DOI: https://doi.org/10.68064/jshe.2021.kve6hyza

JOURNAL OF THE SOCIETY FOR HUMAN ECOLOGISTS

Perceived Benefits of Food Security among Rural Households in Makurdi Metropolis, Benue State Nigeria

Kingsley O. Helen, Amah Mary Apie & Ochigbo, Susan Eloyi

Abstract

This study examines Perceived benefits of Food Security among rural households in Makurdi, Benue State, Nigeria. The study has three objectives. This study employed descriptive survey research design. The population for this study comprised of four hundred and twenty-two thousand, one hundred and fifty-nine (422,159) households in Makurdi Metropolis including males and female (NPR 2021). Simple random sampling techniques was used to select 2 wards each from the 5-metropolis ward making it 10 wards, and a sample size of 200 respondents from the 10 wards in Makurdi Metropolis, Benue State was selected. Findings reveal perceived benefits of food security which include, food security fight hunger and poverty among rural households (3.31), food security entails adequate and sustainable food supply (3.39) and availability of adequate and nutritious food for human consumption (3.70). Findings also shows affordability of food as perceived among rural households in Makurdi Metropolis which include affordability of food fight malnutrition (3.38), affordability enhances food sufficiency (3.20), The challenges involved in achieving food security based on the perceived benefits among rural households in Makurdi include, natural disasters (flood, fire (3.75), poor infrastructure (road and transportation system)(3.07), poor food distribution systems(2.82).The paper concluded that rural households have access to good food, adequate, nutritious foods that are affordable except for the challenges highlighted which can also be tackled if proper measures are taken. It was recommended that there is a need for the rural households to be constantly enlightened by home scientists and extension agents on the benefits of safe, affordable and nutritious food, also rural households should synergize on means to enhance food security and stability.

Key Words: Food Security, households, Nutritional Quality, food production, Malnutrition

Introduction

Food is the most basic of human needs for survival, good health, and productivity. It is the foundation for human and economic development. When food is not adequately available, it can lead to hunger, sickness, and death. Malnutrition could easily predispose people to ill health due to poor resistance (Uko-Aviomoh, 2005). Hunger remains a problem in Nigeria, the rate of hunger and high food prices is alarming, Nwabah (2005) explained that lack of food has strong effect on human potentials in life. Food security means availability of food and accessibility to the available food; it is also a state of having reliable access to enough affordable, nutritious food to live a healthy life. Food security entails that that there is availability of food items, access to the food and utilization of the food (Uko-Aviomoh, 2005). Food security "is a situation that exists when all people,

always, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. It has four pillars – food availability, food access, food utilization, and food stability". Food security has a lot of dimensions; such dimensions include sufficiency, acceptability, safety, stability and nutritional quality. Food Insecurity refers to the unavailability of adequate and sustainable food supply, inability to access adequate balanced diet, and inability to utilize safe and quality food which is nutritionally adequate and socially acceptable ways for all household members (Bhalla, Handa, Angeles, and Seidenfeld, 2016).

Nutritional quality of food is important as food security as it means that there is reliable access to enough affordable, nutritious food to live a healthy life. A hunger-free country is one that is food secure. According to Cadre Harmonize (CH, 2021), the number of food insecure population is projected to be about 3.5 million people in the peak of the lean season of 2022, which is about a 20% reduction as compared to the 2021 lean season peak. Food security is a national priority for Nigeria considering that most of its population is food insecure (FMARD, 2019). Food insecurity is prevalent in Nigeria despite its favorable agro-ecological endowments with a total landmass of 92.4 million hectares, out of which only about 32 million hectares or 34.63 percent are under cultivation. As such, food insecurity and the prevalence of under nutrition in Nigeria are among the worst globally (Fadare, Akerele, Mavrotas and Ogunniyi, 2019).

