

**THE EFFECT OF GLOBAL FOOD CRISIS ON LIVING
STANDARD OF LOW AND MIDDLE LEVEL INCOME
EARNERS IN KOGI STATE, NIGERIA**

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Abstract

The study was conducted to determine the effect of global food crisis on standard of low and middle income earners in Kogi State. Three research questions and three hypotheses were formulated and tested in the course of the study. Data collection was done using summated scale method of 2.5 as acceptance region. Structure questionnaire comprising of 15 questions were used for data collection. The population of the study consisted of 1430 respondents. The questionnaire was pilot tested by the use of Cronbach's alpha method. The reliability result obtained 0.85 showed that the questionnaire was reliable. Descriptive statistics was used to test the mean and t- statistic to test the hypotheses. The result of the analysis revealed that high cost of food in Kogi State is caused by low agricultural production among others. From the result of the analysis there was significant difference between the mean factors that result to food crisis in the state. For hypotheses two and three, the result of the analysis indicate that the mean factors of the variables identified in the study were not significant. It was recommended that government should proffer solutions to food crisis in the State by adopting appropriate policy options meant to alleviate suffering of low and middle income earners in the State.

Keywords: Global food crisis, Standard of living, low income earners, middle income earners

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Introduction

Recently, the world has witnessed an astronomical increase in prices of food items resulting to global food crisis. Food crisis is usually referred to as shortage of food. It is also regarded as a pronounced scarcity of food in a broad geographical area causing widespread starvation, disease, and/ or death in a population. The global food crisis therefore exists mostly in the urban areas where people are expected to purchase all their food at the mercy of volatile market. The result of this action has affected political and economic instability in both developed and developing countries of the world. With the exception of clothing and shelter as the basic necessities of life, food remains the most vital aspect of human living because of its centrality to human existence. According to the World Bank (2008), the prices of agricultural commodities including staples of many African diets have risen sharply over several years in most part of the world. The factors leading to this persistent increase in prices and reluctant food crisis are diverse and complex.

Most of the factors according to Aksoy, and Bernard (2010), can be thought as having impact on supply of food and demand for it. The demand for food they maintained may be affected by land and water constraints, underinvestment in agriculture, lack of access to fertilizer, and irrigation to mention but a few. The demand for food on the other hand is affected by rising energy, population growth, globalization of food market and change in diet. Jacoby, (2013.) states that the current food crisis in many countries of the world results from rapid growth in food demand in conjunction with decline in growth of food supply. This in no doubt has adversely affected the livelihood of socially vulnerable groups, especially the poor. The poor are usually the most vulnerable to high price in the society because they rely on diets that are more and more scarce and expensive, such as; cereal grains, yam, cassava, rice, millet, Barbara nuts, cooking oil, and other dairies leading to increase in hunger (World Bank 2012).Hunger, according to Aksoy, and Alylin.(2008), is mostly associated with low agriculture output, drought, and famine. Most of the previous studies conducted by Nelson (2010) shows that hunger is not always related to food production or availability alone but are associated with other factors, such as the level of income, inadequate access to basic services and poor living conditions. It is also akin to ruthless expedition for food which has shaped human history, provoked violence, driven migration and underpinned the growth of nations. Usually, people's

inability to purchase food at affordable prices in most developing countries like Nigeria often results to insufficient nutritious value.

Furthermore, food consumption according to sulaiman et.al.(2009), represents about 60-90 percent of consumption spending by the poor households. The variations in income of the poor on food prices usually have multiplier effect on rising rate of malnutrition among the poor households. In many countries of the world, food prices have increased sharply since 2005 affecting many households and families thereby increasing their level of poverty. In the developed countries of the world, most people are able to deal with the crisis reasonably well as a result of well-functioning safety nets; however, people in many relatively poor import-dependent countries, like Nigeria usually experienced large price hikes that have permanent effects on their future income and their ability to escape poverty. Small farmers and poor consumers are extremely vulnerable to poverty as a result of unstable commodity prices. Poverty usually affects real food price shock on household disposable income based on the extent to which households are net food consumers or net food producers.

