

## Incidence of Food Security among Farming Households in Ogbomoso Agricultural Zone

T. A. OLAOYE

PhD. Candidate

Department of Agricultural Economics  
Ladoke Akintola University of Technology  
Ogbomoso, Oyo-State, Nigeria

W. A. ADEWOLE

M. Tech. Candidate

Department of Agricultural Extension and Rural Development  
Ladoke Akintola University of Technology  
Ogbomoso, Oyo-State, Nigeria

### Abstract

*This study examined the incidence of food security among farming households in Ogbomoso agricultural zone. Multistage random sampling technique was used in selecting the respondent for the study. In the first stage, 60% of the total number of villages in Ogbomosho North (3 villages) and Ogbomoso South Local Government Areas (4 villages) were randomly selected while 10% of the villages in Ogo-Oluwa LGA (16 villages) were selected making a total of 23 villages. The third stage, 10% of the number of household in Ogbomosho North and South Local Government Areas were randomly sampled as well as 0.5% of the number of household in Ogo-Oluwa Local Government Area, to give a total of 148 households as respondents for the study. Data were subjected to descriptive statistics. Over 56% of the Farmers had farm size of less or equal to 5 ha: this could encourage food availability for their various families in the study area. Households heads with no formal education had highest insecurity incidence (0.50), while those with tertiary education had the lowest food insecurity incidence (0.25). Food insecurity incidence increased with increase in household size. Government and other stakeholders in charge of agricultural extension and family planning should therefore, mobilize Farmers to do proper family planning.*

**Keywords:** Food insecurity incidence, household size.

### Introduction

Food is a basic necessity of life. Its importance at the household level is obvious in the fact that it accounts for substantial part of a typical Nigerian household budget (Omonona and Agoi, 2007). Adequate intake of quality food is a key requirement for healthy and productive life (Helen, 2002). However, it

has been established that the quantity and quality of food consumed by households affects their health and economic well being (Adesimi and Ladipo, 1979). These in turn have significant repercussions on the general level of economic activities and productivity.

A country and its people are food secure when production, markets and social systems work in such a way that food consumption needs are always met (Maxwell, 1992). Food insecurity, in turn, is the lack of access to enough food and may be chronic or transitory. Chronic food insecurity is depicted by continuously inadequate diet caused by inability to acquire sufficient food in terms of quantity and quality. It affects households that persistently lack the ability either to buy enough food or to produce their own. Transitory food insecurity is a temporary decline in a household's access to enough food. It results from instability in food prices, food production, or household incomes and in its form, produces famine.

The per-capita growth of production of major foods in Nigeria has not been sufficient to satisfy the demands of an increasing population (Karmawa, 1999). The result is a big gap between national supply and national demand for food. Progress in the agricultural sector has also remained unsatisfactory (Abdulahi, 1999). Common staples in most Nigeria homes are insufficient and do not provide a balanced diet, as malnutrition is prevalent in most homes.

The objectives of this are to;

- describe the socio-economic characteristic of the farming households in the study area,
- compute the incidence of food security of farming household in the study area.

## **Methodology**

The study was carried out in Ogbomoso Zone of ADP in Oyo State. Ogbomoso zone was made of 5 Local Government Areas, Viz Orire, Ogo-Oluwa, Surulere, Ogbomoso North and Ogbomoso South. Ogbomoso was located approximately on Longitude 4<sup>0</sup>15' east of Greenwich and on latitude 8<sup>0</sup>7' north of the equator. The town was situated 104 kilometers north of Ibadan Oyo State capital; 51 kilometers South-West of Ilorin Kwara State capital' 53 kilometers North-West of Oyo town and 98 Kilometers North-East Oshogbo capital of Osun State.

Population of the study comprises of the selected samples of the total population of the entire farm households in Ogbomosho agricultural zone. Going by the village listing survey in Oyo State (OYSADEP, 2001) a multi stage random sampling technique was used in selecting the respondent for the study. In the first stage, 60% of the total number of villages in Ogbomosho North (3 villages) and Ogbomoso South Local Government Areas (4 villages) were randomly selected while 10% of the villages in Ogo-Oluwa LGA (16

villages) were selected making a total of 23 villages. The third stage, 10% of the number of household in Ogbomoso North and South Local Government Areas were randomly sampled as well as 0.5% of the number of household in Ogo-Oluwa Local Government Area, to give a total of 148 households as respondents for the study. Method of data collection was mainly with the use of well-structured questionnaire.

Descriptive statistics was used to analyze socio-economic characteristics of household and food security incidence of the household in the study area. This involved frequency table and percentages.

## Discussion

Table 1 showed that 60.9 percent of the household heads had 2 to 5 dependants, 34.5 percent had 6 to 9 dependant, 4.1 percent had more than 10. The mean number of dependants was 5.08. This implied that majority of the respondents had more people to cater for hence their involvement in other income generating activities.

Majority of the household heads were using personal savings that is (73.6 percent) of the respondents made use of their personal savings which include gifts from friends and relatives (8.1 percent), family inheritance (7.4 percent) and remittance (2 percent) while 50 percent were using cooperative source for their framing activities. This was revealed in the table 1 below. This implied that the respondents had income enough to cater for their family.

The table 1 indicated that the modal farm size range for farmers was less or equal to 5 ha. Eighty three (83) or 56.3 percent farmers fell into that size range. This was expected to contribute to and encourage food availability for their various families in the study area.

