

# The Contribution of Women to Household Food Security in the Kassena -Nankana East District in the Upper East Region of Ghana

Shamsu- Deen Ziblim

University for Development Studies, Faculty of Integrated Development Studies, Department of Environment and Resource Studies

Email: [zshamsu72@gmail.com](mailto:zshamsu72@gmail.com)

Mahama Ishaque

University for Development Studies, Faculty of Integrated Development Studies, Department of Economics and Entrepreneurship Development

Email: [tidobila@yahoo.com](mailto:tidobila@yahoo.com)

## Abstract

The study examines the contribution of women in food production and its impact on food security in the Kassena Nankana district of the upper east region of Ghana. The specific objectives are: to examine the socio-economic characteristics of women farmers in the area, the challenges they face in food production

The study utilizes both primary and secondary data. Primary data were obtained through questionnaire administration and direct observation in the study area. 160 questionnaires were administered purposively to 160 women who are into food production and live stock production while the secondary sources were obtained from review of related literature on the subject matter. Data collected were analysed through descriptive statistics. Results revealed that majority of the women are into food production in the area than their male counterparts, it also revealed that women are discriminated when it comes to decision making with regards to land acquisitions and credit facilities. The study also revealed that about 97% of the women in the study are into food crop farming which they use to feed their household.

**Key Words:** women, food security, household.

## 1.1 Introduction

The debate on the role of women in societies and their participation in economic activity has sparked a lot of controversy for a considerable time. Different groups of people such as women groups, government, development partners, and civil society groups have forwarded many arguments to support their stand on access by all people at all times to adequate food of good quality for active and healthy life.

Women farmers in Sub-Saharan Africa produce more than three-quarters of the region's basic food needs, manage some two-thirds of marketing and at least one half of their activities are into storing food and raising animals (Gittinger, 2006; Saito, 2001).

Food security can be explained as an access by all people at all times to adequate food of good quality for active and healthy life (World Bank, 1986). However, not all people have access to adequate food at all times for active and healthy life. Hunger and food insecurity are widespread in most developing countries including like Ghana. The upper east region of Ghana where this study was conducted is the most deprived region and the region in Ghana that is not fortunate to have fertile land for food cultivation.

Gender differentials in the farm household also play a significant role in the economic performance of a given household. A great deal of empirical research has convincingly demonstrated that gender is important in defining the economic role of rural people in Africa (McSweeney, 2010). This in turn has resulted in a growing recognition that men and women often have very different rights and responsibilities with respect to resource use and decision-making in the process of agricultural production.

This recognition has resulted in a number of studies documenting the roles of women and men in various farm, non-farm, food preparation; household maintenance and child care activities (Whitehead 1985; Bryceson 1995). It has been recognized that both gender and household-based approaches are useful frameworks for targeting policy and interventions in rural areas (Warner et al., 1997). Agricultural productivity could also be determined by gender differences if they (men and women) use different technologies or different quantities of factors, or there are differences in the quality of these factors (Saito, 1994).

The rural sector in many developing countries is increasingly characterized by the prevalence of poverty and food insecurity (FAO, 1990b: 2). Recent years have shown a new trend, most prominent in Africa, whereby male family members leave the rural household to try to find waged labor in the urban centers and increase the family income. Hence, in Sub-Saharan women head 31 percent of the households (FAO, 2003).

The traditional gender division of labour, intra-household rights and obligations is weakening, the gender-based

division of labor is breaking down and farm women are increasingly undertaking tasks which were earlier men's one.

Despite the economic gains that Ghana has made over the decade, poverty and household food insecurity remain a persistent and pressing social concern. Food insecurity is a major problem amongst a large part of the population. "An estimated millions of Ghanaian households experience food related hardships, most of them chronic" (William, 2010). In order to ensure food security, provide adequate nutrition for the population and impact on poverty reduction and human development, investment is needed. Those living in the rural areas, especially women must have access to productive resources such as land, credit and inputs to grow enough food for their households. "Research evidences show that empowering rural women, increasing economic assets that women control has a positive impact on the family, particularly on food and nutrition security, health and education. Women also are known to spend a greater proportion of their income on household basic needs such as food than men (Quisumbing, et al, 2001). Yet most rural Ghanaian women have less access to economic and productive resources, and are generally discriminated against in personal and social relationships and all these combine to make their households more food insecure. In northern Ghana for instance where this study was conducted, women are traditionally and customary discriminated against the ownership of landed property and this in a way affect food production in the area.

