

## ASSESSING THE FACTORS INFLUENCING WOMEN ATTAINMENT OF HOUSEHOLD FOOD SECURITY IN IKWUANO LOCAL GOVERNMENT AREA OF ABIA STATE, NIGERIA

**Uchechi Apu and O.T. Okewale**

Department of Rural Sociology and Extension  
Michael Okpara University of Agriculture, Umudike  
Abia State, Nigeria.  
E-mail: [ogudu24@yahoo.com](mailto:ogudu24@yahoo.com)

### **Abstract**

*This study assessed the factors influencing the attainment of household food security in Ikwuano Local Government Area (LGA) of Abia State, Nigeria. The study specifically examined the socio-economic characteristics of women in the study area; ascertained income generating activities embarked upon by women in the area and examined factors influencing the role of women in achieving food security in the area. A total of one hundred and twenty respondents were sampled using simple random sampling procedure. Data collection was facilitated by the use of structured questionnaire, designed and validated for the purpose. Data analysis utilized descriptive statistics such as frequency counts, percentages as well ordinary least squares regression analysis. Results revealed that majority of the respondents (58.4%) were within their active and innovative years, aged between 40-59 years. Only a small proportion of the respondents (12.5%) had no formal education. Results further showed that majority of the respondents (80%) were engaged in farming as their primary occupation and income generating activity. Majority of the respondents (93.3%) were married. Furthermore, results showed that majority of the respondents (68.3%) did not belong to cooperative societies. While 65% of the respondents had no access to credits, 71.7% had no contact with extension service.. Results of the regression analysis indicate that age, which was linked to years of practical experience in farming as well as the status of the women were positively related to the attainment of household food security among the respondents and were significant at 5% level. In like manner access to credit as well as access to extension services were also positively related to the achievement of household food security and were significant at 1% and 10% levels respectively. It was recommended that constraints that limit women's access to credit as well as extension services be removed as a means of encouraging the women increase their agricultural production capacities. This will enable them contribute much more meaningfully towards achieving household food security.*

**Keywords:** *Food security, gender, food availability, food affordability*

<http://dx.doi.org/10.4314/jafs.v9i2.5>

### **Introduction**

Nigeria recently celebrated the golden jubilee anniversary of her independence. At fifty (1960 - 2010) the country is still known to be experiencing widespread poverty, poor nutrition, poor socio-economic infrastructures and is heavily plagued by food insecurity both at the household and national levels (Ogbuagi, 2004). FOS (1999) reported that before the discovery of oil Nigeria's economy was primarily agricultural and despite its decreased role as a component of the Gross Domestic Product (GDP), the sector continues to employ about 72 percent of the labour force. Nigeria currently faces serious food and agricultural problems manifested in the declining

per capital food production, growing food importation and acceleration of ecological degradation (Ilevbaoje, 2002; Iheanacho and Ogunbameru 1997). The indicators of food insecurity including hunger, malnutrition, disease, depressions, backwardness, disease, underdevelopment, enslavement, subservience, lack of planning, lack of direction, lack of self confidence, poverty, corruption, low life expectancy, high rate of crime, infant mortality, maternal mortality, are still starring us in the face today in Nigeria.

The role of women in agricultural production and development in Nigeria cannot be over-emphasized. Women constitute half of the world's population and about 565 million of them reside in rural areas of the underdeveloped countries, where they perform increasingly indispensable roles in agricultural, rural and national development (Akpabio, 2005). According to him, women play very important roles in sub-saharan Africa, where they physically produce 70-80 percent of domestic food crops hence helping to ensure family and national food security. Women are known to be involved in such farming operations as land clearing, tilling, planting, weeding; fertilizer/manure application, harvesting food processing, threshing, winnowing, milling, transportation and marketing as well as management of livestock (Okewale, 2010). According to her, in spite of the dominant and important role women play in agricultural production in the country, they are hardly given any attention in the area of training and/or visitation by extension agents with improved technologies. Furthermore, banks, hardly grant loans to women and they are hardly reached with improved seeds, fertilizers and other inputs (JAS, 2007). These conditions have therefore entangled the women in a vicious cycle of poverty thus placing them at a disadvantaged position in income and resource empowerment.

Women have been described as the invisible workforce and the unacknowledged backbone of the family and national income or gross domestic product (GDP) (Adubi and Jibowo, 2006). According to them, this description results from an assessment of their contributions and role performance which are said to be central and pivotal. Jones (1986) noted that women carry the burden of domestic work and combined it with the work outside the home. Adubi and Jibowo (2006) pointed out that women do the majority of work with little or no financial reward for as long as 18-20 hours a day using backward and labour intensive technology. This arrangement does not enhance food security.