According to Ivanic and Martin (2008), World Bank study shows that 105 million people would be thrown into poverty by higher food prices (at the \$1/day) by the year 2020. Subsequently, the study estimated that global poverty rose by around 160 million people, 90 million of whom were in rural areas (Hoyos and Medvedev 2009). Usually, food shortage due to lack of food or difficulties in food distribution affect large number of people due to climatic change, environmental , socio-economic reasons and extreme political conductions such as tyrannical government activities. This can also cause widespread starvation, disease, or/and death among people in the population. There are many reasons why people cannot grow or buy enough food to feed their families.

Most of them according to Ahamed D.and Camilla (2009), among other thing include poverty, natural disasters, and change in climate and a host of others. They maintain that poverty reduces output of food among many African farmers by making then to produce small harvests because most of them lack irrigation and farm inputs when compare with their counterparts all over the world. This has devastating effect on the production and distribution food among the teeming population. . For that reason, even temporary reductions in prices for farmers or price hikes in prices for consumers can cause permanent effects on income, leading to poverty traps. Poverty issues and global food crises are twin brothers scourging the world like AIDS. Food

crises increase poverty worldwide (World Bank2008}. Draught and adverse climatic variation associated with it according to Aksoy and Alylin (2008), has adverse effects on food insecurity as it is capable of fueling the fire of poverty and hunger. The sharp increase in food and energy prices globally has hurt the poorest and most food unsecured regions of the world. It is important to note here that Africa is one of the hardest hit regions of the world with some 150m people at risk because of global food crisis.

The higher the price of the food the more the people is being pushed into poverty trap. Thus, the rising prices of food is sending shivers down the spines of many world leaders who are aware that the skyrocketed prices lowers the potential effect of causing a real economic and humanitarian crises in most developing countries (Nelson 2010). Food prices according to Adejobi (2004) have increased by 83% in the last three years capable of real risk saturation on the estimated100 million poor people unable to afford enough food. A greater bulk of the 100m falls within the African zone thus has manifested in riots, tension leading to food crises in Egypt, Ivory Coast, Senegal, Ethiopia, Burkinafaso, and in some part of Nigeria to mention but a few. This has the capability of trumping the countries growth, peace and stability and security. Food crises / shortage are not according to Adejobi, (2004) is not limited to African countries alone. It has occurred in Indonesia, Haiti and led to the resignation of the prime minister. It is a weight; trivial issue affecting the whole world. From the above scenario, it is important to note that food represents a large share of farmer income and also a significant share of the budget of low-income consumers. As a result, big changes in food prices have a large negative impact on the real incomes of small landholders and poor families. Therefore, Investment in agriculture remains the most decisive instrument to promote sustainable long-term food security. Such investment has the potential to improve the competitiveness of domestic production, increase farmers' profits and make food more affordable for the poor.

However, from time immemorial, Nigeria economy has witness a lot of devastating effect on food crisis. This is because of neglect in its major economic policy. Akrides (1999), opines that Nigerians for years has been suffering a lot of frustration, anger and despair in food production and consumption because of the persistent food crisis in the economy. Nigeria with abundant human and material resources has for years depended on food importation for its several. Since independent in 1960, Nigeria have experimented all kinds of ideologies and economic management theories to move the economy forward especially as it concerns food

production and distribution but to no avail. The structural adjustment programme (SAP) was advocated as an alternative strategy to revamp and sustain the economy, followed by green revolution, operation food for the nation and recently millennium development goals to mention but a few, but Nigerians are still faced with hunger and poverty. Although hunger is most often associated with low agriculture output, drought, and famine in rural areas, previous studies have shown that hunger is not always related to food production or food availability alone. Rather, in urban areas, other factors, such as incomes, inadequate access to basic services and poor living conditions, play more significant roles.