In spite of social, political and economic constraints, women farmers have proved extremely resourceful and hardworking in their attempt to ensure household food security (UNDP, 1995). Social constraints place barriers around their access to agricultural land, scientific and technological information. Lack of collateral denies them access to agricultural credit. Culture or traditions accord membership of cooperatives only to heads of household – Usually a man. Many rural women, even in highly mechanized farming systems such as the Republic of Korea and Japan would have agriculture for work in other sectors if choices were available (WTO, 1999).

A proper understanding of this interaction in rural household is indispensable for policy formation towards ensuring food security, reduction of hunger and poverty at the household level in developing countries.

The first step towards women's empowerment and full participation in food security strategies is the collection and analysis of gender disaggregated data, in order to understand role differences in food and cash crop production as well as men's and women's differential managerial and financial control over production, storage and marketing of agricultural products. The engagement of women in economic activities in Ghana is widespread, ranging from the formal to the informal sector; even though a majority of their activities is in the informal sector women perform a lot of "invisible" activities that may not be considered as economic activities. Women's participation in the formal sector is improved with access to education and therefore as more women get educated and acquire the requisite skills, they are increasingly being engaged in the formal sector with a few of them in managerial positions. However, considering that women make up the majority of the people in Ghana, it is disheartening to note that their impact on the decision making process is limited. In fact women are found at the receiving end of the decision making process and therefore have little or no influence on the decisions that affect them and their families (Amu 2000 ) )Amu

Despite early efforts at tackling issues concerning food security, it seems the problem still stares the world in the face as little progress has been made in that direction. Global, regional and national interventions have been developed and implemented over the years all in an attempt to ensure food security, yet much has not been achieved in this direction as the problem still persists with fears it might worsen.

Also worrying is the fact that though the contribution of women in contributing to food security has been recognized, governments and those who matter in issues relating to food production pay lip-service to ensuring that their contribution is harnessed effectively especially in an environment where discrimination exists in relation to the sexes. Attention has been shifted toward the male gender to the neglect of the female who studies have shown is more productive than the male farmer when given access to resources.

Development policy makers and planner are becoming increasingly aware of the crucial contributions of women farmers to agricultural production and food security. Nevertheless, agricultural policies on the whole still do not address the needs of women farmers adequately. Where the roles and needs of women farmers are recognized in policy, these tend not to be adequately translated into practice in agricultural development programmes and planning. Agricultural research, too, gives inadequate attention to women farmers and their needs. As has been pointed out, for instance, women and men farmers are often responsible for different agricultural tasks and crops. Research is generally focused on the improvement of production and technologies for men's crops and tasks, while those of women are neglected.

Achieving food security in its totality continues to be a challenge not only for the developing nations, but also for the developed world. The difference lies in the magnitude of the problem in terms of its severity and proportion of the population affected. In developed nations the problem is alleviated by providing targeted food security interventions, including food aid in the form of direct food relief, food stamps, or indirectly through

subsidized food production. These efforts have significantly reduced food insecurity in these regions. Similar approaches are employed in developing countries but with less success. The discrepancy in the results may be due to insufficient resource base, shorter duration of intervention.

The number of people without enough food to eat on a regular basis remains stubbornly high, at over 800 million, and is not falling significantly. Over 60% of the world's undernourished people live in Asia, and a quarter in Africa. The proportion of people who are hungry, however, is greater in Africa (33%) than Asia (16%). The latest FAO figures indicate that there are 22 countries, 16 of which are in Africa, in which the undernourishment prevalence rate is over 35%.

By way of comparison, in one of the largest food producing countries in the world, the United States, approximately one out of six people are "food insecure", including 17 million children, according to the U.S Department of Agriculture. [http://en.wikipedia.org/wiki/Food\\_security](http://en.wikipedia.org/wiki/Food_security).

In most African countries, agriculture is the major source of food and income. Despite the potential to increase agricultural production, the performance has been generally poor. The AU Commission's Food Security Report [2005] estimated that African agricultural production has to increase by at least four to six percent per annum on a sustained basis to meet the food needs of the African population that is expected to increase from about 900 million in 2005 to 1.26 billion in the year 2020. Therefore, the Commission has urged African Governments and the private sector to commit them to supporting sustainable production and consumption of foods with high nutritional value.

