

# Assessment of Food Insecurity and Alleviating Poverty among Rural Households in Emohua Local Government Area of Rivers State, Nigeria

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**Abstract:** *This study assessed food insecurity and alleviating poverty among rural households in Emohua Local Government Area Rivers State. It was designed to determine the effect of food insecurity on the wellbeing of rural household, identify the challenges facing the food security programme, and ascertain the factors for reducing food insecurity and alleviating poverty in the study. The sample size of 121 respondents were chosen from four different communities which were among the fourteen wards found in Emohua local government area using purposive sampling techniques. Data were collected with the use of structured questionnaire; data was analyzed using frequency, percentage and mean analysis. Findings from the study showed that the lack of farm land, fast paced population growth, natural disaster, climate change, conflict, violence and war were the major challenges facing the food security and also the leading factor for declining food production which is the main cause of poverty today in Emohua local government area. Also, adherence to reducing food wastage, improving existing infrastructural program, improve trade policies, promoting diversification, work towards defeating climate change, skill acquisition, education and access to governmental grants/funds in the study area were the major factor for reducing food insecurity and alleviating poverty in the study area. It was concluded that the effect of food insecurity on the wellbeing of rural household were malnutrition, hunger, increase in food price, unemployment, stunted growth, rise in health cost, kwashiorkor and lack of man power to till the soil. The study therefore recommends that Governments should provide funds/grants to assist the farmers who do not have capital to start up farming and more importantly the government and the community development committee should provide good crop/food storage facilities and modern markets which will help to reduce food wastage and accessible markets.*

**Keywords:** Food Insecurity, Poverty, Rural Household, Food Security

## INTRODUCTION

### Background to the Study

According to Foster, Greer and Thorbecke, (2010) poverty is more easily recognized than defined, therefore, a universally accepted definition of the term poverty has remained elusive (Nsikak-abasi & Solomon, 2010). However, poverty can be regarded as the inability to adequately meet the basic human necessities such as food, shelter, clothing and Medicare International Bank for Reconstruction and Development (I B R & D, 2010). Poverty in Nigeria is concentrated in rural areas. Low resource or resource-poor farmers characterized by preponderance of small farm units, fragile soils, rain-dependent, minimum inputs and poor yield dominate the agricultural sector. The incidence of poverty is highest among households in which the head is engaged in agriculture as the main source of income. Agricultural growth is therefore important to the eradication of extreme poverty and hunger in Nigeria. Conscious policy efforts by government towards poverty alleviation began during the SAP era. Some companies like Shell and certain State Governments have shown real interest in alleviating poverty through their agricultural programmes and policy statements (Okuneye, Fabusoro, Adebayo & Ayinde, 2004).

Food security exists when all people at all times have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2012). To achieve food security, food should be available, accessible and properly utilized at all times. Availability relates to the supply of food through production, distribution and exchange while food access refers to the affordability of and allocation of food as well as the preferences of individuals and households (FAO, 2008).

Food security has become a major policy issue in many countries with the increase in food prices worldwide. Food security is defined as having sufficient food to generate a calorie requirement of about 2200–2300 calories per day for adult females and 2900–3000 calories per day for adult males. Children require a lower calorie level to maintain themselves in adequate health. In 2022, countries that are highly dependent on food imports have seen a spike in food inflation, as the war in Ukraine and associated supply shortages caused sharp price hikes for wheat and other staples on top of high fuel and transportation costs resulting in a deterioration in food security. The prices of staple food in sub-Saharan Africa (SSA) have surged by an average of 23.9 percent in 2020–22 (Okou, Spray, and Unsal, 2022).

Food insecurity is elevated in Nigeria. Using the September 2018 to October 2019 household survey of expenditures, the cost of achieving 2251 calories per day (age-weighted caloric need for food security), is about 82,000 naira per person per year. Based on

this survey, about 40 percent of the Nigerian population is identified as food insecure. Mekonnen et al. (2021) show similar results using the same data survey, arguing that about 28 percent of the population was food insecure based on the cost of a diet with localized food preferences that achieves food-based dietary guidelines. Food insecurity varies across regions in Nigeria and rural-urban settings. According to the 2018/19 household survey, the North-East and North-West regions have the most acute levels of food insecurity, and this is confirmed by data from the recent Cadre Harmonise surveys. The household survey also found large differences in food insecurity estimates between urban (18 percent) and rural areas (52 percent), a view also supported by Mekonnen et al. (2021). However, the urban-rural food inflation differential has been positive in recent years, possibly indicating a more nuanced impact of global prices on rural food inflation due to heavier reliance on home production. Household survey data reveals that the median rural family produces 35 percent of its food consumption at home, with this ratio rising to 39 percent for families below the food security threshold (82,000 naira per day). In contrast, urban families only produce 5 percent of their food needs at home at the median, suggesting that poor urban families are more sensitive to rapid changes in food prices.