**Table 1: Socio –economic characteristics of respondents and their household**

Socio Economic Characteristics	Frequency	Percentage
<b>Number of dependent</b>		
No dependent	4	2.7
2 - 5	87	60.9
6 – 9	51	34.5
> 9	6	4.1
<b>Sources of income</b>		
Personal saving	109	73.6
Family inheritance	11	7.4
Cooperative	74	50
Friends and relatives	12	8.1
NACRDB	1	0.7
Commercial bank	1	0.7
Money lender	6	4.1
Remittance	3	2.0
Other	1	0.7
<b>Farm size</b>		
≤ 5	83	56.3
5.1 – 10	48	32.8
10.1-15	13	9

Field survey, 2010.

The household heads in the food insecure group with no formal education were 42.6 percent, primary six were 35.2 percent, those with secondary education constitute 14.8 percent while 7.5 percent of the food insecure household heads had tertiary education.

For food secure group, 37.2 percent of the household head having primary six educations were food secured. However, the least food secured households (12.7) had their household head with tertiary education.

Households heads with no formal education had highest insecurity incidence while those with tertiary education had the lowest food insecurity incidence. This was in agreement with study of Omonona *et al.*, (2007), who found out that as one moved from households heads with no formal education food insecurity incidence decreased while those with tertiary education had the lowest food insecurity incidence.

The highest percentage of the population in the food insecure group had no formal education. This might be due to their illiteracy while the decline in food insecurity incidence from 0.52 for households whose heads that had no formal education to 0.25 for those with tertiary education can be explained by the increase income as their educational status improved as this had direct influence on occupation and income.

It could be observed in table 2 that 88.3 percent of the male headed households were food secured while 11.7 percent of the female headed households were food secured; hence, the proportions of food secure households were more in male headed households than female headed households. This was in line with the finding of Amaza *et al.*, (2006) which revealed that households head by male had higher probability of being food secured, and Oluyole *et.al*, (2009), also revealed that proportion of food households was more in male than female.

Among the food in secured households, 94.4 percent of the household heads were males while 5.6 percent were females. Food insecurity incidence is higher in male-headed households where both the head their spouse were engaged in income generating activities while in the female headed households, the dependency is mainly on the head.

Table 2 showed that as household size was increasing, the percentages of food secure households keep on decreasing. Hence, the size of households determines the food security status of the households. The result was in agreement with Oluyole *et al.*, (2009), which depicted that as the household size increase, the percentage of food secure households kept on decreasing. This could imply that as the number of household increases, there was larger number of people to be taken care of by the same source of income.

Food insecurity incidence increased with increase in household size. This could be as a result of increase in the dependency ratio in the households.

The insecurity incidence range between 0.13 for household with 1-4 members and 0.65 for households with greater than 12 members.

The distribution of household on the basis of their monthly income was as follows.

The food in secured group had the highest proportion of its population in the low income category earning 0-40 thousand naira. This category represented 96.3 percent of the population. For the middle –income group, earning 41-60 thousand naira, they constituted 3.7 percent in food secured group, the low income, middle income and high-income groups constituted 79.7, 8.5, and 11.7 percent of the population respectively. Food insecurity incidence, as expected, declined with increased in income from 0.48 on the average for the low income group to 0.20 for the high-income group.

In the food insecure group, 13 percent were commercial motorcyclist, 42.6 percent were trader, and 9.3 percent were commercial driver while 35.2 were artisan. Majority of those that were food secure were artisan. They constitute 40.4 percent of the population, 35.1 percent were traders, 13.8 percent were driver while 10.6 percent were motorcyclist.

The food insecurity incidence for those engaged in artisan was relatively low at 0.33. This might be as a result of high income associated with this category. Trader and motorcyclist records a food insecurity incidence of 0.41 while 0.27 for commercial drivers. These would be as a result of inconsistencies in income and expenditure of trader and motorcyclist since they spent as they earn.

**Table 2: Status and incidence of food security of household**

Socio Economic Characteristics	Food insecure		Food secure		Food insecure incidence
	Frequency	Percentage	Frequency	Percentage	
<b>Education level</b>					
No formal education	23	42.6	23	24.5	0.50
Primary six	19	35.2	35	37.2	0.35
SSCE	8	14.8	24	25.5	0.25
Tertiary	4	7.5	12	12.7	0.25
Total	54	100	94	100	1.35
<b>Sex</b>					
Male	51	94.4	83	88.3	0.38
Female	3	5.6	11	11.7	0.21
Total	54	100	94	100	0.59
<b>Household size</b>					
1 – 4	3	5.6	20	21.3	0.13
5 – 8	36	66.7	62	65.9	0.36
9 – 12	15	27.8	8	8.5	0.65
> 12	0	0	4	4.2	0
Total	54	100	94	100	1.14
<b>Income</b>					
< 20,000	22	40.7	23	24.4	0.49
20,0001-40,000	30	55.6	52	55.3	0.37
40,0001-60,000	2	3.7	8	8.5	0.20
>60,0000	0	0	11	11.7	0

Total	54	100	94	100	1.06
<b>Income generating activity</b>					
Commercial Motorcyclist	7	13.0	10	10.6	0.41
Trading	23	42.6	33	35.1	0.41
Commercial driver	5	9.3	13	13.8	0.27
Artisan	19	35.2	38	40.4	0.33
Total	54	100	94	100	1.42

Field survey, 2010.

## Conclusions and Recommendations

Over 56% of the Farmers had farm size of less or equal to 5 ha: this could encourage food availability for their various families in the study area. Government should acquire large expanse of land for agricultural purposes. Such land and other agricultural input facilities could encourage land expansion and enhanced agricultural output. Households heads with no formal education had highest insecurity incidence (0.50), while those with tertiary education had the lowest food insecurity incidence (0.25). Therefore, adult education should be made accessible and affordable to farmers. Food insecurity incidence increased with increase in household size. Government and other stakeholders in charge of agricultural extension and family planning should therefore, mobilize Farmers to do proper family planning.

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