According to Ahmed (2008), in their studies, Nigeria economy rank 20th on Global Hunger index which represents 65 percent of Nigeria food insecurity. This means that in every household of 100 in Nigeria, about 65 households have insufficient access to amount and variety of food for healthy living. However, in 2008 or there about, attempt to remedy this situation, was made by Yar'Adua administration when he spent about \$80 billion for rice importation. Since then the situation has been worrisome. The question is how can this ugly situation of arbitrary food price increase be arrested? And can there be remedy to its effect on the standard of living of the low and middle income earners in Kogi State Nigeria?

Literature Review

Rising global food prices affect countries differently depending on whether they are net exporter or importers of food (Jacoby, 2013). A complex combination of poor harvest in some major commodity producing countries, increase in the cost of production due to higher fuel and fertilizer prices, diversion of food crops to produce bread, starch, cornflakes, biofuels and a blockage in global trade is driving food prices up worldwide (Jenny and Aker, 2008). The recent escalation of food prices and the reports of global food crisis in many African countries threaten economic growth, peace and security. The rising food prices and food shortage highlights the need for more concerted efforts to harness the potential of the agricultural sector for development since it has remained the dominant sector in most African economies. Food security focuses very much on trade policies when it concerns developed countries while for developing countries, taking one African country as an example, it is a matter of securing supply of food for the people (Jacoby 2013). A very important issue related to food security is: "do we have

enough food at the right time at the right place?”, and “is the food we are eating safe?” The second aspect of food safety has recently got increased attention.

The current crisis calls for much closer scrutiny and monitoring of the input to agriculture as well as its production processes. This in turn will create enormous new challenges of agriculture statistics (Aksoy and Bernard (2010),). Politicians and the public are increasingly requesting for more accurate, detailed and timely statistics not only on output but also on the quality of output based on the improved monitoring of inputs and the production processes (Nelson 2010). The reality is that the existing data system in agriculture is not capable of providing the information needed to neither understand the issue nor determine the action to take.

Accordingly, Headey (2013) maintains that lack of quality data on agriculture and related topics remains a major constrain to agricultural development in many African countries and Nigeria in particular. Safety nets are also crucial for alleviating food insecurity in the short term, as well as for providing the basis for long-term development. Additional measures according to him includes limits to bread, starch, and biofuels expansion as it is clear that this is one of the key factors behind rising agricultural commodity prices. The high levels of price volatility must also be addressed, by increasing financial regulation to curb speculation in commodity markets. Also, food reserves are needed to cushion price swings. The global food crisis compels households with of low and middle income to reduce the quantity and quality of food Consumption (Jacoby,(2013) .The number of meals taken in a day reduces as low and middle income earners of many households may not have a wide choice of food items to purchase. The global food crisis on the food security of the poor urban households causes many families to concentrate in the consumption of Carbohydrate based food items such as maize, cassava, millet and rice which may greatly affect children’s health in the short term while the long term effects cannot be determined. As a consequence of household’s inability to purchase food that is both sufficient and nutritious affect many families showing increased stunting and wasting and underweight (Gana 2003) .

Accordingly, Jenny and Aker (2008) posit that since early 2008, a variety of international actors have expressed concern over higher global and regional food prices. The average world price for rice for instance has risen by 217 percent since 2006, with wheat and maize prices increasing by 136 percent and 125 percent, respectively (Headey 2013). Thus, the

increase in global food prices can be attributed to a variety of factors, including a decline in global food reserves, increased demand in Asia, the production of biofuels, increases in fuel prices, and climatic shocks in several parts of the world. Food price increases have also been associated with violence since January 2008, riots and demonstrations protesting higher food prices have taken place in numerous countries in West Africa, including Benin, Burkina Faso, Guinea, Ivory Coast, Niger, Senegal, and Sierra Leone and some part of Nigeria to mention but a few.