Currently in Ghana, in a research conducted by the Comprehensive Food Security and Vulnerability Analysis (CFSVA), it was discovered that in Ghana, solely on the basis of household food consumption, 5% of the population of 1.2 million people have limited access to sufficient and nutritious food for an active and healthy life.

Food insecurity can be found mostly in the poorest regions, which are also the areas most prone to adverse weather conditions such as floods and droughts, and have been affected by soaring food prices. All over the country, about 2 million people are vulnerable to become food insecure. In the rural areas of the Upper West, Upper East and Northern regions, 507,000 people were found to be vulnerable to becoming food insecure. Up to 1.5 million people vulnerable to food insecurity live in the rural and urban areas of the seven remaining regions with the largest share in the Brong-Ahafo Region.

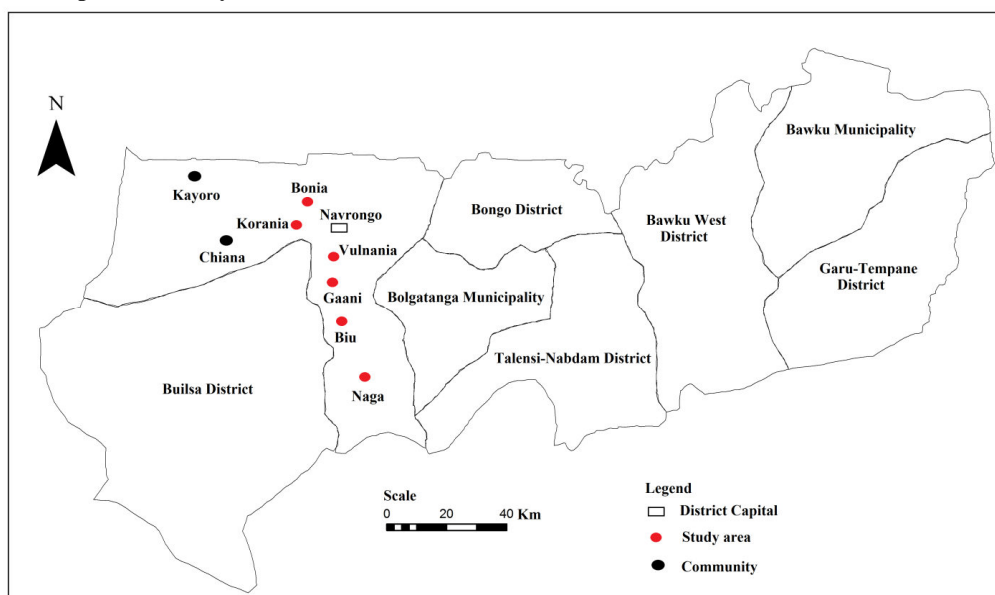
This paper therefore examine the attitude of women in the study area towards contribution in household food security, kind of agricultural activities women engage sustaining their livelihood and the socio economic and cultural factors that affect women in contributing to food household food security.

## 1.2 Study Area

The Kassena Nankana East District lies within the Guinea Savannah woodlands. It is one of the nine (9) districts in the Upper East Region of Ghana.

Fig. 1.1 shows the map of Kassena Nankana East District and the surroundings. The District shares boundaries to the North with Kassena-Nankana-West and Burkina Faso, to the East with Kassena-Nankana West and Bolgatanga Districts, West with the Builsa District and South with West Mamprusi District in the Northern Region

**Map of the study area**



### 1.3 Data and Methods

Data for this study were collected from both primary and secondary sources. This coupled with oral interviews from opinion leaders, direct observation and questionnaire administration. These constitute the major information used for empirical analysis in this study. Questionnaire were administered to 160 respondents using simple random sampling methods to obtain information the socio-economic characteristics of respondents on their involvement in food production in the area, mode of farming and land acquisition for agricultural purposes. Data obtained from the field were analysed through descriptive statistics.