Food security generally refers to the safety, availability and affordability of the food we eat (Iliyasu et. al., 2006). According to them it means making food available, affordable and safe in both quantity and quality to each living individual. Food and Agriculture Organization (FAO), 1999, opined that food security exists when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and healthy life.

Although women have been reported to produce about 70-80 percent of domestic food crops in sub-Saharan Africa, thus helping to ensure family and national food security (Akpabio, 2005), yet they are known to be constrained by systematic gender biases in form of customs, beliefs and attitudes that confine them to domestic spheres, barred from household and other levels of decision making and restricted access to resources such as land, water, credit, productive agro-inputs, improved technology and also medicare, employment, education, information and

extension training and services that would have enhanced their productive capacity. It is against this background that this study sets out to assess the role of women in achieving household food security in Ikwuano Local Government Area of Abia State, Nigeria. Specifically the study examined the socio-economic characteristics of women (farmers) in the study area; determined income generating activities embarked upon by women in the area; and ascertained the factors influencing the attainment of food security by women in Ikwuano Local Government Area of Abia State, Nigeria.

### **Materials and methods:**

The study was conducted in Ikwuano Local Government Area of Abia State, Nigeria. Ikwuano LGA is bounded by Bende and Umuahia (North and South) LGAs in the west; Ikono and Obot Akara LGAs of Akwa Ibom State in the East and Cross River State in the South. It has a land mass of about 600sq kilometers and has a population of about 137,993 persons consisting of 66965 males and 71028 females according to the 2006 housing and population census (FRN, 2007). The main occupation of Ikwuano people is farming. The soil is fertile and major crops grown by farmers in the area include cassava, yam, cocoyam, cocoa, local beans and banana. In addition, fish, poultry and different kinds of livestock are raised by people in the area.

Ikwuano LGA is made of four principal clans/communities, namely Oboro, Ibere, Oloko and Ariam Usaka out of which numerous autonomous communities have been created by the state government. Amaoba Ime autonomous community was purposively selected based on the involvement of women in agricultural activities in the area. However, four (4) villages/communities, namely Ndeulu, Umukia, Umuohia and Umukele were randomly selected from Amaoba Ime. Furthermore, 30 women farmers were randomly selected from each of the four communities, using simple random sampling procedures. This gives a total of one hundred and twenty women farmers, which constituted the sample size for the study. The list of women farmers was obtained from the women leader in each of the communities, and this formed the sampling frame from which the samples were drawn.

Structured questionnaire which was developed and validated for the purpose were used to collect data from the respondents. Data analysis employed such statistical tools as descriptive statistics such as frequency counts, percentages as well as ordinary least squares (OLS) regression analysis. The implicit form of the regression model was specific as follows:

$$Y = f(x_1, X_2, X_3, X_4 \dots X_8)$$

Where Y = food security (measured in terms of monthly household expenditure on food).

X<sub>1</sub> = age (in years)

X<sub>2</sub> = level of formal education (years spent in school)

X<sub>3</sub> = marital status

X<sub>4</sub> = household size (no of person in the household)

X<sub>5</sub> = Access to extension (access = 1, otherwise = 0)

X<sub>6</sub> = women's status (full time housewife = 1, otherwise = 0)

- $X_7$  = membership of cooperative society (member = 1, other =0)  
 $X_8$  = Primary occupation (farmer = 1, otherwise = 0)

The semi log functional form, which provided the best fit, was chosen as the lead equation for explaining the factors influencing women attainment of household food security in the study area.

### Results and Discussion

Table 1 shows the socio-economic characteristics of the respondents,

Results in table 1 revealed that majority of the respondents, (58.4%) were aged between 40-59 years, implying that majority of the women were still active, vibrant and therefore can engage in farming as a business. Furthermore, result showed that only a small proportion of the respondents (12.5%) had no formal education. The implication is that majority of the respondents (87.5%) are able to read and write and as such would be able to source information from various media which could boost their agricultural production endeavours. Majority of the respondents represented by 93.3% were married and majority (80.00%) were engaged in farming as their primary occupation. Furthermore, majority of the women (53.3%) had household sizes varying between 6-10 persons. This implies that most of the farm hands (labour force) could be sourced within the household.