Even though, Nigeria has great agricultural potentials and abundant natural resources for all round development, most indicators of the economic well-being are still very low. Food insecurity and poverty are still widespread across different parts of the country. Food insecurity situation in Nigeria is worsening with the passage of time due to the wide gap between the national supply and demand for food. There are overwhelmingly large proportions of Nigerians who are food insecure that spread across both urban and rural communities, though most of the food insecure is found in the rural areas. Reducing the number of food insecure households, therefore, continues to be a top priority of Nigerian governments.

### **OBJECTIVE OF THE STUDY**

The specific objectives of the study were to:

- i. determine the effect of food insecurity on the wellbeing of rural household
- ii. identify the challenges facing the food security programme in the study area
- iii. identify the factors for reducing food insecurity and alleviating poverty in the study area

### **METHODOLOGY**

#### **Study Area**

The study area was Emohua local government area which is situated in Rivers state, South South geopolitical zone of Nigeria. Emohua was created in the year 1991 and the LGA is headquartered in the town of Emohua. Emohua LGA consists of fourteen political wards, several towns and villages makes up Emohua LGA and they include Ibaa, Egbeda, Obelle, Odegu, Ogbakiri, Umudioga, Rumuekpe, Rundele, Alimini, EleleAlimni, Akpabu, Egbelu, Agbandele and Omuabali. The estimated population of Emohua LGA is 169,802 inhabitants with several languages such as Ogoni, kalabari and Ikwerre spoken in the area. Christianity is the widely practiced religion in Emohua LGA. Emohua LGA has fertile land that favours primary production such as farming. The presence of water bodies gives room for activities of primary production such as sand dredging and fishing. Farming is one of the major economic activities in Emohua LGA with crops such as sugarcane, cassava, yam, plantain and banana grown in the area. Furthermore, the presence, popularity and proximity of its markets favour secondary production such as oil milling, cassava processing, yam processing, meat processing (abattoir) and wood milling and poultry. Emohua LGA covers a total area of 831 square kilometres with the average temperature of the area at 25 degrees centigrade. The humidity of Emohua LGA averages 83 percent while the average wind speed in the area is 10 km/h. Emohua LGA is also home to several rivers and tributaries. The area is located between Latitude 5° 10 ' 0 " N and Longitude 6° 54 ' 0 " E. The area which lies within the tropical rainforest is characterized by eight months and four months of the wet and dry season respectively.

#### **Research Design**

This study adopted a descriptive survey design; this investigated the opinion and expenses of sample respondents based on series of questionnaire which enabled the researcher to explore the assessment of food insecurity and poverty status of the rural households. The population of the study comprised heads of selected rural households in the selected communities

#### **Sampling Procedure and Sampling Size**

Random sampling techniques was used to select four (4) communities, while purposive sampling techniques was employed to select 121 heads of households from the selected communities.

#### **Method of Data Collection**

Data was collected mainly from primary sources. This was obtained from structured questionnaire administered to the respondent and also interview schedule. Copies of the questionnaire were distributed to the respondents' individually in their various communities.

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

Data obtained for this study were analyzed using descriptive statistics such as percentages, frequency and mean analysis which was actualized using Likert scale.

### **RESULTS**

#### **Table 1 Effect of Food Insecurity on the Wellbeing of Rural Household**

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Practice	(Frequency (%)) N=121				Total	Mean
	Strongly Agree	Agree	Disagree	Strongly Disagree		
Children						
Malnutrition/kwashiorkor	60	60	-	1	121	3.48
Leads to hunger	61	59	-	1	422	3.49
Increase in food price	65	55	-	1	426	3.52
Unemployment	58	59	3	1	416	3.44
Stunted growth	64	56	-	1	425	3.51
Increase in health cost	61	59	-	1	422	3.49
Anemia	63	56	1	1	421	3.50

**Criterion Mean: 2.50**

**Source: field survey 2022**

### Effect of Food Insecurity on the Wellbeing of Household

The Effect of Food Insecurity on the Wellbeing of Rural Household in Emohua Local Government was ranked as shown in Table 1. The result shows that all items were agreed with by the respondents (as they all had their mean  $\geq 2.50$ ) this indicate that malnutrition, hunger, increase in food price, unemployment, stunted growth, rise in health cost, kwashiorkor and anemia were the major effect of food insecurity in Emohua Local Government Area. This finding agrees with the findings of Matemilola and Elegbede (2017) who observed that Nigeria population suffered the misfortune of food insecurity as they can hardly afford the rising prices of imported foods.

