

## ASSESSMENT OF THE ROLE OF WOMEN IN THE ATTAINMENT OF HOUSEHOLD FOOD SECURITY IN OWERRI-WEST LOCAL GOVERNMENT AREA OF IMO STATE, NIGERIA.

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### ABSTRACT

*In the study, data were collected with a set of structured questionnaire and interview schedule administered to the respondents. A multi-stage sampling technique was used to select one hundred and fifty (150) women involved in food security and family well being in the study area. The data collected were analyzed using descriptive statistics and multiple regression analysis. Results of the analysis showed that the mean age of respondents was 45 years. Majority (90.67%) of them was educated, and 90 percent had household size of 8 members and below. Fifty (50%) Percent of the respondents had a monthly income of less than ₦10,000.00 and in addition, 68 percent of them did not belong to any cooperative association. Over 53 percent of the respondent reduces quantity of food given to their households as a means of coping with food insecurity. The study further revealed that 52 percent of the respondents were food secured, while 48 percent were not. Age, Education, income and occupation were the significant indicators explaining food security status of households in the study area. The most serious problems encountered by the respondents were; high cost of labour, poor food storage and processing facilities, pest and diseases, high cost of pesticides, among others. The study therefore call for policies aimed at empowering women by strengthening their control over a range of assets and also by providing them with production inputs and other necessary facilities at least cost.*

**Key Words:** Assessment, Role of women, Attainment, Food security, Owerri-west L.G.A, Nigeria.

### INTRODUCTION:

History has it that increase in agriculture sector productivity has contributed greatly to the economic growth and the reduction of poverty.

Damisa and Yohanna (2007) noted that the world food needs in the year 2020 will depend even more than it does now on the capabilities and resources of women. They went further to argue that women are responsible for generating food security for their families in many developing countries, particularly in Sub-Saharan Africa. Women not only process, purchase and prepare food, but they also play a significant role in national agricultural production, producing both food and cash crops, (FAO, 1995). Thus, the feminization of agricultural work requires a clear gender perspective to be integrated into policies for effective poverty reduction. However, the substantial contribution of women continues to be systematically marginalized and undervalued in conventional agricultural and economic analysis and policies.

FAO, (1995) reported that women produce more than 50 percent of the food grown worldwide. Egunjobi (1991) opined that about 70 percent of women are actually employed in agriculture and that they produce 60-80% of Africa's food. Not only are women the mainstay of the agricultural food sector, labour force and food systems, but they are also largely responsible for post harvest activities. Rural women also fetch water and firewood for the family. It is therefore important to consider the essential role

of women when considering food security in Nigeria (Akinwumi and Djato, 1992). Women are engaged in wage labour as well as in other income generating activities and earn a substantial proportion and sometimes, even all of the basic daily food for the family. Women also play a multiple role and are said to be feeding the world (Wing, 1990).

In Asia, rural women provide between 50% and 90% of the labour force used in rice cultivation. In Latin America, women's home garden represents some of the most complex agricultural systems known. The percentage of rural women working in agriculture ranges from about a third in Bosnia and Herzegovina to more than half in Poland. In Sub-Saharan Africa and the Caribbean, women produce up to 80% of basic foodstuff. In Sub-Saharan Africa, where women and men farm separate plots, women farmers have traditionally been responsible for food production. Estimates from the food and Agriculture organization of the united Nations (FAO) show that women account for more than half of the labour force required to produce the food consumed in the developing world (FAO,1995). Aggregate data suggest that African women perform about 90% of the work of processing food crops and providing household water and fuel wood, 80% of the work of food storage and transport from farm to village, 90% of the work of hoeing and weeding, and 60% of the work of harvesting and marketing (World Bank, 1989). Despite their traditional specialization in food production, women are becoming increasingly

involved in cash crop cultivation (Saito, et al, 1994). In developing world, rural women provide most of the labour for farming (i.e. from soil preparation to harvest). In addition, after harvest, they are almost entirely responsible for operations such as; storage, handling, processing and marketing (Shiva, 1991).

A lot of literature has shown the various contribution of women to agricultural production in Nigeria (Rahman and Alamu, 2003; Auta et al, 2003, NAERLS, 2000). Damica and Yohanna (2007) using Zaria in Kaduna State of Nigeria as the study area: examined the level of participation of rural women in the decision-making and found that the high level of knowledge and experience about improved farm practices acquired by the educated women farmers has positive influence in that regard. Similarly, women in Anambra State of Nigeria contribute more than the men in terms of labour input in farming and are solely responsible for household management duties (NAERLS, 2000). Women in Agriculture in Nigeria as a programme came about in 1988, when it became obvious that inspite of decade of World Bank's assistance in building up Nigeria in agricultural extension service, women farmers were still receiving minimal assistance and thus was therefore created within the Agricultural Development programme (ADP) in 1990 to address the gender related deficiencies within the existing extension programmes (Ogulela and Muktar, 2009).

