

Asian Journal of
Rural
Development

Gender Contribution to Rural Household Food Security in South West, Nigeria

O.A. Alade and P.O. Eniola

Department of Agricultural Technology, The Polytechnic Ibadan, Oyo State, Nigeria

Corresponding Author: O.A. Alade, Department of Agricultural Technology, The Polytechnic Ibadan, Oyo State, Nigeria

ABSTRACT

The study investigated the contribution of gender to rural household food security in South West, Nigeria as food insecurity is a major social problem with far reaching economic and development consequences. Multistage sampling technique was used to select respondents for this study. Oyo and Osun State were randomly selected out of the six states in South West, Nigeria. Structured interview schedule was administered to 120 respondents in selected communities in the two states out of which 112 were found useful. The data was analysed using both descriptive (frequencies and tables) and inferential statistics (Chi-square). Results of the study reveal that 41.7% of the respondents were between 41 and 50 years of age and 56.2% have household size of 4-6 people. Men contribute more to economic access of food than women while women contribute more to sustainability of access to food than men. However, the respondents faced some constraints in achieving food security like lack of capital, land and employment. Chi-square analysis revealed that sex and primary occupation influence gender contribution to household food security. It is pertinent for government to assist rural people through the provision of credit, loans and agricultural inputs which will definitely improve household food security.

Key words: Food security, gender, production, land, rural household

INTRODUCTION

Food is very important as it is ranked the most basic of all human needs. Food generally refers to the final product which consumers eat or drink to satisfy human nutritional requirement. Food is for life's sustenance, prevention of sickness and in providing energy for the normal physiological activities of the body including the maintenance of the normal state of mind. Around the world, 1.2 billion people eat too much, there are almost 900 million people suffering from hunger. Over the past years, the number of malnourished people has increased due to high food prices and rising unemployment levels (LEISA, 2009). In Nigeria, food insecurity is a major social problem which rose from about 18% in 1986 to about 41% in 2004 (Ajani *et al.*, 2006) and it has a lot of development consequences like deterioration in the eating pattern and living conditions of the average family. Ensuring food security is one of the greatest challenge facing the world community today, it is a complicated phenomenon in which those facing food insecurity will have to decide themselves how better they can attain food security while keeping in mind their social and economic constraints (Farooq and Azam, 2002).

According to LEISA (2009), food security is concerned with everyone having enough good food to eat each day. It is a way of ensuring that all people at all times have both physical and economic

access to sufficient, safe and nutritious food to meet their dietary needs and preference for an active and healthy lifestyles (Ibrahim *et al.*, 2009a). Also, food security refers to the ability of a household to secure, either from its own production or through purchases, adequate food for meeting the dietary needs of all its members (Ibrahim *et al.*, 2009b). The production, provision and consumption of good nutritional food in households depict food security. Physical access to food relates to issues of food supply or food availability, economic access to food is concerned with capacity to purchase or acquire food while sustainability of access to food deals with food supply and demand issues that determine the ability of a nation or household to enjoy stable sustained physical and economic access to food over time.

Household consists of people who live together in a house including their servants. However, Beaman and Dillon (2009) defined household as a group of people living under the same dwelling place who eats meals together and acknowledge the authority of a man or women who is the head of household. Thus, a household is food secured when it has access to food needed for a healthy life for all its members, adequate in terms of quality, quantity, socially and culturally acceptable and when it is not at risk of loosing such access (UNO, 1991). For household to achieve food security, they must have the means to produce or purchase the food that are needed and ensure that the dietary requirements of all family members are met.

Gender is an important variable in household food security issues. Gender describes the socially determined attributes of male and female. It is an essential variable for analyzing the roles, responsibilities, constraints, opportunities, incentives, costs and benefits of male and female in agriculture (Jiggins *et al.*, 1998).

