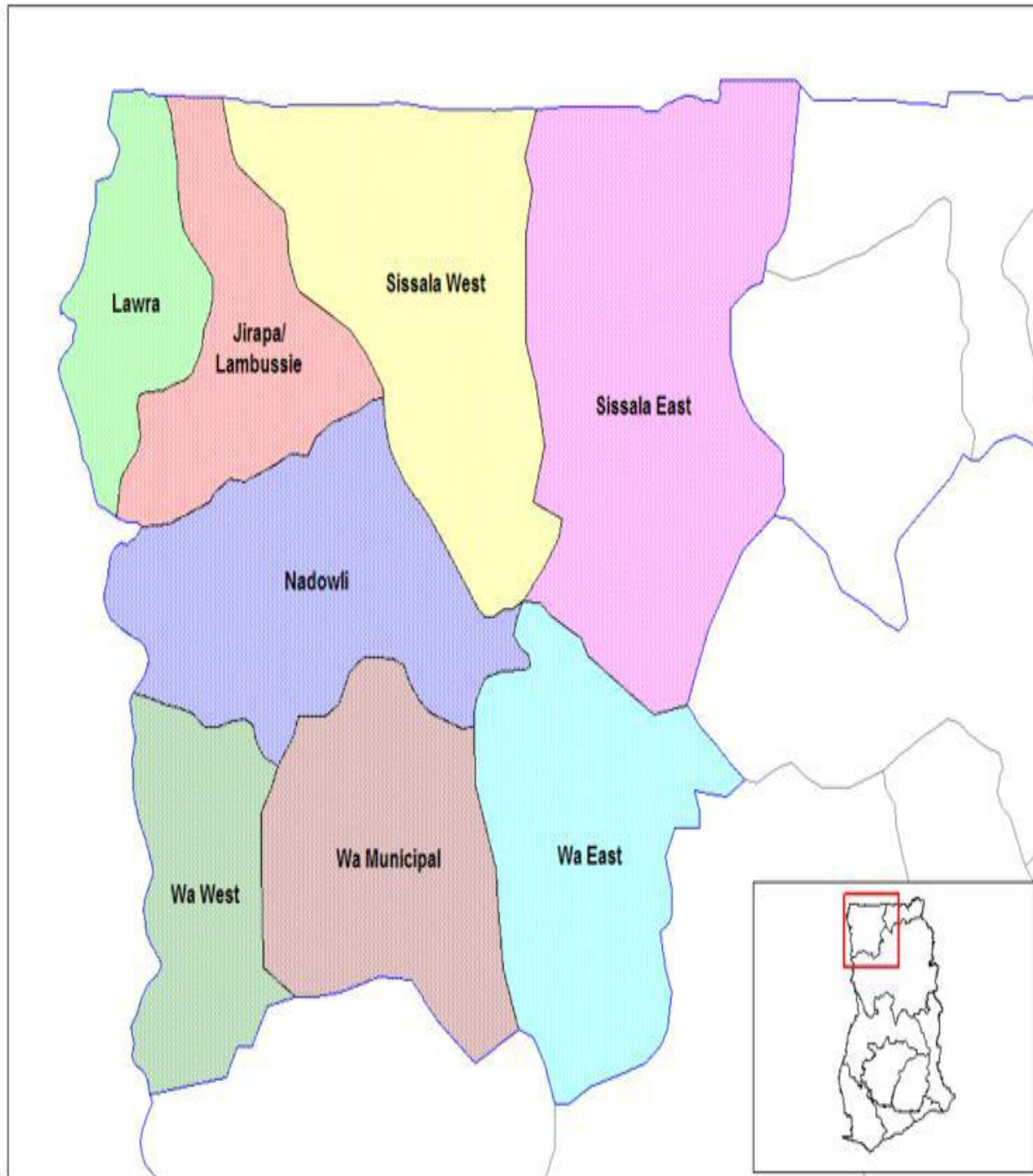
The 2010 population census report indicates that more than a half of the population (59.5%) in Upper West Region is illiterate. This is more than twice as high as the national average of 25.9 percent. The data also indicate that less than one-fourth of the population were literate in English and a Ghanaian language while about 15 percent were literate in English language only. The level of literacy was higher for males (49.5%) than for females (33.5%). The data further showed that the proportion of males (51.5%) and females (66.5%) who are not literate is far higher than the national average of 19.8 percent males and 31.5 percent of females (GSS, 2010)

3.2.1.5 Religion

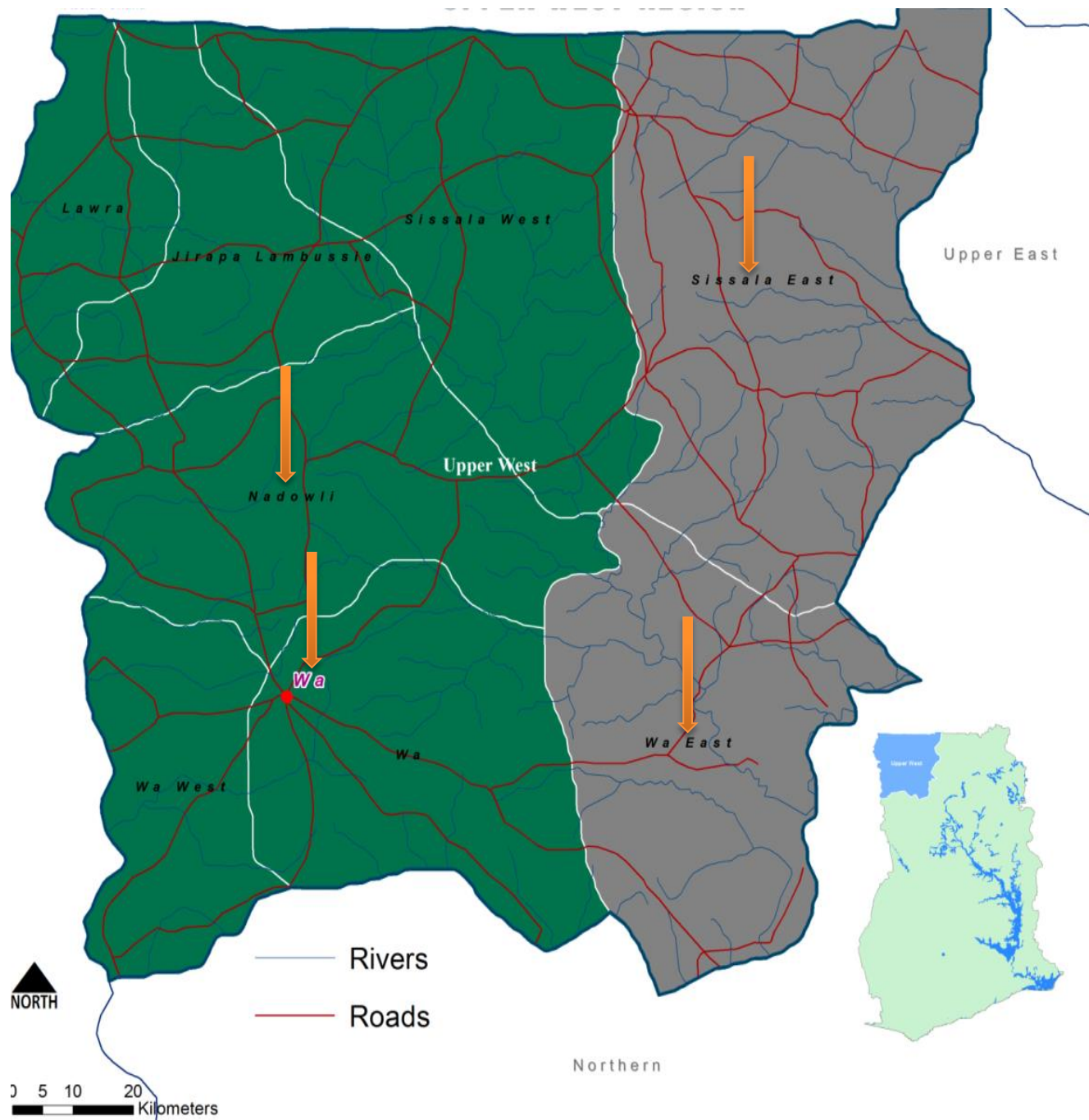
The predominant religious group in the region is Christianity even though there are other religious groups present. There are three main religions in the region. Christianity (comprising Catholics, Protestants, Pentecostal/Charismatic, and other denominations) leads with 44.5 percent, followed by Islam (35.6%) and African traditional religions (13.9%). Christians constitute the largest religious group in five of the nine districts – Lawra (72.3%), Jirapa (65.9%), Nadowli (62.8%), Lambussie Karni (50.7%) and Wa West (38.5%). It can be seen that Christians have a very strong presence in Lawra. Islam, on the other hand, has its strongest presence in Sissala East (88.0%), Sissala West (70.3%), Wa Municipal (65.9%) and Wa East (57.9%). Adherents of traditional religion are largely in Wa West with 29.5% of the population and a fairly good presence in Lambussie Karni (19.2%), Jirapa (18.8%) and Lawra (16.9%).

Catholics constitute the majority of Christians in all districts, ranging from a low 5.5 percent in Sissala East to a high 63.9 percent in Lawra. The Pentecostal/Charismatic group is the second largest denomination, after Catholics. Even though Traditional Religious belief exists in the region, it has been over-shadowed by the huge presence of Christianity and Islam. There is a slight variation between male and female adherents. Female Christians are more than their male counterparts in almost all the districts except in Wa Municipal where the percentage is lower for the female Christians than their male counterpart. On the other hand the percentage of female Islam adherents is higher for males than for females in almost all the districts except in Wa Municipal where more females than males profess the Islam religion (GSS, 2010).

Map of Upper West region (Fig 3)



Map of the selected districts (Fig 3.2)



3.3 Target Population

The target population of this study was mainly the household heads in twelve (12) communities in four (4) districts in the Upper West region; namely Wa East, Wa Municipal, Nadowli and Sissala East, where migration is said to be high with reference to the population by birth and district table prepared by the Ghana Statistical Service (2010).

3.3.1 Inclusion Criteria

The districts were selected based on the following reasons:

First, the districts have a long history of out-migration to both urban and rural areas in other regions. There has been so many migrations of significant numbers of both young and old women in more recent times. Many of them remain in their new locations for many years especially the youth/single ones.

Secondly, the selected districts are known to be peasant farmers, many of whom experience food shortages almost every year.

Finally, based on the World Food Programme Report of 2009 declaring the Upper West as a region with the highest rate of food insecurity.

In all, four districts, out of the nine districts in the region, were selected based on the migratory patterns from the 2010 Population and Housing Census report. These are Wa East, Sissala East, Sissala West and Nadowli districts (intra migration) with Wa Municipal having the highest rate in inter regional migration.

The age limit for the women was pegged at 15 years and above. This corresponds with the normal ‘informal’ working age in the country. The selected respondents were mostly small-scale farmers. There

were mixture of men and women among the household heads who were between the ages of 25 and above.

3.4 Sample and Sampling Procedure

3.4.1 Sample Size Determination

The choice of fairly representative sample for a study is critical for generating results that reflect characteristics of the entire population. The sample size for the study was determined based on the poverty rate of the region. The poverty rate as at the time of the interview was 70.7 percent. A number of factors including resources and logistical considerations influenced the choice of sample size used in the study. In addition, key indicators such as: present living conditions, poverty levels, food security etc. Therefore, using the mathematical relation:

$$n = \frac{k^2(PQ)}{E^2}$$

Where,

P is the proportion of poor persons in the region;

Q = (1-P);

K is a multiple of the sampling error selected to achieve the specified degree of confidence level (95%);

E is the error; and

n is the sample size;

On the basis of this mathematical relation, a minimum of 221 households would have been enough to interview if a simple random sampling approach had been used. However, to ensure that a minimum sample size of 60 eligible individual respondents was obtained per domain, this number was adjusted upwards to 240. The allocation of the sample for each district was pegged at 60 per households.

3.4.2 Sampling Procedure

The research used purposive sampling in selecting the research locations. Purposeful sampling is a criterion-based selection in which particular settings, persons, or events and area are selected deliberately in order to provide important information for the researcher (Patton, 2002). First of all, the Upper West region was suggested for fieldwork because majority of the population is engaged in food production (BDHDR, 2004) and history confirms their involvement in migration, dating back to pre-colonial times (Pickbourn, 2011). Additionally, the area is one of the most economically deprived regions in the country, both in natural resources and infrastructure (SEND, 2013). Food security in Ghana is characterized by geographical, occupational and gender magnitude. Geographically, food insecurity in Northern part of Ghana is chronic and occupationally affects more crop cultivators than cash crop farmers and in gender terms. The districts are in rural areas with poverty rate of over 70 percent according to the 2010 population census report, with majority of its dwellers being crop farmers who depend basically on land for their survival. It is based on the above that the districts were chosen for the study.

A multistage sampling technique was used to select the respondents that were interviewed. The first stage involved the selection of the districts from which the respondents were selected. This was done using purposive sampling technique where the districts were grouped into areas with the highest migratory history rate using the 2010 Population and Housing Census report. The second stage involved

the selection of the communities/villages using again, the purposive and simple random sampling techniques. This was achieved by the assistance of the districts' MOFA officials and the assemblymen and women of the districts. Names of the communities within the 4 districts were written on pieces of papers and were picked at random. The third and final stage was the selection of the households with migration history. Two screening questions were posed to all households upon arrival. The questions were based upon: 1) *Do you have a female who is above 18 years and has migrated to any part of the country?* 2) *Can you tell us which part of the country the person has migrated to.* This last question is actually to determine if the place is within the region (intra) or outside the region (inter-region). All this information was provided by the household heads. In a situation where the household head is absent, the older person among the members of the household is interviewed. The survey questionnaire asked only basic information about the households and their food security situation.

3.5 Data Collection

3.5.1 Instrumentation

3.5.1.2. Structured Questionnaire

Primary data was collected using structured questionnaires (Appendix I). The structured questionnaires were designed to collect information on the socio-economic characteristics of the households together with the migrants, perceived determinants of female migration, the impact of female migration on food security as well as the contributions of these migrants to food security. Food security in this study refers mainly to availability of food, accessibility of food, utilization of food and sustainability of food. The questionnaire consisted of eighty three questions. The first part had to do with their socio-demographic and reasons for migrating, the second part dealt with the food security issues from availability to sustainability and the final had the effects and coping strategies. The questionnaire was designed using

both close-ended and open-ended questions. The interview guide focused on general perception of the female migration and the effects on the family and the food security.

3.5.1.3 In-depth interviews

The In-depth interviews were used for the two institutions namely, Ministry of Food and Agriculture (MOFA) and Environmental Protection Agency (EPA) in the Upper West Region as the key informants within the communities. The In-depth interviews were used to find out about their perception of food security within the district and investigate programs implemented to improve upon the situation and curb migration to the south.

These interviews, as annotated by Bryman (2008), were conducted in order to allow the MOFA and EPA officials to reveal information that the researcher has not thought of asking about, but still stay within a constricted focus and predefined theme. The main interviewees were with the two Regional Directors of both institutions. One limitation of in-depth interviews is only a few people can participate in the interviews. This means that, data collected through this method cannot be generalized.

3.5.1.4 Observation

In studying the people in the community, the researcher adopted observation as another way of getting to identify the physical problems in the communities, because as Hammersley has argued, just relying on what people say they believe and do without observing, “neglects the complex relationship between attitudes and behaviour” (1992:11). Observational studies have been reported as more valid than interviews (Kvalsvig *et al.* 1986). With observation, the researcher is expected to observe the daily activities of participants over an extended period, observing, listening to conversations and asking

questions where relevant to learn about the whole gamut of their life experiences and recording information about their lives (Dewalt and Dewalt 2002; Bernard 2006).

It was also believed that using this method will understand the social world from the subjective point of view of the subjects since he/she “enters” the shoes of the people being studied and understands them better because, according to them, behaviour is governed by self-concept and changes within different situations. The researcher immersed herself in the community, listening to them and observing their daily lives. Through observation, it was possible to make some few comparisons regarding the environment and the social amenities that exist in the areas without asking the participants.

3.5.1.5 Focus Group Discussion (FGDs)

Focus Group Discussions (FDGs) were held with community members. Focus group method was adopted as one of the main research methods for this study to explore community members’s views on female migration and the effects it has on household food security issues. According to Cloke *et al.* (2004 p. 160):

As an interview technique, group discussions allow researchers to draw out interaction between participants and make direct comparisons between the experiences and opinions narrated in the group.

According to May (2011), the ideal number of participants may vary between eight and twelve. Mikkelsen (2005) also suggests that six to eight people are good for focus group interviews. Focus group discussions have the advantage which allows a lot of data to be collected in a short period of time (Morgan, 1997). They allow the researcher to develop an understanding about why people feel the way they do, participants are able to bring up issues they feel are Important to them, and are able to challenge

each other's' views and the researcher may benefit by having a more realistic account of what people think.

A total of twelve focus group discussions were held with 80 participants segmented by age, sex and community of residence. There were approximately 15 participants in each group. One for men, another one for women and the group had both young men and young women. The aim of this approach was to provide a platform for the people to discuss how female migration has affected their economic and social situation. All persons aged 30 and above were classified as adults while the youth were between 15 and 29. The discussions were held in the local dialect of the people by the help of an interpreter who is a native of the region. One discussion was done at a time, during which the thoroughly trained research assistant moderated the discussion while the researcher took notes. This dual method of recording and taking notes has been discussed by Gazzinelli *et al.* (1998) as increasing data content validity and reliability and thus allowing comparison between audio recordings and handwritten notes. The notes were subsequently transcribed into English.

Group discussions and interviews with members were arranged by the assembly members of the communities at 10:00 in the morning. Interviews in the twelve communities were fixed on the different days during my five week stay in the Upper West region. With the help of assembly members, venues were arranged for the group discussions. In almost all the communities, a place was arranged under a tree close to the Chief's palace for the focus group discussions. The group discussions were held mostly on days that community members are less busy and willing to participate. They were consulted earlier on to inform them about our visits and this made it easier for the participants to reach out to the venue before we arrive. In Sissala East, the Focus Group Discussion(FGDs) was held under a tree where elderly people usually relax or have meetings concerning the community. Each group discussion lasted for approximately one and half hours with a 10 minutes break.

Discussants of the FGDs were found to be very enthusiastic. This was because the problem of women's migration to other areas within and outside the region has captured the public attention and has become a topic for discussion in the surrounding areas. Since all the participants knew each other there was openness among them with a strong sense of criticizing each others' views.

3.5.2 Pre-test

The survey instrument (structured questionnaire) was pre-tested at Agbogbloshie, a suburb of Accra to help find any ambiguities which have not been noticed with the naked eye. Agbogbloshie was chosen for the pre-test because of the mixture of people residing there. Previous studies have confirmed the existence of most rural women from both the Northern and Upper West regions of Ghana. Women from the Upper West region are recognised by the kind of work they do as compared to the other tribes. It was learnt that, women from the Northern region are those selling groundnuts whilst those from the Upper West region are those carrying of goods and working as chop bar waitresses.

In spite of the good attributes of surveys as an important tool for social science research, De Vaus (1990) observed the following flaws about them:

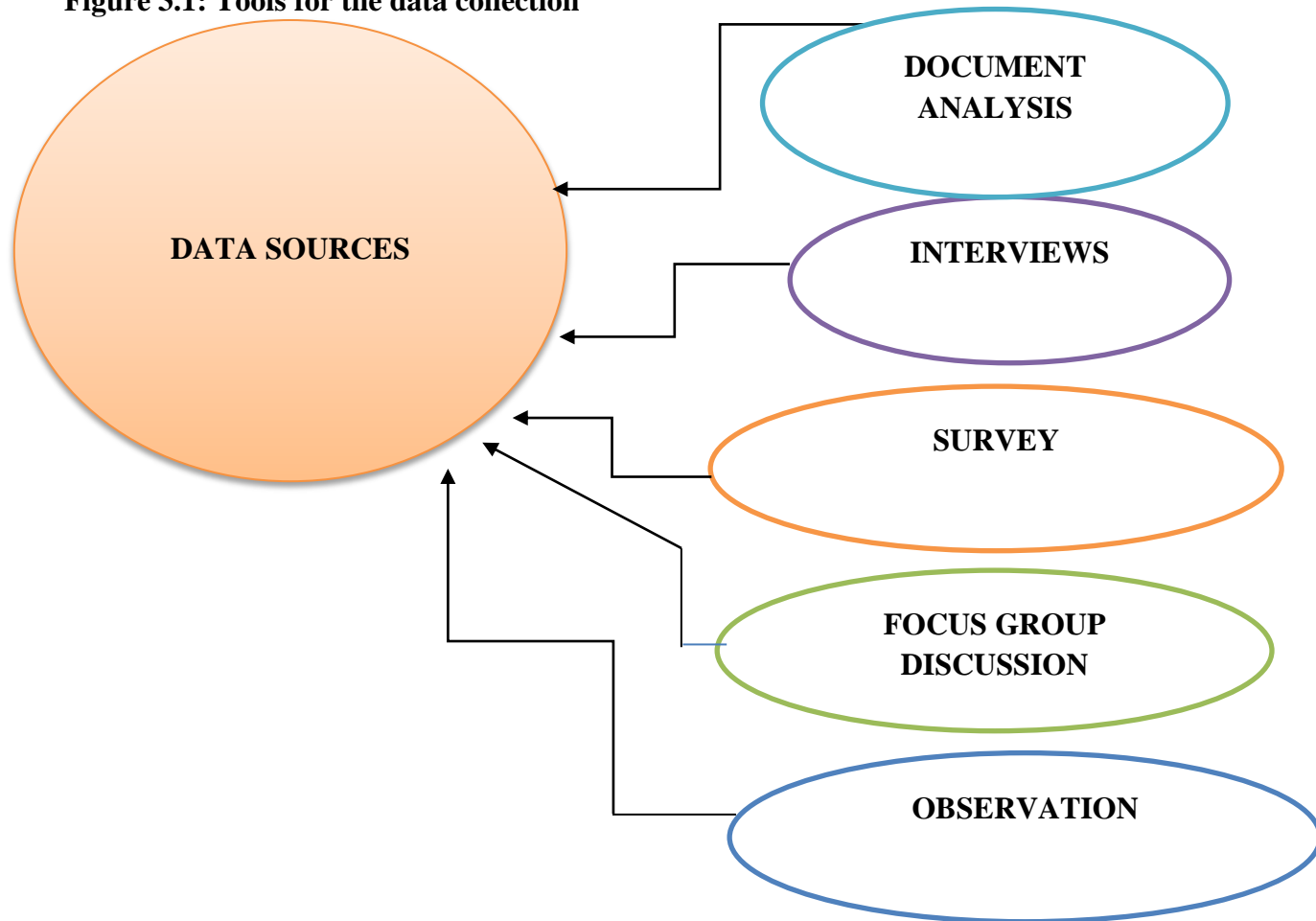
- a) Survey cannot adequately establish cause and effect relationship between variables.
- b) Surveys look at just particular aspects of peoples' beliefs and actions.
- c) They assume that human beliefs and actions are caused by external forces and relegate the role of human consciousness to the background.