Oparaeke, Ofor, and Ibeawuchi (2010) are of the view that global food crisis has caused a lot havoc among low and middle income earners in different sectors of Nigeria Economy. They admonished that low and middle income earners especially in urban areas of the country are most vulnerable to high prices of food items because they use up to 80-90percent of their income for food consumption. This according to them has devastating effect on them in the different part of the country. However, since the living condition the poor populace especially the middle and low income earners in the country are regarded as paramount in today's politics, any negative action emanating from such policies calls for a sober reflection. From the literature, a number of reports have indicated that population increase is the main contributors to increasing food demand, but much has not discussed about how distribution of income especially among low and high income earners are affected by global food crisis. This research work therefore intends to explore and discuss how food crisis has affected the living condition of the low and middle income groups in Kogi State since there the worse hit by global food crisis.

Research Question

The following Research Questions guided the study

1. What are the causes of food crisis among food sellers in Kogi State?
2. What is the effect of high prices of food on living standard of low and middle income earners in Kogi State?
3. What are the policy options have been advocated by government to tackle this ugly situation?

The objectives of the study

The major objective of this research work is to determine the causes of food crisis in the state and find out its effect of the living standard of the low and middle income earners in Kogi State. Specifically, the study intends:

1. To determine the causes of food crisis in the Kogi State despite its abundant agricultural production.
2. To determine the effect of high prices of food on living condition of the low and high income earners in the State.
3. To determine the policy option adopted by the government to ammorelate the situation in the State.

Research Hypothesis

The following research hypothesis guided the study.

1. Global food crisis has not reduced as a result of abundant agricultural production in Kogi State.
2. There is no significant difference between high cost of food items and living standard of low and middle income earners in the state.
3. Different Government policy options on food crisis have no effect on high prices of food in the state.

Methodology

Descriptive survey method was used for the study. Descriptive survey describes the events at their natural settings and unravels the major elements and characteristics of a phenomenon (Ali, 2006). A random sampling 1430 households of low and middle income groups were selected for the study. The population of the study comprises of 715 each of both low and middle income earners in Kogi State. A 15-item questionnaire was used for the study.

The structured questionnaire had two clusters A and B. a four point scale response; Strongly Agreed (SA), Agreed (A), Disagreed (DA) and Strongly Disagreed (SD) were used. The instrument used for data collection was validated by two experts in Economics and one expert in Measurement and Evaluation all from Kogi State College of Education, Ankpa. The reliability index of the instrument was tested by the use of Cronbach's alpha method. The overall reliability index was 0.85 showing that the instrument was reliable. The instrument was administered to the respondents through direct delivery and on-the-spot collection by the researcher. Data collected were analyzed using descriptive statistics of mean (\bar{x}) and standard

deviation (SD). The following mean range was considered in taking decisions for the four research questions;

X range	Remarks
3.50-4.00	SA
2.50-3.49	A
1.50-2.49	D
0.50-1.49	SD

Also, the hypotheses were tested using t-test a 0.05 level of significance.

Results

The results of the study are presented in the following tables:

Research Question One

What are the major causes of food crisis in Kogi State?

Table 1: Mean scores and standard deviation of respondents on the factors the causes of food crisis in Kogi State.

S/NO	ITEMS	X	SD	DEC
1	LAP	2.6	0.02	SA
2.	HXF	2..6	0.09	SA
3.	HCI	2.6	0.08	S A
4.	HCAI	2.6	0.03	SA
.5.	MOX	2.4	0.6	SDA
Cluster mean		2.5	0.16	

The table above shows the mean scores and standard deviation of the causes of food crisis in Kogi State, identified as Low agricultural production, High exportation of local food to neighboring countries, High cost of imported food into the Country, High cost of agricultural input such as fertilizer and lack of irrigation and represented by LAP, HXF, HCI, HCAI and MOX The analyses on the table indicate that Low agricultural production has a mean of 2.6 and a standard deviation

of 0.02. Also, items 2,3,4, and 5 has means of 2.6, 2.6, 2.6 and 2.4 respectively. While their standard deviations are 0.09, 0.08, 0.03 and 0.6. The cluster mean of 2.5 and standard deviation of 0.16 indicates that all the variables mentioned on the table above are the major factors causing food crisis in Kogi State.