Rural men and women are responsible for half of the world's food production and produce between 60 and 80% of the food in most developing countries depending on the region, (CTA, 1999). Despite their effort and active participation in food production, 30% of people in Africa are malnourished as at 2010 and over 40% of Nigerians are food insecure (Babatunde *et al.*, 2007). It is crucial to know that for most developing countries to achieve food security and the first Millennium Development Goal-eradicating extreme poverty and hunger, cognisance should be given to people who are involved in food production as it is the first pillar of food security. Increasing food production at the local level will help to achieve food security not only focusing on the global level (Farooq and Azam, 2002).

Food production is not the sole responsibility of men alone as it is believed in some culture and circles (Olawoye, 2000). In addition to women being expected to look after children and cook on daily basis in most rural areas, they still provide food and engage in other farm work such as weeding, transporting, seedling, harvesting and processing. However, women play these roles in the face of enormous, social, cultural and economic constraints (FAO, 1999), like inadequate supply of quality seeds, low output prices, lack of extension services and inadequate availability of financial resources (Bakhsh *et al.*, 2006). In the rural areas, there is marked division of labour between men and women members of a household in an effort to minimize risks and promote food security particularly during crisis period. However, they play separate but complementary roles or responsibilities to secure the welfare of the household. Men influence food security decision making by providing the resources (capital, land, inputs etc.) needed to acquire the food processed by women to meet the food needs of the family (Meludu *et al.*, 1999).

Many factors affect household food security, these factors vary according to location, culture, religion and political systems. Some of these factors are high food prices, unemployment, low wages, inadequate access to markets, poor storage facilities, selling at harvest due to poverty, inadequate

control of property and right to land for agricultural production, poor weather conditions etc. The equal participation of men and women in attaining household food security may be impeded by cultural and legal constraints and by women's relative lack of time and mobility caused by their workload and multiple roles. Thus, it is critical to maximize these individuals participation of ensuring the equitable access to and control over the resources needed to meet and achieve food security. The main aim of this study was to investigate gender contribution to rural household food security in South West, Nigeria. The specific objectives of this study are to determine the socio-economic characteristics of men and women in the study area; know the level of contribution of men and women to household food security in the study area and determine men and women constraints to food production in the study area.

MATERIALS AND METHODS

Study area: The study was carried out in South West, Nigeria. South West is one of the six regions in Nigeria with six states which are Oyo, Ogun, Ondo, Ekiti, Lagos and Osun State. Oyo and Osun states were randomly selected for this study. Oyo state is located between latitudes 7° and 8° and 9° 10' north of the equator and longitudes 2° 10' and 4° 35' east of the meridian. Osun state has an area of approximately 8, 802 km. The states enjoy a tropical climate with prominent dry season between November and March and rainy seasons between April and October. The mean annual temperature for the states varies between 28 to 34°C and an annual rainfall within the range of 1000-1200 mm. Agriculture and civil service are the major sources of livelihood for people in the study area.

Sampling procedure and sample size: Multistage sampling technique was used to select respondents for this study. Oyo and Osun State has 33 and 30 Local Government Areas (LGAs), respectively out of which ten percent were randomly selected making 3 Local Government Areas (LGAs) from each state with a total of 6 in all. Two communities were randomly selected from each Local Government Area (LGA) making a total of 12 communities. Using systematic random sampling, married male and female were selected from every third household until five male and five female were obtained from each community. This gave a total of 120 respondents, who were used as sample size for the study.

Method of data collection: Primary data was used to collect the data for the study through the use of structured interview schedule which was administered to equal number of men and women (120) out of which 112 were used for the study. Data were collected over a period of one month by the authors and variables like personal characteristics of respondents, contribution to household food security which was measured by assessing the physical access to food, economic access to food and sustainability of access to food and constraints faced in food production were measured.

Statistical analysis: Chi-square was used to determine the relationship between socio-economic characteristics of the respondents and contribution to household food security.