In all, a total of fifty (50) women within the ages of 18 to 45 years were interviewed. The level of education among the respondents was generally low. Only 6 percent had basic education and about 65 percent were not married with just over 30 percent were married with children. In the pre-tested area, social networks appear to be the main reason why migrants from northern Ghana have clustered in Agbogbloshie. Most of these female rely on their social networks to provide initial accommodation and assistance in finding a job. This observation supports Yaro's findings on *Migration and population Dynamics* (2011).

3.5.3 Procedure for Data Collection

The study had four main objectives. The first was to describe the socio-demographic characteristics of the female migrants; the second objective was to identify the factors associated with intra and inter-regional female migration in the selected communities by using the pull and push factors of migration. The third was to examine the impact of female migration on food security among these households whilst the last one was to examine the differences between the contribution made by both intra and inter-regional female migrants. Data were drawn from both primary and secondary sources. The team collected series of qualitative data from the study communities and survey in 2014. The study used Focus Group Discussions, in-depth interviews and key informants as the main qualitative data collection technique for the twelve communities selected.

Secondary data sources were from both the Ministry of Food and Agriculture and Environmental Protection Agency as well as published and unpublished sources including relevant literature documenting theories on food security and migration, journals, documents, books, articles and other scholarly sites of the internet (such as google, yahoo, jstor, pub-med) were read to fish out the missing information.

Figure 3.1: Tools for the data collection

The qualitative data for the study involved three focus group discussions in each of the study communities. The focus group discussion was organized separately for adults and young women between the ages of 20 – 55 years old, young and old men of ages between 25 and above in their local dialects (wale, sissala and dagaare). The age distribution of adult participants for the focus group discussions range from 25 and above in all the selected communities. The selections were done with the assistance of the assemblymen and women of the areas. An interpreter was provided by the assembly who informed the people about meeting with the team in the communities. All the focus group discussions were facilitated by the researcher and her team together with the interpreter who understand the local language of the people. Due to the high illiteracy in the study communities, the responses to

questions were in their local languages and later translated to the researcher and team and all recorded in our notebooks. The survey on the other hand involved 240 households in the four districts. All the 240 households representing more than 50 percent of households in the communities participated in the survey. Approximately 60 households were interviewed in each district within the region, three communities in each district. Farming is their mainstay of the region. However, there were some few households in Sissala East district whose main economic activity was tree felling and charcoal processing which serve as alternative source of livelihood to people of the area.

The questionnaire was administered to household heads. Household heads were chosen because of the role they play in decision-making in the households. They are known to be providers of shelter and see to the upkeep of the members of the households. Household heads are thus held in high esteem and issues confronting families are usually discussed at that level before it is taken to higher levels outside the house, especially when there is no compromise among the parties. Although migration decisions are to be discussed with the household heads, most of the time, individuals leave without informing the heads for fear of being prevented from going. In order to know how vulnerable the household is, information on some socio-economic characteristics of both the household heads and the female migrants were sought. These included age, sex, educational status, marriage status, household size, source of food and income, as well as the occupation. These factors are influential in amplifying or reducing overall vulnerability to hazards (Hewitt, 1997 cited in Codjoe *et al*, 2013). Analysis on these variables was conducted to find out about their vulnerability. The influence of female migration on household food security was based on a quantitative measurement of food security, using the USDA standard scale in measuring food security with slight modification to be able to have a clear understanding the status of food security in the household before and after migration of the female.

Appendix II presents the complete questionnaire utilised in determining the food security situation in the various households visited.

The set of these questions were combined with other migration questions to assess the consequences of migration on household food security. In interpreting the responses, all the questions above were used to determine food secure or food insecure households. Based on their food security scale scores, households were categorized into two categories, food secure and food insecure. Those responding ‘yes’ to more than six out of the eleven questions, were classified as food insecure and those responding ‘no’ to more than six of the eleven questions, were grouped as food secure. In other words, if households heads ‘yes’ are more than six, then that household qualifies to be food insecure and if ‘no’ are more than six, then the household is placed under food secure group.

It is important to note that, what the questions try to measure was the sufficiency, accessibility and number of times households skip meals and how long the produce from the farm lasts, the kind of foods taken by migrants and not necessarily the nutritional adequacy of diets as a nutritionist would measure it.

3.6 Data Analysis and Presentation

3.6.1 Quantitative data

Correlation analysis was done to measure the relationship between food security and choice of destination of females. Regression analysis was also used to determine the significant levels of age, marital status, household size, source of income, education, household and migrants occupation at both place of origin and destination. A cross-tabulation of the two variables was done to ascertain the association between food security and the choice of migration (be it intra or inter-regional). The strength of the associations was checked at 95% confidence level.

To understand how the female migration affects household food security, a binary logistic regression was employed to handle the dichotomous dependent variable, for that matter food security. Chi-square tests were carried out in order to compare observed data with the expected data according to the study hypotheses. The variables that showed significant association were tested further using the logistic regressions. Two models were run for the study. The first model examined the consequences of intra and inter-regional female migration on household food security. The second model examined the contribution by both intra and inter-regional female migrants. The likelihood of being food-insecure was determined by regression analyses, using binary logistic regression.

The logistic regression helped to analyse simultaneous relationships among several variables (like women's role before migrating, food production/availability before migration, food accessibility, food utility and sustainability, intra and inter migration of women, contributions/remittances) as well as the effect of demographic characteristics like age, sex, marital status and others on these variables (Abbas, 2006).

The binary logistic regression model was used to examine the factors that influence the odds ratio of the household food status. The odd ratio is the ratio of the probability that a household would always have enough food to eat for its members to be food secure (P_i) to the probability of a household not always having enough food to be food insecure ($1 - P_i$). The dependent variable used in the study is a dummy variable that takes the value of one, if there is always sufficient food and the kind of foods for household members (food secure); 0 for (food insecure), in other words, for all other household heads who get worried that food will run out of stock and they would not be able to purchase or provide for the household member. We estimated food availability as a function of several independent variables. The logistic model of the relationship between the household food security status variable (FSS) and its explanatory variables is specified as follows:

$$\ln [P_i/(1 - P_i)] = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i}$$

where subscript i denotes the observation in the sample, P is the probability of the outcome, β_0 is the intercept term and $\beta_1, \beta_2, \dots, \beta_9$ are the coefficients associated with each explanatory variable, $X_1, X_2, \dots, X_6, X_7, \dots, X_8, X_9$.

Table 3.1 : Coding of food secure and food insecure households

Description of variable	Coding
Food secure	1
Food insecure	0
Male household head	1
Female Household head	0
Educated	1
Not Educated	0
Income a month – more than ₵gh200	1
Income a month – less than ₵gh200	0
Farm size – more than 1 hectare	1
Farm size – less than 1 hectare	0
Receipt of remittance	1
Non-receipt of remittance	0
Flow of remittances – every 3 months	1
Flow of remittances – more than 3 months	1
Choice of destination - Inter -regional migration	1
Choice of destination - Intra-regional migration	0

Chi-square test of independence was also employed to examine the relationship between household food security and the variables used for the models. Also among the chi-square test, roles played by women at the household level before and after migration were also tested. Roles women-farmers played on- and off-farm were categorized into three general roles namely: producers of food (which involves the cultivation of basic food staples), traders of food commodities and other off-farm income earning activities; and home management, which includes preserving, processing and preparing food and provision of child care and other household chores. Results have been provided in the main work. Frequency distribution tables, percentages and pictograms were used to summarize and organize the field data.

3.6.2 Qualitative data

The analysis of the qualitative data was undertaken in five steps –familiarisation, identification of thematic frameworks, indexing, charting, mapping and interpretation as discussed by Rabiee, (2004). In the familiarization stage, the transcripts were read thoroughly and discussed several times with the team. The next stage involved the identification of thematic frameworks where five themes which includes: knowledge of migration and food security, push and pull factors, effects of migration on households food security, contribution of migrants and whether migration should be encouraged or discouraged were identified. During the indexing stage, the transcripts were analyzed in detail that is line by line. The respondents' own words and phrases were identified. Then after, the issues were grouped as themes according to the objectives of the study, which is what Rabiee (2004) called charting. In that process, a coding frame was developed after which the codes for each of the above themes were independently identified from the transcripts.

In order to make the charting easier, each line of the transcript was numbered then two copies were printed. While the codes on one of the transcripts were cut out, the other remained intact. The cut pieces were arranged under the listed themes and categories – age, sex and community, a process referred to as mapping by Krueger and Casey (2000). The codes that were not relevant to the objectives of the study were left out.

Then the data was ready for interpretation. In the course of the interpretation, attention was paid to the words, context, internal consistency, the frequency and extensiveness of comments, specificity of comments and the intensity of comments as recommended by Rabiee, (2004).

3.7 Limitations of the study

In carrying out the fieldwork, the researcher encountered some challenges and limitations. First, the day of arrival was not announced officially to the people of the community because the researcher and her team were not sure of the confirmed dates of arrival. Mission was postponed twice due to logistical problems. The second and last problem which was considered a particular challenge in the fieldwork was the period of data collection. The fieldwork coincided with the Ramadan season that began in the month of July. During the blessed month of Ramadan, Muslims all over the world abstain from food, drink, and other physical needs during the daylight hours. It is a time to purify the soul, refocus attention on God, and practice self-sacrifice, Ramadan is much more than just not eating and drinking. Sissala East and Wa East are known to be Islamic communities whilst the other two are dominated by Christians. Most of the participants especially the men were not very comfortable with us during the interview. There were times, when people would get up and spit or would just turn and spit not too far from where the interview was going on. It was such an uncomfortable situation but we had no option

than to cope with all the negatives acts of fasting. There were some few ones who stopped in the middle of the interview and requested that we come the next day to continue or evening time, since they could no more stand it. So for an interview to last for an hour, from such an attitude, it could take you more than the anticipated time and as a result of that, fatigue set in for many of the respondents. The researchers had to use encouraging words as a way of maintaining the interest of the respondents. A package made of body cream and deodorant was provided by the researcher as an appreciation for their time. This was very helpful. Another limitation was the unavailability of statistical data at community and district levels. Due to time limitations, there was no time to visit institutions to gather secondary data; and authorities at the District level could not provide us with migration data especially on women.

The fieldwork has some limitations. The initial plan was to undertake a comparative study of households without a migrant history to see if having all members of the household could also affect one's household food security. However, this proved beyond the possibilities of the study, as the duration of the fieldwork was short. Also, time and logistical constraints prevented us from visiting those households with non-migrants history. The other limitation of the fieldwork was that it was difficult to find respondents on one's own effort due to the language barrier.

3.8 Ethical considerations

In every study with humans as units of analysis, ethical considerations are often encountered and dealt with. As stated by Kent (1996:19-20 in Silverman 2005:258), researchers need to obtain informed consent of the respondents under study. This is done by first giving information about the research. This enables respondents to make decisions about whether to participate or not. It is also important to make sure the subjects understand what the information will be used for, ensuring that participation is voluntary. The researcher had an interpreter (retired extension officer with MOFA) who is known to the

respondents with me, so they were very comfortable and responding to almost all the questions posed to them.

The ethical issues were addressed by informing respondents about the nature and purpose of the research. In order to protect the identity of the respondents who participated in the research, the researcher ensured anonymity of the respondents who participated in all notes and records, including tape recording. The researcher kept on introducing herself together with the research assistant as to what the researcher intends asking them and what the data would be used for before the interview begins.

The researcher tried as much as possible to be honest about the purpose of the study. Each participant was given a verbal explanation of a letter outlining the purpose of the research. In addition the researcher ensured that community members understood the implications of their involvement before giving their consent to participate. An apology was also rendered to most of the people who were fasting during the interview.

Time frame

The researcher spent approximately four and half weeks in the field for the data collection.

Unit of analysis

Trochim, (2006) defined units of analysis as ‘what and whom’ being studied in social science research, the most typical units of analysis are individual people. They usually are also the units of observation. Units of analysis then are those things the researcher examines in order to create summary descriptions of all such units and to explain differences among them. It is a component of the population of the study

which is concerned with defining the ‘case’. The ‘case’ really is or the basic unit whose properties the researcher chooses to measure and analyze. Without this the researcher will have no bounded system and will be tempted to collect everything that randomly may have bearing on the issue. Common unit of analysis in social science research include individuals, social groups and social interactions. The main unit of analysis of this study was therefore the household.

The 2010 Population and Housing Census (PHC) defines household as a single or a group of persons who lived together in the same house or compound and shared the same house keeping arrangement and are catered for as one unit. A household has a head who may be a male or female member of the household and who is recognized as head by the other members of the household regardless of age or sex. The head of the household is the person who has economic and social responsibility for the well-being of household members.

Nukunya (2003), also explained household as a residential group, the extended family comprises a series of close relatives around patrilineal or matrilineal lines living together. Thus, in the case of the patrilineal line, as the case is for northern Ghana, a man and his wife or wives, daughters, sons, and the sons’ wives and their children live together. Traditionally in most communities in the selected districts, this was the commonest family type. However, a lot of families are moving towards the nuclear type now as a result of factors of social change, such as western education and migration (Ibid).

Using an Interpreter

Working with an interpreter can be difficult. Misperceptions occur and important details can be lost in the process. However, cautions can be taken to avoid such risks, and if a good teamwork is developed, having an interpreter can be advantageous. A local person is usually aware of possible stigmas and can translate questions accordingly. He can even bridge cultural differences.

Furthermore, a skilled interpreter with local knowledge can advise on which questions might be superfluous and which to add. Through contacts made during a meeting at the Ministry of Food and Agriculture (MOFA) in Wa, the Crop Protection Officer with MOFA recommended a suitable interpreter. His name was Gedo, a previous student at the University of Development Studies and a freelance research consultant. Gedo hails and lives in Wa. His English was good, he was friendly, intelligent and very engaged in my fieldwork. All in all, I could not have had a better interpreter.

The researcher found it important to thoroughly explain to him the focus of the thesis and the purpose of the fieldwork. Thus he would understand the reasoning for the questions and be able to judge when a response needed further elaboration. He was thus also enabled to suggest changes in the wording in order to avoid stigmas and cultural inappropriateness. We spent a considerable amount of time debating how to conduct the interviews, as we were both concerned with the flow of the interviews. The interviewees had to wait with patience while Gedo translated the answers of each question to me, and I formulated elaborating questions. At times, this felt like it was interfering with the flow of the interview, especially concerning the more sensitive issues, such as starvation. However, after a while we developed an understanding where Gedo only translated answers that were different from previous ones. This way the balance between disruption to the interview and my influence was ideal.

Household heads were interviewed through the use of structured questionnaire. Some of the questions assumed to be relevant to this study were asked. Firstly, the ages of both the household heads and the female migrants were asked. Household heads who are older have one or two members out of the house in search of better livelihoods. followed by their socio-economic status which revealed the financial status of the households, information on where the migrant has left for was also considered to be able to determine if it is an intra movement or inter-regional movement. Those moving to other communities within the same districts were told to be doing so because of the attachments they have to their

households as compared to those who go farther down. Older household heads due to their strength are not able to take care of all the needs of the family. Female migrants who are able to secure a better opportunity elsewhere are able to convince the entire family to move with them. In addition, prior and current occupation of the migrant at destination was also discussed to determine if they would be able to contribute to food security in the long run. This led to the migrants' support to household food security, flow of remittances, and regularity of the visits.

The study considered two sets of variables; the dependent variable and the independent variables. The dependent variable in the study was the Food security. Household heads were asked, “Do you have enough food available year all round?”; Are you able to access food all year round?; Are you able to eat a balanced meal all year round? And lastly, does your harvest last the whole year? These questions sought to identify if households were food secure or not food secure. Households that indicated ‘yes’ to all the above questions were those who are food secure and those who say ‘no’ are categorised as those who are food insecure.

The independent variable used was the reasons for female migration. Household heads were asked to indicate the main push and pull factors that they know are the reasons for female migration in the region. Other members in the house during the interviews also chipped in some few reasons which are not known by the heads. After mentioning the factors, they were asked to indicate the most serious ones and how they think those factors have contributed to the movement of these women. They were further asked if they think the factors mentioned have a role to play in the decision of these women to migrate and whether the reasons mentioned also contribute to food insecurity in the households. The reasons together with the socio-economic features namely, age, marital status, educational level, household income, source of food, households size which are known to influence internal migration were all used in the regression models provided in the subsequent chapters. Household size was grouped under three:

1) between zero and three, 2) four to six persons 3) seven and above. Household with more than six members were described as larger households because the current household size for rural areas in Ghana is five members per household according to the Ghana statistical report (2008).

The age of the migrants was measured in years; marital status of the migrant was measured single, married, divorced, separated, widow. Educational attainment of the migrant was measured based on no formal education, primary and JHS level, SHS and above. The household income was also classified into three groups: those who earn between GH¢100 to GH¢ 200; GH¢300 to GH¢ 500 GH¢600 and above. Income levels in the study areas are very low and there is little variation in income among households. However, some households confirm receipt of support as another means of income.

In all 240 were selected for analysis after removing the questionnaires that were not properly administered. The households were selected from four districts and 12 communities. In summary, the 240 households were used for the analysis together with 4 officials serving as key informants from both the Ministry of Food and Agriculture and Environmental Protection

3.9 Conclusion

In summary, this chapter dealt with methods used to conduct the study. It began with the description of the study sites. Thereafter, the materials and methods during the investigation were explained in detail. The qualitative approach necessitated use of interviews, a focus-group discussion, observations, and the review of documents whilst survey was used for the quantitative approach. A two-phased approach was used to conduct the study. The first phase was a survey conducted to determine the factors of migration, the relationship between female migration and its effects on household food security. The second approach was the in-depth interviews with the officials of the two institutions namely Environmental Protection Agency and Ministry of Food and Agriculture and finally an investigation into ascertain the

most contributor remittances from migrants. The next chapter reports results obtained from the study which revealed socio -economic characteristics in the selected districts in terms of demography, land acquisition, crop production and sources of income, etc. Research constraints were intensely discussed together with the role of the researcher in overcoming them.

CHAPTER FOUR

CHARACTERISTICS OF HOUSEHOLDS HEADS AND FEMALE MIGRANTS

4.0 Introduction

This chapter describes the socio-demographic characteristics of both the household heads and the female migrants in the study area are described in this chapter. The features of the respondents include age, marital status, educational background and the size of the households. The study areas are, Sissala East, Nadowli, Wa Municipal and Wa East. A total of 240 household heads participated in this study. Of the households interviewed, 199 had male heads whilst the remaining 41 were female head households.

4.1 Socio-demographic characteristics of Households Heads

Table 4.1 shows the distribution of the 240 respondents according to specific socio-demographic variables. As shown in Table 4.1, there are more male-headed households than female headed households. Out of the total number, 22.2 percent were women located in the intra households whilst the remaining 77.8 percent were found to be males. It followed the same pattern in the inter-regional households. This could be due to the fact that among other reasons, females become household heads in the event of a divorce, becoming a widow after the loss of a husband or separation. Women again were in the minority (14.3 percent), whilst their male counterparts were 85.7 percent.

Despite the major roles women play in the society, they appeared to be marginalised in every aspect of life especially in the northern part of Ghana. Men are seen as bread providers and women as bread processors. This confirms findings in the 2010 Population Census report that majority of households are

headed by males. This is also in agreement with the findings also in the 2010 population census, that, the recognition of male as the head still persists, further strengthening the patriarchal view of the majority of the people within the population. The literature discusses the disadvantaged position of female household heads.

Table 4.1: Household Heads Composition

Description	Intra (Frequency & Percentage)	Inter-region (Frequency and Percentage)
Male	56 (77.8%)	144(85.7%)
Female	16(22%)	24(14.3%)
Total	72(100%)	168(100%)

This trend demonstrates the importance of men in the society. Despite the major roles women play in the society, they appeared to be marginalised in every aspect of life especially in the northern part of Ghana. Women in most part of Northern Ghana are hardly seen as head of families due to the patriarchal norms of the area. Men are seen as bread providers and women as bread processors. This confirms findings in the 2010 Population Census report that majority of households are headed by males. The recognition of male as the head still persists, further strengthening the patriarchal view of the majority of the people within the population. Again, the old age perception of the man as the bread winner and the woman as the bread processor is prevalent in modern times. Thus with the high percentage of males as household heads in the study only goes to confirm this notion.

4.2 Household size or number of persons

Household composition looks at the people who make up the household and this include the gender of the head of household and the total number of children, among others. Table 4.2

Table 4.2 Household composition

Description	Intra (Frequency & Percentage)	Inter-region (Frequency and Percentage)
0 – 3	1(1.4%)	0
4 – 6	42(58.3%)	72(42.9%)
7 and above	29(40.3%)	96(57.1%)
Total	72(100.0)	168(100.0)

From the sampled study, majority (57.1%) of Inter-regional female migrants had households made up of 7 and above, followed by 42.9 percent representing those with 4 to 6 persons. Comparatively, the Intra group had fewer members under those with 7 and above, this could have an adverse effect on their food production if there are less people in the household to serve as labour force. The average household size is 5 persons. The implication here is that, large household size may affect household food security because; it is assumed that when the household is big, the chance of obtaining sufficient food decreases. This has the potential of creating the problem of obtaining adequate food for healthy and active life. It could also lead to extra financial stress on the households leading to food insecurity. Although Lipton (1968) sees large household as the source of free labour on one's farm, this study rather sees large size of households as a threat to food security in the study communities.

4.3 Age Distribution of Heads of Household

The age of household heads were examined and is displayed below in Table 4.1.

Table 4.3 - Age of household heads under intra and inter-regional female migrants

Description	Intra (Frequency & Percentage)	Inter-region (Frequency and Percentage)
25 – 29	0	4(2.4%)
30 - 34	1(1.4%)	5(3.0%)
35 - 39	5(6.9%)	17(10.1%)
40 – 44	12(16.7%)	28(11.9%)
45 – 49	17(23.6%)	38(22.6%)
50 and above	37(51.4%)	84(50.0%)
Total	72(100.0)	168(100.0)

Source: Author's field work, 2014

The age of the household heads who participated in the study ranged from 25 years and above. Among the 240 households, majority (50.0 percent) were 50 years and above for the two groups, followed by 14.3 and 24.1 percent of those within the ages of 45 – 49, 16.7 percent and 11.9 percent were within the 40 – 44 for inter-regional migrants households and intra households respectively. Ages between 35 to 39 for the two groups were 10.1 and 6.9 percent. The least (1.4 and 2.4 percent) represented were between 25 to 39 years. A look at the age distribution of respondents from the groups shows that majority of the members from the migrants' household were 50 years and above. An aging population of rural farmers has implications for food security as well as the sustainability of agriculture production. This also threatens to negate efforts to introduce new and improved technologies and varieties of crops. These ageing groups may not have enough energy to work so hard to feed the family and possibly

migrate to other places to make a living. Compared to the Inter-Regional Female migrants' households, the household heads consist of more of older people, even though those who were below 40 years were more in the intra group.