### 1.4. Results and Discussion

#### Women attitudes towards contribution in household food security in study area

Table 1 shows the percentage of women selecting positive (strongly agree or agree) responses on the attitude scale by settlement. The table shows that over half of the participants constituting 57.3% of the women in this study reacted positively towards contribution in household food security in the Kasena-Nankana East District. The three highest expression of positive attitude to the variables was in 'Interest in contributing to household', 'Understanding of food security' and 'Socio-economic development and cultural factors' with 73.6%, 71.9% and 63.5% responding to them.

**Percentage of Women Selecting Positive Responses for Various Attitudinal Dimensions in all Settlements**

Attitude Variables	Percentage Positive Responses						All
	Bonia	Kwarania	Gaani	Vunania	Biu	Naaga	
Understanding of food security	72.2	68.3	80.5	68.0	70.2	69.4	<b>71.9</b>
Spouse/family expectations	39.0	40.4	40.3	33.2	30.6	42.4	<b>37.7</b>
Interest in contributing to household	70.2	72.0	78.2	68.8	82.2	70.0	<b>73.6</b>
Confidence in other agriculture supportive resources	52.3	60.7	44.1	53.0	59.4	68.6	<b>56.4</b>
Anxiety in governmental and nongovernmental interventions	57.3	48.2	55.5	47.0	48.2	40.1	<b>49.4</b>
Socio-economic development and cultural factors	68.4	69.0	50.4	63.5	68.0	61.7	<b>63.5</b>
<b>All items</b>	<b>59.9</b>	<b>51.2</b>	<b>58.2</b>	<b>55.9</b>	<b>59.8</b>	<b>58.7</b>	<b>57.3</b>

The table shows that the settlement with the three most positive attitude women towards household food security were in Bonia, Biu and Naaga with percentages 59.9, 59.8 and 58.7 respectively. The least percentage positive response was in Kwarania with 51.2% responding to the statements.

### 1.5 The social-cultural factors that affect women contribution to food security

Many issues were pointed out by the respondents as factors that affect women contribution to food security. The women at the focus group discussion said that, there was no involvement of women in traditional rituals among others. No inclusion of women in the decision- making process, for example, the distribution of farm lands and the sale of family lands. In addition to that, was the issue of widowhood rites from some families' members where property of decease were taken by immediate brothers at the expense of their wives thereby depriving them from contributing effectively to food security situation in the area.

Responses from the questionnaires indicated various factors. A list consisting of eleven statements with respect to socio-cultural factors that affect women roles in household food security were presented to respondents. They were to strongly agree, agree, strongly disagree, disagree and no opinion. A mean score between 2.2 and 2.3 shows that respondents have neutral view about the statement. A mean score below 2.2 indicates that respondents disagree that statement is factor that affect women contribution to household food security and a mean score between 2.35 and above indicates that respondents a

### 1.6 Social-Cultural factors that affect Women Contribution to food security

Statement	number	Mean	Standard deviation
Decision making	160	2.73	1.21
Widowhood rites	160	2.35	1.13
Subordinated roles played by women	160	2.48	1.25
Access to education	160	3.27	1.11
Access to health care	160	3.37	1.08
Access to credit facility	160	3.17	1.12
Access to land	160	3.04	1.24
Female household headship	160	2.08	1.22
Insufficient purchasing power to buy food	160	2.26	1.31
No recognition for women's actual roles and responsibilities	160	2.37	1.45
Lack of data on female contribution to food security in the community	160	3.01	1.15
<b>Total</b>	<b>160</b>	<b>2.74</b>	<b>1.21</b>

It was agreed that decision making role of women in the area affects their contribution to household food security. A mean score of 2.73 (standard deviation of 1.210) was obtained out of 159 respondents. This means respondents agreed that decision making affects the contribution of women to food security in the district.

The next item was that the performance of widowhood rites affects women contribution to food security in the district. A mean score of 2.35 was obtained from the respondents indicating that the respondents agreed to the statement.