RESULTS

Socio-economic characteristics of respondents in the study area: Table 1 showed that 20.6% of male respondents were between the age range of 21-40 as against 37.7% of female. 41% of the respondents were between 41 and 50 years old. About 74% of the male respondents fall

Table 1: Distribution of respondents according to socio-economic characteristics

Variable	Male		Female		Total	
	Frequency	%	Frequency	%	Frequency	%
Age group						
21-30	2	3.8	5	8.5	7	6.25
31-40	9	16.8	17	29.2	26	23.2
41-50	18	33.5	28	48.1	46	41.7
51-60	22	0.9	8	13.8	30	26.7
60 and above	3	5.6	-	-	3	2.60
Family structure						
Monogamous	36	66.0	36	63.2	72	64.5
Polygamous	18	36.8	22	36.8	40	35.5
Household size						
1-3	1	1.9	2	3.4	3	2.60
4-6	30	55.6	33	56.9	63	56.2
7-9	18	33.5	19	32.7	37	33.0
10-12	5	9.3	4	6.8	9	8.00
Education background						
No formal education	13	24.1	13	22.4	26	23.2
Primary education	13	24.1	17	29.2	30	26.7
Secondary education	26	48.1	27	46.6	53	47.3
Adult education	2	3.7	1	1.7	3	2.60
No. of rooms occupied by household						
2	23	42.6	27	46.6	50	44.6
3	27	0.0	28	8.3	53	9.10
4	4	7.4	3	5.2	7	6.25
Primary occupation						
Farming	17	31.5	8	13.8	23	2.50
Civil service	16	29.6	7	12.1	21	18.8
Artisan	16	29.6	6	10.3	22	19.6
Trading	5	9.3	37	63.8	42	37.5
Secondary occupation						
Farming	9	16.1	17	30.4	26	23.2
Civil service	-	-	-	-	-	-
Artisan	9	16.1	7	12.5	16	14.3
Trading	8	14.3	9	16.1	17	15.2
No secondary occupation	30	53.6	23	41.1	53	47.3
Total	56	100	56	100	112	100

Source: Field survey, 2010

within 41-60 years of age while 61.9% of the female respondents fall within the same age category. Also, majority (64.5%) of the respondents were in monogamous homes while 35.5% were in polygamous homes. 56.2% of the male respondents have family size of 4-6 people. However, few of the respondents (8.0%) have household size of 10-12 persons. Primary occupation of most of the male respondents was farming (31.5%) as compared to 13.8% of the female respondents. Trading constitute the primary occupation of the female respondents (63.8%) as compared to only 9.3% of the male respondents. The female respondents were mostly engaged in farming as their secondary occupation (19.6%) than the male respondents (16.1%). About 47.3% of the respondents had no

Table 2: Distribution of respondents according to contribution level of respondents to rural household food security

Contribution level	Male		Female		Total	
	Frequency	%	Frequency	%	Frequency	%
Physical access to food	10	17.9	15	29.3	25	24.1
Economic access to food	39	69.6	28	48.2	67	58.0
Sustainability of access to food	7	12.5	13	22.4	20	17.8
Total	56	100	56	100	112	100

Source: Field survey, 2010

Table 3: Distribution of respondents according to constraints to food production

Constraints	Male		Female		Total	
	Frequency	%	Frequency	%	Frequency	%
Lack of farmland	4	7.1	6	10.7	10	8.9
Lack of capital	28	50.0	31	55.4	59	50.0
Lack of farmland and capital	19	33.9	19	33.9	38	33.9
Lack of employment	5	8.9	-	-	5	4.5
Total	56	100.0	56	100.0	112	100.0

Source: Field survey, 2010

Table 4: Chi-square result showing the relationship between some socio-economic characteristics and contribution to household food security

Variable	df	χ^2	p-value	Result
Sex	1	20.870	0.000	Significant
Family structure	1	0.715	0.950	Not Significant
Educational background	3	9.920	0.002	Significant
Occupation	3	52.340	0.010	Significant
Household size	3	0.126	0.185	Not Significant

Source: Field survey, 2010

secondary occupation. Twenty four percent of the male respondents did not have formal education as against 22.4% of female respondents. Furthermore, 24.1 and 48.1% of the male respondents had primary and secondary education, respectively as compared with their female counterpart 29.2 and 46.6%.