As the composition and structure of household changes, gender responsibilities also change, typically with rural women becoming more responsible for household food security and children's welfare. In most developing countries, female-headed household is on the increase. In Sub-Saharan Africa, women head an estimated 45% of rural households in Kenya and 15% in Nigeria (FAO, 2003). Female headed households are among the poorest, with the lowest level of food security (Heyzer, 1992)

FAO (1996) described food security as when all members have year-round access to the amount and variety of food required to live active and healthy lives. In other worlds, household food security implies access by all people at all times to sufficient food required for a healthy and active life in the household which can be ensured through the following (i) nutritionally adequate and safe food supply at household level. (ii) Reasonable degrees of stability in the supply of food during the year and in all years; and (iii) access by each household to sufficient food to meet the needs of all. Therefore, for a household to achieve food security, it must have the means to produce or purchase the food that are needed and must also have the time and the knowledge to ensure that all the nutritional requirements of the household members are met. Women encounter many difficulties in their attempt to ensure food security as they do not have land ownership rights. In some communities, they have only annual rights to the use of land given to them by

the head of their household. Modupe (1990) reported that majority of rural women obtained their farmland from their husbands or his family. Thus, women faced a lot of constraints, which serve as hindrances to their roles (Adekoya and Oladele, 1998). It is against this backdrop that this study sought to assess the role of women in attainment of household food security. Specifically, the objectives were to; (i) describe the socio- economic characteristics of women in the study area, (ii) ascertain the various income generating activities embarked upon by the women to ensure household food security (iii) determine the factors influencing the attainment of household food security by the women. (iv) ascertain the state of food security among the rural households; and (v) identify the problems encountered by women in the attainment of household food security in the study area.

## **METHODOLOGY**

### **Study area:**

The study was conducted in Owerri-west local Government Area of Imo State, Nigeria. The local Government Area lies between latitudes  $7^{\circ} 58'$  and  $6^{\circ} 48'$  North of the equator and longitudes  $9^{\circ} 44'$  and  $14^{\circ} 58'$  East of the Greenwich Meridian (Nwadike and Ukawuike, 1998). It falls within the tropical rain forest zone of the country's vegetation, with a mean annual rainfall range of 1500mm- 1800 mm. It has a total land area of 295 square kilometers and an estimated population of 250,000 people (NPC, 2006). It has an annual temperature range of  $28^{\circ}\text{C}$  –  $32^{\circ}\text{C}$  and the topography is undulating with little or no hills. About 60%-70% of the inhabitants are engaged in agriculture and the crop commonly grown are; cassava, yam, cocoyam, maize and vegetables; while the animals reared are: goat, sheep, poultry, etc. All these are on a small scale basis. Other economic activities carried out include: barbing, hair-dressing, fashion designing and petty trading. The soil type is clay-loam.

### **Sampling procedure and data collection**

Multi-stage sampling technique was used in selecting the respondents for the study. In the first stage, five (5) communities were randomly selected out of the eight (8) communities that make up the study area. In the second stage, ten villages (10) were also randomly selected from each of the five (5) communities already selected in stage I. In the third stage, three (3) women farmers were selected from each of the fifty (50) villages already selected in stage II, which gave the total respondents of One hundred and fifty (150). This also represents the sample size. Data were collected with structured interview schedule.

### **Measurement of Variables**

Actual value was used for analysis in case of age, income, household size, farm size, years of formal education, and occupation. Dummy was used for marital status and membership of cooperatives. Household was said to be food secured when the household have access to, and can afford food for all

members of the household. This was scored based on the extent to which the household can provide for the family. In order to determine the households food security status, per capita, households food expenditure method was used. This study classified household into either food secured or food insecure. Per Capita Household Food Expenditure (PCHFE) = Total Household Monthly Food Expenditure/ Household size.

Mean Per Capita Household Food Expenditure (MPCHFE) =

Total Per Capita Household food Expenditure/ Total Number of Households

The poverty line was drawn from the mean per capita household food expenditure to get the food security or insecurity.

Food secured households are those whose PCHFE is equal or greater than 2/3 mean of PCHFE. Those with PCHFE less than 2/3 mean PCHFE were said to be food insecure. Respondents were allowed to indicate those activities in which they were engaged in order to be food secured.