Orisa and Usoroh (2019) described food insecurity as not having sufficient food, experiencing hunger because of running out of food and being unable to afford food, eating a poor-quality diet because of limited options, anxiety about acquiring food or having to rely on food relief. According to Food and Agricultural Organization (FAO,2019), between 2004 and 2006, the total number of undernourished Nigerians was 9.1 million. This number increased to 25.6 million people or 281.32 percent in the period between 2016 and 2018. As Nigeria's population, which has growth rate of 3.1 percent continues to expand, the food requirements of the country would also increase with the likelihood that food insecurity might assume an alarming dimension. Furthermore, it is estimated that over 2 billion people worldwide are affected by food insecurity that is linked to malnutrition in both resource rich and resource poor countries. Nigeria is particularly dire as undernourishment increased from 5.9% in 2008 to 7% in 2016 (Grebmer, Bernstein, Nabarro, Prasai,Amin, Yohannes, Sonntag, Patterson, Towey and Thompson 2016). The State of Food Security and Nutrition in the World in 2018 was estimated to about 21million people in Nigeria that are undernourished between 2015 and 2017, up from about 9 million in 2006. (Fadare, Akerele, Mavrotas and Ogunniyi, 2019).

Many factors contribute immensely to food insecurity; these include wars, political instability, loss of lives and properties, corruption, natural disasters such as flood, limited mobility, lack of access to good roads (Kembe 2015), others are low level of farm technology, low income, and production fluctuation (Okoye 2017). Food insecurity causes a lot of nutritional deficiencies such as malnutrition, stunted growth, vitamins, iron, and protein deficiency, and anemia (Ecker and Breisinger 2013). It is in this

that the study seeks to focus on food security among rural households in Makurdi Metropolis, Benue State.

Statement of the Problem

Nigeria is facing to many challenges aside for malnutrition, these challenges include, terrorism, banditry, kidnapping, killings, corruption, unemployment, loss of lives and properties and displacement of people from their communities. Malnutrition can be attributed to lack of availability and access to good foods, poor quality foods, high food costs, and even total lack of food which can lead to ill health or death. Nigeria is still characterized by high reliance on food importation. Many food items and consumables are being imported into the country instead of boosting agricultural production locally, (Olaloku, Fajana, Tommons and Ukpong 2007). This make food affordability even more challenging as import tariffs are higher for imports.

The enormous amount of money spent in attempting to assure food security of Nigerians without success calls for a fundamental review of the approaches on how to ensure progress toward achieving the second Sustainable Development Goal 2015 of Zero hunger by 2030. Since most Nigerians (70 percent) live in rural areas, an analysis of the food security status of rural dwellers will provide a clear picture of what needs to be done to assure food security in Nigeria with the attendant improvement in nutrition status. This situation is so in Makurdi because most families are undergoing changes because of the economy downturn, depression, migration, unemployment, communal crises, and farmers /herder's clashes. This study is therefore motivated by the observed lack of accessibility and affordability of food by residents of Makurdi Metropolis

Objective of the study

The main objective of the study is to examine the benefits of Food Security as perceived among rural households in Makurdi Metropolis, Benue State. Specifically, the study intends to:

1. Determine the benefit of food accessibility by rural households in Makurdi Metropolis Benue State.
2. Determine the benefit of food affordability by rural households in Makurdi Metropolis Benue State
3. Examine the challenges involved in achieving food security among rural households in Makurdi Metropolis Benue State.

Methodology

Research Design- the study employs Descriptive survey design: the design is aimed at using surveys to gather data on traders and farmers of food commodities in the area, this will enable the researcher to analyze facts and help in developing an in-depth understanding of the research problem. (Emaikwu 2019).

Area of Study- the Area of the Study is Makurdi Metropolis. Makurdi Metropolis is made up of 5 wards namely Wailamayo (jor poor, logo 1&2), Highlevel (Idye village), Ankpa/ Wadata(after Boma sec sch, iongugun) and Modern Market (kwa settlement). These are rural settlements in the council wards and were purposely chosen because the respondents engage in farming and marketing of farm produce, and have an experience about food security challenges.

Benue state is predominantly an agricultural area which specialized in cash crops and subsistence crops and rich in agricultural produce such as potatoes, yams, cassava, soya bean, guinea corn, flax, yams, sesame, rice, and groundnuts.

Population of the Study.
The population for the study comprised of rural households with estimated population of four hundred and twenty-two thousand, one hundred and fifty-nine (422,159) in Makurdi Metropolis including males and females. (Makurdi Population Review, MPR 2021).