Results in Table 1 further revealed that only a handful of women in the area (31.7%) were members of cooperative societies. The implication is that majority of the women farmers in the area will have difficulties accessing production inputs as well as credits that will enhance their productive capacities. Results further showed that only about 35% of the respondents had access to credits (possibly from formal as well as informal sources) whereas majority (65%) had no access to credits. The implication is that the scale of their farming operations will largely be at the subsistence level. More so, majority of the women (71.7%) had no access to extension services. Perhaps due to certain institution, structural and/or cultural defects they were not reached with extension services/ training. The resultant effect is bound to be low level production as well as minimal contribution in achieving household food security.

Table 2 shows the distribution of respondents according to income generating activities in which women were involved. Results in Table 2 revealed that majority of the women (80.0%) were engaged in farming as their major or primary income generating activity. A small proportion of the women (17.5%) engaged in trading whereas majority (81.7%) were involved in food processing activities. Ocloo (2000) emphasized that women need to be trained in improved methods of food preservation as a way to help increase the economic availability of food throughout the year. Food processing often enhances the preservation of certain food items and/or products.

Adekanye (1988) noted that food processing is an aspect of food production done exclusively by women in rural areas. Results in Table 2 further showed that a small proportion of about 10.8% and 10% of the women were involved in such income generating activities as sewing and teaching respectively. About 31.7% of the respondents were civil servants while 35.8% were involved in other livelihood activities such as hair dressing, information and communication technology (ICT) and a host of others. The implication is that, in spite of the fact that majority of the women

engaged in farming as their primary income generating activity, they also engage in other income generating activities such as trading, sewing, teaching, civil service, food processing and a host of others. The result is that these income generating activities engaged in by the women would empower them to be able to ensure that their respective households were food secure most of the time, if not at all times.

Results in Table 3 indicate that both age and the status of the women were positively related to the attainment of food security and were significant at 5% level. This implies that as the age of the respondents increased, the level of attainment of food security among the respondents also increased. Age here is linked to years of practical experience/ knowledge in farming. The more experienced the respondents were in farming, the more food secure their households would be. In like manner, as the status of the women increased in terms of devoting more of her time and other resources to the upkeep of the household, so does the household become more and more food secure.

Table 3 further revealed that access to credit as well as extension services were positively related to the attainment of household food security and were also significant at 1% and 10% levels respectively. The implications is that as the respondents' access to credit as well as extension services increased, so do their level of attainment of household food security. It can be concluded therefore that age (in terms of farming experience/knowledge), access to credit, access to extension services as well as the status of the women are the factors that influenced their attainment of household food security.

### **Conclusion**

This study has shown that majority of the women (80%) in the study area were engaged in farming as their primary income generating activity. The women also engaged in diverse non-farm livelihood activities such as trading, hair dressing, food processing etc. The factors influencing the attainment of household food security were identified as age, access to credit, access to extension services as well as the status of the women.

It was recommended that the constraints that limit women's access to credit as well as extension services be removed as a means of encouraging the women increase their agricultural production capacities, and enable them contribute much more meaningfully towards the attainment of household food security. Government can set the stage to achieve this laudable goal. NGOs can also lend a helping hand in the area of increasing contact of extension services with the women.

**Table 1: Distribution of Respondents According To Their Socio-Economic Characteristics**

<b>Age (in years)</b>	<b>Frequency</b>	<b>Percentage</b>
20 – 29	04	5.3
30-39	19	15.8
40-49	32	26.7
50-59	38	31.7
60-70	29	22.5
<b>LEVEL OF FORMAL EDUCATION</b>		
No formal education	15	12.5
Primary school (incomplete)	11	9.2
Primary school (complete)	19	15.8
Secondary school (incomplete)	13	10.8
Secondary school (complete)	38	31.7%
Tertiary Institution	24	20.00
<b>HOUSEHOLD SIZE</b>		
1-5 persons	32	26.7
6-10 persons	64	53.3
11-15 persons	24	20.00
<b>MEMBERSHIP COOPERATIVES</b>		
Member	38	31.7
Non-member	82	68.3
<b>ACCESS TO EXTENSION SERVICES</b>		
Access	34	28.3
No access	86	71.7
<b>ACCESS TO CREDIT</b>		
Access	42	35.00
No access	78	65.00
<b>MARITAL STATUS</b>		
Single	8	6.7
Married	112	93.3
<b>OCCUPATION</b>		
Farmer	96	80.00
Non-farmer	24	20.00

