

Women's Status, Household Food Security and Coping Strategies in Nigeria: A Survey Based Analysis

Risikat Oladoyin S. Dauda

Department of Economics, University of Lagos, Akoka, Lagos, Nigeria

Abstract: The relative importance of women's empowerment for household food security has generated a lot of interest so much that governments, multilateral and non-governmental organizations have all shown concern. This study provides an analysis of the interrelationship between women's status and provision of food for household members for food security in Lagos metropolis, Southwestern Nigeria using survey methodology. The survey was conducted between May and June, 2008. The women selected were from different socio-economic status, i.e., they reflect a mix of people in the upper, middle and lower socio-economic groups. The study population includes all economically active women aged 18-60 years presently living in metropolitan Lagos, South Western Nigeria. It is impossible to cover all the elements in the study population due to the huge amount required and labour intensity. As a result of this, four local government areas were chosen purposively. Purposive sampling was the best available method in order to reduce cost, time and labour intensity. Using a quota technique, the 4 local government areas were roughly zoned into three sections each. The survey results indicate that socio-economic and demographic variables such as marital status, income, education and occupation are significant indicators explaining food security status of households in the study area. The results also identify the coping strategies used by food insecure households to manage limited food resources. This is done with a view to bringing to the fore strategic policy options on how to enhance food security among vulnerable households.

Key words: Empowerment, government, population, purposively, occupation, economically

INTRODUCTION

In recent times, there has been a renewed interest in the poverty and food security issues in most developing countries. This revival of interest is fuelled partly by the dramatic rise in world food prices occasioned partly by rising fuel costs, increased food demand, erratic weather patterns, diminishing global reserves and the conversion of land to grow crops for bio-fuels. The developing countries are the worst hit of soaring food prices. Food insecurity in most of these countries including Nigeria is worrisome.

In Nigeria, the food situation has led to a tremendous increase in the prices of food over the years and deterioration in the living conditions of many families. For instance, the aggregate consumer price index for food rose from 96.59 in 2002-152.2 in 2006. Household food insecurity is identified to be prevalent among the vulnerable groups especially, children, women and elderly. The central role women play as producers of food, managers of natural resources, income earners and caretakers of household food security and nutrition has

become increasingly recognized. Empirical evidence shows that women in developing countries play a crucial role in ensuring household food security (Quisumbing *et al.*, 1995). The Nigerian government also concur that women are vital to food security and family well being. Similarly, the importance of women as agricultural workers and income earners have become increasingly recognized hence strategies have been directed towards eliminating the inequities and constraints affecting women's productive role. Giving women the same access to physical and natural resources as men could enhance agricultural productivity (Agnes *et al.*, 1995).

There are increasing empirical evidences that improvement in women's socio-economic indicators such as income, educational attainment and living conditions are strongly related to household food security in most countries (Delpeuch *et al.*, 1999; Kramer, 1987). Could the same be said of Nigeria? This study provides evidence on the relationship between women's status and provision of food for household members for food security in Nigeria using Lagos metropolis, southwestern Nigeria as a case

study. The study also identifies the coping strategies used by food insecure households to manage limited food resource in the study area. This is done with a view to bringing to the fore strategic policy options on how to enhance food security among vulnerable households.

Brief review of literature: The literature is replete with various conceptualizations of household food security. The common practice is to define it as the ability of all individuals to access an adequate supply of food on a stable basis and in a sustainable way. An alternative approach which is perhaps the most used and quoted defines household food security as access by all people at all times to enough food (of good quality) for an active and healthy life (Reutlinger, 1987). However, regardless of the definition adopted, availability of food and access to food are two essential determinants of food security. Availability does not ensure access. Food may be available globally but not all countries, households within countries or individuals within household that need it have access to it. Attempt to determine the link between of socio-economic status and household food security within the context of socio-economic upheaval has received increasing notice over the past few decades.

Socio-economic status has been defined as the components of economic and social status that distinguish and characterize people (Morrisa *et al.*, 2000). Conceptual issues regarding measurement of socio-economic status are extensively discussed in the literature (Oakes and Rossi, 2003; Daly *et al.*, 2002; Teller and Yimer, 2000). Several empirical studies show that increase in women's education and improvement in women's status over the past few decades have contributed to more than half of the reduction in the rate of child malnutrition.