4.2 Marital status of household heads

With regards to the marital status, the number of married people versus the unmarried (whether separated, widowed or divorced) varied in the study areas. In many traditional African societies, every man or woman who reaches adulthood is expected to marry and bear children.

Table 4.4: Marital status Household heads

Description	Intra (Frequency & Percentage)	Inter-region (Frequency and Percentage)
Married	61(84.7%)	131(78.0%)
Not married	12(15.3%)	37(22.0%)
Total	72(100.0)	168(100.0)

Source: Author's work 2014

The findings clearly depict that marriage is a very significant part of the culture of the people of Upper West region. Majority (84.7 percent and 78.0 percent) of the males in the selected districts were married. This highlights the importance of the marriage institution, a highly cherished institution that serves as a source of family labour. Again, in the culture of these people, marriage and procreation are very important as they believe it perpetuates the family lineage and provides free labour on their farms. Thus at a certain stage, one is expected to marry and reproduce. Such perceptions of masculinity tend to pressure men to prove their manhood (Sundong, 2005). This might also explain why despite the fact that poverty rate is high in that part of the region, the birth rate is so high (GSS, 2010).

4.3 Education of Household Heads

The educational level attained by the respondents is generally low. Most household heads are uneducated in both intra and inter-regional female migrants' households. There seemed to be no specific pattern indicating that the higher the level of education of the household head, the more food secure a household would be.

Table 4.5: Household Heads Educational Status

Description	Intra (Frequency & Percentage)	Inter-region (Frequency & Percentage)
No formal education	47(65.3%)	95(56.5%)
Primary school	14(19.4%)	54(32.1%)
Middle/JHS	10(13.9%)	16(9.5%)
SHS and above	1(1.4%)	3(1.8%)
Total	72(100.0)	168(100.0)

Source: Author's field data, 2014

The study recorded 56.5 percent for intra household heads and 65.3 percent for inter-regional household heads as those without formal education. This may possibly mean that, education is still not important in the Upper West Region even though it contributes to food security as asserted by Fekadu(2008) and Amaza *et al.* (2009), that educated household head has the capacity to innovate and to adopt timely technology and has better understanding of the cash crops that can help them to have a better income which will improve their food security than the non-educated households. Thus, education status is hypothesized to have a positive effect on household food security yet some people in that part of the region still believe that no higher skill is needed to enter into farming even though some level of it is important for achieving household food security and also to accessing information on agricultural

chemicals. Lacking educational qualifications, individuals become excluded from many types of employment opportunities.

4.3 Occupation and Source of Household heads

Table 4.5 shows the types of occupation for household heads. The major economic activity in the selected communities is farming where they cultivated maize, sorghum, millet, beans and groundnuts. More than half of the respondent (63.9 and 57.5 percent) were engaged in farming in the two selected groups. Whilst, less than a third representing 26.4 percent for intra and 27 percent for inter-regional migrant's households were into rearing of animal/livestock. About 6.9 percent and 8.0 percent were engaged in petty trading in both intra and inter-regional households. Only about 1.4 percent were found as hunters in the inter-regional female migrant's household. The observation here is that, since their level of education is low, they are able to secure jobs under the informal sector where education or special skills are not needed to perform any task.

Table 4.6: Occupation of household heads

Description	Intra (Frequency & Percentage)	Inter-region (Frequency & Percentage)
Farming	46(63.9%)	91(57.5%)
Rearing of livestock	19(26.4%)	46(27.4%)
Trading	5(6.9%)	16(8.0%)
Other	2(2.8%)	12(5.7%)
Hunting	0	3(1.4%)
Total	72(100.0)	168(100.0)

Source: Author's fieldwork, 2014

The study also shows that there are more farmers in all the selected communities and this supports the assertion made by the Ghana Statistical Service (2010) that the mainstay in the Upper West Region is Farming. There was no difference in occupation of respondents from both Intra and Inter-regional female migrants' households. This means that there were no variations in the kind of occupations available in the region. This could also be attributed to the level of education of respondents in that part of the country. Lack of schools in the area, coupled with poverty are all factors contributing to the low attendance of schools. These findings seem to correspond strongly with (Van der Geest 2011; Berg, 2010), who also noted that the people in the UWR engaged in agriculture and farming in particular as their mainstay.

4.4 Farm Land Size of the Households

As can be observed in the table 4.6 below when respondents were asked about their farm land size since it is also another important determinant of household food security, majority of the respondents under intra had more than 1 hectare representing 44.5% as farmland size whilst inter-regional female migrant's households had 39.9 percent. This was followed by 39.9 percent representing those with more than 1 hectare. The least on the list was those under the 0.5 hectare of land representing 18.9 percent and 12.5 percent for the two groups.

Farm size is the total area of land under cultivation for food and cash crop by households and measured in hectares. Positive relationship has been established between farm size and improvement in households' income and food security (Jayne et al., 2005; Yilma, 2005). It was therefore expected that a household with a larger farm size would be more food secure than a household with a smaller farm size. As a result of this, a further test was conducted to see if indeed the size of farmland had any relationship at all. The results below show that, farm size and food security have statistically significant relationship.

The larger the farm size, the more crops will be grown and more food will be produced if all things go equal.

Table 4.7: Farm land size of the households

Description	Intra (Frequency and Percentage)	Inter-region (Frequency and Percentage)
Farm size – 0.5 Hectare	13(18.1%)	21(12.5%)
Farm size -1 Hectare	27(37.5%)	80(47.6%)
Farm size -2 Hectare	32(44.4%)	67 (39.9)
Total	72(100.0)	168(100.0)

Source: Author's field work 2014 - ($X^2 = 7.578$, $df=2$, $P= < 0.5$) (0.023))

4.6 Income of the Household Heads

Household heads' income per month was also examined to determine if it has any association with both food security and migration. The assumption here is that, if one has so much income to provide the family with food at all times and other basic needs, there will be no need for anyone to migrate because there will be abundance of everything that man needed for survival.

Table 4.8 : Income of household heads

Description	Intra (Frequency & Percentage)	Inter-region (Frequency & Percentage)
Between ₵GH100 - ₵GH20	36(50.0%)	62(36.9%)
Between ₵GH300 - ₵GH400	32(44.4%)	93(51.9%)
Between ₵GH500 - ₵GH600	4(5.6%)	12(5.2%)
Between ₵GH700 and above	0	1(0.6%)
Total	72(100.0)	168(100.0)

Source: Author's field work, 2014

Based on the income shown in Table 4.7 above, the highest income in ranked order was GH¢300 - GH¢400 (53 and 51.9 percent), GH¢100 - GH¢200 (50.0 and 44.4 percent); and those who make between GH¢500 - GH¢600 represent 5.6 percent and least among the lot was 0.6 percent representing those household heads who earn GH¢700 and above. These amounts mentioned in table 4.6 above were earned monthly according to the respondents. As we all know, disclosing one's income is always problematic, people are not very comfortable mentioning how much income they make in a month, so in the end, they turn out to mention any amount at all to please the researcher. When comparing the incomes of the two female migrant's households (intra and inter-regional), what can be seen from the data in table 4.7 is that, inter-regional households have higher income between GH¢300 cedis to GH¢400 cedis. Could it be as a result of receipt of remittances?

4.7 Age distribution of the female migrants

The age of the female respondents ranged from 15 years to 50 years and above, with a mean age of 35 years. It was found out that most of the migrants were young despite the differences in locations.

From the table 4.8 above, out of the 240 households, ages of the female migrants were between 15 to 40 years and above. The majority of the female migrants were between 25 and 29 years representing 54.2 percent for inter-regional group and 32.7 percent for the intra group before they left for their destinations, followed by 30 -34 representing 29.2 percent (intra) and 23.2 percent for inter, with 14.3 percent representing 40 years and above group. Therefore, the age variation indicated by the data is in agreement with the Ghana Statistical Service (2012) assertion that, most female migrants are relatively young.

Table 4.9: Age of female migrant

Description	Intra (Frequency & Percentage)	Inter-region (Frequency & Percentage)
15-19	1(1.4%)	0
20-24	3(4.2%)	26(15.5%)
25-29	39(54.2%)	55(32.5%)
30-34	21(29.2%)	39(23.2%)
35 - 39	4(5.6%)	24(11.3%)
40 and above	4(5.6%)	24(11.3%)
Total	72(100.0)	168(100.0)

Source : Athor's fieldwork 2014

The data showed that most of the females are young, active and strong. This finding confirms Awumbila's report that female migrants from the Northern part of Ghana are mostly between 25 and 49 years (Awumbila, 2014). Some migration scholars are of the view that when they are young and they move out, it affects the development of the area. Others say that the labour loss experienced as a result of the migration of young people is replaced by remittances thus increasing family incomes, as well as food security (Van der Geest, 2011; Hartveld, 2009). Macpherson (2000) cited in Mwangi (2013) uses the example of Samoa to expound that migration of young people leads to a drop in agricultural labour force, leading to a decline in agricultural production. He explains that in 1980-5 and 1992, Samoa experienced more than 25 percent drop in food production per person as a result of youth migration.

This finding is also consistent with the view of Tanle, (2003), that, females migrate at younger age. Also another observation was that, those within the ages of 50 and above for intra, travel within the districts, this by implication means that, some (29.2%) of the women who were married would not like to leave their family for a longer distance and prefer to go for a short time and return after making enough money

to support their families. Meanwhile, very active female migrants from inter-regional zone between the ages of 25 – 40 years. These are women who think that getting drowned in the sea is better than the pond, meaning it is better to move out from your place of origin to a better place where there are a lot of opportunities that you can explore and succeed.

4.8 Marital Status of the Female Migrants

Marriage is an important factor that influences population growth. In an ideal situation, the presence of the two parents is supposed to provide acceptable conditions for the upbringing of children, as the two individually and collectively provide socio-emotional, psychological and material environment, and support for members of households. Table 4.9 shows the general trend of marital status from the two groups.

Table 4.10: Marital Status of Female Migrant

Description	Intra (Frequency & Percentage)	Inter-region (Frequency & Percentage)
Single	3(4.2%)	3(1.8%)
Married	53(73.6%)	138(82.1%)
Divorced	6(8.3%)	8 (4.8%)
Separated	5(6.9%)	9(5.4%)
Widowed	5(6.9%)	10(6.0%)
Total	72(100.0)	168(100.0)

Findings from the study revealed that more than two-third (2/3) of the women for both intra and inter-regional female migrant's households were married before leaving (73.6 percent and 82.1 percent), followed by the single women representing 4.2 percent and 1.8 percent respectively. The least on the

table were the widows, divorced and separated representing (8.3%,6.9%,6.9% - intra and 4.8%, 5.4% 6.0% for inter-regional female migrants.

In the study communities, marriage and children is a sign of having enough food to eat. It is also assumed that, the size of your family determines the availability of food production from one's farm as the size they determines the labour force on the farm. Both married and unmarried women migrate, in terms of age, people within the prime ages are more likely to migrate than older people (Awumbila *et al*, 2008; Tanle, 2003). This has implications for household food security where women are expected to play a pivotal role of food cropping and processing as well as their reproductive responsibilities.

4.9 Level of Education of Female Migrants (prior to migration)

Formal education plays a key role in the social advancement of societies and has always been treasured (Addae-Mensah, 2000). Education is very important in all aspects of life. The level of education determines the sort of employment one gets and hence one's contribution to household income and food security. Education is an important tool used by individuals to escape poverty. Analysis of the female migrant's educational level is displayed below.

Table 4.11: Educational level of female migrants

Description	Intra (Frequency & Percentage)	Inter-region (Frequency & Percentage)
No formal education	41(56.9%)	110(65.5%)
Primary school	20(27.8%)	20 (20.8%)
Middle/JHS	8(11.1%)	8 (10.1%)
SHS and above	3(4.2%)	3(3.6%)
Total	72(100.0)	168(100.0)

Source: Author's field data, 2014

The table 4.11 above indicates that out of the 240 households, over half (56.9 and 65.5 percent) of the respondents' migrants had no formal education, for inter-regional households, 20.8 percent had primary attainment whilst 11.1 percent had middle/JHS level with 4.2 percent and 3.6 had SHS and above. This confirms what was reported in the 2010 census publication about the level of education in the Upper West region especially for women. It was not different for the intra households female migrants, over half of the female had no formal education, with about 28.6 percent with primary school education; whilst 3.6 percent had Middle/JHS 10.4 percent. There was no representation of female with SHS and above. This could be explained by the cultural norms of that part of the region, where people for that matter men, believe that women's duties do not require any educational skills to perform, even though education enables people to access information on all spheres of life leading to enhancement in socio-economic development, the level of education was found to be very low in the Upper West region with poverty rate of 70.6 percent (GSS, 2012).

What can be said about the female educational level is that inter-regional households have slightly higher levels of education, but the difference is not significant. This finding may be reflective of trends throughout rural areas especially the northern part of Ghana, where female education levels remain lower than their male counterpart. The reason for this is that education of females is not seen as a priority given the conservative nature of rural society. This finding is in line with Akbar's (2006) views on female education in rural India where education among women is not as important as men.

In the view of Asenso-Okyere (2001), the proportion of the poor in society reduces steadily as the level of education increases. Education in general enables one to appreciate the close links between knowledge, skills, experience and husbandry. If farmers are more educated they will begin to understand the implications of how to manage their land, environment and local conditions and ensure that food security is achieved even if a member migrates.

Extension of new knowledge will be most effective when the farmers themselves are highly educated and are able to absorb the new knowledge successfully and even make incremental improvements to it. This affirms Boserup's theory on technological innovation that increasing output to feed the growing population calls for increasing land use intensification (Tiffen *et al.* 1994; Simon 1996; Pingali *et al.*, 1987; ODI 1991) cited in Codjoe *et al.*, 2011.

The reasons for the low level of education were explored. In the women's FGD, respondents cited poverty and location of schools as some of the factors preventing them from going to school and acquiring knowledge. It was not surprising that, quite a number of children especially girls of school going age were seen loitering around during the survey. The situation was, however, different in the men's FGD. To them, the girl child does not need any level of education to enter into marriage life.

Further discussions revealed that it was difficult to send their children to school due to poverty. Those who were able to send their children to school found it difficult to cater for their needs. It was found out that, some of the children were given local drink in a 1.5 litre bottle to take along to school and come back to eat lunch. They could hardly make ends meet with wants. The likely explanation for the dominance of farming as the main occupation in the rural economy stemmed from the fact that, subsistence farming in particular did not require a high level of education as a basis for entry. It could also be perceived that, in the olden days emphasis was on child labour, where children were used on the farm as labourers than attending school. Moreover, there were fewer job opportunities, therefore, the desire for higher education was limited.

The low level of education by most of the females in almost all the communities confirmed the assertion that women's education always lagged behind that of men in African societies. Reasons for this situation as outlined by Dolphyne (1991) include:

“...She did not need formal education to perform marriage functions. Moreover a woman was expected to be provided for by the husband, and since education became a means for entering highly-paid jobs in the formal sector, it was considered more important for boys to have formal education, since they were the breadwinners of the family...most girls who started school did not continue beyond primary school level...it did not seem profitable, therefore, to invest money in the education of a girl who was expected to get married and help her husband look after her children. There was always the risk of a girl dropping out of school because of pregnancy...whenever money was short and a decision had to be made between a son and a daughter in school, it was the daughter who was withdrawn. The practice still persists in rural communities”.

This has been the spectacle of the education of the girl child, in conformity to the finding in relation to the level of education in the Upper West region. This finding therefore supports the socialization process, whereby boys were sent to school and girls stayed at home to assist their parents (Brydon & Chant, 1989).

Although this perception is changing in Ghana, it is taking longer for it to take root in the Upper West region. The research findings further show that the proportion of people with no education is higher among women. Even with the introduction of Free Compulsory Universal Basic Education (fCUBE) programme in 1996, people of the north were yet to see the need to educate the girl child. The booming kayayei business in the major cities of Southern Ghana where women carry basins/bowls ready to assist people doing shopping in the market.

One of the household heads in Tumu in the Sissala district, the respondent has this to say:

....we found out that, sending a girl to school is not too important, in the sense that, she does not need any formal skills in her matrimonial home apart from basic skills to perform household chores for the husband. A woman as you know, is expected to be given everything by her husband, therefore, the men should rather be educated so that they get good jobs to provide for their wives since men are seen as bread winners for the family.

No wonder we see so many of these women from the north with very little or no more formal education on the streets of the big cities working in the informal sector. The implication here is that without

formal education, securing employment in the urban areas becomes a problem likewise the rural areas, it tends to limit farm productivity and access to agricultural extension services (Brydon, 1987). These findings are supported by the GSS (2012) which confirms that females lag behind males in education.

Similar research by Quam-Baffour also confirms the illiteracy rate of the rural women in Ghana (Quam-Baffour, 2008). Observation made whilst reviewing literature in Zimbabwe placed greater value on the education and employment of male children as future bread winners than women, since the latter is known to be married at an early stage and depend on the husband. Therefore, women's academic career is destructed (Khayundi, 2009). A similar study in the Upper West region also confirmed that, as people climbed the educational ladder from the primary school to the tertiary level, the interest in agriculture reduces because farming, for that matter agriculture, is considered to be for those who are not educated. This is seriously affecting agricultural productivity especially when it comes to postharvest handling of food crops. Most of the illiterate farmers are not aware of practices that lead to postharvest losses of food products leading to loss of produce and food insecurity (Augustus, 2011).

4.10 Occupation of migrants before leaving

Table 4.12: Migrants' occupation prior to departure

Description	Intra (Frequency & Percentage)	Inter-region (Frequency & Percentage)
Farmer	55(56.9%)	107(63.7%)
Trader	8(27.8%)	20 (11.9%)
Pito brewer	2(11.1%)	12 (7.1%)
Shea-butter processor	6(8.3%)	22(13.1%)
Labourer	1(1.4%)	7(4.2%)
Total	72(100.0)	168(100.0)

Source: Athor's field data 2014

In order to understand why women migrate to other communities within the districts and outside the region, a background knowledge of the kinds of work such women were doing prior to departure was deemed expedient. Considering the table above, for intra-regional migration many of them (76.4 percent) were farmers, 11.1 percent were traders, followed by 8.3 percent as ‘pito’ brewers (Local drink in the area). Also 8.3 percent were shea butter processors, and those who worked as labourers were 1.4 percent. Whilst inter-regional migrants, 63.7 percents as farmers, followed by 11.9 percent traders, 7.1 percent for pito brewers, shea-butter processors, 13.1 and labourers representing 4.2 percent. The likely explanation for the dominance of farming as an employment avenue in the rural areas stemmed from the fact that, subsistence farming in particular did not require a high level of education as a basis for entry. As agriculture and for that matter farming is the major occupation in the rural areas, it was no wonder that many of the women were said to be farmers.

4.11 Occupation of the Migrants at destinations

The occupations of the migrants in their new destinations are presented in table below

Table 4.13: Migrants’ occupation at destination

Description	Intra (Frequency & Percentage)	Inter-region (Frequency & Percentage)
Farming	22(56.9%)	63(37.5%)
Selling/business	20(8.3%)	31
Chop bar attendants	6(9.7%)	13(7.7%)
Labourer/Domestic help	0	17(10.1%)
Head porter	22(30.5%)	58(34.5%)
Total	72(100.0)	168(100.0)

The analysis aimed to see the kind of occupation the female migrants are currently doing at their destination. From table 4.12, it is clearly evident that most of the migrants are still working at their destination as farmers representing 30.6 percent and 37.5 percent for intra and inter-regional female migrants respectively. Others are head porters representing 30.5 percent and 34.5 percent for both inter-regional and intra female migrants, 7.7 percent and 8.3 percent for labourer/domestic help for inter-regional, and for intra female migrants group. Other jobs, included selling/trading representing 19.4 percent for inter-regional and 18.5 percent. Whilst 10.1 percent (inter) and 9.7 percent (intra) for those into business in their destinations. It could also be mentioned that, though most of them were into farming before migrating from their communities, upon reaching their destinations, based on the information provided by their family members, some of them sought refuge in the informal economy, particularly in trading which, like farming, required very little or no education at all for entry. From this observation, one could conclude that, employment opportunities exist more in the urban areas than in the rural areas.

4.11 Summary

This chapter has looked at the socio-demographic and the economic characteristics of both the household heads and the female migrants. There were differences between the two groups although there were similarities. One interesting findings from the analysis concerned the category of women who move. One would have thought that the younger ones would move more than the older ones, but both the old and the young migrate. Furthermore, the household heads were mostly males in almost all the communities for the intra and the inter- regional migrant's households. They were within the ages of 30 years and above. Female migrants were both the young and old, single and married with children with very little or no formal education. Farming was found to be the mainstay of the households. Apart from farming, there were few other households that were involved in other activities like sheanut, dawadawa

processing and burning of charcoal for sale. The next chapter discusses the reasons determining the intra and inter-regional female migration. Understanding the pull and push factors of this migration could be helpful in developing policies related to this phenomenon.

CHAPTER FIVE

REASONS FOR INTRA AND INTER-REGIONAL FEMALE MIGRATION

5.0 Introduction

This chapter discusses reasons for female migration in the study areas. It begun with the views of migration by the participants and its relation to food insecurity, followed by the factors (push and pull factors) influencing female migration and examines the females' decision to migrate to other parts of the region or outside the region and the associated reasons.

5.1 Views of Migration and Food Security by the Discussants

Discussants in the focus group discussion viewed migration as the movement of people from one place to the other, and it is linked to food insecurity. Both are seen as related, the shortage or absence of adequate of food, triggers or necessitates movement of people to the source of food or locations where food is available. During the discussion, various definitions and reasons were given to explain migration and lack of food security, one of the statements from the group discussion is stated below.

“There is so much hardship in this region, so the only thing most people do is to leave for other places where they can get enough to eat, look round and see the soil, it has lost its nutrients, when one farms, one does not get much, no money to buy fertilizer because it is expensive, no machines to plough our land, the little energy we have can only work on a small portion of land which will not produce enough food to feed the family so the only thing you can do is to move out”. (Lamisil, Jenyiri)

This statement corroborates Chilimampung's (1997) observation in Malawi that, migration can at one point be responding to the level of household food security and at another point influencing household

food security. This however does not suggest that migration is the only factor influencing food security at the household level.

The respondents further pointed out that, although food security constituted one of the factors for migration, especially in the case of women, a secured source of income as the purchasing power is also identified as a main push factor. In a situation where one runs out of stock or exhausts farm produce, one is forced to buy food from the market, and if one has no means of buying, then it means the family will go hungry that day or they may be forced to borrow from neighbours or skip meals. As Hassan a 45 year old man from Kulikpong pointed out during a Focus Group Discussion:

“.....when we run out of stock, the little we get from relatives or neighbours are given to the younger ones and we the adults go to sleep with our empty stomachs or we feed ourselves with some wild fruit if it is the season. Sometime back, only men go and then later come for their wives and family but these days, the women are also going, and the family suffers most when the women go, because, women are known to be food processors in the homes, whilst the men are seen as the food producer, when the processors are gone, eating and feeding the family becomes a problem where most of the children are below the ages of ten years and cannot cook” (Alhasan, Kulpong).