Contribution level to rural household food security: Table 2 shows that 17.9% of male respondents contribute to physical access of food i.e., food availability as compared with 29.3% of female. About 69.6% of male contribute to the economic access of food as compared to 48.2% of the female counterpart. 22.4% of the female respondents contribute to the sustainability of access to food as compared to 12.5% of the male respondents.

Constraints faced in food production: Table 3 indicates that the major constraint of the respondents to food production is lack of capital (50.0%) which is common to both male and female respondents, 33.9% of the respondents lack access to farmland and capital. The 10.7% of female respondents were of the opinion that land is a constraint to food production as against 7.1% of male respondents. Results on Table 4 (Chi-square table) showed that sex, educational background and occupation are significantly related to respondents' contribution to household food security.

DISCUSSION

Socio-economic characteristics of respondents in the study area: It is obvious from the findings of this study that youths in this study area do not want to stay in the rural areas and therefore are gradually migrating to the cities for better lives leaving the older people to undertake several agricultural activities in the rural areas. This supports the assertion of Adesope (2007) that rural youths are the driving force and future of any country because of their restiveness and physical strength which is needed in agricultural sector as major agricultural activities are carried out in the rural areas where all depends, even people living in urban areas. 20.8% of male were between 21-40 years as against 37.7% of female which shows that female still stay back to help their parents in both domestic and agricultural activities than male. This shows that younger people are crucial factor in food production which will ensure achievement of food security. Thus, the need to make the rural areas and agricultural activities attractive to the youths by provision of social amenities, loans, inputs becomes important.

Household size is vital to the study of gender and food security because the number of wives a man has will determine his financial capabilities in the household which will in turn affects food consumption. Rural people are known to be involved in several income generating activities to be able to meet up with the demands in the house especially provision of food. This implies that men and women in the study area participated in several jobs like trading, farming, civil service in order to meet the household needs. This supports CTA (1999) that rural people are involved in food production and other income-generating activities in most part of developing countries. 47.3% of the respondents did not engage in secondary occupation, this probably means that their primary occupation takes most of their time and therefore, cannot diversify or maybe it is able to meet their household needs.

Contribution to rural household food security: Women in the study area were able to contribute more to physical access of food i.e food availability, than men. Women will make sure that food is available for member of the households despite all odds. This is in line with the findings of Quisumbing (1996) that women's income is more strongly associated with improvement in children's health and nutritional status than men's income. Men were found to be able to contribute more to economic access of food than their female counterpart. This implies that men have more income than women because they have access to farmland which will give them opportunity to produce more and have enough money to make food available. Fabiyi *et al.* (2007) stressed that women have little access to assets like land, agricultural inputs, capital that will make agricultural work easier and also enable them to make more income which will boost food security in rural households. Women were able to sustain the access to food, that is, they made sure that food was available for their households over time as compared with their male counterpart. The welfare of family members is always very important to women as they are the caregivers in terms of health, food and clothing.

Constraints to food production: In the study area, women were more affected with constraints like capital, land and lack of employment than men which will impede their ability to contribute more to food security. Women do not have access to farmland due to cultural discrimination and they also have little or no access to credit facilities and loans, may be due to lack of collaterals which has made it very difficult for banks to be of significant help in making funds available (Fabiyi *et al.*, 2007).

Chi-square result shows that sex, educational background and occupation were found to be significantly related to respondents' contribution to household food security. This supports the findings of Babatunde *et al.* (2007) that household size and educational status will determine food security status of farming households. Individual with more than one occupation is likely to contribute more to household food security than an individual with only one occupation.