Delpuech *et al.* (1999) assesses the relative importance of socio-economic and maternal/prenatal determinants of the nutritional situation of children below 6 years old in the capital city of Congo after several years of economic crisis using cross-sectional cluster sample survey. The researchers observed that the physical and maternal and prenatal characteristics are strongly related to children's nutritional indices, especially stunting. Among the socioeconomic determinants of malnutrition, some such as economic level of the household or schooling of the mother seem to act mainly through prenatal factors whereas others mainly dwelling or district characteristics, seem to influence more directly the children's nutritional status.

Davis *et al.* (1983) examines the socio-economic determinants of food expenditure patterns among racially different low-income households in the United States of America. A double logarithmic functions form was used to explain responses in household food expenditure to socio economic factors.

Household income, family size and food stamp participation were found to exert a strong positive impact on food expenditures. The general educational level of the homemaker registered no significant impact on household food expenditure. However, the nutritional knowledge of the homemaker increased the efficiency of food purchasing activities.

In a study by Doocy and Burnham (2006) measures of socioeconomic status were compared with a measure of physical well-being, Mid-Upper Arm Circumference (MUAC) in the food insecure regions of Ethiopia. Evidence shows that income, housing conditions and education had the greatest correlation to MUAC and significant differences in these measures were observed between malnourished and adequately nourished individuals.

On the choice of MUAC as a measure of food insecurity measure, they argue that MUAC was chosen as the anthropometric measure because it is commonly used for nutrition screening in emergency situations and because it is recommended for assessing acute adult malnutrition and prevalence of under-nutrition at the population level (Cogill, 2003).

Olumakaiye and Ajayi (2006) investigated the association between women's education and household food security in Nigeria using χ^2 -test. The results showed that the educational level has an association with the labour saving devices and food security indicators.

This implies that women with higher education are likely to provide varieties of food security. Similarly, Smith and Haddad (2000) in a cross-country analysis to explain factors responsible for child malnutrition in the developing world between 1970 and 1995 provide evidence that increase in women's education accounted for 43% of the total reduction in child malnutrition by far the largest contribution.

Using the static, non-separable agricultural household model, Faiz (2007) seeks to examine the effect of changing in key exogenous factors on food security and consumption pattern of rural households in Pakistan. The results, according to him, tend to suggest that house full income, food prices and women specific variables such as age and time allocation influence household food

security. In addition, the women specific variables tend to indicate a slightly more significant impact than food prices. What emerges from the above discussion is that the importance and strategic role of women empowerment and improvement of socioeconomic status cannot be overemphasized. It improves the quality of life, productivity and enhances household food security.

MATERIALS AND METHODS

This briefly discusses the study population, scope of the study, sampling design and technique, sampling size, method of data collection, data preparation and the method of data analysis employed in this research work. The study population includes all economically active women aged 18-60 years presently living in metropolitan Lagos, South Western Nigeria. It is impossible to cover all the elements in the study population due to the huge amount required and labour intensity.

As a result of this, four local government areas were chosen purposively. Purposive sampling was the best available method in order to reduce cost, time and labour intensity. Using a quota technique, the 4 local government areas were roughly zoned into 3 sections each. Somolu local government area was zoned as Lady-Lak, Bajulaiye and Oguntolu; Mainland was zoned as Sabo-Yaba, Akoka and Abule-Oja; Eti-Osa was zoned as Obalende, Ikoyi and Kingsway Road while Apapa was zoned as Olodi Apapa, Orile and Iganmu. Care was taken to draw the elements from the three zones of each local government area.

The women selected were from different socio-economic status, i.e., they reflect a mix of people in the upper, middle and lower socio-economic groups. The survey was conducted between May and June, 2008. Data were collected from women because they are the key players in ensuring food security. Empirical studies such as Quisumbing *et al.* (1995), International Organizations like the World Bank, Food and Agricultural Organization submit that women in developing countries play a crucial role in ensuring household food security.

The sample size for this study was five hundred. About 125 women were selected in each of the four local governments. In all 500 women were interviewed by means of the research instrument which is through questionnaire. About 436 questionnaires were successfully retrieved, representing 87.2% of the total distributed questionnaires. The key instrument used in this study was a structured questionnaire.

This method of data collection was employed because of its relative merit of comprehensiveness and impersonal nature. The entire questionnaire was

thoroughly scrutinized to ensure legibility, consistency and uniformity. Descriptive statistics such as simple frequency, percentage distribution and cross tabulation were used in data presentation. Demographic and other descriptive data were used to develop profiles of respondents.

These profiles provide a basis for determining relationship of socio-demographic and economic data with level of food insecurity. Household characteristics include: number of household members, monthly income, education attainment, ethnicity, occupation, marital status etc. Household food security indicators were: frequency of meals, number of times household runs out of food, percentage of monthly income spent on food.