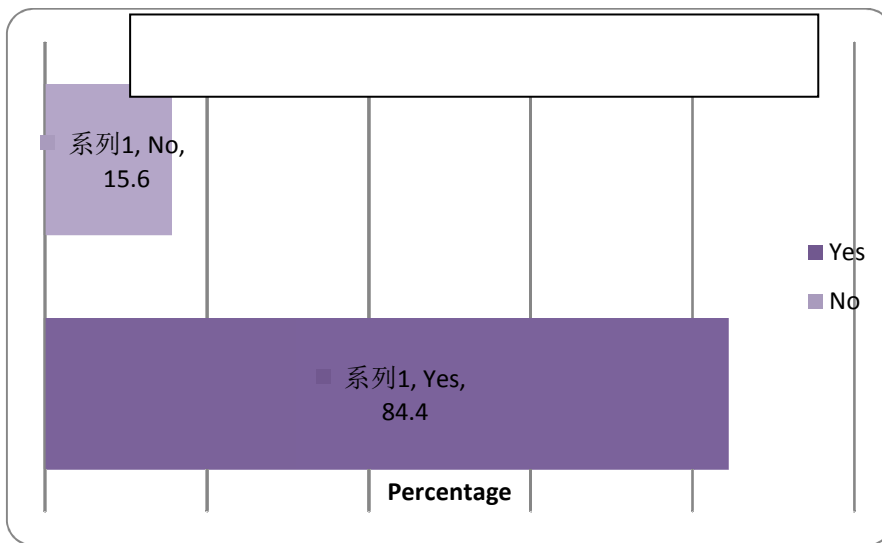
Another statement was that women subordinated roles in the families affect their contribution to food security in the district. The respondents with a mean score of 2.48 agreed to the statement.

In addition, respondents agreed that access to education, health care, credit facility and land affect women contribution to food security in the study area. Mean scores of 3.27, 3.37, 3.17 and 3.04 respectively were obtained from 159 respondents.

However, respondents disagreed that female headship in the family affects women contribution to food security in the area while respondents were neutral to the view that insufficient purchasing power to buy food affects women's contribution to food security in the study area.

As part of the objectives, the study was to determine how women in their communities contribute to household food security especially in agricultural activities. This section therefore explores the participation of women in agricultural activities towards household food security Respondents described several roles as to how they contribute currently. Respondents contacted using questionnaires indicate following.

Specifically, on the issue of women involvement in agricultural production, 84.4 percent representing 135 of the respondents stated they are into agricultural production. This is shown in figure 1.1

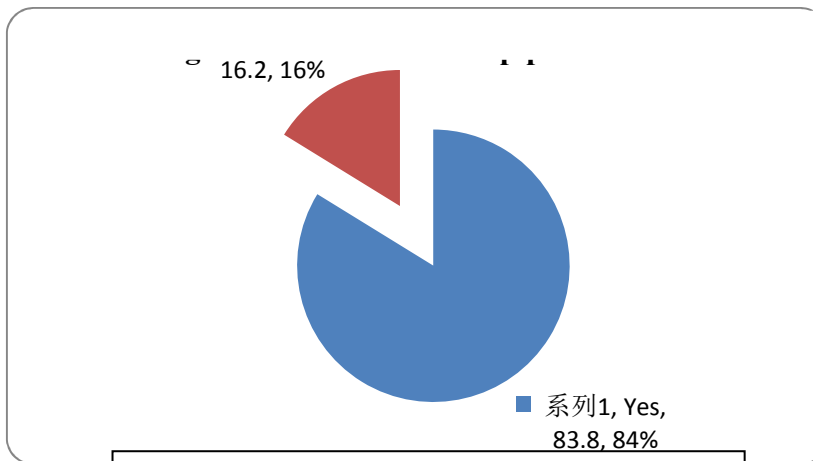


Source: Field Data (2012)

**FIG. 1.4: WOMEN INVOLVE IN AGRICULTUREAL PRODUCTION**

**Main crops produced by women in the district**

Among the agricultural activities towards household food security, women undertake farm activities and agricultural labour. They undertake crop farming to feed the family. The major crops produced in the District were mainly rice, soya bean, millet, maize, groundnuts, beans, guinea corn and various vegetables. Almost all (83.8%) of the respondents indicated that they undertake crop farming with 16.2 percent indicated otherwise. This is shown in figure 4.5.