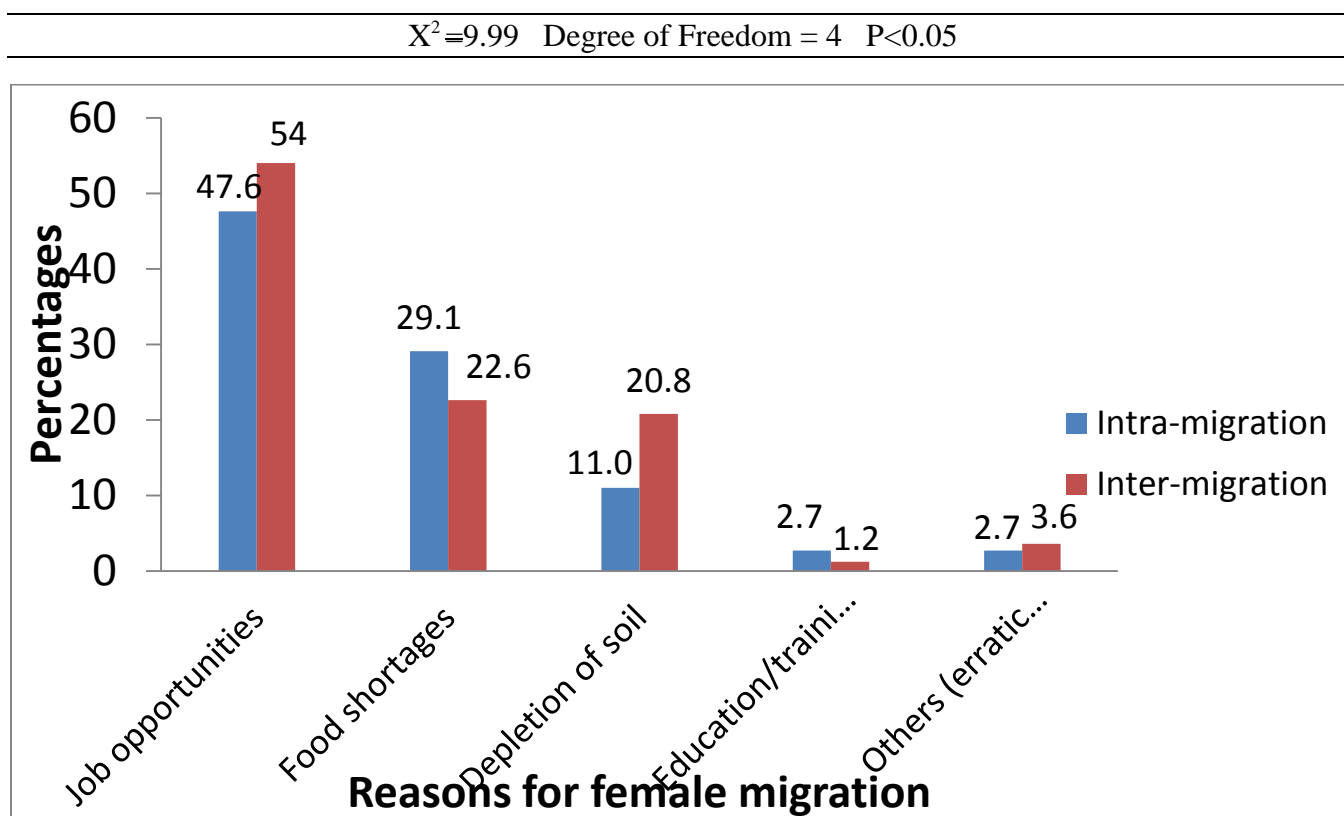
Another definition of food security by some of the participants in the group discussion also mentioned sufficient good quality food availability as food security, to them when there is plentiful food for household consumption and there are available job opportunities, no women would like to move anywhere, more so when they are married with children below the ages of 10 years, it is their responsibility to take care of them, but it is the circumstances that they find themselves in which push them away from the communities. This brought to bear Lee’s (1966) push-pull theory of migration – this model suggests migrants are “pushed” from areas where they are dissatisfied and “pulled” to areas where they can “better” themselves. Often economic issues are at the root of both the push and pull factors. In the present study, two inter-related push factors and two pull factors emerged. These include

the lack of job opportunities and depleted soils/land degradation and the hope of finding fertile land in other regions like Brong Ahafo and Ashanti region, where land is fertile and there exist 2 rainy seasons. The other push factor is crop failure and the frustration associated with living in such an environment. Most households in this region grew subsistence crops (maize, millet, beans, cowpeas and groundnuts, among others). Mohamed, a 55 year old farmer in Nankpawie lamented on the frustrations they go through as a family before the wife left with their 2 year old son :

“sometimes you plant and it does not produce when harvest time comes, meanwhile you have invested so much in ploughing the land before growing, so I was not surprised at all to hear that my wife had joined the sister in Botim in the Brong Ahafo region” (Moahmed, 55 years old, Nakpawie).

5.2 Reasons for intra and inter-regional female migration

This section presents the reasons for intra and inter-regional female migration in this study since it brings out the motivation for their movements. It was earlier postulated that when a migrant moves from Upper West region to any other region it is regarded as inter regional migration, however, if the migrant moves to that same region it is regarded as intra migration (Van der Geest, 2011). The existing literature suggests that people move for a number of different reasons which include, but is not limited to, the search for a better life. UNECLAC (2006) suggests that this search for a better life for a number of people usually begins within the region. The table 5.1 below showed the reasons given by the household heads when they were asked to indicate the reasons for the female migration.

Fig 5.1: Reasons for intra and inter-regional female migration

Intra and inter-regional households have almost the same reasons for female migration but at their levels. The study revealed lack of employment, food deficits/shortages, depletion of soil, erratic rainfall, education/training and excessive demand of sex within the household as the reasons for migration, which is accentuated by poverty in the region. Out of total 72 households for intra, 47.6 percent said job opportunities was the primary reason for female migration, followed by the problem of food deficit/shortages (29.1%), depletion of soil (11.0%), education, erratic rainfall, health and adventure were all in smaller percentages (2.7% and 2.7%). Whilst 54.0 percent representing search for job opportunities for inter-regional female migrants, 22.6 percent for food shortages, 20.8 percent for depletion of soil and ‘all other’ that is (adventure, high demand of sex, health, erratic rainfall) represent

1.2% and 3.6%). The observation that most of the women had migrated elsewhere for job related reasons is not strange, given the fact that rural areas are known to be less developed and for that matter, lack almost all the basic needs such as schools, clinics, potable water and electricity.

The findings of this study show that the major motivation for female migration is to look for jobs opportunities which will improve the economic well -being of the household as well as improve their food security. However, there is considerable debate as to whether migration is actually a successful strategy for achieving this goal (Durand and Massey 1992; Durand *et al.* 1996; Conway and Cohen 1998; Grasmuck and Pessar 2001). The reasons provided by the respondents during the focus group discussions were not different from what was given by the household heads. Reasons for migration were mainly for economic reasons. Economic is therefore among the push factors at the places of origin of these female migrants, this is consistent with the assertion by Kwarteng, (2001) that inadequate economic opportunities in the north compel some of these women to migrate to the south for job opportunities (Songsore & Denkabe 1995 cited in Tanle, 2003).

The researcher further analysed the relationship between the choice of destination and reasons for migration using the chi-square test. The results indicated a significant association ($p < 0.05$) between reasons for inter-regional female migration and zero significant with intra's choice of destination. This, by implication, supported the findings of Van Der Geest (2011) and Dugbazah (2007) that people move to other regions due to the availability of job opportunities and fertile soils which will increase their food production and provide them with more money to access other basic needs of the family. This observation was expected as it is generally known that more people migrate from the Northern part of Ghana to other regions particularly in the southern sector. Further analysis was done on the choice of

destination and marital status to see if one's marital status has any significant contribution to the choice of destination.

Movements of these women may have implications for their household food security since most of the women are known to be assisting their spouses on the farmlands and the homes as well. In their absence, not only will food processing be affected, emotional support given by mothers to children and husbands will be lacking. This pattern of migration is characterised 'stepwise migration' by Anarfi *et al.* (1999) (a progressive movement from one village to a bigger settlement until migrants arrive at final destination). Regarding distances, male migrants are known to be travelling over long distance whilst females are associated with short distance migration. This study's finding was contrary to what has always been postulated by other school of thoughts.

The reasons for female migration during the group discussions, the main impetus for migration was poverty (same as lack of job opportunities). The fact that majority of the migrants moved to other places because of economic reasons imply that internal migration in Ghana can be attributed to inequalities in development indicators. This observation is consistent with earlier findings which indicated that a key characteristic of internal migration in Ghana is the strong 'pull' of income, employment, and other opportunities for personal success and development in the southern urban centres (Awumbila *et al.* 2011; Black *et al.* 2006).

The following are selected quotes from some of the participants on reasons for female migration:

"Life was so difficult for us, we could not afford to buy porridge everyday, shea-butter processing was so tedious, we could not think of any other thing that will make our life comfortable here". (33 year old Mariama living in Kong)

“We used to go to bed on empty stomachs, we are many so the food does not reach all, our men have no money, so some women are forced to go out and work to get money”. (Nambiri, 45 year old)

“...we struggle to feed our children, there are times we had nothing to eat in the morning, when one sees the child coming, one closes the eyes and pretend one is sleeping so one will not be disturbed. Madam, life in this village is full of struggles, real struggles, I mean financial struggle and the only means to survive is to leave and go elsewhere, where life is better.” (Faanko, 47 year old farmer)

Some of the factors also cited were economic hardships, family reasons and the lack of access to basic needs. Many women moved from rural areas to other places be it intra or inter-regional because of their belief that those other places are the best places to raise money for one's needs and also coupled with the fact that, women are not given access to farmlands. This makes them labourers mainly on the farmlands. As a result of that, they are not able to raise enough money to support their large families that they have, especially the older married women. The movement of both young and old people from the study areas have been on the rise since the 1980s (Grant, 2009). This has been attributed to various factors, including declining access to farmland, ethnic conflicts, environmental degradation in Northern Ghana (Van der Geest, 2011), better job opportunities elsewhere, and certain economic policies that have made northern Ghana relatively poorer (Addai, 2011; Awumbila, 1997; Twumasi-Ankrah, 1995).

The overall results show small variations in the reasons between the two groups, but a slighter greater proportion of respondents in the inter-regional category cited seeking employment as reason for female migration. Less employment opportunities in their communities do not allow women to work and earn wages to display their wealth, and to be self-reliant without depending on their spouses. According to the discussants, the community had nothing to offer, be it employment or food and the only way to survive is to move out to places where the opportunities are in abundance. One of the discussants lamented:

“Salat is just around the corner, if we were to be working and earning some wages, we would buy our own clothes and wear during the festival, but here we are in the village, waiting for our husbands to give us money. It is not good for a woman to be seen at the receiving end all the time. We need to move and make ourselves happy by earning some good money”. (Reesie, 29 year old)

In the group discussions, especially those that on the young women, they believed that they had a better chance of attaining economic prosperity and the power to change their lives and improve upon their food security situation. Another factor that emerged as a cause of female migration from the north to the south was the evident disparities in wealth distributions, in particular access to land and credit to women. While women are constantly struggling to provide opportunities for sustenance for the family, socio-cultural practices prevent them from having equal rights or say in decision making. Meanwhile, their counterparts in the south appear to have an abundance of opportunities and equal rights.

In real terms, when one compares the south and the north, the north is not only burdened with lack of opportunities, but also with other environmental factors which hinder their economic growth. Looking at these differences, most of the respondents were convinced that the south is the place to be, if one wants to become economically prosperous and be able to provide for the family.

Other participants even likened the experience of going to the south as “going to heaven” where everything is, despite the risks and challenges people there say they go through. To them, leaving the rural area to other regions was just to go and get the good part of life. The opportunities according to them in the south are more than those in their communities.

Another discussant of the FGDs stated that:

“The south is generally perceived as the land of opportunities and therefore people as well as women would always want to go and exploit those opportunities to better their lives and that of their families.”

“There are no jobs here, many of the teenagers, especially the girls do not want to further their primary school, and they consider migrating to southern Ghana to work for money as an alternative to staying in school.

The under-development of the area also contributes to the decision to migrate to areas where development has reached. Responding to the reason why women leave, others group of people indicated that the phenomenon discourages the girls from going to school or staying in school. A critical look at the arguments put across by the discussants show they are highly inter-related – one leads to the other. As a confirmation, responses from the men’s group expressed their dissatisfaction, though but concluded by saying that, if the north were to be like the south, they do not think anyone would like to migrate.

In this light, by extension, one can argue that, the migration of females from the study areas to other places, partly if not wholly, contributes to the school dropout rate of girls in the area.

This is explained by the Borjas (1996) who recognizes the differences in economic opportunities when regions industrialized. Also in the view of Lee, few opportunities in the place of origin and abundance in the place of destination was enough to get prospective migrants moving. This thinking is reflected in the writings of Stouffer (1940) when he posits that people will usually migrate to places where there were better opportunities than where they lived. The implication here is that, households who face a lot of hardship will definitely look for a place where they can make ends meet with wants. And for the fact that, women’s opportunities are so limited in the north, they would definitely look for better places where they can go and have better standard of living exists.

It has often been mentioned that marriage and childbirth reduce the mobility of women, so that female migrants are usually young and single (Pickbourn, 2011). Although the typical migrant (male and female) from northern Ghana is likely to be young and single, the present study’s finding indicates that

married women with children also migrate with or without their children. In other words, marriage and the presence of children do not necessarily prevent women from migrating from this part of Ghana as their responsibilities may require that they move out to provide income for the their families if their husbands may not do so.

While the common perception is that most females migrate for marriage or to depend on husbands for economic and social support (Werbner, 1995; Wray and Bartholomew, 2006), there are other reasons as well, because both single and married women migrate with or without their families (Ghosh, 2009). There is a mounting evidence of mothers migrating in search of jobs and have left the care of their children with family members who remain at home (Ghosh, 2009). They believe that migration improves the livelihood security of their families in the north.

However, there were non-economic reasons that were not captured by the survey but it was revealed during the women's group discussions. Furthermore, it was interesting to discover that even though most respondents said the women migrated to pursue economic goals with various levels of vigour, a few also expressed that some of the young married women migrated because of the problems they face within their marriages. They explained that some of the women could not stand the sexual requests made by their husbands hence the movement.

Supporting this finding, a participant in the focus group discussions said her friend of 27 years old, who went into marriage as early as 18 years left her two children in her matrimonial home and went with her last child of 4 years because she could not stand the frequent nature of the sexual demands from her 58 year old husband. In the young women's FGDs, some of the participants expressed their dislikes about farming and since there are no job opportunities or any income generating activities for them in the

communities, living in those communities becomes a problem and the only option is to migrate and go out there to look for jobs that will make them better persons.

This finding supports the existing studies (for instance, Cooke, 2008; Haar, 2009), which says that, migration has resulted in an increase in women's income, making them more independent and self-reliant. However, Chant (2007) had a different view about the income, he said, though earnings are important, money alone cannot make for empowerment, "wage is a trigger for other activities....." Indeed for many women, migration has strengthened their agency within structures that generally offer them few opportunities (Omelaniuk, 2005).

In one of the men's focus group discussion in Nankpawie, located in the Sissala East district, some of the men expressed their views on female migration in general. They attributed hardship in the village to their inability to take care of their women. Although they would prefer that the women stay, they are not able to provide them with their basic needs and this does not make them have a say when they want to leave.

..we would prefer the women to stay here and be taken care of because that is what our religion teaches us. But we do not have the means of livelihood ourselves, how can we support them and give them what they need to stay here? We are even feeling guilty that we are not able to provide for them, more so when our neighbour's wife or daughter has left and there is a change in the house, how can you stand in their way if they want to go? (Husband of a female migrant, Nankpawie).

Hard conditions not only compelled women to look for work outside their communities, it also appeared to have weakened the ability for men to prevent their women in their families from migrating, because

everybody is going through the same problem. The words of Shaibu, a farmer in his mid- fifties, whose wife had migrated, summed this up.

...My wife left because we both didn't have money. How could I stop her? If a man has no money but his wife has money, she can afford to stay here and not go to the south, but if she also has no money, then it is difficult for her to stay. And since the man has no money, he cannot stop her. If I was strong financially, I would go to the south myself and bring them back, but since I am not strong, what can I do?

Food shortages and poor harvest also made consensus and cooperation in migration decision-making more likely, even when men might have otherwise objected to women's migration. This was true for Malik, whose wife had migrated and left their four children to care for. He said this during our interaction with him:

...The harvest last year was very bad, eating became a problem for us. We are always at the mercy of my relatives, so I was not surprised at all when I realized that my wife had left without telling me anything. I always pray for her that she gets the money she is looking for. At least, she will send something for her children, if not me. With these children to take care of, do you think I would have agreed to her going if things weren't so bad? Of course not!

Saadia, 38 years old in Wa had this to say:

I saw my own sister suffering to put food on the table for the family, it was a real struggle, she didn't have any job apart from gathering fuel wood and making charcoal, so I volunteered to take care of the children whilst she leaves for the mines. She has been away for the past 8 months, and had only sent 150ghana cedis and mini bag maize for us. What can that amount of money do? I brew pito to support them (Hajia, 38 year old, Luggo).

Out of the 44 female household heads interviewed, about 9 of them confirmed having been part of the decision of their oldest daughters to migrate to the south due to the difficulties they were going through. They think that, the south offers the best opportunities to make money in no time. Rekyiatu, a 49 year old mother of 5 with the youngest child being six years old lamented:

“..... I lost my husband about 3 years ago, he had a farm he was growing crops, after his death, his brother took over the land because he said I didn’t have a son to take over. He grows and gives us some of the produce, but they do not last and I am forced to look for fuel wood and sell in the community. I don’t make enough money so I asked my daughter to go to Kumasi and look for job where she can work and send me something to take care of the rest of her siblings.”

“ Maimunatu, a divorcee with four children, ages 7, 10, 14 and 19 years old sent her daughter away to the south. Hajara (age 19) was her oldest child whom she claimed is the reason they are alive because she sends them food stuff. She has been away for the past 2 years and she sends them food stuff through a transport driver almost every 3 months. She works as a waitress in a chop

On the surface, the apparent absence of these women appears to provide some support to some of the family members left behind, whilst others feel the pinch of a woman be it daughter or wife being absent from the household.

In Funsu located in Wa Municipal, during the focus group discussions, the men were able to voice out their feelings by putting pride aside. They begun by talking about the category of women who were migrating in the past, what they said was that, migration of married women was a very recent phenomenon, in the past it was only the younger ones (single) who were migrating to the south, some by the influence of both parents and sometimes the mothers. The fathers have always kicked against migration because most often than not, those young girls who go always come back with pregnancies or diseases. Just turn around and look he remarked: “

“..... that child going there is called “**degree**”- the mother of that child left in the name of going down town to continue her education, after 14 months, she came back with pregnancy, she didn’t even know who was responsible for her pregnancy..... But you see, she is not the only one, there are several of them in this village. So, should we continue to allow them to go? No, they can only leave without our knowledge and that is what most of them are doing.

“ Now to your question about the married women who have also joined the stream - I wish you could spend a year with us and understand the life we go through here – very tough but it is the grace of Allah that we are still alive. Most married women are forced these days to go and work

and get money to help out at home. We have a large family, we need to take care of them. We, the men cannot do it alone, before our culture didn't permit women to work and feed the family, it is the responsibility of the men, but things have changed.

Madam Zenabu, a widow commented on why men are no longer opposing to the migration of married women because they have all come to realized that, when the married women go, they are able to make some money to help out the family. She further explained that these days no one objects their decision to move.

In the words of Njiri, a female household head – returned migrant:

I saw that life was hard and I could not provide food for my children every day. We eat once a day sometimes. There were times I sleep on empty stomach. So I decided to send my children to my mother in Nandom so I can go to Accra and get some money so that I could help them out.

Listening to these stories on women's migration and the decisions of these women brings us back to the theory on household strategy. How does it relate to decision making of these married women? Despite the fact that decision is always initiated by the migrant, one could tell that, the decision is not taken alone to benefit the migrant per se, but the family which is so dear to her – she saw what they were going through and decided to move out and get some help out there. Her desire to move the family out of that situation pushed her out of the house.

One may expect that married women would be more likely than single or widowed women to face resistance from their husbands when they raised the issue of migrating. However, from the focus group discussion, it was revealed that some of the married women even discuss with their husbands before they migrate. The quotes below provide some insight into some of the reasons for this:

When we look at our neighbours' house, we see change in their lifestyle, there is fire/smoke coming from their kitchen all the time that is a sign of having enough to cook and eat. And how did they do it, their older daughter was sent out to the city to go and work and send money to them. Unfortunately, we don't have older children, they are all very young-we cannot all leave them alone. But we realized that we are suffering so one evening, my wife told me she wanted to go to Kintampo to go and work and make some money and send us food. She's gone for a while now and has been able to send us some food items, if she were here, would we have gotten something to leave on? Life is a struggle – not until the Government comes to our aid, we, the men will lose our respect. You know when women get money, their character change too. (Ibrahim, age 56 year old).

Mutari resides in Luggo in Wa East. He was not left out in the discussion, he expressed his feelings by saying that, if he could change the pattern, he would call for all chiefs to come out with strong laws which will prevent the women from going. But unfortunately, he has not got that power to do that. He said and I quote:

“We, the men in this village, would prefer that the women stay here. If we had the means, we would support them and give them money to trade so that they will stay here. But we do not have the means of livelihood, we only depend on what we get from the farm which is not enough to last the whole year, so how can we stand in their way if they want to go?”

The situation in the communities compelled people to move, and it becomes even more difficult for the married ones with children. The situation sometimes facilitates their decision to migrate, even when their men might have otherwise objected to their decision. This was true for Salifu, whose wife had migrated some few months prior to our meeting.

“We didn’t harvest enough, the rain did not favour us at all, so my wife Amina decided that she would go and work in the mines and if she gets enough money, she will come back and start her own business that will give us a regular income..... What can I say to that? I don’t have what it takes a man to give to the family so reluctantly, I agreed to her leaving. Do you think I would have allowed her to go if things were not so bad? Not at all.”

Other existing studies on migration consider the “push and pull” theoretical framework developed by Lee in 1966 as one of the major theoretical underpinnings for rural-urban migration (Yeboah, 2008). The theory indicates that ‘push’ factors present at the point of origin act as obstacles which prompt the decision to migrate. The push factors include poverty, hardship, lack of adequate infrastructure in rural areas, food shortages/food insecurity, lack of employment opportunities, and socio-cultural practices. Push factors are associated with mainly the bad conditions in the place/area of origin of migrants. For instance, land degradation and deforestation are directly correlated with their productivity and life condition. When they are not in a position to sustain their life through farming, where it is highly affected by environmental conditions, coupled with erratic rainfalls, then they would prefer to migrate to other areas and engage in either farming or non-farm activities (Dereje, 2002; Kinfé, 2003).