RESULTS AND DISCUSSION

Background characteristics of respondents: A descriptive analysis of the various socio-demographic and economic variables of respondents is shown in Table 1. Segment 1 of the Table 1 depicts that most respondents (58.0%) belong to the Yoruba ethnic group.

Table 1: Socio-demographic and economic characteristics of respondents

Variables	Category	Percentage
Ethnic group	Yoruba	58.0
	Ibo	29.1
	Hausa	9.9
	Others	3.0
Age	18-24 years	7.6
	25-34 years	37.3
	35-44 years	42.2
	45-54 years	9.7
	Over 55 years	3.2
Marital status	Married	81.3
	Unmarried single mother	5.8
	Widowed	5.8
	Divorced	3.5
	Separated	3.7
Religion	Christianity	67.7
	Islam	24.5
	Traditional	6.4
	No religion	1.4
Education	No formal education	11.9
	Primary	7.8
	Secondary	39.9
	Post secondary	40.4
Number of children	None	10.6
	1-3	47.5
	4-6	36.9
	7+	4.6
Occupation	Trade/Craft	49.8
	Farming	2.4
	Wage labour with local entrepreneur	5.5
	Civil Servant	22.3
	Professional	14.5
	Unemployed	5.5
Income	<₦5,000 month ⁻¹	3.1
	₦5,001-₦10,000 month ⁻¹	8.6
	₦10,001-₦15,000 month ⁻¹	23.9
	₦15,001-₦20,000 month ⁻¹	8.6
	₦20,001-₦30,000 month ⁻¹	27.5
	₦30,001-₦50,000 month ⁻¹	11.2
	₦50,001 and above	10.3

Field survey, 2008

Table 2: Husband's background information

Variables	Category	Percentage
Occupation	Trade/Craft	25.2
	Farming	4.4
	Wage labour with local entrepreneur	14.3
	Civil servant	27.7
	Professional	26.7
	Unemployed	1.7
Education background	No formal education	8.8
	Primary	4.2
	Secondary	35.0
	Post Secondary	52.1
Income	<₦5,000 month ⁻¹	1.5
	₦5,001-₦10,000 month ⁻¹	2.5
	₦10,001-₦15,000 month ⁻¹	7.2
	₦15,001-₦20,000 month ⁻¹	11.9
	₦20,001-₦30,000 month ⁻¹	25.4
	₦30,001-₦50,000 month ⁻¹	21.2
	₦50,001 and above	21.2

Field survey, 2008

This is not surprising because the study area is situated in the South Western part of Nigeria where Yoruba is the native language. About 29.1 and 9.9% are Ibo and Hausa, respectively. Those in the age group 35-44 years comprising 42.2% of the total sample size were more represented in the study than other age groups.

The Table 1 shows that most of the respondents constituting 81.3% were married. This implies that they are responsible to provide food for their household and determine the type of food, quality and quantity to prepare. The divorced and those separated were 3.5 and 3.7%, respectively. The Table 1 shows that Christians were more represented in the sample with 67.7% and those with no religion were the least represented.

On the educational status of the respondents, it could be observed from the Table 1 that 88.1% of the respondents have formal education of at primary school education. This shows that majority of the respondents are educated. The data indicates that the highest proportions of respondents are in tertiary education category. Generally, in Nigeria, women are disadvantaged at the tertiary educational level when compared with men.

The data in Table 2 shows this fact, in that the proportion of husbands of the respondents with tertiary education constitutes about 52.1%. Research studies such as Smith and Haddad (2000) confirm that women tend to be less educated than their husbands. However, evidences abound increases in women's education is a crucial factor determining household food and nutrition security. In respect of the occupation of respondents, the data showed that 49.8% were in trade and craftsmanship, 22.3% civil servant, 2.4% farming, 14.7 professionals while 5.5% were unemployed. This shows 95.5% of the respondents have jobs and as such have access to regular source of income which is needed to ensure household food security. Table 2 shows selected characteristics of husbands. From the Table 2, it could be observed that 91.3% of the husbands

Table 3: Information on food security status within households

Characteristics	Category	Percentage
Frequency of meals	Once	0.9
	2 times	27.6
	3 times	68.0
	4 times	3.5
Percentage of income spent on food	10%	13.9
	20%	25.1
	30%	19.5
	40%	15.5
	50%	10.9
	60%	4.0
	70%	4.5
	80%	1.6
Do your household	Yes	48.9
	No	51.1
Runs out of basic food items	Once	18.8
	2 times	29.6
	3 times	24.8
	4 times	26.8

Field survey, 2008

of the respondents have formal education of at least primary school education. This, by implication shows that majority of the respondents husbands are educated. As regards the employment status of their husband, 1.7% is unemployed. About 26.7 and 27.7% are professional and civil servants, respectively. A variety of food security indicators were devised to assess the food security status of respondents. In Table 3, information on food security status within households is provided. The Table 3 shows a number of interesting results.