#### **Method of Data Analysis:**

Descriptive statistics such as mean, frequency, and percentages were used to analyze qualitative data; while multiple regression was used to identify significant socio-economic variables that influence household food security.

### **RESULTS AND DISCUSSION**

#### **Socio-economic characteristics of respondents**

Table I shows the descriptive analyses of respondent's socio-economic and demographic variables investigated in the study. The mean age of respondents was 45 years. About 33.33% of the respondents were above 45 years. This implies that this number of respondents were not agile enough to provide food for their households.

These inactive respondents together with the under-aged would depend on the active ones for their livelihood. All (100%) of the respondents interviewed were married, but 70% were with their spouses, 3.33% were divorced, 16.67% were widowed, and 10% were separated. Majority (96.67%) of them were educated, while only 3.33% had no formal education. This indicates that many citizens of the Local Government Area had formal education which was an important factor that could influence household food security. Also 90% of the respondents had a household size of 8 members and below. This may positively influence household food security if the members helped to reduce expenses on hired labour in farm production. Twenty four percent (24%) of the respondents had farmlands less than 3 hectares, while seventy six percent (76%) had farmlands more than 3 hectares. The monthly income of half of the respondents (50%) was less than N10,000; while 3.33% of them were earning more than N30,000 monthly. This shows that respondents do not have enough money to purchase and to provide adequate food for their households. The respondents were asked to state what they do

presently which is taking a higher percentage of their time? The data collected showed that 40% were civil servants, 23.34% were farmers, 20% were artisans, 13.33% were either businessmen or traders; while only 3.33% of them were without any job. This is an indication that 96.67% of them were employed and have access to regular sources of income as presented in table I. This information is an evidence that the women also engaged in various forms of income generating activities which were basically to ensure household food security and good economic stability. Result also indicated that majority 68% of the respondents did not belong to any cooperative association, while only 32% of them were members of cooperatives.

The study also identified the coping strategies used by the food insecure households to manage limited food resources.

Data from table 2 shows that majority (53.33%) of the respondents reduce quantity of food served to household members so as to cope with food shortage in their households. Also 20% of them indicated that they skipped meals; 18% said that they withdrew their savings; and 14% said that they borrowed money in order to cope with the food shortage. Similarly, 10% of the respondents engaged in family labour, while 8% said that they ran to their relatives to meet the food needs of their households. However, 4% of the respondents engaged in other lucrative small businesses; while another 4% said that they sold part of their assets (sheep, goats, fowls, etc) in order to meet the food needs of their households. From the table above, it could be inferred that most women do not leave the food security of their households to their husbands alone, but they also take part in ensuring the security of their household in terms of food.

Table 3 shows the food security status of households. The mean food expenditure of the respondents was calculated to be ₦990.31 and 2/3 means per capita food expenditure was ₦660.21. This figure was used to classify various households into food security and food insecurity. The table above shows that 52% of the households were food secured, while 48% of the households were food insecure. These findings revealed that food insecurity also exist among the rural household where food is expected to be abundant.

Results of the multiple regression analysis revealed that age, which was linked to years of practical experience in farming, as well as status of the women were positively related to the attainment of household food security among them and were significant at 1% level of probability. In the same vein, the coefficient of education has significant and positive effect on the household food security at 1% level of probability. This means that as the respondents increased their educational status, their food security level also increased, which equally leads to higher income and better management of scarce resources (Anwal 2006). However, previous

studies such as that of Quisumbing (1996), Agnes et al, (1995) and Smith and Haddad (2000) established that increasing women's education is a key ingredient for women's empowerment which invariably would affect household food security. Those who lack access to basic education are not likely to accept new programmes such that will enhance food security within the households. Thus, the higher the educational status, the better their contribution to household food security.

The coefficient of income has a significant positive influence on the household food security. Positive influence on food security status suggests that respondents who earned more became much involved in the provision of food for their household and also determine the type of food, quality, and quantity to prepare (FAO, 1995).

The coefficient of occupation has a negative relationship with the food security status of respondents, but was significant at 1% level of probability. This implies that as the respondents embarked on many occupations so as to ensure household food security, their food security status declines. This is in agreement with the economic theory and a priori expectations.