On the other hand, the ‘pull’ factors’ include the perceived availability of jobs and other opportunities at the destination, better infrastructure/social services and food and freedom from family pressure (Opare, 2003; Kesse, 2004; Awumbila, 2007; Berg, 2007; Kwankye *et al.*, 2007). This means that migration can only occur if the reason to live elsewhere (the push) can be solved by the corresponding pull factors at a particular destination (Muñiz-Solari *et al.*, 2010 and Solem *et al.*, 2011).

The unavailability of non-farm activities in the study areas coupled with declining soil fertility, poor crop yields resulting in food insecurity have compelled some of the inhabitants both men and women to leave the area for other places where they will get the opportunities to earn a living. This finding agrees with the studies by the Ghana Statistical Service (2007), Awumbila (2007), Kwankye *et al.*, (2007) and

Kwankye, (2011) who pointed to the fact that the north-south migration is due to the north-south development dichotomy.

Challenges faced by people, especially the women of the Northern part of Ghana, be it Northern, Upper West or Upper East regions compelled them to seek other means that will bring them additional income, as predicted by other studies on household livelihood diversification in agricultural communities (Pickbourn, 2011; Bahigwa, 2003, Ellis, 2000). However, what this literature has largely failed to acknowledge is the role that women's economic activities play in household food security.

In conclusion, it could be said that socio-cultural, economic and other intervening factors act in various dimensions to influence the migration's decision of females, especially from the rural areas to other destinations. Many households have now accepted migration as both "survival strategy approach" put forward by Stark (1984) and as "household strategy approach by Chant (1998). As a matter of fact, as long as poverty level among people continues to rise, the problem of migration will continue to be existing. If nothing concrete is done to reduce the poverty level in the area, people and for that matter women will continue to seek greener pastures wherever they can find them.

5.3 Influence on Decision to Migrate

Migration decisions do not happen without a cause, it is influenced by many factors, be it economic, social, or familial factors or occupational status. These factors put together affect individual differently and it is quite difficult to ascertain what exactly or who motivates an individual to migrate. Household heads were asked if they were part of the decisions taken by these female migrants before their departure. The table below revealed the results of the brain behind the movements.

Table: 5.1: Influence on decision to migrate

Description	Intra (Frequency & Percentage)	Inter-region (Frequency & Percentage)
Household	12(16.7%)	7(4.2%)
Friends/relatives	31(43.1%)	77(45.8%)
Individual	29(40.3%)	84(50.0%)
Total	72(100.0)	168(100.0)

Source: Author's field work 2014

The study found three sources of influences on migration decisions reported by household heads and its members during the focus group discussions. These include parents, especially mothers, friends and relatives, as well as individuals themselves. As shown in table 5.3, individual's own decision recorded the highest percentage under inter-regional, followed by friends and relatives. Most of the heads expressed the concern that they were not informed by their women before they migrated. Among Intra category of households representing 43.1 percent were influenced by friends and 16.7 percent were influenced by their households to migrate. The only reason why female migrants could be influenced by household members could possibly happen because the husbands of the migrants may not have what it takes to care of their women and they would not mind if they leave just for a short duration. This probably, could be the seasonal female migrants, due to their responsibilities and family pressures at home they would not like to move away for a long period of time. Seasonal migration offers the opportunity for migrants to contribute to domestic food production (Van der Geest, 2011).

5.4 Choice of destinations

To check on the choice of destination, household heads were asked to answer questions on where the female migrant had moved to. The results revealed that about 70 percent moved out to other regions, be it, Brong Ahafo, Greater Accra or Ashanti region. The result is presented in the Table 5.4.

To the respondents, going out of the region is perceived to lead to better opportunities. Since the main economic activities of the rural folks is farming, most of the time when they move, they prefer regions like Brong Ahafo, Ashanti and Greater Accra regions, to continue their farming activities or for other types of employment (Claver, 2013; Care, 2012, Van der Geest). The reason why most people leave for Brong Ahafo (the middle belt of the country) is that, it has two annual cropping seasons and more fertile lands than the northern part of Ghana, according to the discussants of the focus group discussions.

Migration to these regions is now facilitated by both well-established networks that have developed there among the migrants from the study area and the availability of regular transportation facilities to those destinations.

Table 5.2 : Choice of destinations by region

Region	Frequency(#)	Percentage (%)
Western Region	3	1.3
Central	4	1.8
Greater Accra	39	16.3
Volta	2	0.83
Eastern	5	2.1
Ashanti	33	13.8
Brong Ahafo	57	23.8
Northern	20	8.0
Upper East	6	2.5
Upper West	72	30.0
Total	240	100.0

Source: Field Data, 2014

The study revealed that, migrants from Upper West region move to all the ten regions in Ghana. According to Table 5.3, among the ten regions, Brong Ahafo (BA), Greater Accra (GAR) and Ashanti (ASH) regions are the main destinations of these migrants. BA had 23.8 percent, followed by GAR 16.3 percent and 13.8 percent. Upper East region, Western region, Northern Region, Volta region, Central region and Eastern regions are destinations with very small proportion of the migrants. A relatively higher proportion remain in Upper West Region (30.0 percent).

The total percentage of intra migration is therefore 30.0 percent whilst the total percentage of inter migration is 70 percent. This indicates that, there is a high rate of inter-regional migration than intra-regional migration as observed from the study. This observation expected as it is generally known that more people migrate from the Northern parts of Ghana to other regions, particularly in the southern

sector because, the problems facing them in the communities are the same in every community within the three northern regions.

Table 5.3: Choice of destinations by intra and inter-regional migration

Choice of destination	Frequency (#)	Percentage(%)
Intra	72	30.0
Inter	168	70.0
Total	240	100.0

Source: Fieldwork, 2014

In response to the question: “which place or region do these women normally from this area travel to? Out of the 240 households, 70 percent mentioned other regions, whilst 30 percent mentioned within the region but different location from the place of origin. The Focus Group Discussions responses were not different from what was captured in the questionnaire regarding the choice of destination. One respondent remarked in their local dialect: “*mane kuon andi annan seu kole kuaon andi*” ((*translated literally : it is better to get drowned in the sea than to get drowned in a pond*) – Meaning that the communities within the region are in no way better than where the migrants move from so it is better they move out of the region and look for what can bring them the comfort they want even if it means, taking a risk. This is an affirmation of Stouffer’s Rational Economic Man (1940) interpretative explanation of migration which postulate the theory of intervening opportunities which states that, the number of people going a given distance is directly proportional to the number of intervening

opportunities. That is, if there is perceived availability of jobs at a destination, people will definitely move to those areas.

They further mentioned that, working within the same region does not make one rich, one suffer more than one can imagine. For instance, since one is known within the region, when one renders a service to the people in the region, they decide on how much to pay. Sometimes, one even ends up not getting paid at all.

With regards to the choice of the destinations, some of the findings correspond strongly with the concept of chain migration ((Dimova, et al, 2009), whereby migrants at a destination attract more from their origin by means of letters and other forms of contact. Over-time, they form a large association. Also it confirms the theory on the basis that quite a number of migrants go to the cities directly which is far away from their homeland. Indeed, some migrants had been to other places further than their region all in the name of looking for better livelihoods.

It was also noted that some of these female migrants' duration of stay in their new destinations were on average short (6 months to 18 months). These findings correspond strongly with the concept of circular migration, which is essentially seasonal or short-lived in nature (Yaro, 2008; Dayton, 2009; Fakhoury 2010). However, it is also contrary to the findings of Nelson, (1976), Asare, (2012); Alenoma, (2014) which concluded that, migrants most of the time prefer to stay in urban areas permanently with the entire family.

A number of migration studies such as those by Tanle (2011), Awumbila *et al*, (2008) and Pickbourn (2009) on the internal movement of people in Ghana concluded that internal movements from the northern parts of Ghana are seasonal or circular migration or permanent migration. Movements

sometimes are from one community to another community. Or move from one region to the other especially to places where people have relatives. Again, the choice of destination is also determined by migrant's level of education, if migrant has low level of education, he/she earns less and may not be able to generate enough income to provide food for the household at all times. High level of education is universally understood to improve migrant's chances of searching for jobs that require skilled labour with higher wage (Tegeje, 2014). Income and education are positively correlated because an education can increase the cumulative lifetime earnings of the migrant and he/she can support the family better.

5.5 The Role of Social Networks

In recent years, social networks theory has gained significant ground in the field of migration. Among famous authors, Massey et al (1998) state that "migration is shaped, facilitated and maintained in multiple ways by the social ties in which migrants remained or become embedded". Over 60 percent of the household members got to know after the migration of their members through a returned migrant/friend or relative from their destinations. This supports Martin and Widgren's (2001) categorization of migrants into demand-pull, supply-push and network factors. That is to say, information about jobs opportunities elsewhere will be mentioned by a friend or a relative and a person who wants to migrate will be encouraged to move by demand pull factor. This person may not have any work at home or may have faced crop failure or depleted soil which has resulted in food insecurity, so he/she would like to move thus supply –push factor. After obtaining information about the location which is the network factor, they then also move unannounced.

Although the female migrants were not there at the time of the interview, discussants in the Focus Group Discussions were able to point out how destinations information are sought from experienced migrants. According to the discussants information is given by those who know the places. Assaitou, a returned migrant had this to say:

“..my friend’s sister and the family were living in a village near Kumasi and I told her about my intention to migrate to Kumasi but I did not know anyone there, she gave me good information about the place and how I can survive when I get there since she has been there before. She added that her friend even told her which vehicle she should take and which place I should tell the driver I would be dropping and added her sister’s telephone number too so I could call when I arrive. I informed my mother of my journey, she was not happy but I told her, we are suffering and we need to survive. I promised her I will not be long, she should take care of the children for me and I left without telling my husband”.

“ at the water catchment place to fetch water, I over-heard two women discussing how their neighbour’s wife had returned from Accra and look different as compared to the way she was a year ago before her departure. Since that time, I have been thinking of migrating too but I just do not have the courage to do so, and also I cannot imagine leaving my children behind..... they are too young to be left on their own, so I am stacked, but I know one day I will leave, life is a struggle here”. (Jemilla, 35year old with 5 children)

From the discussions, one could easily deduced that, some if not all, have information prior to their departure about the places they could go to and the kind of work they could start with an who they could even stay with for a while. Once they are given the information, network is established and plans are executed.

As it is seen, social informal networks provide information for these would be migrants about the places they could move to. They create rumours and reputations which seemed to play an important role in the choice of destinations. Boyd explains (1989) that the networks are important at different steps in the “migration process,” that is, during departure” and “arrival”. Granovetter illustrates that there are two different types of social ties. While the strong ties include families, kinships and relatives, weak ties include “superficial personal contact” such as relation to a friend of a friend or to people outside close

family (Faist, 2000). One could as well say that female's decision of a destination is influenced by the network group.

5.6 Summary

In this chapter, we have looked at the main reasons for intra and inter-regional female migration. There are numerous factors that determine the movement of women from their communities to others or to other regions. Both economic and environmental factors were mentioned as reasons motivating women to migrate. Some of these factors were lack of job opportunities, food shortages, infertile soil, erratic rainfalls, lack of basic amenities were the push factors for both intra and inter-regional female migrants.

Lack of job opportunities ranked high because of the location of the region where it is known to have just one rainy season with little or no irrigation facilities. However, the depleted soil or the infertile soil was very critical among households of both inter and intra female migrants, this has serious adverse effect on the households food security status. As a result of this situation, those who cannot continue to starve migrate to other areas in search of fertile land to grow more crops to feed the family or look for other jobs in urban areas. Generally, the level of poverty as a result of lack of employment opportunities in the Upper West region leads many households to be food insecure.

Women's role in society make them responsible for making up for household food shortfalls and ensuring that every member, especially children, have enough food to eat at all times. The aforementioned together with other factors combined are enough justification to push married women to migrate even though they may have a stronger claim on household resources than the single ones. All the factors mentioned contribute to the increased female migration in the Upper West Region. The next chapter discusses both the positive and negative consequences of female migration on household food security using both qualitative and quantitative materials.

CHAPTER SIX

THE CONSEQUENCES OF INTRA AND INTER-REGIONAL FEMALE MIGRATION ON HOUSEHOLD FOOD SECURITY

6.0 Introduction

This chapter explores the implications of female migration on household food security. To determine the consequences of intra and inter regional migration of women on food security, the role of the migrant in the household was measured against a set of food security criteria, using the Chi-Square test. The specific issues focused on include: 1) the status of household food security before migration, 2) role (s) of the migrants before migration and 3) the impact of intra and inter-regional female migration on food security after migration.

6.1 Food Security Situation

People of the north for that matter, Upper West region are known to be farmers. In their various communities, they plant maize, corn, millet, yam, groundnuts, rice, beans, bambara beans. Dawadawa, wild fruits and sheanuts are found in those areas and are used by the people of the north. Apart from farm activities, women grow vegetables in little gardens around the house or in between the crops mostly during the wet season. These vegetables are mostly consumed in the house and are in different forms. They are leaves, okro, tomatoes, pepper and onions. There is one rainy season in the north and it is between May and October each year. Food scarcity is around July and August, during this period, households are seen running out of stock because the new ones are not yet grown to be harvested. Food during this period is very expensive and very few people are able to afford due to their level of income. Most farmers in the study area mainly farm for subsistence, they do not sell their produce but store them

for family consumption if they are able to harvest more. During the harvest time, both men and women have their own task: men are seen harvesting the crops and women carrying the crops from the farm to the house. To identify food secure and insecure households within the two groups, household heads were asked questions related to food availability, accessibility, utilisation/consumption and sustainability (this could be found in the appendices). Normal consumption according to the participants is three meals a day, when there is enough to eat from late August to November. Depending on how much they are able to produce and harvest, they are able to store some and sell the surplus. Although, most of the heads were not able to report the amount of food produced per growing season, partly due to poor record keeping, they are able to compare the amount of food production when the migrant was there and after departure. Household heads were asked to answer the eleven food security standard questions to determine their food security situation.

6.2 Food Security Status of households before migration

The study explored the food situation in the study areas under the intra and inter-regional female migration. Migration induces changes in the population distribution and, consequently, in the social organization and patterns of production and consumption in both sending and receiving countries and areas thereby affecting considerably both the supply of food and the demand for types of food produced and consumed.

Food security at individual household level can be measured by many factors including food availability, food accessibility, food utilisation (consumption) and food stability (storage). The household food security levels of respondents of both intra and inter-regional female migrants' households was measured using the eleven questions below. For this study, household food security

was measured using questions under availability, accessibility, utility and time span of food available from the perception of the respondents and the results are presented in Table 6.1 below.

Table 6.1: Measurement of food security at household level

Food Security score category	Intra Frequency	Percentage (%)	Inter-regional Frequency	Percentage (%)
> 6 (no)	14	19.4%	75	44.6%
> 6 (yes)	58	80.6%	93	55.4%
Total	72	100.0	168	100.0

Source: Field data, 2014 : Scale: Food secure for those responding ‘no’ more than 6 questions and for food insecure, those scoring ‘yes’ to more than 6 of the eleven questions.

Although the objective of the study was to analyse the impact of intra and inter-regional female migration on household food security, the researcher deemed it necessary to find out about the situation of the household food security in the two groups. Household heads were asked about the eleven questions developed by USDA (2007). The results revealed that majority (80.6% and 55.4%) of the respondents’ households were food insecure, they did not have food available all year round, and this confirms the assertion by the participants of the focus group discussions that availability of food during certain parts of the year become very expensive for an individual household to afford, even what it takes to buy is a problem.

Another area of food insecurity is having limited choices in the type of food that a household eats due to one’s financial situation. The researcher asked respondents whether they are not able to eat according to their preference due to a lack of resources. Out of the respondents interviewed, more than half of the

total number within the intra female migrants' households expressed their inability not to have enough resources to purchase the food whilst about one fifth of the respondents indicated borrowing from neighbours and sometimes relatives. Meanwhile, inter-regional female migrants' households are able to purchase food more than those in the intra female migrants' households. The discussions show that in terms of food availability and household income, individuals in the intra group experience lower level of food and income as compared to those in the inter-regional group. This confirms what was said during the group discussions that, those who move outside the region are able to send both food and cash to families left behind. As illustrated in table 4.7 labelled as household heads income, those within the ₵gh100.00 - ₵gh200.00 for intra are those who are not able to purchase food when they run out of stock.

The difference in income and availability of food for those in the inter-regional group is attributed to choice of destinations. Outside the region is perceived as having rich soil and two rainy seasons, therefore, production of crops is much higher than the place of origin. This is in agreement with De Brauw and Rozelle (2003 cited in Mahama, 2013). In their study they found out that despite the loss of households labour from migration, remittances sent home by migrants compensate for the loss. This therefore confirms the reason why those in inter-regional households seem to have more food than their counterpart in the intra households. In fact, migration and remittances are expected to increase household food security as well as their welfare.

Further analysis was conducted using the chi-square to determine if there is an association between choice of destination and household food security. The result shows that there is no relationship between the two variables. This could be attributed to the fact that, it is not all migrants who contribute to household food security, be it intra or inter-regional. In fact, there is no specific time period that these migrants remit their families left behind. It is based on availability of having enough funds and sharing it with family members.

6.3 Role (s) of the migrants before migration

Gender plays a very important role in every community in Ghana and the Upper West Region for that matter. Women's roles are into food production, processing, distribution and marketing. They are also involved in subsistence farming and represent about 43% of the agricultural labour force in developing countries (IFAD, 2009). Generally, men are engaged in farming than women but it is the females who are in charge of harvesting, processing, preservation, marketing and uses of agricultural products in the domestic home.

Specifically, in response to the question, what role was the female migrant playing before migrating on table 6.2 below, over half of the respondents mentioned all of the above representing 29.1 percent for intra and 42.9 inter-regional female migrants 'household respectively. In addition, 20 percent and 41.1 percent mentioned food production and processing, only about 17.6 and 11.9 percent mentioned caring for the house. The least on the list was marketing representing 5.5 and 1.2 percent. In this light, by extension, one can confirm that, these roles performed by these women would definitely be affected and other members of the family would be forced to play those roles.

Table 6.2: Migrants role in the household

Description	Intra Frequency	Percentage (%)	Inter-regional Frequency	Percentage (%)
Food production	15	20%	69	41.1%
Food processing	18	25%	5	3.0%
Caring for the house	12	17.6%	20	11.9%
Marketing of produce	4	5.5%	2	1.2%
All of the above	21	29.1%	72	42.9%
Total	72	100.0	168	100.0

Female migration affects their homes in a variety of ways especially if the migrant plays a major role in the household. These effects were found to be both positive and negative. The migrants' families reported to suffer from not only the absence of the migrant but also the responsibilities left behind. Given women's crucial roles in and contribution to food security, their absence automatically affects the household's food security, according to the discussants during the focus group discussions. Women are known to be involved in the day to day running of the house – working on the farmlands, tending livestock, gathering fuel wood, fetching water, transporting and marketing farm produce, processing and preparing meals for the family (IFAD,2009). In their absence, those left behind have to take over those functions in addition to their own. For instance, if the woman's role is food production, there will be a depletion of labour if the family is not able to hire someone to replace her and this can lead to a reduction in food production, thereby affecting the production of surplus which could be sold to generate income for other basic needs. Though respondents stated that they receive assistance from the migrants, the regularity of these supports was not consistent.

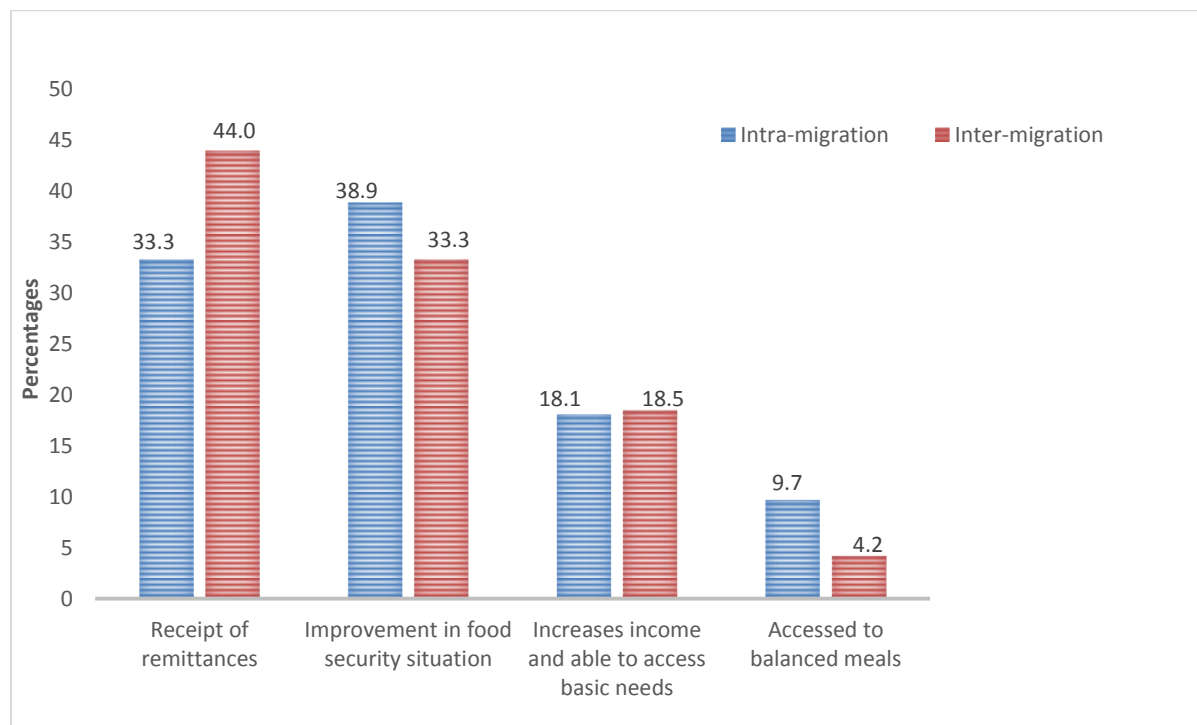
The Chi-square statistic was used to test the hypothesis that there is significant relationship between female migrant's roles and household food security. The results showed a positive relationship between intra and inter regional migration of women and food security (the Pearson Chi-Square value **1.245**, **$P>0.05$**). The null hypothesis of no significant relationship between the two variables, namely female migrant's roles and household food security was rejected in favour of the alternative hypothesis. As the data show, almost half (over 40 percent) of the inter-regional female migrant's households indicated women's involvement in several activities. The implication is that, if they continue to migrate, household members, including the male household heads may be compelled to take over from them thereby affecting traditional norms and gender roles.