In respect of the frequency of meals, the survey shows that 0.9% of households eat once a day while 99.1% could be said to be food secure because they eat more than two times a day. The principal drawback of this indicator is that frequency of meals by individuals could be limited for health and dietary reasons.

In terms of the patterns of food expenditure, 26% of the respondents spend over 50% of monthly income on food. About 13.9% of households spend only 10% of monthly income on food. This might be attributed to the increase in food prices, household size or changing consumption patterns of member of household. For instance, the costs of staples like sugar, maize, millet, rice and wheat have increased considerably in recent times. The price of a 50 kg bag of rice which was ₦6000 in December 2007 is presently selling at ₦7500.

The price of a bag of rice is higher than the minimum wage of ₦7500 in the country. Empirical studies such as Davis (1982) has suggested that household food expenditures increase with the addition of children to the household and continue to increase as children get older, peaking when they are teenagers. In order to understand better, the households vulnerability to food insecurity,

Table 4: Marital status and food insecurity (%)

Marital status	Do your households run out of basic food items such rice, garri, wheat, beans, etc.	
	Yes	No
Married	74	88.1
Unmarried single mother	7	4.3
Widowed	7	4.8
Divorced	5	1.4
Separated	7	1.4
Survey data		

Table 5: Education and food insecurity (%)

Education	Do your households run out of basic food items such rice, garri, wheat, beans, etc.	
	Yes	No
No formal education	14.4	10.4
Primary	11.9	4.7
Secondary	46.5	34.6
Post-secondary	27.2	50.2
Survey data		

respondents were asked whether they have ever run out of basic food items. To further buttress this fact that there is the existence of manifestation of food insecurity, the survey reveals that 48.9% of respondents reported that they have ever experienced food inaccessibility while 51.1% reported that they never experienced food inaccessibility.

About 18.8% of the respondents reported that their households have run out of food at least once in a year. About 29.6 and 24.8% of respondents reported that they have been out of food twice and thrice, respectively. This confirms the assertion that the global food crisis knows no boundary, impacting negatively on both the rural and urban dwellers.

Socioeconomic characteristics of respondents and food insecurity: Table 4-7 shows the relationship between selected socioeconomic variables of respondents and food insecurity, proxied by the question which seeks to establish whether households run out of basic foods items in a year.

As shown in Table 4, the marital status has important implication for household food security. Out of the people surveyed, 74% had experienced food shortages before in their households while 88.1% never experienced food shortages. The data indicates that married women are more vulnerable to food insecurity and need to be targeted for food and nutrition programmes.

Education is widely believed to be a key determinant of food security. Knowledge associated with primary education has been known to substantially improve nutritional education and consequently improve household food security. The data in Table 5 shows that out of those who had below post-secondary education,

Table 6: Occupation and food insecurity (%)

Occupation	Do your households run out of basic food items such rice, garri, wheat, beans etc.	
	Yes	No
Trade/Craft	54.4	46.6
Farming	3.1	2.0
Wage labour with local		
entrepreneur	8.7	2.5
Civil Servant	22.1	21.6
Professional	5.6	22.5
Unemployed	6.2	4.9
Survey data		

Table 7: Income and food insecurity (%)

Income food	Do your households run out of basic food items such rice, garri, wheat, beans, etc.	
	Yes	No
<₦5,000 month ⁻¹	4.2	2.4
₦5,001-₦10,000 month ⁻¹	10.0	7.8
₦10,001-₦15,000 month ⁻¹	28.4	22.0
₦15,001-₦20,000 month ⁻¹	8.9	8.8
₦20,001-₦30,000 month ⁻¹	29.5	26.3
₦30,001-₦50,000 month ⁻¹	6.8	13.2
₦50,001 and above	6.8	12.2
Survey data		

72.8% had ever experienced food insecurity while only 27.2% of those with post-secondary education has ever experienced food insecurity. Thus, confirming that education is one of the key determinants of food security. Employment opportunities for women are crucial for empowerment and food security. There is a growing evidence that increasing women's income in the household significantly improves family and societal welfare being that women tend to invest more than men in children's welfare. Enhancing women's earnings and share of family income has also been known to empower women by strengthening their bargaining power in the household.