**FIG.1.2 WOMEN INTO CROP PRODUCTION**

About 97 percent of the respondents mentioned that women cultivate groundnut. Also 90 percent indicated that they cultivate rice. The study further revealed that 91 and 78 percent of the respondents are into beans and maize production respectively, Their response are shown in the

**Table 1.2: crop production in the district**

<b>Crop cultivated</b>	<b>Frequency</b>	<b>Percent</b>
Rice	121	90
Beans	122	91
Maize	105	78
Millet	73	54
Groundnut	130	97
Pepper	55	41
Others	32	24

The study further indicated that about 77 percent of the respondents produce between 1 and 10 bags of rice, 57 percent of the respondents produce less than 5 bags of beans and 65 percent produce between 5 and 10 bags of maize. About 66 percent of millet producers produced between 5 and 10 bags. Their response is shown in table 4.3

**Table 1.3 : Volume of Crop Production in the District**

<b>Crop cultivated</b>	<b>Less than 5 bags</b>	<b>5- 10 bags</b>	<b>11- 20 bags</b>	<b>21 +bags</b>	<b>Total</b>
Rice	38	39	19	4	100
Beans	57	30	14	0	100
Maize	10	65	22	3	100
Millet	30	66	3	1	100
Groundnut	8	52	22	18	100
Pepper	78	22	0	0	100
Others	91	9	0	0	100

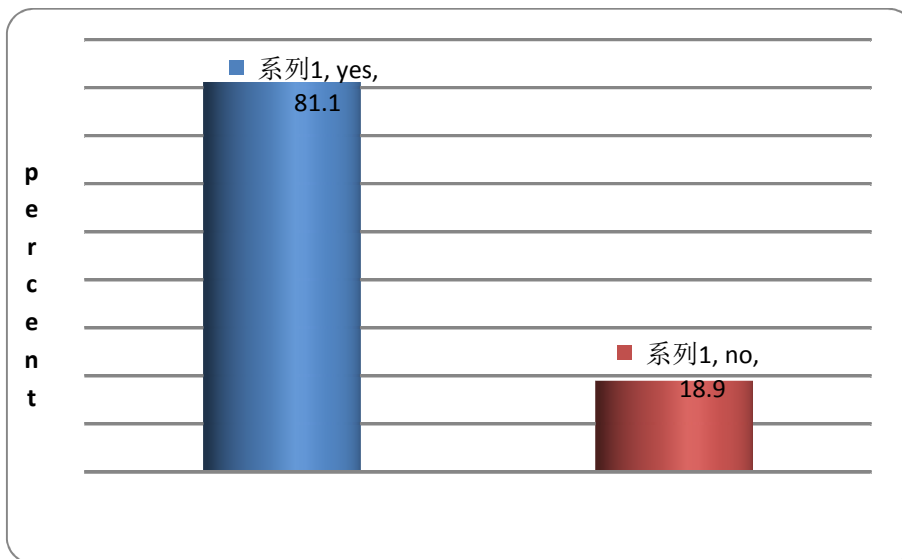
The study further revealed that about 63 percent of the respondents' rear between 1 and 10 sheep to supplement the food production, 58 percent of the respondents' rear between 5 and 10 goats and 55 percent of respondents who rear pig rear between 5 and 10 animals. About 78 percent of the respondents who are into cattle rearing rear between 1 and 10 cows to support their crop production in the study area.

On the statement that no recognition for women's actual roles and responsibilities affect their contribution to food security in the area, respondents with a mean score of 2.37 agreed to the statement.

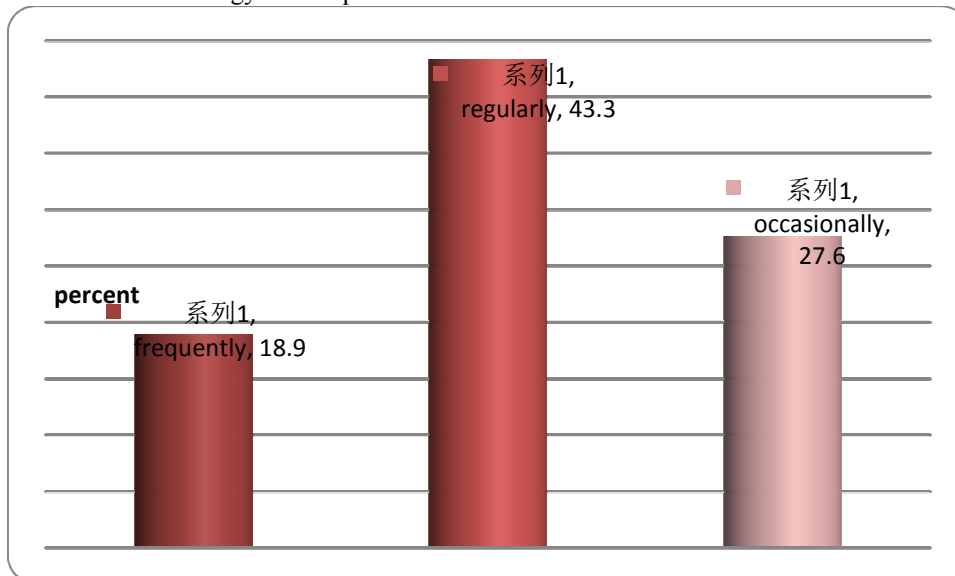
### **1.2 Access to agricultural supportive resources**