Sample and Sampling Techniques.
Simple random technique was used to select 2 rural households from each of the 5 wards making 10 households. A simple random sampling technique was used to draw 20 respondents from each of the ten (10) households that make up the study area. Thus, the sample size for the study was 200 respondents. The selection of the study area was based on traders and farmers of food commodities in the area.

Data Collection Techniques
The instrument used for data collection was a questionnaire titled "Perceived Benefits of Food Security Questionnaire'' (PBFSQ) comprised of three (3) sections and twenty-seven (27) items. The study adopted a 4-point rating scale of strongly agree (4), agree (3), strongly disagree (2) and disagree (1). The questionnaires were distributed by the researcher with an assistant in the area who hand delivered to the heads of households during one of their meetings in the selected area. There was 100% return of the filled questionnaire. The instrument used in collecting data was validated by two experts from Home Economics Department of College of Education, Pankshin and one expert from Test and Measurement Department, Joseph Sarwuan University, Makurdi, after which corrections was made on face and content validation. **Reliability was conducted using** Cronbach Alpha (á) coefficient formula. 20 copies of the questionnaire were filled by rural households at Pankshin which were not among the main respondents. The coefficient of 0.90 was obtained and it was adjudged to be reliable.

Data Analysis Techniques:
The data was analyzed using frequency and mean. A criterion mean value of 2.50 was used as a decision point either to reject or accept the questionnaire items.

Results and Discussion
Table 1 presents the mean of the participant's response on accessibility of food among rural households in Makurdi Metropolis. Ten (10) question items were presented to the respondents and the entire question items were accepted based on the 2.50 decision point set in the study. The accepted perceived benefits include accessibility of food promotes growth and total well-being of the households (3.39), accessibility of food fight poverty and extreme hunger among the rural households (3.31) among other. The indication is that food security has high benefits and is seen as the ultimate for human existence; the results also ensure that the rural households in the study area have access to good, adequate and nutritious foods. Due to access to food, the rural households have opportunity to improve their economic/ social lifestyles.

Objectives 1: Accessibility of Food Security by Rural Households in Makurdi Metropolis

S/No.	Item	SA	A	D	SD	Mean	Decision point
1	Accessibility of nutritious food for consumption to the rural households	154	34	10	2	3.70	Accepted
2	Nutritional quality of food promotes growth and total well-being to the rural households	119	50	21	10	3.39	Accepted
3	Accessibility of food fights hunger and poverty among rural households	90	91	10	9	3.31	Accepted
4	Nutritional food improves health system among rural households	111	37	29	23	3.18	Accepted
5	Transport and good roads enhance food accessibility	145	35	15	5	3.60	Accepted
6	Food production increases employment opportunities and food accessibility	121	50	20	9	3.41	Accepted
7	Accessibility of food empowers labor force by the rural households	79	81	32	8	3.15	Accepted
8	Quality of education is improved by food accessibility	73	69	40	18	2.98	Accepted
9	Food security increase economic/social factors of rural households	80	76	34	10	3.13	Accepted
10	Accessibility of food production promotes rural development.	66	62	50	22	2.86	Accepted

Table 2 presents the results of the participant's response on affordability among rural households in Makurdi Metropolis. Affordability of food increases food stability (3.24), food production increases employment opportunity/ food accessibility (3.41), food security increases economic/social factors of rural households (3.13).

Objectives 2: Affordability of Food security among Rural Households

S/No	Item	SA	A	D	SD	Mean	Decision Point
1	Affordability of food fights malnutrition among rural households	100	84	9	7	3.38	Accepted
2	Affordability of food controls nutrients deficiencies among rural households	89	66	30	15	3.14	Accepted
3	Affordability of food increases food stability among rural households	81	96	13	10	3.24	Accepted
4	Affordability increases nutritional quality of food among rural households	96	93	9	2	3.41	Accepted
5	Affordability of food enhances food sufficiency among rural households	106	54	15	25	3.20	Accepted

Table 3 presents the frequency and the mean of the participant's response on the challenges of food among rural households in Makurdi. The accepted

question items as rift or conflicts between communities (3.66), displacement of people through communal clash (3.31) other challenges include natural disasters such as flood and fire; Poor food distribution system, poor infrastructure such as road and transportation system. All this implies that there are challenges hindering the achievement of food security based on the perception of rural households in Makurdi Metropolis.