The prevalence of food insecurity is high among women traders and those in the civil service (Table 6). This is not surprising because women petty traders do not earn enough which can ensure food security in their households. In the same vein, the minimum wage rate in the civil service cannot be relied upon to provide sufficient food for members of their households due to increase in food prices. This is corroborated by the evidence shown in Table 7 where about 75% of respondents earning below N30,000 experience food insecurity. The major policy implication from the survey results is that the socioeconomic conditions of women play a significant role in food security or food insecurity. Ensuring national food self-sufficiency does not necessarily translate into household food security. The need to ensure household food security is not only a function of food supplies but also of demand of purchasing power. Hence, there is the need to empower women for household food security.

Table 8: Coping strategies against food insecurity (percentage distribution)

Variables	Percentage
Cutting down on number of meals a day	77.5
Postpone expenditure on health	5.2
Gather on foods and roots rather than purchase the usual dietary items	7.1
Draw non-earning members into employment	7.4
Sell-off assets such as consumer inventories and productive assets	1.1
Breakdown of family units	0.8
Abandon your children and spouse	0.8
Field survey, 2008	

Perception of coping strategies against food insecurity by respondents: In a bid to develop interventions to assist the vulnerable households to meet their immediate food needs questions on coping strategies against various manifestations of food insecurity were asked. Table 8 shows the fact that 77.5% of respondents show that they cut down on number of meals a day when faced with food insecurity. About 5.2% of respondents postpone expenditure on health when confronted with food insecurity. This has serious consequences on the productive capabilities of women. Evidences abound that poor health is a major cause of low agricultural productivity among farmers in developing countries. About 1.1% of the respondents sell-off assets such as consumer inventories and productive assets. It should be noted that asset ownership in the early stages of food insecurity contributes to increase coping capacity and in later stages of food crisis, assets are often sold in order to purchase food.

CONCLUSION

This study has examined the interrelationship between women's status and provision of food for household members for food security in Lagos metropolis, Southwestern Nigeria using survey methodology. The study population includes all economically active women aged 18-60 years presently living in metropolitan Lagos, South Western Nigeria.

It is impossible to cover all the elements in the study population due to the huge amount required and labour intensity. Purposive sampling was used during the course of the study. A total of 500 structured questionnaires were administered, out of which 436 questionnaires were successfully retrieved. Descriptive statistics like simple frequency and percentage distribution were utilized to describe the data. The major policy implication from the survey results is that the socioeconomic conditions of women play a significant role in food security or food insecurity. Ensuring national food self-sufficiency does not necessarily translate into household food security. The need to ensure household food security is not only

a function of food supplies but also of demand of purchasing power. It was revealed that women empowerment will serve as a critical ingredient in ensuring both national and household food security. Findings also provide valuable insight into the strategies used by the respondents to manage limited food resources.

RECOMMENDATIONS

Based on the findings, the following suggestions are recommended as ways to increase women's capacity for provision of food for household food security.

- First, there is the need to improve women's status and increase their ability to actively participate in the country's development process. Investment in women's education is crucial in this regard. Government in collaboration with the private sector should ensure adequate provisioning of sound education and training. Since it is the level of literacy among other factors that determines earning and human development capabilities. Measures that can achieve the main objective of increasing women literacy rates at all cost should be put in place
- Second, a good social security system should be put in place to address the problem of food insecurity in the country. This system should incorporate food and nutrition programmes to ensure that every citizen is able to meet minimum dietary requirements to avoid malnutrition among the vulnerable groups
- Third, provision of resources for farming and own food production should be encouraged among urban dwellers. There should be favourable macro-economic environment to provide incentives to boost food production even among women dwelling in urban areas. Land access is essential in this regard. Since women in the rural areas mainly engage in farming, productive resources should also be made available to them
- Fourth, all stakeholders in both the rural and urban economy should strive to stimulate women involvement in research, training and extension services with a view to introducing modern techniques of farming to enhance women's productivities and incomes
- Fifth, efforts should be made not to ignore food security issues in agricultural development policy. Policies to improve women's bargaining power within the household and enhance access to factors of production are crucial. Policies have to be directed towards eliminating the inequities and constraints affecting women's productive role

- Sixth, there is the need for vigorous advocacy and communication aimed at enhancing women's capabilities to possess productive assets

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