With regard to whether women have access to agricultural supportive resources, about 81 percent of the respondents stated yes with 19 percent indicating otherwise. This shown in figure





The respondents further indicated various kinds of agricultural supportive resources. Fifty seven (57%) percent mentioned new technology and 32 percent indicated land. The result is indicated in table 9



**Figure 1.2 Access to Agricultural Supportive Resources by Women**

Figure 1.2 shows that 43.3% of the respondents stated that they regularly have access to these resources while about 28% indicated that they occasionally have these resource

### 1.5 Recommendations

1. Considering the fact that women in the upper east region of Ghana contribute significantly in food crop production, the paper outline the following policy recommendations

Women who formed the majority in food production should be involved in decision making that has to do with land acquisition.

Credit facilities should be given to women farmer to enable their increase their production capacities.

3. Government and other NGOs should come to the aid of female farmers groups in the area by given them education on the modern methods of farming. This can be done by encorporating them into the SADA framework.

### REFERENCES:

- Al-Hassan R (2007). *Regional Disparities in Ghana: Policy Options and Public Investment Implications*. International Food Policy Research Institute, Sustainable Solutions for ending hunger and poverty IFPRI Discussion paper February 2007 Washington D.C, USA.
- Aryeetey E, McKay A (2004). *Operationalizing Pro-Poor Growth: Ghana Case Study*. Department for International Development and World Bank, London, UK.



- Borg, M. & Gall, K. (1983). *Limited-dependent and qualitative variables in econometrics*. New York: Cambridge University Press.
- Cooper, C. & Shindler, L. (2000). *Determinants of fertility and child mortality in Cote d'Ivoire*. LSMS Working Paper 105. Washington D.C.: World Bank.
- Dejene, Arado. (1994). 'Female-headed Farm Households in Two Constrating Regions in Ethiopia: Access to and Management of Resources'. Ethiopian Journal of Development
- Dreze, J. and A. Sen., (1990), *The Political Economy of Hunger*, Vols 1,2, and 3, Oxford: University Press .
- FAO (1995a). *FAO Regional Plan of Action for Women in Agricultural in the Near East*, Regional Office for Near East, Cairo.
- Report of the global consultation on agricultural extension (1989). Rome: FAO.
- Fraenkel, J. R., & Wallen, N. E. (2000). *How to design and evaluate research in education*
- Food Consumption and Nutrition Division (FCND). (1999). Technical Guides for Operational zing Household Food Security in Development Projects. Washington: International Food Policy Research Institute.
- Gay, T. (1987). *Poverty Assessment in Sub-Saharan Africa: Using Qualitative and Participatory Research Methods*, PSP Discussion Paper Series, No. 60, Poverty and Social Policy Department, Human Capital Development and Operations Policy. World Bank, Washington, D.C.
- GLSS (2006). *Ghana living Standard Survey Report, 2000* Published by Ghana Statistical Service, Accra, Ghana.
- Gender Issues in Cooperatives – An ILO-ICA Perspective. Issued by ILO Geneva;
- Women in Rural Development – A Report. Issued by the Afro-Asian Rural Reconstruction
- Takyiwaa Manuh (1998), women in Africa's development; Overcoming obstacles, pushing for progress, R
- Prakash D (2003) rural women, food security and agricultural production
- Saito, A. Katrine et al (1994). *Raising the Productivity of Women Farmers in Sub-Saharan Africa*, World Bank Discussion Papers

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

## CALL FOR PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <http://www.iiste.org/Journals/>

The IISTE editorial team promises to review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

### IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