Table 3: Challenges of Food Security among Rural Households in Makurdi Metropolis,

S/NO	Item	SA	A	D	SD	Mean	Decision point
1	Poor farming technologies	98	53	30	19	3.15	Accepted
2	Poor soil fertility	65	5	40	38	2.74	Accepted
3	Natural disasters such as flood, fire	150	50	0	0	3.75	Accepted
4	Conflict (Displacement of people from their communities through communal clash or herdsmen invasion)	100	70	22	8	3.31	Accepted
5	Poor food distribution system	80	40	45	35	2.82	Accepted
6	Poor infrastructure such as road and transportation system	90	60	24	26	3.07	Accepted
7	Weak extension services	86	90	10	14	3.24	Accepted
8	Financial constraint and incentives	87	81	17	14	3.19	Accepted

Discussion of Findings

Findings on table 1 reveals perceived benefits of food security which includes accessibility of adequate and nutritious food for consumption among the rural households, access to food by the rural households which help to fight hunger and poverty is a benefit to food security. Food is highly essential and beneficial to human growth and development. When an individual does not have adequate access to quality food, it may cause its nutritional level to deteriorate. Mkhawani *et al.* (2016) found that inadequate food and high food prices are responsible for downgrading dietary quality and total caloric intake of food. More households tend to be vulnerable to nutrition and health disorders emerging from reduced total energy intake and deteriorating immune system if food is not accessible (Brinkman *et al.,* 2009; Andreyeva*et al.,* 2010).

A finding in table 2 reveals that affordability of food increases healthy life and nutritional quality of the rural households. Issues relating to food security initially only focused on food supply with reference to the availability of adequate supplies of basic foodstuffs as well as price stability at the national and international levels with considerations also given to adequate nutrition and well-being (FAO, 2003). Since 1974, the concept of food security has undergone series of refinement starting from when it was simply conceptualized in terms of availability and adequacy of food supplies to sustain a steady expansion of consumption to affordability by households and having enough food to lead an active, healthy life.

Findings on table 3 also shows the challenges involved in achieving food

security based on the perceived benefits among rural households in Makurdi. This includes poor farming technologies, poor soil fertility, natural disasters such as flood, poor food distribution systems communal clashes, violent conflicts in the forms of abductions, killings and forced displacements of people can hamper food and market efficiency (Verwimp *et al.*, 2010). Conflict can induce food price because of decrease in agricultural productivities and market disruption which leads to higher transactions costs (D'Souza and Jolliffe, 2013) The impact of displacement on these farming communities is that their contributions to food production in the country are lost as they are not in any position to continue with their occupation of farming. This is in line Abebow (2003) on Dimensions of determinants of food insecurity among rural households in Ethiopia. All these challenges could be tackled if the appropriate measures are taken. Appropriate measures can be put in place towards attaining food security which includes sensitization on the benefit of good nutrition to the households, increase agricultural productivity by reduced post-harvest lost, (Sanni1999).

Conclusion and Recommendations

Food Crisis threatens food security of people, there is the threat to the functioning of food systems, with severe consequences for health and food security. With concerted action, a transition to more sustainable food systems that are in better balance with nature is the health prospects for all**.** Based on the finding, it was recommended that:

1 There is a need for the rural households to be constantly enlightened by Home Economists extension workers through community meetings, seminars on the benefits of safe, affordable and nutritious food.

2 Rural households should intensify on needs for adequate infrastructure to store excess food production. These can be achieved through rural extension workers or during communities' meetings or seminars by Home Economists.

3 Rural households should synergize more means to enable food security and stability as these will improve the socioeconomic life of the rural households

References

Abebow S.A (2003). Dimensions of Determinants of Food Insecurity among Rural Households in Ethiopia. Unpublished Master's Thesis, Alenaya University, Ethiopia

Akinyele, I.O (2009) Ensuring Food and Nutrition Security in Rural Nigeria: An Assessment of the Challenges, Information Needs, and Analytical Capacity. USA, International Food Policy Research Institute. Pp 1-90.

Andreyeva, T., Long, M.W. and Brownell, K.D. 'the impact of food prices on consumption: a systematic review of research on the price elasticity of demand for food'. *American journal of public health*, Vol. 100 (2010), pp.216-222.