6.4 Consequences of Intra and Inter-Regional Female Migration

Consequences of female migration are studied on a wide range of indicators. For this study, both the negative and the positive effects were identified in the various households visited. It is widely believed that migration have some effects on households. Migrants, for that matter female migrants move in order to improve upon their lives and that of the family but then, it is not all female migrants who realize their dreams and expectations. Migration therefore can have both positive and negative consequences to both an individual migrant and their families in areas of origin. Some of the positive consequences include remittances for families left in rural areas, assets such as cooking utensils, sewing machines, suitcases and mobile phones. Hosegood and Solarsh (2001) defined remittances as money and goods that migrants send to their families in areas of origin. Attainment of the autonomy of female migrants as a result of increased income is also another positive consequence of female migration.

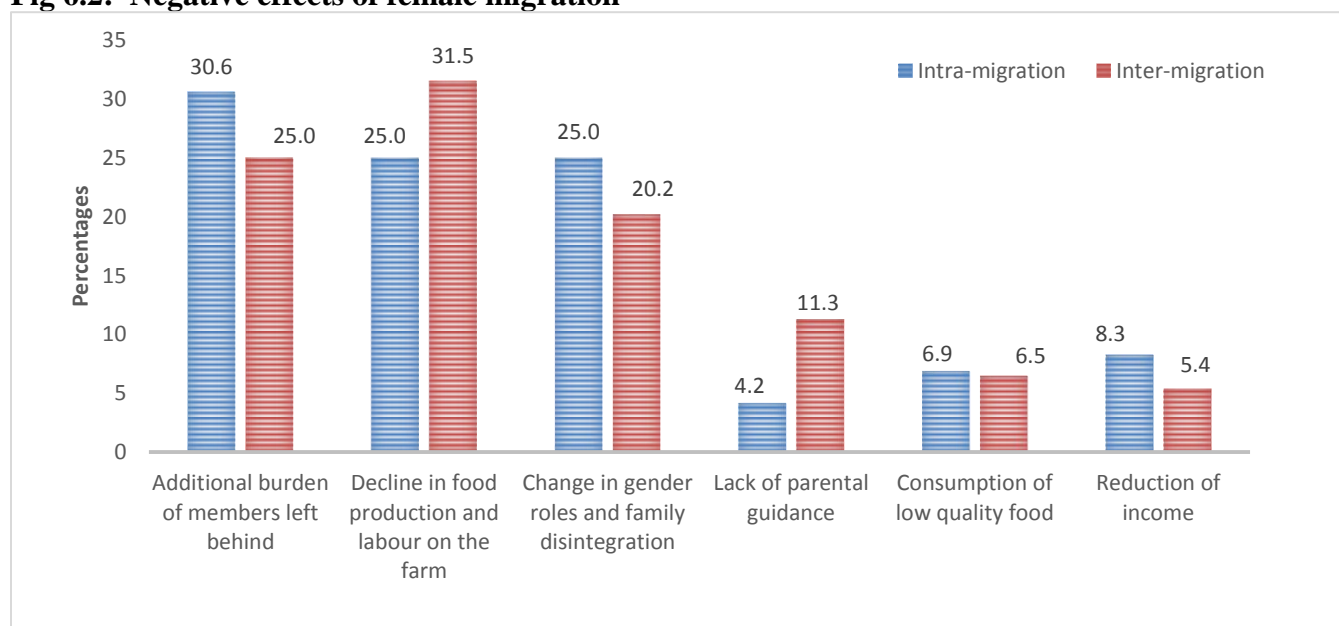
Based on this assumption, the researcher deemed it necessary to find out from the respondents how the absence of the female migrant has affected their households and for that matter, the food security situation. Both the positive and negative responses provided by the respondents during the FDGs are shown on the bar charts below.

Fig 6.1: Positive effects of female migration



Source: Author's field work, 2014

Fig 6.2: Negative effects of female migration



Source: Author's field work, 2014

Traditionally, farming communities are full of family members who serve as labour force. Therefore when one family member migrates, the work is shared among the remaining people left behind. When a households' members are working in their full capacity, any additional work burden due to the migration of one member may lead to a fall in food production. The main reason is that, if the loss of the member may not be replaced by sharing the work. In the absence of physical competence and skills required to perform both responsibilities effectively, any extra workload will lead to a fall in one's own productivity. Hassan, a 55 year old farmer whose wife left without his knowledge noted while sobbing:

“there is nothing painful than having children who are very young and the woman to care for them leaves, that was what happened to me. She just left without a word until she gets to her destination, all effort to get her back proved futile, how I wish she will come back.....”.

The above statement is an example of a man expressing a negative sentiment regarding the absence of a loved one who did not inform him before migrating. In other words, the decision to migrate was solely the woman's own.

Immani, a 48 year old farmer remarked that: “for a man to be seen assisting with the household chores, then it means he is doing it out of love”.

A typical example of how men feel towards women's role is produced here below:

“It is Allah who has differentiated women's and men's responsibilities. “It will culturally be out of the way and shameful if a man does any of women's responsibilities”. (Ali, 70 year old farmer – Sing - Wa)

Once again, societal norms have been socially constructed in such a way that, there are defined roles perform by men and women. In a situation where men are seen performing women's role, they are

mocked at. The lack of awareness of the different roles and contributions of men and women lead to “gender blindness” (FAO, 2010).

For some reasons, the men at the Focus Group Discussions remarked that, even hired labourers are difficult to get and in some cases, poor households are unlikely to use them due to the cost involved. As a result of that, there is always a decline in production apart from other factors like erratic rainfalls and infertile soil. Those households who cannot pay for services rendered by someone else are forced to go in for another woman to take care of the house chores despite the cost of the dowry.

Apart from the negative effects, there are positive ones that help the households from time to time. Female migrants do not abandon their people left behind. They try to send either food stuff or money especially when the migrants come from a poorer family. Migration is more likely to result in greater food security for household members. Remittances send back home is supposed to elevate the well-being of members. This same remittance is used to purchase foodstuff when the family runs out of stock and also use it for other things that are needed in the house.

6.5 Determinants of Household Food Security

One factor alone cannot explain the determinants of food security. It involves a lot of factors such as access to farm, farm size, land quality agricultural inputs, per capita aggregate production, access to market, remittances among others. These are found to have deterministic relationship with household’s food security (Feleke et al., 2005). A study in Bangladesh reported that food security is significantly correlated with some household’s characteristics including Land ownership (Faridi and Wadood, 2010). Household heads were therefore asked to indicate the acquisition of lands in their communities. Majority of (84.5%) them were found to be the owners of the farmlands. Those who do not possess land either

work on someone's farm or lease the land for farming. Again, research has proven that, households with small farms or no lands are prone to food insecurity (Ibid) but then receipt of remittances (either in the form of cash or food stuff) from relatives who have migrated help them access some kind of food when they run out of stock.

This was also confirmed during the focus group discussions that remittances are not received only in the form of cash but for things like cloths, medicine, electronic items and bicycle which also help households to improve welfare level. Also in the discussions regarding the frequency of the remittance flow, participants provided some of these responses, once a while, every six months, twice a year and occasionally. This suggests that, remittances are not after all done on regular basis.

6.6 Impact of female migrants on food production/availability

A question on the impact on production was posed to respondents to know whether the departure of the women has had any negative or positive impact on the households' food production. A vast majority (79.2% and 85.1%) respectively from intra and inter-regional indicated that they had been affected. This is not different from other studies on migration where food security has been adversely affected as a result of migration (Yaro, 2008; Chilimanpunga, 2003); especially when the household member who has migrated contributes to food production and income generation. Meanwhile when household heads were asked to indicate which of the food security pillars are affected most, food production and accessibility were the top two raised and this by implication means that, when there is no available food in the house, women would be forced to go out there and look for food to feed her family.

Table 6.3: Migrant's absence and its effect on food availability/production

Description	Intra Frequency	Percentage (%)	Inter-regional Frequency	Percentage (%)
Between 6 and 12 months	29	40.3%	94	56.0%
Between 1 yr and 2 yrs	22	30.6%	49	29.2%
More than 2yrs and above	21	29.2%	25	14.9%
Total	72	100.0	168	100.0
X ² =7.159 degree of freedom = 2; p = 0.028 p<0.05)				

Source: Author's fieldwork, 2014

A chi-square statistic was used performed to demonstrate if there is any relationship between household food security and period the migrant has been away. The results show a significant relationship between the period that the migrant has been away and food security. In other words, being away for a period of time could have both positive and negative effects on household food security. For instance, the longer one stays away, the likelihood one remits home because it is assumed that one is gainfully employed and should be able to support the family left behind. This was expressed during the discussions with the women's group. Meanwhile, a proportion of the discussants in the men's group did not agree with what the women said, they indicated the negative effects female migration has on food production and they cited decrease in food availability, income as well as shortage of labour force.

The division of labour that exists in that part of the region does not allow individuals to just leave. If one leaves and there is no replacement, the effect is felt by every household member and the community as a whole, especially during festivals and ceremonies like wedding, outdooring and funerals, women are seen cooking together. One man remarked:

“It is during these festivities that one is able to see the effects of these female migration, very few women are seen preparing the foods; they have all gone and left the aged, what strength do they have? They cannot cook like the younger ones” (Adult male farmer in Luggo).

Not only will there be a reduction in food supplies, it will deprive household members of their economy power if they are not able to produce enough and sell the surplus. Fasoranti (2009) in his studies in Nigeria also found the negative effect of movement of people away from the rural areas as a decrease in labour force, which to him, affect crop production.

However, other researchers (Quartey, 2006; IFAD, 2007; Mahama, 2013;) are of the view that, when labour is reduced, remittances sent by migrants are used to hire more labourers to do the most tedious work on the farm and are used to take care of other needs. But the question one could ask is that: how regular do they receive the remittances and how much? Indeed, female migration affects the livelihoods of their households in terms of food availability and household income with intra households experiencing lower level of food and incomes compared with individuals in inter-regional households. Baba Seibo, a 62 year old farmer remarked below:

“my wife and I used to cultivate together and harvest a lot which lasts for a period of six months, nowadays, I cannot plant more because I am alone, the children are also very young so they cannot farm like their mother”. (Baba Seibo 43 years old – Busa)

Positive sentiments expressed by some family members were that female migration has rather increased food availability in the house due to the remittances they receive from time to time. If they run out of stock, they are able to purchase from the local market. This showed that, the magnitude of the remittance flow from the migrants is very significant. Thus it is obvious that households who receive contributions either cash or in kind from their female migrants may encourage more household members to migrate.

Regarding the social consequences, discussants (both male and females) in the focus group discussions could not hide their feelings. They expressed them through statements such as:

“you need to be in our shoes to understand the hardship we go through, especially when you woke up and you do not know where the next meal will come from, you will be thinking about skipping breakfast and lunch to make provision for the children at home” (Jengri, 59 year old in Kong).

“we live under the mercy of Allah because he provides life and food”. (Eric, Sing in Wa East)

“ I do not attend ceremonies anymore, because all I hear is, since the wife left, he has taken to drinking” (Mamoud, 43 year old, Tumu).

“ wish my wife will come back, I am old now and I can continue to rely on my sister to provide me and the children food all the time. She does not complain, but I do not feel comfortable asking for support all the time” (Bagbin, 59 year old - Jenyiri).

“ when we do not have enough to eat, we the older ones take water and give the remaining food to the children” (Assibie, 39 year old woman).

Indeed, this observation confirms Quaye, (2008) and Van Der Geest’s (2004) study in Upper West region where household members had to derive a strategy known as “adaptation to hunger”, to ensure adequacy of food for the younger ones to eat, adults are forced to either reduce the intake of food or skip meals during certain periods of the day.

Household members including women, who could not continue skipping meals, migrate to other areas where they can work and make some money and send money or food stuff to their families left behind. Since food is a basic human need for survival, health and productivity, it should be made available at all times for all people. Not only available, it should be safe and nutritious to meet the dietary needs and food preferences to enable live actively and have a healthy life.

Fusein, a 55 year old man with five children had to rely on his aged mother to be assisting him in the house because the wife left them for the following reason:

“She was always complaining that the food we produce is not enough and because our children are young and need to eat well, I should go to Accra like other men have done so that I can send them money to buy food, but I also refuse to go because I can foresee the trouble ahead of me, I have problems to solve here, how can I go to an unknown place..... if she can go then I have no problem”.

The males were so concerned about the movement of their spouses and daughters because of the problems they bring back when they migrate to the south alone but since they cannot meet all their needs they are forced to accept the situation. The sentiments expressed by the men’s group were that:

“Women of today want to have all the basic needs for themselves and their children, so they would like to go the extra mile without our knowledge. They say migration is good for them because they are able to buy clothing, and cooking utensils, educate their children which we cannot provide for them. But when they migrate, especially during the farming season, it affects our farming activities in many ways”.(Ali, 60 year old – Tumu).

Looking at the role women play in food production, one will be tempted to say that, yes indeed, if these female continue to migrate, production of food will continue to decline if household members are not able to hire labourers to assist on the farms and their situation will become worst off.

In short, inadequate production of food at home, coupled with other factors in the north compared to the south were the main factors accounting for the migration of females from the north (Anarfi *et al.* 2003; Kwanteng, 2001). The higher the output levels of household production, the greater the likelihood of food security. The lower output level of households’ productions increases food insecurity. Ojogho (2010).

6.7 Impact of female migration on Food accessibility

Food accessibility addresses issues on the purchasing power and consumption. Although migration plays a pivotal role in income diversification of the households in general, it also has severe drawbacks on households’ livelihood. There is a general consensus that households access food mainly through three sources. These are the markets, subsistence production and transfers from public programmes or

other households (Riely et al., 1999). These sources are also referred to as entitlements categories: production, exchange (barter or purchase) and transfers (Scherr, 1999).

It was revealed at the Focus group discussion that access to food is the ability to purchase food when one runs out of food. Daily consumption decreases one's food availability. Ideally, one is expected to have food available at all times, but it is not the case in some household in the communities visited. The discussants revealed that most of the time they were not able to buy food when they run out of food. Meanwhile, some of them confirmed that they were able to buy food thanks to the remittances they receive and other income generating activities they take part in apart from the main occupation which is farming.

Factors that determine food accessibility include financial income or other means to purchase, barter, or gather food; market price and availability of credit; and food transfers from relatives, community or government (Codjoe, *et.al*, 2011). Economic and physical access to food means being in employment with stable livelihoods and having financial resources to access food. In most communities, for that matter farming communities, production of adequate food is an essential means to access food. If one is able to produce enough that can feed the family the whole year until the next season, one is assured of making money from the surplus for other basic needs in the household.

The table 6.2 below shows household income and the number of people who are able to access food with the income they receive. A steady income is essential for household stability and economic mobility as the procurement of goods improve the overall standard of living of a household. Household income is a variable known to have an influence on food security of farming households. The study for the two groups namely intra and inter-regional migrants' households show a significant relationship between the two variables. This is expected because, higher income, all things being equal, means an

increase in the access for food. The table 6.8 revealed almost about 40 people being able to access food with the amount of income they receive monthly. Majority of the respondents identified themselves as people who do work for a living and are able to make an income between ¢gh100 to ¢gh300 a month. At least, the result is an evidence that every household has an income that comes monthly to sustain them. Over a 50 percent of respondents under inter-regional households, make an income between ¢gh200 and ¢gh300, followed by 58 representing 34 percent for those earning an income between ¢gh100 and ¢gh200. These are people who hardly make ends meet with wants. Low levels of income can result in lack of household amenities.

Table 6.4: Comparing Income with access to food

Income	Are you able to access food throughout the year	
	Intra & Percentage	Inter-regional & (%)
Between ¢GH100 - ¢GH199	40	58
Between ¢GH200 - ¢GH399	30	95
Between ¢ GH400 - ¢GH599	2	14
Total	72	168

Source: Author's fieldwork 2014: ($X^2 = 8.616$; $df = 3$; $P < 0.05(0.035)$)

Being in an employment and earning a living guarantees one's access to food. The more gainfully employed the households are, the greater their chances of being able to secure food at all times. That was why there was so much condemnation from the side of the men about the farm produce getting rotten because they do not get to the market on time and the women who are to carry the goods to the market places have all left for the big cities. This is expected because it was through the sale of these goods that households get money for other needs. The result of the study is in line with the findings of

Pappoe (2011), who found that access to income improves the food security status of households among bio-fuel producers in the Central region of Ghana. If all things go equal, accessibility of food has a very positive influence on food security status of households, without it and with low production, households will suffer severe chronic food insecurity.

6.8 Food utilization/Consumption

Food consumption is a very useful indicator of the food security situation of household. Usually the number of times a household eat in a day depends on the availability of food one has in store. In most households, food consumption pattern is based on food availability. Under such conditions, the number of times a household eats becomes a coping mechanism. Regarding a question on female migration and the role she plays before migration, households with female migrants who play major roles in both production and consumption suffered a lot.

In order to determine the effects of intra and inter-regional migration of women on food eaten by the family/household members, household heads were asked to state the kind of foods they eat (breakfast, lunch and supper) in the last three months preceding the survey and also to confirm if there had been any change since the departure of the migrant who were in charge of food processing. Various foods were discovered; however the main foods consumed by the migrant's household are shown on table 6.9 below. The most nutritious foods as perceived by community members is Sao (cooked maize/millet dough) and vegetable soup. Generally, the food consumed by the communities consists mainly of grains, cereal and starchy foods which are combined with soup or sauce made up of vegetables, leguminous crops, animal products and oils.

Table 6.5: Main food Consumed by both Intra and Inter-regional migrant's households

Description	Frequency	Percent
Sao(TZ)	193	80.4
Fufu	15	6.3
Rice	11	4.6
Yam	13	5.4
Other	8	3.3
Total	240	100.0

Source: Field data (2014)

Table 6.3 shows the kind of foods consumed by most of the households visited. The most consumed food by respondents were, Sao (popularly known as TZ), it is made up of maize or millet; it is prepared like porridge until it becomes hard and ready to eat with different kinds of soups notably among the soups are peanut or green leaves with okro. Over eighty percent of the households visited mentioned Sao as the main food consumed by household members anytime of the day. Surprisingly only about 6.3% of the total number consume Fufu which is made up of yam, cassava and plantain and this was followed by rice representing just a little over 5 percent. But as witnessed from the table Sao is the most cherished food consumed by the respondents with majority of the respondents (80.4%) confirming to this.

Nafisa, 20 year old girl, whose mother had left remarked:

“we don’t have the kinds of food we used to eat before, when my mother was here, she prepares at least rice twice a week with groundnut soup, since she left, we eat only T’Z and green soup. My grandmother is old and lack what it takes to buy variety of foods. She prepares based on what she is provided by my father”.

“ we are fed on what is available, we have not choice.....if they prepare the food and you don’t like it, you go to bed without eating because that is what the family can afford. It is worse during the latter part of the year, when one had nothing left from the last harvest.”

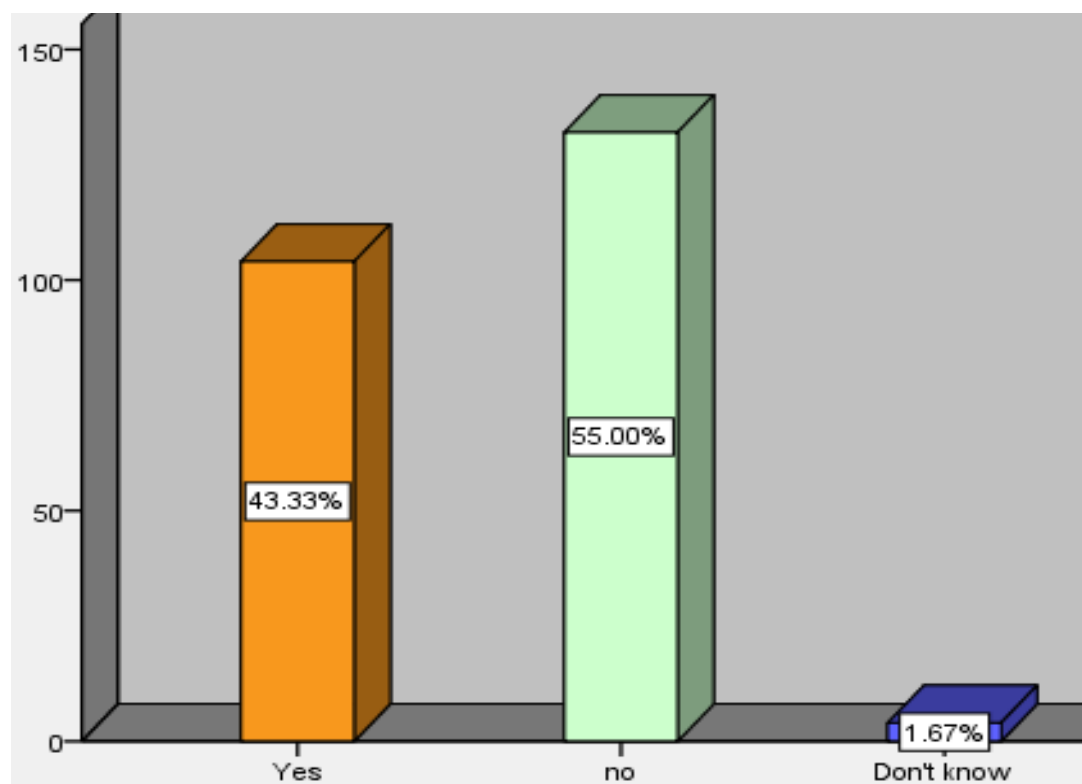
But Mary had a different story to tell:

“we depend on what we produce but my mother realised that, she can go and work in Accra and make money to send us food. She has been away for almost eight months now. Anytime, someone is coming this way, she sends money to us and it is helping a lot”.

With these three scenarios, one could deduce from the stories that, whilst others are expressing negative effects of migration, others are talking about the good things they receive from the migrants. So depending on the angle you are looking at it, migration can at one point be a response to food insecurity and at other point influence food security.

6.9 Choice of food influenced by Migration

The influence of migration on the choice of food is shown on figure 6.1. From the figure, 55% of the respondents claim that the choice of food in their household is not influenced by migration, whereas 43.33% indicated that it was influenced by migration. Which implies that, what they eat depend on the departure of the migrant. Some discussants confirmed this during the focus group discussion. It was also revealed that when the household heads for that matter the men, gave out the grains, it is the responsibility of the women to look for other items to prepare the food for everyone to consume. Therefore if the person who is responsible leaves, automatically, food preparation becomes a problem.

Figure 6.3: Choice of food influenced by Migration

6.10 Impact on Food storage/sustainability

Food storage or sustainability is when crops are harvested and dried and kept for future use. Grains like guinea corn, maize and millet left in the cobs are stored in the traditional granaries or seen hanging on top of their house roofs, whilst others like, beans and cowpeas are also stored in bags or sacks in room. Groundnuts are also dried and stored in bags and can stay for a year or it could be roasted and grinded into paste for soup. When harvest is good and there is abundance of food, after marketing some, the surplus is stored for future use. Household heads were asked to tell how they store their harvested crops. Abbou with Nafisa the wife and their two children (Assibie and Ashietu) with a grandchild Muni, from Kong narrated his style of storing corn:

“When we harvest my corn, we peel off the husks on the farm before bringing it home. In about a week or two, we remove the kernels from the cob. We then dry it and apply insecticide on the grains. We put them into sacks, seal them and keep them. This method helps the grains to last longer, especially the new varieties”.