Table 2: Summary of t-test on mean scores of the factors responsible for food crisis in Kogi State

Subject	\bar{X}	SD	df	LS	t-cal	t-crit	Decision
Causes of global food crisis In Kogi State	2.6	0.05	4	0.05	4.7	2.77	Rejected

Where N = Number of respondents, \bar{X} = mean scores, df = degree of freedom, LS = Level of significance, t-Cal = t-calculated and t-table = t-critical

Table 2 indicates that the calculated value of t calculated is 4.7.while t-critical at is 2.77. This result shows that the null hypothesis was rejected since t-cal of 4.7 is greater than t-critical of 2.77 at 4 degree of freedom and 0.05 level of significance. This implies that there is significance difference between the mean scores of the factors that results to food crisis in Kogi State

Research Question 3

What is the effect of high prices of food on living standard of low and middle income earners in Kogi State?

Table 3 shows: Mean scores and standard deviation of respondents on effects of food crisis among low and middle income earners in Kogi State

S/NO	ITEMS	X	SD	DEC
1	NAEF	2.3	0.19	SA
2.	MTSH	2.3	0.02	SA
3.	RSV	2.4	0.15	DA
4.	LMEND	2.7	0.03	A
.5.	FI	2.4	0.6	DA
Cluster mean		2.28	0.19	

The result of the analysis above shows that None affordability of essential food items for many families results to ill health and untimely death represented as NAEF has a mean value of 2.3 and standard deviation of 0.19. While other effects such as humiliation, social vices, neglect and food insecurity represented as MTSH, RSV, LMEND, and FI has means values of 2.3, 2.3, 2.4, 2.7, and 2.4 respectively. While there standard deviations are 0.19, 0.02, 0.15, 0.03 and 0.6. The cluster means of 2.28 and standard deviation of 0.19 shows that the mentioned variables do affect the living standard of low and middle income earners in Kogi State.

Table 4: Summary of t-test on mean scores on the effects of food crisis in Kogi State

Subject	X	SD	df	LS	t-cal	t-crit	Decision
Effects of food crisis In Kogi State	2.6	0.05	4	0.05	2.5	2.77	Was not rejected

Table 4 indicates that the calculated value of t calculated is 2.5, while t-critical at is 2.77. This result shows that the null hypothesis was not rejected since t-cal of 2.5 is less than t-critical of 2.77 at 4 degree of freedom and 0.05 level of significance. This implies the identified factors affect the living standard of low and middle i in Kogi State

Table 5 shows: Mean scores and standard deviation of respondents on the policy options adopted by the government of Kogi State to alleviate the problems of these vulnerable groups in our society in Kogi State

S/NO	ITEMS	X	SD	DEC
1	YEP	2.4	0.14	DA
2.	FR	2.2	0.12	SDA
3.	IPS	2.4	0.05	DA
4.	AGP	2.5	0.03	A
.5.	PIS	2.4	0.6	DA
Cluster mean		2.38	0.18	

The result of the analysis above shows that represented youths and adult empowerment programmes represented as YEP has a mean value of 2.4 and standard deviation of 0.14. While other policy options such as food reserves, import subsidy, agricultural programmes and fertilizer and improved seed represented as FR, IPS, and AGP and PIS has means values of 2.4, 2.2, 2.4, 2.5, and 2.4 respectively. While there standard deviations are 0.14, 0.12, 0.05, 0.03 and 0.06. The cluster means of 2.38 and standard deviation of 0.18 shows that the mentioned policy option affect on living standard of low and middle income earners in Kogi State since if implemented well will reduce the effect of food crisis in the state

Table 6: Summary of t-test on mean scores on Government policy option on food procurement in Kogi State

Subject	\bar{X}	SD	df	LS	t-cal	t-crit	Decision
Effects of food crisis In Kogi State	1.7	0.32	4	0.05	2.5	2.77	Was not rejected

From the table 5 above,. It can e shown that the value of t calculated is 1.7, while t-critical at is 2.77. This result shows that the null hypothesis was not rejected since t-cal of 1.7 is less than t-critical of 2.77 at 4 degree of freedom and 0.05 level of significance. This implies that the identified helps in reducing the effect of food crisis in Kogi State

Discussion of results

In the study of global food crisis on living standard of low and middle income earners in Kogi State, it was discovered that in most case food crisis is caused by inadequate production and distribution of food in the economy. High exportation of local food to neighboring countries, High cost of imported food into the Country, High cost of agricultural input such as fertilizer and lack of irrigation(Oparacke 2010),.