CONCLUSION

Men and women have been identified to play a significant role in household food security but this study showed that women contribute more to household food security than men. They do this even when culture and traditions denies them access to farmland, capital etc. Based on this study, the following recommendations were made; Government should assist the rural people in sourcing for credit and other resources (farm implements, land etc.) as all these are relevant for effective production which will definitely help household food security; women groups should be encouraged and strengthened through the provision credit facilities, extension services, agricultural inputs, processing, storage and marketing services as this will help in formulating policies that will help their production.

REFERENCES

- Adesope, O.M., 2007. Agricultural Youth Organisations, Introductory Concepts. 2nd Edn., University of Port Harcourt Press, Port Harcourt, pp: 12-16.
- Ajani, S.R., B.C. Adebukola and Y.B. Oyindamola, 2006. Measuring household food insecurity in selected local government areas of lagos and Ibadan, Nigeria. *Pak. J. Nutr.*, 5: 62-67.
- Babatunde, R.O., O.A. Omotesho and O.S. Sholotan, 2007. Socio-economics characteristics and food security status of farming households in Kwara state, North-Central Nigeria. *Pak. J. Nutr.*, 6: 49-58.
- Bakhsh, K., B. Ahmad and S. Hassan, 2006. Food security through increasing technical efficiency. *Asian J. Plant Sci.*, 5: 970-976.
- Beaman, L. and A. Dillon, 2009. Do household definitions matter in survey design? Results from a randomized survey experiment in Mali. http://siteresources.worldbank.org/INTFR/Resources/475459-1259791405401/BeamanDillon_HHdef_mali.pdf
- CTA, 1999. The Economic role of income in Agriculture and Rural Development. Technical Centre for Agricultural and Rural Cooperation (CTA), Summary Report of a Seminar. Athens-Greece, 18-22 October
- FAO, 1999. The State of Food Insecurity in the World. Food and Agriculture Organization, Rome.
- Fabiyi, E.F., B.B. Danladi, K.E. Akande and Y. Mahmood, 2007. Role of women in agricultural development and their constraints: a case study of Biliri local government area, Gombe state, Nigeria. *Pak. J. Nutr.*, 6: 676-680.
- Farooq, S. and F. Azam, 2002. Food security in the new millennium-1: The role of agricultural biodiversity. *Pak. J. Biol. Sci.*, 5: 1345-1351.
- Ibrahim, H., M. Bello and H. Ibrahim, 2009a. Food security and resource allocation among farming households in North Central Nigeria. *Pak. J. Nutr.*, 8: 1235-1239.
- Ibrahim, H., N.R. Uba-Eze, S.O. Oyewole and E.G. Onuk, 2009b. Food security among urban households: A case study of Gwagwalada area council of the Federal Capital territory Abuja, Nigeria. *Pak. J. Nutr.*, 8: 810-813.

- Jiggins, J., R.K Samata and J.E. Olawoye, 1998. Improving Women Farmer's Access to Extension Services: A Reference Manual. Food and Agricultural Organization of United Nations, Rome, Italy, pp: 73-82.
- LEISA, 2009. Magazine on low external input and sustainable agriculture. *Women Food Sovereignty*, 25: 5-7.
- Meludu, N.T., P.A. Ifie, L.A. Akinbile and E.A. Adekoya, 1999. The role of women in sustainable food security in Nigeria: A case of Udu local government area of Delta state. *J. Sustainable Agric.*, 15: 87-97.
- Olawoye, J.E., 2000. Contemporary Research Interests and Problem Areas in Agricultural Extension and Rural Development. The Ibadan Extension Monograph Series No. 2, University of Ibadan, Ibadan, Nigeria, pp: 17-20.
- Quisumbing, A.R., 1996. Male-female differences in agricultural productivity: Methodological issues and empirical evidence. *World Dev.*, 24: 1579-1595.
- UNO, 1991. The causes of Africa's food crisis. *Afr. Dev.*, 2: 1631-1645.