Figure 6.4: Harvested Maize from the farm



Figure 6.5: Harvested Maize for storage



Source: Fieldwork – 2014 (the two pictures show the stages of storage - from plucking to peeling of corn ready for storage)

The discussion with the group revealed that, that majority of them go by traditional method of storing maize because of lack of funds to buy insecticides. They store maize on huts usually built in kitchens. The heat in the kitchen reduces the rate at which insects attack the kernels. Storage of cereals is in either a “saazu bogr, kata”, and “bogpula” made out of a mix of clay soil and pirme (local grass), that had a lifespan of between 25 - 30 years, or in baskets and clay pots.

The respondents believe that it is better to prepare food with maize stored with this method than when chemicals are applied on the grains. Storage of food crops for some time now has not been regularly due to the quantity of food crops produced annually. About forty-five percent (45%) of the households are able to store only two thirds of their produce. For those who are not able to store because of insufficient produce or insufficient space, find themselves buying food most of the time. In times when they cannot afford to buy, they depend on relatives for assistance.

As stated earlier on, food could be stored when it is in abundance, if production is low, storage becomes a problem. One needs to eat first before one thinks of storage. If the household size is big, definitely there will be a lot of people to feed, and if the plot is too small, production will not be adequate enough to feed entire house. Or it could be households who sell part of their produce soon after harvest in order to get money for other household requirements such as paying school fees and buying medications. What the study found out later was that those households which produced food do not last to the next harvest employ combination of coping strategies including borrowing from relatives or neighbours, collection of wild foods or migrating to bridge the gap of food deficit gap. All things being equal, households who adopt those strategies still maintain stable availability and access to food in spite of low production.

6.11 General Impact of female migration

Specifically, in response to whether female migration has any impact on the household, about 86 percent (86%) of the respondents indicated that the phenomenon has an adverse effect on the stability of most marriages, especially those with children, coupled with unreliable rainfall in the area in recent times is also making living and farming in the environment very difficult and unattractive. They argued that the migration of females has caused a number of marriages to break down and in some cases separation.

With more women leaving, more tasks are left in the hands of the men, from taking care of the children to working on their various farms.

The implications of female migration on the households are varied and complex. The evidence available indicates that female migration impacts household structure, functioning and roles, sexuality, agricultural activities including crop production. Household income, children left behind, and female empowerment and social status. The turn-around witnessed in gender roles where males are now taking up childcare functions and other related functions performed by women. Whilst others support the movements of unmarried, the same could not be said about married women although they also send remittances to families left behind. This thereby supports the assertion of Awumbila et al. 2008 that majority of the migrants remittances enable them to support many people back home.

6.12 Summary

This chapter had discussed the implication of intra and inter-regional female migration on household food security with particular attention to the four pillars of household food security namely, production/availability, utilisation/consumption, accessibility and sustainability. None of the four pillars had any significant relationship with female migration; although it was hypothesised that female migration will have effect on household food security. However, the study revealed other variables like farm size, household size, education and income to have statistically significant relationship with household food security. Both positive and negative views were expressed by the respondents on female migration. A high proportion of respondents condemn female migration whilst others applauded it due to the remittances they receive from time to time. To the respondents, food security is central to the survival of humanity and can never be underestimated because, we represent what we eat. This

therefore suggests that intra and inter-regional migration of female can be viewed to have both positive and negative effects on household food security, depending on individual's perception.

CHAPTER SEVEN

FACTORS INFLUENCING HOUSEHOLD FOOD SECURITY AND CONTRIBUTORS OF HOUSEHOLD FOOD SECURITY

7.0 Introduction

This chapter discusses factors contributing to and influencing household food security in the selected areas in the Upper West Region of Ghana. It also examines the factors leading to current household food security in the study areas and also tests the hypothesis on contributions made by female migrants.

Hypothesis

H0: inter-regional female migrants contribute more to household food security than the intra –regional female migrants;

H1: inter-regional female migrants do not contribute better to food security than the intra female migrants.

7.1 Contributions/Remittances to Household Food Security

Recent evidence suggests that remittances, the portion of a migrant's income sent back to the family members left behind, are helping to improve the livelihoods of households in many low income countries, including Ghana (FAO, 2013; Willams et.al. 2013). Contributions made by migrants are either in the form of cash or food stuff. The impact of remittances varies from one location to the other and is often used for consumption than investment. Migration serves first to assure survival. Migration is considered to be one of the areas for improving the socio-economic conditions as well as household food security of many families in communities that are poorly endowed with resources (Anarfi, et al. 1991; Tanle, 2003). In the survey, respondents were asked whether or not they received remittances from their

female migrants. The results (Table 7.1) of the survey show that 62.5 percent of inter-regional female migrants' households receive remittances whilst intra female migrants' household receive only 41.6 percent. On the other hand, only 37.5 percent of the inter-regional female migrants' households and a little over half of the respondents for intra female migrants' households (58.3 percent) do not receive. Those who do not receive could be due to the fact that, the female migrants have not made enough money to enable them send money back home since their remittances depend on how much money they are able to make at their place of destinations or they might not have found any reliable person to send the money to their relatives.

Table 7.1: Receipt of Remittances

Receipt of Remittances	Intra Frequency	Percentage (%)	Inter- regional Frequency	Percentage (%)
Yes	30	41.6%	105	62.5%
No	42	58.3%	63	37.5%
Total	72	100.0	168	100.0

Source: Author's data 2014

Looking at the two female households namely, intra and inter-regional, almost half of the female migrants do send money or food items to their households. It is obvious that through migration, the females are able to provide some basic needs of their household members.

7.2 Relationship between household characteristics, migration type and Food Security

This section first, presents results of a bivariate analysis of household characteristics, migration type on one hand and food security status of households on the other hand. Finally, a binary logistic regression model is employed to examine the relationship between the same variables. The utilization of a binary logistic regression model is justified by the fact that, the dependent variable is measured by either a household is food secure or food insecure, which is dichotomous (0 for food insecure and 1 for food secure). Reference categories were created for each of the variables for comparison, using the odd ratios (exponential β).

The results of the binary logistic model were interpreted to ascertain whether there is a significant relationship between a particular independent variable and food security at 95% confidence level. Variables with a p value of less than or equal to 0.05 were considered to be significantly associated with food security.

7.4 Bivariate analysis

In this section, the bivariate analysis is presented. It was used in this study to explore the relationship between various independent variables and the dependent variable. The Table 7.2 shows the dependent variable (food security) and the independent variables namely, household age, marital status, household head occupation, household head educational background, household income, sex of household, farm size, landownership, remittance and type of migration (intra and inter-regional migration). A Chi-square test of association between household heads characteristics namely, age of household head, educational background of household head, marital status of household head, income of household head, occupation of household head, farm size, landownership and type of migration (Independent variables) showed that at 0.005 significance level, there is a significant association between the dependent variable (food

security) and the above-mentioned variables (independent variables). Out of the eleven variables tested, six of the variables were statistically significant, whilst, the other variables did not show any significant association with the dependent variable.

Table 7.2 Bivariate analysis showing food secure households with some household characteristics

Variables	Food security	
	Frequency	Percentage
Sex of the household head		
Male	199	82.9
Female	41	17.0
Total	240	100.0
$X^2 = 0.969$ $p = 0.325$		
Marital status of Household head		
Married	142	60.0
Not Married	98	40.0
Total	240	100.0
$X^2 = 13.344$ $p = 0.010$		
Household size		
<6 persons	93	38.7
>6 and above	147	61.2
Total	240	100.0
$X^2 = 0.773$ $p = 0.379$		
Age of Household Head		
≤ 44 years	58	24.1
45 years and above	182	75.8
Total	63	100.0
$X^2 = 3.595$ $p = 0.609$		
Farm size		
Less than 1 hectare	198	82.5
More than 1 hectare	42	17.5
Total	240	100.0
$X^2 = 4.924$ $p = 0.026^*$		

Land ownership		
Yes	98	
No	142	
Total	240	100.0
$X^2 = 8.024$ $p = 0.005^*$		
Education		
No Education	145	60.4
Educated	95	39.6
Total	240	100.0
$X^2 = 0.636$ $p = 0.425$		
Household head occupation		
Farming	168	70
Other non-farming activities	72	30
Total	240	100.0
$X^2 = 1.379$ $p = 0.240$		
Household Income		
< ¢GH300	170	70.8
> ¢GH300 or more	70	29.1
Total	240	100.0
$X^2 = 4.029$ $p = 0.043^*$		
Remittance		
No	165	72.9
Yes	75	27.1
Total	240	100.0
$X^2 = 9.481$ $p = 0.002^*$		
Frequency of remittance		
Once in six months	125	52
Once in more than six months	95	48
Total	240	100.0
$X^2 = 1.077$ $p = 0.299$		
Type of migration		
Inter	168	70
Intra	72	30
Total		
$X^2 = 8.487$ $p = 0.004^*$		

Source: Field work 2014 (* is significant at the 0.05 level)

The results show household income, remittances, farm size, landownership and type of migration are all significant. As we all know, a steady income is very important for households' stability and economic mobility as the purchase of goods and services improve the overall standard of living (Akbar, 2012). Also significant in the table was the marital status of households. This could be attributed to the fact that married household heads are likely to have larger households which are engaged in income generating activities, therefore, contributing more to household income compared to those who are not married. This finding is supported by other studies that have also found that a household head's marital status has a positive and significant association with household food security (Haile et al., 2005 and Kaloi et al., 2005) which indicates that married couples are likely to be more food secure than the unmarried ones. While confirming the significance of marital status on household food security in Ghana, Aidoo et al.,(2013), argues that households headed by unmarried people were likely to be food secure than those headed by married ones. This is because households with married people may have larger households and this means many mouths to feed.

7.4.1. Empirical Results and Discussion on factors influencing Food Security

The binary logistic regression results in Table 7.3 show the determinants of food security (having enough food for all household members at all times). The logistic regression model indicated that the overall predictive power of the model (19.6%) was quite high, while the significant Chi square ($\chi^2 = 34.251$, $p < 0.05$ with $df = 11$) and pseudo-R² were indicative of the strength of the joint effect of the covariates on the probability of household members being food secured.

Table 7.3 Relationship between household socio-economic characteristics and food security

Description	Co-efficient (β)	Standard Error (S.E)	Significance (P-value)	Odds Ratio [Exp (B)]
Intercept	0.541	0.658	0.411	1.718
Sex of the household head				
Male (RC)				1.000
Female	0.515	0.231	0.025	1.673
Marital status of household head				
Married(RC)				1.000
Not married	-0.287	0.159	0.071	0.750
Household size				
<6 persons(RC)				1.000
>6 and above	-0.429	0.657	0.514	0.651
Farm size				1.000
Less than 1 hectare	-1.285	0.434	0.003	0.277
More than 1 hectare(RC)				1.000
Land ownership				
Yes (RC)				1.000
No	0.919	0.375	0.014	2.507
Education				
No Education (RC)				1.000
Educated	0.447	.395	0.258	1.564

Household head occupation				
Farming (RC)				1.000
Other non-farming activities	-0.140	0.333	0.674	0.870
Household head's age				
≤ 44 years (RC)				1.000
44 years and above	0.588	0.264	0.028	1,786
Household Income				
< ₵GH300(RC)				1.000
>₵GH300 or more	1,238	0.471	0.009	3.448
Remittance				
No (RC)				1.000
Yes	0.044	0.425	0.011	1.045
Frequency of remittance				
Once in six months (RC)				1.000
Once in every six months	0.304	0.412	0.461	1.355
Type of migration				
Inter (RC)				1.000
Intra	-0.878	0.388	0.024	0.416

Nagelkerke $R^2 = 0.195$ (19.5%) : $X^2 = 34.251$: Degree of freedom = 11 : $P = 0.000$

Source: Field work 2014

The regression model estimates the factors that are associated with significantly increased odds of household members being food secure.

Table 7.3 shows that sex of household head, land ownership, farm size, household income, household age, receipt of remittance by household and type of migration have statistically significant associations

with household food security. Meanwhile, household head's educational level and occupation as well as frequency of remittance were found not to be statistically predictors of household food security.

Regarding the sex of households' heads, male household headship is a tradition in all the study communities. Of the households interviewed, about 40 (16.7%) had females heads. About 18 of them were however, temporarily heads owing to male out-migration, in search of employment or separation of the household members due to re-location in other communities. It was however observed from table 7.3 that female-headed households are more likely (1.673) to be food secured compared to male headed households. The explanation to this observation, could be because female-headed households tend to be engaged often in food cropping rather than cash cropping therefore they are able to provide for the families when it comes to food. It could also mean that the female headed households have a variety of crops and livestock as well as alternative income-generating activities taking place alongside their farming activities.

It was revealed during the women's focus group discussions, that, some of the women had undertaken some training in soap and cake making so they are able to make some wages and support their family.

One of the discussant had this to say:

“ I have always wanted to go to the city because we all believe that the ‘gold’ is there until one day my cousin came from Lawra district to tell me about the women's group who have been given some training in soap and cake making. She promised to send the trainer to our community if I can mobilize the women. I managed to convince quite a few and we had our training. We are now making the soap and the cake and we have not regretted at all. Thanks to my cousin”.

The above confirmed the findings of Chavas *et al.*, (2005) who asserted that, female headed households do more for their household to meet basic food needs and also ensure healthy life among household

members due to their involvement in other non-farming activities which serves as other source of income.

The outcome of this study is also in consistent with the findings of Codjoe (2010) who examined the population-food crop production nexus and within it assessed the differences between male headed households and female headed households. He found that female headed households in the transitional agro-ecological zone produced more maize, owned more land and earned more from the sale of maize relative to male-headed households an indication that female headed households in the transitional agro-ecological zone are less likely to be poor relative to male headed households. This is contrary to the findings of Felker-Kantor et al., (2012) in a study carried out on female-headed households and food in security in Brazil. They revealed that the odds of food insecurity are higher among female-headed households compared to male-headed households.

Households with income of GHC 300 or more are more likely (3.448) to be food secured compared to households with income of less than GHC 300. The result of the study implies that, the higher the income the greater the probability of being food secure. This could be expected, because, increased in income, all things being equal, means increase in access to food. This was also revealed during the focus group discussions when one has enough money, one is able to make food available when the stock one finishes. Similar results were found by Kuwornu et al, (2013) in a study carried out on food security status of farming households in the forest belt of the Central Region, Ghana. They revealed that households with income had a greater chances of being food secure.

Acquiring land is one thing, having what it takes to have bumper harvest and ensuring food is available at all times is another. The result from the table showed that, households who do not owe their own lands are more likely (3.2179) to be food secured compared to farmers who cultivate on their own lands.

The result in the model is at variant with Kyaw's (2009) findings that, incident of food insecurity and poverty tends to be more severe among landless people. Having one's own land does not guarantee one's success in crop production, there could be other intervening factors such as erratic rainfall, soil infertility and some agricultural inputs that could lead to crop failure. Renting someone's land for production encourages one to farm more in order to get a fair deal of the produce.

Farm size on table 7.3 indicted a significant relationship with household food security. It was observed that, those household whose farm land is below 1 hectare are (27.7%) times less likely to be food insecure. This is at variant with previous studies done on the same issue. It is believed that, if the farm size is large enough, production could be high, if all things being equal. The surplus of these crops are sold and more money is made out of it and it is used for other basic needs of the household members (Babaunde et al., 2007; Quinoo, 2010; 2009; Pappoe, 2011). Therefore, the quantity of household own production increases the probability of food security

It is also assumed that, if one has a large plot of land to cultivate food and cash crops, that household is assured of being food security. In other words, the larger the size of plot the more food secure one will be. This assertion corroborates Jayne et al., (2005) findings which also confirmed that, the positive relationship of farm size and food security has already been established.

From Table 7.3, the age of the household heads was found to be statistically significant and it conforms to the earlier statement by Hofferth (2003) and other previous studies that argue that the higher the age of the household head, the more stable the economy of the farm household, because older people have also relatively richer experiences of the social and physical environment as well as greater experience of farming activities. The results show that households with heads aged 44 years and above are more likely (1.786) to be food secured compared to households with heads below 44 years of age. As age increases,

other factors such as farm experience influence food security as well. Older people have relatively richer experience in farming activities since they have been involved in such occupation for a long time. They are more aware of fluctuations in the onset of the rainy season, climate changes and other physical conditions that affect farming activities.

In Table 7.3 households that received remittances, are more likely (1.045) to be food secured compared to households that did not receive remittance. Remittances are known to help bridge the gap between those who have and those who do not have. It helps in many diverse ways and it is used for many things. Other source of income increases one's household's income thereby corroborating the food security situation in the household (Babatunde et al. 2007). The more money one gets, either from sale of farm produce or from remittances, the more food secured one is (Arene *et al*, 2010). This variable has positive influence on food security status in most households. This indicates that, the more one receives remittances from the migrants the greater the probability of being food secure. This is expected because, increased in one's purchasing power, all things be equal, means increased access to food.

Furthermore, other studies have also confirmed that, remittances reduce the probability of being poor in female headed households which is consistent with the findings of Gyimah-Brempong and Asiedu (2009). Remittances received by female heads are used more productively than male heads (IFAD, 1999) and as such, flow of remittances is more likely to be used effectively to improve welfare of members in the female household headed homes than their male counterparts (Ibid).

Finally, table 7.3 shows that households with intra-regional female migrants are less likely (0.476) to be food secured compared to households with inter-regional migrants. This finding is in conformity with what was reported during the focus group discussions and supports the findings of Van der Geest (2011) who reported on the contribution made by those who travel outside the region. The assertion is that,

those who move outside the region contribute better to household food security than those who go shorter distance (intra). This also supports the hypothesis that, female inter-regional migrants contribute more to household food security than intra female migrants.

7.6 Summary

This chapter has investigated the factors influencing food security. Some variables were identified as having relationship with food security, in other words, they have been identified as influencing household food security. The Chi-square test of association showed that, at 0.05 significance level, there is a relationship between the marital status of household head, household income, landownership, farm size, remittance and type of migration. Using binary logistic regression, the study was able to reveal that, food security household is not determined by one variable but a multiplicity of factors including the type of migration be it intra or inter-regional. What was learned from examining the data is that, household food security is complex, and is not determined by any one factor but rather a multitude of social and economic forces that create situation in which migration becomes a compelling option for the individual. After running the regression analysis on a few selected variables, what was learned is that the strongest predictors from the analysis are: type of migration, landownership, followed by household income and remittances.

CHAPTER EIGHT

SUMMARY, CONCLUSION AND RECOMMENDATIONS FOR FUTHER RESEARCH

8.0 Introduction

This study was necessitated by the growing importance of migration as a survival strategy in most rural areas of Ghana, the focus was on intra and inter-regional migration of women in the Upper West Region and the effects on household food security. The categories of female migrants were identified, the main reasons for intra and inter-regional female migration were examined, followed by the consequences of female migration on household food security and assessment of female migrants' contribution to household food security. Mixed research method approach (comprising of both qualitative and quantitative methods) was used for the data collection and analysis. This involved a structured questionnaire survey, interviews, focus group discussions and observations.

This chapter summarizes the main findings and draws conclusions based on the outcomes in relation to the research objectives and outlines some recommendations in the succeeding sections for further research and policy implementations.

Both young and women are increasingly migrating on their own mainly in search of job opportunities to improve upon their economic situation at home. The data collected has indicated the high percentage of female migrants against their male counterparts. The International Labour Organisation (IOM, 2003) has estimated that women are half of the global migrant population. Recent studies on migration have confirmed that females now move over longer distances. Their movements are no more as associational partners but as independent migrants. Female migration takes many forms. It can be intra, that is from

one community to another community within the same region, or from one region to another region, all in the search of better livelihood.

8.1 Summary of Findings

In all, two hundred and forty (240) households' heads were randomly selected and interviewed in the study, with 196 being males and 44 being females. The socio-demographic analysis indicates that, the majority (81.6 percent) of the respondents were 45 years of age and above, with little education or no formal education. Their main economic activity is farming. More than 60 percent of the households in the selected districts had between 5 and 8 persons with an average of 5.5. This revelation supports the assertion made in the Ghana Population and Housing Census report of 2010 that the household composition is high.

Investigating the socio-demographic characteristics of the migrants, the study revealed that both old and young between the ages of 15 and 55 years old, married and unmarried with little or no formal education migrate to different parts of the country. Since the migrants attained low level of education, they mostly find their way in the informal sector – where job is easily accepted, so far as money is earned. This observation confirms studies by Awumbila *et al*, 2008 and Attah *et al*. 1997.

The study revealed three main reasons for female migration. These were the quest for job opportunities, followed by food shortages and depletion of soil. Some of the pull factors identified were the presence of jobs, better opportunities and social amenities at destinations. The result from the cross-tabulation shows that, lack of income (lack of jobs availability) to ensure household food security, influence women, especially the married ones to migrate to the south for some “paaoopaa” (head porters/labourers) which will earn them wages to be able to afford food items for the family when they

run out of stock from the one they harvested. Given recent suggestions that environmental change and associated declining agricultural yields are contributing factors in many migration flows, especially in poor regions of the world (Odada et al. 2008; Warner, et al. 2009; Foresight 2011), we had expected that a greater percentage of female migrants households would cite depletion of soils as the main factor pushing them out since fertile soil when all things be equal results in high yields in production. Surprisingly, however, only 49.9 percent of the household heads (both intra and inter-regional) reported that some of the females migrated to other places because of depletion of soils. These unexpected findings may be explained by the fact that although environmental change and associated declining yields can be important contributing factors in many migration flows, they never act alone (Van der Geest, 2011).

The type of migration observed in the area for most married women was seasonal or temporary. Any family who goes beyond 2 years is considered a permanent migrant and does so with the entire family.

It is clear from the on-going discussion that, no single factor can explain the reasons why women migrate from the study area to their places of destination. It is a multiplicity of factors which have been grouped under three namely, economic, social and psychological. However, the results from both the survey and the focus group discussions revealed widespread poverty/hardship among the people, food shortages and unemployment in the area (especially during dry season) to a very large extent the contributory factors of the female migration.

The absence of women in the household has both direct positive and negative impacts on the family, community and the Country as a whole. About a quarter of the household heads (24.2%) were of the view that, female migration transforms the situation of the household from worse to good through the remittances made by the migrants, whilst 71.2 percent indicated negative effects of the absence of

female migrants, with 4.5 percent being neutral. The 71.2 percent majority that indicated that female migration negatively impacted on the household cited reduction in food production, additional tasks for household members, difficulty in food preparation, and loss of parental guidance if fathers are not ready to take care of the children left behind, and emotional stress from both husband and children.

The study also revealed that women's and men's roles are going through major changes, creating turmoil at the household level. In many cases where men are not able to support the family, women are forced to migrate and look for jobs that can help them take care of the children. Sometimes the husbands give their consent to the decision for the woman to migrate; whilst for others they leave unceremoniously. And when the latter happens, men are forced to take over the role of women by providing all the necessary attention to the children left behind. Those who are not able to cope with the situation are compelled to marry another woman to take care of the children and the house. Meanwhile, marrying another woman comes with its own cost.