Usually, the effectiveness in the production and distribution of food improves the standard of living of individual in the any society. From the findings, it was discovered the inadequate supply of food may prompt many people in the society especially the low and middle income earners to engage themselves in so many social vices such as armed robbery, prostitution, kidnapping and abduction, drug trafficking and a host of others to survive. Furthermore, improper formulation and implementation of most government policies and programmes meant to address the suffering of the masses in the economy are sometimes being politicized thereby depriving the masses from enjoying such benefit. However, the findings on this subject find out that

most of the policies and programmes of Kogi State government may have significant effect on the masses if properly implemented and monitored.

Null hypothesis 1. Was stated to find out whether there was significant difference between abundant food production in the State and food crisis. From the result of the findings, the researchers fails to reject the null hypothesis as stated. The finding agreed with the response of the respondents on items identified as the causes of food crisis in Kogi State as presented on table 1

Research question 2 and 3 were also formulated to find out the effect of food crisis on low and middle income earners in Kogi State, and whether government policy options have any effect in improving the welfare of these groups of workers in the State. The study among other things discovered that food crisis results to a lot of social vices in the economy. From tables 3 and 5, the result showed that, null hypotheses were rejected. Based on these, there alternative hypotheses were accepted. This means that the findings agreed with the responses of the respondents on tables 3 and 5

Implications of the findings.

Poor policy implementation by the government often affects policies and programmes and distorts different economic activities in the country. This is because most policies and programmes of the government are often politicized at the expense of what it is meant to achieve. Hence, the issue of food crisis in Kogi State is a subject of great concern. In view of this therefore, the following policy implications are necessary.

The first policy implication is derived from analysis on agricultural production and distribution in Kogi State, for this to be effective all state holders ranging from farmers in the rural and urban areas of the state as well the marketers and middlemen need a lot of reorientation in the production and distribution of food items. Also, agricultural production could be made viable through soft loans, improved seeds and seedlings, procurement and distribution other farm inputs to at a subsidize rate and on time to farmers. This if properly implemented and monitored will reduce the risk of food crisis in the State. Also, food importation and distribution have to be properly monitored through good channels involving reputable middlemen and retailer devoured of fraudulent practices of creation artificial scarcity on the sales of food product in the State. Secondly, the income redistribution capable of raising the standard of low and middle income earners need be addressed through bonuses and other incentives to bridge the between these groups and high income earners in the State. Finally, serious people intervention policies capable of revitalizing poverty alleviation programme in the State need be visit for efficient and optimum performance..

Recommendation

From the result of the findings the following recommendation are made.

1. Government should make sure that the production and distribution of agricultural products in the state are evenly distributed for ultimate benefit to the poor masses in the society .Likewise, importation of food items such as rice, wheat, and other staples should be properly monitored to deprive its diversion to other states of the Federation.
2. All social vices associated with suffering such as thuggrey kidnapping, prostitution, armed robbery should be monitored and brought to a holt. Government should make sure that anybody caught in such an art is persecuted in the court of law. Also, rural/ urban migration should be discouraged especially among the youth in Kogi State by providing them enabling job facilities in the rural areas that will discourage them from moving to urban cities.
3. Government should make sure that all policies and programmes formulated in the economy are that which will be able to carry every person alone especially as it affects the low and middle income earners in the State... In this case, poverty alleviation programmes should be revisited and be made more proactive to agricultural production for healthy living in the economy.
4. Agricultural inputs such as improve seeds and seedlings, fertilizer, pesticides, weed site, to mention but a few has to be provided to farmers at a subsidize prices and at right time to enable them use such input for farming during the season.

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