## CONCLUSION

Emerging evidence from the study showed that women engaged in various forms of income generating activities which were basically to ensure household food security and good economic stability. Four variables namely; age of respondents, educational status, income and occupational level had significant influence on the household food security. However, while age, education, and income had a positive relationship with the household food security at 1% level of probability; occupation on its part, had a negative relationship with the household food security at the same level of probability. There were many problems faced by women in attainment of household food security in the study area. Among them were; lack of knowledge of loan, high cost of labour, pests and diseases, high cost of pesticides, poor health services and poor food storage and processing facilities. The study therefore recommends that constraints that limit women in achieving food security should be addressed as a means of encouraging them to increase their agricultural production capabilities.

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**Table I: Socio-economic characteristics of respondents**

<b>Age Range</b>	<b>Frequency</b>	<b>Percentage (%)</b>
25-30	10	6.67
31-35	15	10
36-40	40	26.67
41-45	35	23.33
46-50	25	16.67
51-55	20	13.33
56-60	5	3.33
<b>TOTAL:</b>	<b>150</b>	<b>100</b>

<b>Educational level</b>	<b>Frequency</b>	<b>Percentage (%)</b>
No formal education	8	3.33
Primary education	33	22
Secondary education	49	32.67
Tertiary education	60	40
<b>TOTAL:</b>	<b>150</b>	<b>100</b>

<b>Household size</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1-4	15	10
5-8	120	80
9-12	10	6.67
13-16	5	3.33
<b>TOTAL:</b>	<b>150</b>	<b>100</b>

<b>Farm size</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1-2	36	24
3-4	60	40
5-6	42	28
7-8	12	8
<b>TOTAL:</b>	<b>150</b>	<b>100</b>

<b>Occupation</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Civil Servant	60	40
Artisan	30	20
Business/ Trading	20	13.33
Farming	35	23.34
Unemployed	5	3.33
<b>TOTAL:</b>	<b>150</b>	<b>100</b>

<b>Income (₹)</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Less than 10,000	75	50
10,000-15,000	45	30
15,000-20,000	15	10
25,000-30,000	10	6.67
30,000 and above	5	3.33
<b>TOTAL:</b>	<b>150</b>	<b>100</b>

Cooperative membership	Frequency	Percentage (%)
Membership	48	32
Non-membership	102	68
<b>TOTAL:</b>	<b>150</b>	<b>100</b>

Source: Field Survey Data, 2017

**Table 2: Coping Strategies of Women To Ensure Household Food Security.**

Strategies	Frequency	Percentage (%)
Reduced food quantity served	80	53.33
Skipping meal	30	20
Borrowing	21	14
Withdraw savings	27	18
Sell assets	6	4
Withdraw children from school	4	2.67
Run to relatives	12	8
Engage in farm labour	15	10
Engage in other lucrative small businesses	6	4
<b>Multiple responses:</b>		

**Table 3: Household for Food Security Status**

Status	Frequency	Percentage (%)
Food secure household	78	52
Food insecure household	72	48

**Table 4: result of multiple regression of the factory influencing the attainment of household food security by women in the study area**

Variables	Linear	Semi-Log +	Double-Log	Exponential
Constant	0.120 (0.462)	-4.298*** (-4.003)	-1.701*** (-3.176)	-0.207 (-1.526)
Marital Status (X <sub>1</sub> )	0.002 (0.029)	0.032 (0.343)	0.034 (0.745)	0.004 (0.113)
Age (X <sub>2</sub> )	0.067*** (4.833)	2.357*** (4.682)	1.090*** (4.340)	0.029 (3.990)
Education (X <sub>3</sub> )	0.086*** (5.476)	0.427*** (6.161)	0.259*** (7.496)	0.048*** (5.857)
Household Size (X <sub>4</sub> )	0.011 (-0.292)	0.082 (1.279)	0.028 (0.887)	0.002 (0.112)
Farm Size (X <sub>5</sub> )	-0.279*** (-2.608)	-0.063 (-0.733)	-0.039 (-0.927)	-0.119** (-2.110)
Occupation (X <sub>6</sub> )	-0.002 (-0.081)	-0.337*** (3.500)	-0.140*** (-2.925)	-0.001 (-0.086)
Income (X <sub>7</sub> )	0.003*** (9.230)	172.945*** (9.597)	0.660*** (9.846)	1.287E-5*** (9.422)
Coop. M (X <sub>8</sub> )	0.065 (1.095)	0.031 (0.389)	0.027 (0.687)	0.023 (0.726)
R <sup>2</sup>	0.778	0.831	0.824	0.744
Adj R <sup>2</sup>	0.763	0.820	0.813	0.727
F-ratio	54.421***	76.600***	72.838***	45.165***

Source: Field survey data, 2017

Figures in parenthesis are the t-values

+ = lead equation

Note: \*\*\*, \*\* are significant levels at 1% and 5% respectively.