The findings of the research indicated that, *Sao* and *Fufu* were the main food utilized by the households. They are consumed on daily basis; it is also eaten as breakfast, lunch and supper. Those who could not afford to eat three meals a day do take it either in the afternoon or evening. Maize, millet, sorghum, cowpea, yam and groundnut are some of the main food crops used by the households. The study revealed some of the effects of female migration on food consumption. Food is prepared based on the availability of crops and ingredients they have in stock. The household responds to scarcity of food by consuming less food, consume low quality of food and purchase food on credit. In addition, there was no sufficient quality of food to feed the households.

More than half (53.8%) of those who migrate to destination beyond the region, (inter-regional migrants) contribute much more money and food stuffs to households left behind than migrants who move to

localities within the region. This is so because, it is assumed that the availability of several jobs at place of destinations offer the migrants the opportunity to find jobs and earn some money which enable them to supplement the needs of their households than those who stay within the region where there are virtually no jobs available. Meanwhile, besides the money and other materials gains, their physical appearances also change (Berg, 2007). This observation confirms Synove's (1999) findings that the living conditions of females who migrate outside their places of origin are better than when at home. Both the qualitative and quantitative methods used confirmed that, inter-regional female migration contributes more than the intra female migrants. Although migration is often undertaken with the hope of acquiring wealth that will improve the standard of living of family members left behind, it was not likely to promote economic growth and generate sustainable employment opportunities. It may rather become the beacon to demonstrate the income disparity between the area of origin and the places of destinations. Consequently, it would increase the propensity to migrate among the potential migrants and further escalate the intra and inter-regional migration we are currently witnessing.

8.2 CONCLUSION

This study sought to examine the effects of intra and inter-regional female migration on household food security in the Upper West region in Ghana. The study on intra-and inter-regional female migration and its effects on household food security focused on activities of women from 4 districts within the Upper West region namely Wa East, Wa Municipal, Nadowli and Sissala East. Our findings suggest that, both young and old, married and unmarried, educated and uneducated females all migrate to different destinations. The findings further suggest that major socio-economic factors like seeking jobs, food shortages and depletion of soil compelled women especially to migrate either within their regions or

move to other regions in search of better opportunities which will improve upon their living conditions as well as their food security situations. Widespread poverty in rural Ghana and inequality in development are the proximate factors driving female migration as well as internal migration. These findings substantiate the argument by Crush (2012) that food insecurity or food shortages are also part of the root causes of migration. In terms of movements, majority of these female migrants prefer inter-regional migration to intra migrations. This could be explained in terms of inequalities in economic opportunities and resource distributions within the country.

The findings provide evidence that the female migrants move out of their place of origin due to some ‘pull’ and ‘push’ factors as postulated by Ravenstein (1889), Lee (1966), Caldwell (1969), Stouffer (1963) just to mention a few. Other studies such as the New Economic Labour migration (NELM), the neo-classical theory, the systems theory and the social networks theory also attempted one way or the other to explain the issues in female migration. The theories have all proved to be useful for insights gained in this study.

With regard to remittances, the results also portray that these female migrants (both intra and inter-regional) have had a deep impact on food security in their communities which include good remittances. Furthermore, remittances from female migrants serve as a source of income for most households and this helps members to improve upon their wellbeing. Although the flow of remittances is not regular, at least, there was a very positive view of the improvement of standard of living of household’s members including their food security situation even though there are negative effects of intra and inter-regional female migration.

The logistic regression analyses on a few selected variables have also shown that, there are other factors apart from migration which influence food security at the household level.

In a nutshell, the study has also shown that most households face regular periods of food shortages in the Upper West region during certain period in the year and when that happens, people look for places where they can go and get food to feed their family members. Therefore, the higher the food insecurity of a household, the higher the propensity to migrate.

One main hypothesis was postulated in the study to investigate which of the female migrants (intra or inter-regional) contribute more to household food security. Thus, female migrants who go beyond the region are more likely to contribute to household food security compared to female migrants who stay within the region. Households, which females go outside the region, are more likely to have better job opportunities and remit homes compared to those who do not go beyond the region. It turned out that, those females who go inter-regional contribute more to household food security. The hypothesis was therefore accepted in this study.

The study has focused on the effects of female migration on household food security and has shown a clear picture of female migration as at one point, a response to food insecurity and another point as an influence to food security. The data has revealed that, female migration is not the only factor causing food insecurity but there is multiplicity of factors which according to Lee (1966) could be the intervening obstacles influencing the decision of a person to migrate.

With the on-going discussions, one could conclude that, female migration contributes to improving the food security situation of the household through remittances in kind or cash. In addition, the study has demonstrated that women play and will continue to play important roles in their households as regards food security.

8.3 RECOMMENDATIONS

In view of the revelation that hardship, food shortages and lack of employment were the major factors for female migration, any policy measure should be directed at addressing these issues that had been identified to help curb the movements of people especially women from the rural areas.

The rural women play essential role in the four pillars related to food security: availability, accessibility, utilization and stability. However, women in rural areas of developing countries and for that matter, Africa, are at a disadvantage due to the fact that, they do not have access to the same opportunities or resources as men owing to gender stereotype issues and other socio-cultural factors. This confirms the findings of Lean (1993) cited in Tanle (2003) that women's migration is more likely to occur in areas where men monopolise agricultural land ownership and inheritance. It is important that this issue on land tenure system be revisited to ensure that females also have access to farmlands through which they could farm and earn some income to improve upon their current situation.

There is the need for government to revisit the chapter on integrating or developing the rural areas to make agriculture more attractive to all and also introduce other non-farm activities to the women as a way of empowering them which will serve as alternative source of livelihood to the people.

Migration as a response to food insecurity, although it is useful, can also affect the food security situation of migrants' households. Therefore, attention should be given to areas where household members can improve upon their food production, food accessibility, food utilization and food sustainability without migrating to other places. If soil fertility is the problem, the government and for that matter Ministry of Food and Agriculture should introduce new technologies that will enrich the soil and increase crop production. Also, provision of irrigation dams should be considered to supplement the one farming season system where erratic rainfall is the challenge in the study areas.

The government should also check the dwindling agricultural yield by making farm inputs available. The introduction of new high yielding varieties of profit-oriented crops, encouragement of co-operative farmers' societies, granting of soft loans to women, training in employable skills, establishment of agro-allied industries in the rural areas to take advantage of the abundant agricultural resources that pertain there should be given serious thought.

The government should extend the pro-poor policies such as the Livelihood Empowerment Against Poverty intervention programme to cover large poor households in the Upper West region to help them come out of the hardship that has engulfed them.

In order to reduce the influx of women to other localities apart from their place of origin, it is pertinent for the government to try its best to bridge the gap between north and the south through the provision of more schools, improved road networks and encouraging agricultural productivity in order to reduce the migration of women.

8.4 FURTHER RESEARCH

Due to the general perception that migration is predominantly a male phenomenon, there is the need for more research on the differences between the effects of migration on household food security headed by males and females. This is vital because gender roles, relations and inequalities affect who migrates and why, how the decision is made, the impacts on migrants themselves, as well as home and host locations (Jolly and Reeves, 2005).

The study does not cover every aspect of the intra and inter-regional migration of women and household food security phenomenon, other areas such as variation per districts and communities should be considered.

There is also the need to talk to the female migrants themselves at their place of destination regarding food security before and after migrating.

More of such research is needed to enhance our understanding of the issue and also provide adequate literature on the topic.

8.5 THE STUDY'S CONTRIBUTION TO KNOWLEDGE

The study makes a significant contribution to knowledge having established that there is a relationship between household food security and intra and inter-regional female migration in the Upper West region of Ghana. Unlike previous studies which examined reasons, causes and pattern of migration, this study did not just determine the causes but the effects of female migration on household food security. It also highlighted not only inter-regional migration of women but also intra-regional migration of women and its impact in their communities. This could therefore be used for formulation of policies to curb migration and for that matter female migration in the Upper West region.

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APPENDIX I**INTRA AND INTER REGIONAL MIGRATION OF WOMEN AND ITS EFFECTS
ON HOUSEHOLD FOOD SECURITY IN UPPER WEST, GHANA**

Confidential data for research purposes only
University of Ghana: Centre for Migration Studies

Interview Information

Date of interview:

Interviewer start time.....

End time:.....

Introduction and Consent

Hello, my name is _____. I am a PhD student with the University of Ghana Legon. I am conducting a study on migration and food security in the Upper West region. The information will be used to improve our understanding of female migration and food security issues in this region and for that matter, Ghana. Your household was selected for the survey. Do you agree to participate to answer some questions regarding your household?

[Administer Consent form]

Respondent agrees
[CONTINUE TO ELIGIBILITY SCREEN]

Respondent does not agree
[STOP]

SECTION A. Eligibility screen

READ: First I am going to ask you a couple questions to see if you are eligible for the study, if you are eligible, I will then start the survey.

A1	Does your household currently have a member not living within the household?	1. Yes 2. No If Yes, list all household members living outside your household.
A2	What is the sex of (NAME) who is currently living outside your household?	1. Male 2. Female
A3	Was that person the household head?	a. Yes b. No 1. Father 2. Mother 3. Spouse 4. Siblings
A4	How long has the migrant been away?	a. Less than 6 months b. Between 1yr and 2 yrs c. More than 2yrs and above d. Other (Please specify)

A5	How old was the migrant?	1. Age:..... 2. DK.....	
A6	What was the marital status of the migrant?	1. Single 2. Married 3. Divorced 4. Separated 5. Widowed	
A7	What is the highest education completed by the migrant?	1. No formal education 2. Primary School 3. Middle/JHS 4. SHS 5. Post-secondary Technical/Vocational School 6. Tertiary 7. Other (Specify) 8. Don't know	
A8	To which ethnic group does the migrant belong to?	1. Akan 2. Sissala 3. Mole-Dagbani 4. Grussi 5. Dagarti 6. Wale 7. Other(please specify	
A9	What is the main religion in this household ?	1. Traditionalist/Spiritualist 2. Christian 3. Moslem 4. Other specify:.....	
A10	How many are you in this household?	1. < 3 2. 4 – 6 3. 7 and above	
A11	How many of you fall within this age group?	1. < 14 2. 15 – 24 3. 25 – 29 4. 30 and above	

B1	What was the main work of the migrant before moving out?	<ol style="list-style-type: none"> 1. Farming 2. Trading 3. Weaving 4. Pito brewing 5. Shea butter processing 6. Labourer 	
B2	Does any member of the household work for an income?	<ol style="list-style-type: none"> 1. Yes 2. No 	
B3	What is the main source of income for the household?	<ol style="list-style-type: none"> 1. Remittances 2. Sale of farm produce 3. Sale of livestock 4. Farming 5. Other source (Specify) 	
B4	Does this house belong to your household	<ol style="list-style-type: none"> a. Yes b. No c. Other(Specify) 	
B5	Do your household farm on your own plot of land?	<ol style="list-style-type: none"> a. Yes b. No 	
B6	What is the size of the plot?	<ol style="list-style-type: none"> 1. ....hectares 2. ....acres 3. Don't know 	
B7	How did you acquire the land for farming?	<ol style="list-style-type: none"> a. Purchase b. Lease c. Family land d. Work and share produce e. Other (specify) 	
B8	What is the primary source of your drinking water?	<ol style="list-style-type: none"> 1. Piped water 2. Public pump 3. Well stream 4. River or stream 5. Rain water 6. Boreholes 7. Other (Please specify) 	
B9	Is there a school in this community?	<ol style="list-style-type: none"> a. Yes b. No 	

B10	Do you have a health post here?	a. Yes b. No	
B11	What do you do when any member of your household fall sick?	1. Use herbs 2. Drink concoction 3. Go to Clinic in the next village 4. Do not take anything 5. Go to Clinic in the community	
B12	Is there electricity in this village?	a. Yes b. No	

SECTION C. Migration History at the household level

#	Question	Response	Notes/skips
READ: Now I am going to ask you some questions about places that your household migrant have lived and the times that he/she has moved or travelled.			
C1	In which region did he/she migrate to?	1 Western Region 2 Central 3 Greater Accra 4 Volta 5 Eastern 6 Ashanti 7 Brong Ahafo 8 Northern 9 Upper East 10 Upper West 11 Other country, specify 88 DK 99 REF	
C2	What is the name of the place?	----- 88 DK 99 REF	
C4	How long did she live here before moving?	-----Years -----Months 88 DK 99 REF	

C5	What was the main reason for the migration?	2. Job opportunities 3. Food shortage 4. Education/training 5. Poor quality of land/depleted soils 6. Bad weather conditions 7. Health/medical/illness 8. Adventure 9. Other, specify:	
		88 DK 99 REF	
C6	What work is she doing at her destination	1. Farming 2. Selling 3. Labourer/domestic help 4. Business 5. Head porter 6. Other(Specify)	
C7	How long has the migrant been away?	-----Years -----Months	
C8	Does the migrant come back to the household often?	1. Once a while 2. Every six months 3. Every year 4. Never come back	
C9	Was the migrant playing a role before leaving here?	a. Yes b. No	
C10	How have these roles been affected by the household member's departure (migration)?	Please explain:.....	

C11	How do you cope in her absence when it comes to food preparation?	Please explain:.....	
C12	How do you think migration of your member has affected members of your household?	1. Positively, how? 2. Negatively how?	
C13	Do you receive any support from the migrant?	1. Yes, name support 2. No	
C14	If yes how often do you receive such support?	1. Once a month 2. Once every two months 3. Every three months. 4. Once a year 5. Occasionally	

SECTION D: FOOD SECURITY - I will be asking you questions about your food security situation before and after migration

D1	Are you obliged to eat less preferred food	1. Yes () 2. No ()	
D2	Do you need to borrow food to meet social obligations:	1. Yes () 2. No ()	
D3	Do you buy food (usually staples) on credit?	1. Yes () 2. No ()	
D4	Do you get worried frequently about where the next meal would come from	1. Yes () 2. No ()	

D5	Do you need to purchase food often (because own production or purchased stores ran out)	2. Yes () 2. No ()	
D6	Does the family eat few meals per day on regular basis:	3. Yes () 2. No ()	
D7	Are there some days where respondent adult cut back on amount of food consumed (owing to lack of food)	4. Yes () 2. No ()	
D8	Do you need to borrow food from relatives or neighbours to make a meal:	5. Yes () 2. No ()	
D9	Do adult sometimes skipped entire meals (owing to an insufficiency of food in the household)?	6. Yes () 2. No ()	
D10	There were times when food stored in the house ran out, and there were no cash to buy more:	7. Yes () 2. No ()	
D11	Do children and adults skipped meals sometimes?	8. Yes () 2. No ()	
D12	Would you say that the migration of your mother or wife has affected the kinds of food you eat?	9. Yes () 2. No ()	

D13	Would you say that due to the migration of your household member, the quantity of crops you get from your farm has reduced?	10. Yes () 2. No ()	
D14	Would you say since your household member left, the quantity of food has improved?	11. Yes () 2. No ()	
D15	What is the main food consumed in this household?	a. Sao (T-Zed) b. Fufu c. Rice d. Ampesi/Yam e. Other (specify)	
D16	What is the main food consumed in this household?	f. Sao (T-Zed) g. Fufu h. Rice i. Ampesi/Yam j. Other (specify)	
D17	Is the choice of main food eaten in this household influenced by the migration of the household member?	1. Yes 2. No 3. Do not know	
D18	Are you eating good food since the departure of the household member who was cooking for you?	12. Yes () 2. No ()	
D19	What food crops do you produce?	a. Maize b. Cowpea c. Millet d. Sorghum e. Yam f. Ground nut g. Other (specify).....	

D20	In the past 12 months, how much of that food did you produce?	a b c d e f	
D21	Has the amount of food you are able to produce been affected by the migration of the household member?	1. Yes 2. No	If yes, explain
D22	Is there sufficient quality of food to meet the requirements of all members of the household requirement?	a. Yes b. No c. Don't know	
D23	What strategies do household members adopt to produce more food since the departure of one of your household members?	..... ..... .....
D24	Were the strategies successful?	..... .....
D24	What would help most to satisfy your household's food needs?	..... .....

D24	How do you store your food items?	a. Room b. Granary c. Cupboard d. In holes e. Other (specify).....	
D26	What do you do with the products before storing it?	1. Mill 2. Grind 3. Dry 4. Roast 5. Fry 6. Boil	
D27	Do you have a common storage for other household members in the community?	If yes, please explain If no, please explain	
D28	Are there differences in the level of contributions from migrants in the same region and those of other regions?	If yes, please explain If no, please explain	
D29	Inter migrants contribute to household food security than the intra migrants?	{ 1 }strongly disagree { 2 }disagree { 3 }not sure { 4 }agree { 5 }strongly agree	
D30	How do you store your food items?	f. Room g. Granary h. Cupboard i. In holes j. Other (specify).....	

SECTION E: FOOD CONSUMPTION (UTILISATION)			
E1	What is the main food consumed in this household?	k. Sao (T-Zed) l. Fufu m. Rice n. Ampesi/Yam o. Other (specify)	
E2	Is the choice of main food eaten in this household influenced by the migration of the household member?	4. Yes 5. No 6. Do not know	
E3	How is the main food eaten in this household acquired?	1. Own production 2. Market purchase 3. Borrow 4. Exchange/barter 5. Other (Specify).....	IF (2,3,4,5) SKIP TO E10
E4	What food crops do you produce?	h. Maize i. Cowpea j. Millet k. Sorghum l. Yam m. Ground nut n. Other (specify).....	
E5	In the past 12 months, how much of that food did you produce?	a b c d e f	
E6	Has the amount of food you are able to produce been affected by the migration of the household member?	1. Yes 2. No	If yes, explain

E7	Do you have food stock available from the previous season?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know 	
E8	How easy is it to get some of the farm produce you don't grow?	<ol style="list-style-type: none"> 1. Very easily, 2. Quite easily 3. Somehow easily 4. Difficult 5. Very difficult 	
E10	How affordable would you say the prices of food are : on a scale of 1 to 5	<ol style="list-style-type: none"> 1. very affordable 2. Affordable 3. Somehow affordable 4. Expensive 5. Very expensive 	
E11	What is the food you would like to eat?	<ol style="list-style-type: none"> a. b. c. d. 	
E12	Do you think that the migration of the household head has affected the kinds of food you want to eat?	<ol style="list-style-type: none"> 1. If yes, explain..... 2. If no, explain..... 	
E13	What do you do when you don't get to eat enough of what you want to eat?	<ol style="list-style-type: none"> a. Consume less food b. Consume lower quality food c. Borrow food or rely on help from friend or relatives d. Purchase food on credit e. Restrict consumption by adults in favour of the children f. Reduce number of meals per day g. Used life savings h. Eating from the same bowl i. Other(specify)..... ... 	

E14	Is there sufficient quality of food to meet the requirements of all members of the household requirement?	d. Yes e. No f. Don't know	
E15	Do you all eat from the same bowl?	1. Yes 2. No 3. Not applicable	
E16	Do your household, process any food crops?	If yes state crops: If no state why:	If no skip to 20
E17	How are they processed?	.....
E18	How are they eventually utilized?	.....
E21	What is the best\ most nutritious food for your household members?	..... .....
E22	How often do you eat it?	a. Very often b. Often c. Not often	If a/b skip to 24
E23	If not often, why not more often?	..... .....

E26	How many days or weeks per month do members of your household go hungry? During what time period?	a. Days b. Weeks c. ....Months	
E27	Who is responsible for providing food in the Household?	.....
E28	Do you include all this items in your food: vegetables, meat, fish, oil, legumes, spices, leaves	a. Not all b. Most of the items listed c. Some of the items listed d. Very few of the items listed	
E29	Mention the items you normally use in preparing your food?	..... ..... .....
E30	Do you prepare most of the food in the home or purchased outside?	..... ..... ..... .....
E31	What strategies did household members adopt to produce and to obtain food during lean season?	..... ..... .....

APPENDIX II
Guide for Focus Group Discussions for both Female and Male

A. GENERAL ISSUES:

1. What are the main social and economic activities for both women and men in this community?

PROBE

2. Has there been any changes in these activities for the last five years? If yes, what are some of the reasons for these changes?
3. Are you satisfied with the development of this community?
4. Do you have the basic social amenities in this area?

B. MIGRATION

It has been confirmed in the last few years by the Statistical Service in Ghana that, females have been moving out from this community to either down south Greater and Brong Ahafo regions.

5. In your opinion what could be the factors pushing them out and pulling them in to these areas?
6. Which category of women move? The married, unmarried or the ever married, or the widows?
7. What is their level of education?
8. Is it a family decision for them to migrate or they leave unannounced?
9. Are they supported by their family members?
10. Does the female migration pose any problems to the household as well as the community?
11. If yes, what are the problems?
12. Would you say that, migration of women from this community should be discouraged or encouraged? If yes, why? And if no, why?
13. What measures do you expect from the family, community and the Government to do to control the migration of female?

C. FOOD SECURITY

14. Would you say, in this community do you have sufficient food to eat at times?
15. What are the reasons for not having sufficient food?
16. Do you prepare your own food or you buy from outside?
17. Do you eat balanced diets throughout the year?
18. Are there times when you have to skip meals?
19. What do you do when you run out of food stock from your own production? Do you buy from the market or you borrow?
20. How do you store your harvested crops?

APPENDIX III
Interview Guide for EPA and MoFA Officials

1. What are the challenges to development in the district?
2. What is the poverty situation of the district compared to other districts in the region and beyond?
3. What are the potentials for economic development in the district?
4. What has been the district's approach to these challenges and how much change has it brought about?
5. Has the district made any achievements in development and what are they?
6. Is there a link between poverty and the seasonal and circular migration of peasant farmers from the district to southern Ghana?
7. Why do these farmers migrate, where do they go what attracts them there and what do they do?
8. What do they benefit from migration?
9. Has migration reduced poverty in the district and improved the living standards of households?
10. What are the alternatives to circular migration as a solution to the reasons why these farmers migrate?
11. What is the Government doing about this situation?

APPENDIX IV
QUESTIONS ON FOOD SECURITY SITUATION

1. Are you obliged to eat less preferred food and kind of food because you do not have food available all year round?
2. Do you need to borrow food to meet social obligations because there is less production of crops from farm?
3. Do you take food on credit from a local market because production has reduced and have no money to purchase?
4. Do your worry frequently about where the next meal would come from since the departure of the household member?
5. Do you need to purchase food often (because own production or purchased stores ran out);
6. Do you eat food that is very good to your health per day on regular basis?
7. Do household adults cut back on amount of food consumed (owing to lack of food) because the production is small;
8. Do you need to borrow food from relatives or neighbours to make a meal because food is out of stock?
9. Do the main working adult sometimes skipped entire meals (owing to an insufficiency of food in the household);
10. Were there times when food stored in the house ran out, and there were no cash to buy more?
11. Other adults (not the main working adult) personally skipped entire meals.