Source: field Survey, 2009

**Table 2: Distribution of Women According to Income Generating Activities they Engage in**

<b>Activities</b>	<b>Frequency</b>	<b>Percentage</b>
Farmers	96	80.00
Non-farmers	24	20.00
<b>TRADING</b>		
Trader	21	17.5
Non-trader	99	82.5
<b>FOOD PROCESSING</b>		
Yes	98	81.7
No	22	18.3
<b>SEWING</b>		
Sew	13	10.8
Do not sew	107	98.2
<b>TEACHING</b>		
Teacher	12	10.00
Non-teacher	108	90.00
<b>CIVIL SERVICE</b>		
Civil servant	38	31.7
Non-civil servant	82	68.3
<b>OTHER (LIVELIHOOD) ACTIVITIES</b>		
Involved	43	35.8
Not involved	77	64.2

Source: field survey, 2009

**TABLE 3: The Regression Results On Factors Influencing The Attainment of Household Food Security by Women In The Study Area.**

<b>Variable</b>	<b>Linear</b>	<b>Exponential</b>	<b>Semi-log</b>	<b>Double- log</b>
Constant	4085.339 (1.449)	8.212*** (15.031)	-5955.855 (-0.750)	6.569*** (4.261)
Age	82.393** (1.924)	0.016 (1.908)	3579.798** (2.048)	0.692** (2.040)
Education	11.839 (0.093)	-0.015 (-0.595)	147.318 (0.111)	-0.156 (-0.608)
Household size	-83.346 (-0.441)	-0.016 (-0.432)	-269.599 (-0.403)	-0.087 (-0.673)
Access to credit	-1429.615 (-.440)	-0.315* (-1.639)	1456.851*** (2.644)	-0.323* (-1.681)
Cooperative	536.673 (0.382)	0.207 (0.760)	481.297 (0.343)	0.211 (0.772)
Extension	2453.143*	-0.448*	2400.336*	0.450

	(1.658)	-1.563	(1.623)	(1.567)
Women status	2076.613**	0.330**	2078.785**	(0.337**
	(2.370)	(1.944)	(2.373)	1.981)
Occupation	-132.874	-0.075	-114.534	-0.074
	(-0.241)	(-0.700)	(-0.209)	(-0.693)
R2	0.371	0.122	0.540	0.455
R-2	0.117	0.096	0.278	0.216
F-value	2.148	1.926	2.252	1.975

\*\*\* Significant at 1% \*\* Significant at 50% \* Significant at 1%

Source: field Survey, 2009

### **Reference:**

**OGBUEGU, STELLA CHINYERE** (2004). Gender, Population and Environment Issues. Ark Publishers, Owerri Nigeria, 219p.

**FEDERAL OFFICE OF STATISTICS**, (1999). Poverty and agricultural sector in Nigeria. Poverty incidence of farmers by Region, FOS, October, 1999, pp-4 21.

**ILEVBAOJE, L.E** (2002). Gender Analysis of farmers from the perspective of food security”: a case study of Owan West Local Government Area of Edo State Nigeria. *Journal of Agricultural Extension* (6) 2002, 10-16.

**IHEANACHO, A.C AND B.O OGENBAMERU** (1997). Criteria and approach analysis for selection and disseminating sustainable agricultural technology for small holder farmers in Nigeria. *The Nigerian journal of Agricultural Extension* 10(1X2), 11-26.

**AKPABIO, INI A.**(2005). Human agriculture: asocial themes in Agricultural Development Aboam Publishing company, Unity 972 Ewer Housing Estate, Uyo, Akwa-ibiom State Nigeria pp.106-122

**OKEWALE, O.T.** (2010).Assessing the role of women achieving those house hood security in thousand LGA, Abia State, Nigeria. AB. Agric. Project summated to the Department of Rural Sociology and Extension Micheal Okpara University of Agricult, Umudike *Journal of Applied Science (JAS)*, 2007). 7(3) 412-416.

**ADUBI, K.O.AND A.A. JIBOWO** (2006). Perception of women on their Role Performance and its Relevance promoting Rural Development in Osun State Nigeria *Journal of Rural Sociology* 6(1X2): 49-55.

**JONES, G.E** (1986) Investing in Rural Extension Strategies and Goals. Elsevier applied science publisher London and New Yorks. 155-157.

**ILYASU, A.Y, B. M. HAMIDU AND A. AUWAL** (2006). Agricultural Education: A panacea to food security and poverty Eradication. *Nigeria Journal of profession at Yearbus* 4(40): 49-59.

**FEDERAL REPUBLIC OF NIGERIA OFFICIAL CAZETTE** (2007). Legal notice on publication of the Details of the breakdown of the national and state provision allyotab 2006 census, 3179.

**OCLOO, E.** (2000). Women as food processors and traders, farm income generating activities. A contribution from women agricultural intensification and household food security held at the Sasakawa centre, University of cape coast, Ghana, 68-79