**Table 2 Challenges Facing Food Security programmes**

Practice	(Frequency (%)) N=121				Total	Mean
	High Effect	Medium Effect	Low Effect	Not an Effect		
Lack of farmland	77	43	-	1	438	3.62
Fast paced population growth	74	45	-	2	443	3.59
Natural disaster (drought, flood etc)	77	42	-	2	436	3.60
Climate change	73	46	-	2	432	3.57
Conflict, violence and wars	74	45	-	2	433	3.58
Unemployment	72	39	-	2	407	3.36
Illiteracy	78	41	-	2	437	3.61
Lack of storage facilities	75	43	-	2	431	3.56
Lack of funds	79	45	-	2	453	3.74

**Criterion Mean: 2.50**

**Source: field survey 2022**

The challenges facing the food security programme in the study area were ranked as shown in Table 2. The items were agreed by the respondents to have high and medium effect (as they had the mean scores greater than 2.50). This indicate that lack of farm land, fast paced population growth, natural disaster (flood, drought etc.), climate change, conflict, violence and war were the major challenges facing the food security and also the leading factor for declining food production which is the main cause of poverty today in the study area. This finding conforms to the finding of Matemilola and Elegbede (2017) who observed that basic challenges such as poor information network, transportation, storage facilities, conflict, climate change and financial constraints were the challenges facing the food security programme.

**Table 3 Factors for Reducing Food Insecurity and Alleviating Poverty**

Practice	(Frequency (%)) N=106				Total	Mean
	Very Great Effect	Great Effect	Low Effect	Not an Effect		
Reducing food wastage	80	39	1	1	440	3.64
Improve existing infrastructural program	81	38	1	1	441	3.64
Promote diversification	67	52	1	1	427	3.53
Work towards defeating climate change	71	48	1	2	431	3.56
Skill acquisition	66	52	1	2	423	3.50
Education	65	54	1	1	419	3.51
Access to governmental grants/funds	69	51	-	1	430	3.55

**Criterion Mean: 2.50**

**Source; field survey 2022**

### Factors for Reducing of Food Insecurity and Poverty Alleviation

Factors responsible for reduction of food insecurity and poverty alleviation in the study area were ranked as shown in the Table 3. The respondents agreed to “very great” and “great effect” (as they all had mean score great than 2.50) this indicate that adherence to reducing food wastage, improving existing infrastructural program, promote diversification, work towards defeating climate change, skill acquisition, education and access to governmental grants/funds in the study area were the factor for reducing food insecurity and alleviating poverty in Emohua Local Government Area.

## CONCLUSION AND RECOMMENDATION

### Conclusion

The study concluded that rural households were aware of the effects food insecurity on their wellbeing, also that the lack of farm land, fast paced population growth, natural disaster, climate change, conflict, violence and war were the major challenges facing the food security and also the leading factor for declining food production which is the main cause of poverty today in the study area. Finally, adherence to reducing food wastage, improving existing infrastructural program, improve trade policies, promote diversification, work towards defeating climate change, skill acquisition, education and access to governmental grants/funds in the study area were the major factor for reducing food insecurity and alleviating poverty in the study area.

### Recommendations

- i. Governments should provide funds/grants to assist the farmers who do not have capital to start up farming.
- ii. Extension agents should go to the study area to teach the rural households on the benefits and need for food security.
- iii. Government should provide good crop/food storage facilities and modern markets which will help to reduce food wastage and accessible markets.
- iv. Governments should ensure that programmes for climate and environmental check are intact to ensure good farming climate and ecosystem.

### REFERENCES

- FAO (2012). the state of food insecurity in the world 2012 Key messages W. and I. FAO, ed., Rome: *FAO, WFP and IFAD. 2012.*
- FAO. (2008). Food security for information action-practical guides. Rome: Food and Agriculture organization.
- Foster, J. E., Greer, J. & Thorbecke, E. (2010). The Foster-Greer-Thorbecke (FGT) Poverty Measures. Twenty-Five Years Later. HEP-WP-2010-14. Institute for International Economic Policy. [www.gwu.edu/~ilep](http://www.gwu.edu/~ilep), 2010.
- Matemilola, S., & Elegbede, I. (2017)"The Challenges of Food Security in Nigeria" published by Open Access Library Journal, 4(12), 1-22.
- Mekonnen, D. et al., (2021). Affordability of healthy and sustainable diets in Nigeria, *Frontiers in Sustainable Food Systems*, September 2021.
- Nsikak-Abasi A. E. & Solomon. V. A., (2010). Determinants of Rural Poverty among Broiler Farmers in Uyo, Nigeria: Implication for Rural Household Food Security. *Journal of Agricultural and Social Science*,6, 24 –28.
- Obike, K.C. Idu, M.A., Amusa, T.A., Aigbokie, S.A. & Ukaku, T. (2018). Analysis of Food Security and Poverty Status amongst Farming Households in Abia State, Nigeria. *Nigerian Agricultural Policy Research Journal (NAPReJ) Agricultural Policy Research Network (APRNet)*, 4(1)41-50.
- Okou, C., Spray, J., & Unsal, D., (2022). Staple food prices in Sub-Saharan Africa, IMF working paper 22/135.
- P. A. Okuneye, P. A., Fabusoro, E., Adebayo, K., & Ayinde, I. A. (2004). The Nigerian Agriculture and Poverty Incidence: The Need for Private Sector Empowerment. Paper prepared for presentation at the Farm Management Association of Nigeria Conference, Abuja, Nigeria Oct. 19-21, 2004.