Bhalla, G. Handa, S. Angeles, G. & Seidenfeld, D. (2016) "The effect of cash transfers and household vulnerability on food insecurity in Zimbabwe, "in Innocent Working Paper UNICEF Office of Research, 22 (1) pp. 37–42, UNICEF office of research, Florence.

Brinkman, H., De Pee, S., Sanogo, I., Subran, L. and Bloem, M. (2009)

'High food prices and the global financial crisis have reduced access to nutritious food and worsened nutritional status and health.' *The Journal of nutrition*, Vol. 140, pp.153S-161S.

Ecker,O. & Breisinger, C(2003). Revisiting food and nutrition security: a comprehensive overview, *Journal of Agricultural Economics and Development* 2, 280-289

Emaikwu S.O(2019) Fundamentals of Research Methodology and Statistics. Makurdi, Selfers Publisher.

Fadare, O., Akerele, D., Mavrotas, G. &Ogunniyi, A. (2019). Effect of conflict and food price shocks on calorie intake and acute malnutrition in Nigeria: A micro-panel data analysis. Paper presented at the 93rd Annual Conference of the Agricultural Economics Society, University of Warwick, England 15 - 17 April 2019.

FAO (Food and Agriculture Organization of the United Nations). (2003). *Trade reforms and food security: Conceptualizing the linkages*. Rome:

FAO, Food and Agricultural Organization (2019). The state of food security and nutrition in the world: Safeguarding against economic slowdowns and downturns. Rome:

FMARD. (2016). The Agriculture Promotion Policy (2016 – 2020): Building on the successes of the ATA, closing key gaps. Retrieved from https://fscluster.org/sites/default/files/documents/2016-nigeria-agric-sector policy-roadmap_june-15-2016_final1.pdf

FMARD. (2016). The Agriculture Promotion Policy (2016 – 2020): Building on the successes of the ATA, closing key gaps. Retrieved fromhttps://fscluster.org/sites/default/files/documents/2016-nigeria-agric-sector policy-roadmap_june-15-2016_final1.pdf

Food security cluster sector dashboard Sept 2021. Posted wed 10 November 2021 07:18

Kembe E.M (2015): A lead paper presented on global trends and family sustainability. FACCSON held at Adeyemi college of Education, Ondo on NOV.2-6, 2015 4th FACCSON CONFERENCE.

Mkhawani, K., Motadi, S., Mabapa, N., Mbhenyane, X. and Blaauw, R (2006) 'Effects of rising food prices on household food security on female-headed households in Runnymede Village, Mopani District, South Africa.' *South African Journal of Clinical Nutrition*, Vol. 29, pp.69-74.

Nwabah. N. (2005) Food Security and National Development. Implications for Home Economics Education, *Journal of Home Economics Research* vol.6 (1).

Okoye A.A. (2017): Coping Strategies for Improving Food Insecurity among Rural Households in Orumba South Local Govt Area. Conference proceeding at the 7thHecon/8th IFHE Africa regional conference and exhibition, Uyo on 24th-28th oct.

Olaloku. L.A, Fajana. F.O, Tommons, S, Ukpong, I.I. (2007). Structure of the Nigeria Economy, Lagos: Macmillian,

Orisa.C & Usoroh,C. (2019). Prevalence of food insecurity among students in Rivers State University. *Journal of the Society for Human Ecologists* (JSHE) 1(1) 147-156

Sanni I.O. (1999) *Effective Post Harvest System in Nigerian food Journa*l. Nigeria Institute of Food Science and Technology. Page 61-70

Uko-Aviomoh E (2005) Family Education, Vocationalism and Food Security of the Nigerian child. *Journal of Home Economics Research*. Vol 6. No .2

Verwimp, P., Bundervoet, T. and Akresh, R., 2010. '*The Impact of Violent Conflict on Child Health: What Are the Channels?'* (No. 6). MICROCON-A Micro Level Analysis of Violent Conflict.

Von Grebmer, K., Bernstein, J., Nabarro, D., Prasai, N., Amin, S., Yohannes, Y., Sonntag, A., Patterson, F., Towey, O. and Thompson, J., (2016). '*2016 Global hunger index: Getting to zero hunger*.' International Food Policy Research Institute.