

## Impact of Agricultural Subsidy on Food Security in Nigeria (A Case of South East of Nigeria)

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### Abstract

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No nation can boast of economic growth and development without food security. For proper food security, a country should be able to produce substantially the food she consumes. The country should also be able to produce for export. Unfortunately, Nigeria has not been able to attain economic security, which food security is inclusive. This has resulted to Nigeria being a net import country as most of the food consume in the country are imported. This unfortunate situation grew worse after the discovery of oil in the country, as Nigeria became almost a mono product economy. No doubt, successive governments in recent times have put in one effort or the other to revive the agricultural sector of the economy and subsidy is one of such effort. The research looked at the role subsidy played in the attainment of food security in Nigeria and the specific objectives are: to look at adequacy of agricultural subsidy, accessibility to agricultural subsidy and the awareness people have about subsidy. These served as independent variables and proxies to agricultural subsidy while attainment of food security serves as the dependent variable. In methodology, the research adopted a survey design and the scope was small holders' famers in Abia State who may or may not have benefited from the agricultural subsidy. The research adopted Pearson Product Moment Correlation in its analysis. Findings showed that accessibility and availability to agric subsidy have positive strong correlation with food security while awareness of agric subsidy has weak relationship. It is recommended that governments should increase budgetary allocation to agric subsidy among others.

**Keywords:** *Subsidy, Food security and Accessibility*

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### **Background to the Study**

The need for food security has been a thing of concern to many economies and Nigeria is not an exception. The level of development in the agricultural subsector is a good measure of the level of industrialization and self-reliance of a country in her food system. Nigeria for decades turned to a mono product economy, depending majorly on oil with the high risk of incessant fluctuations in oil prices. Successive governments, mainly the present administration, have been trying to diversify the economy through promoting agricultural production. Apart from providing immediate food for consumption, agricultural produce also serves as source of materials for industries and provides high level of direct and indirect labour employment to the people mainly youths.

Every aspect of Agricultural activity gears to increase yields in crops and animals. The value chain of the agricultural sector has also made it a good source of revenue to both the farmers and the governments. The discovery of oil in Nigeria brought evil consequence to agriculture in Nigeria. Before oil came agriculture was the main source of revenue to Nigeria and with the oil boom of 1970s, there was total shift to the oil industry and total neglect to the agricultural sector which brought about the collapse of the generating powers of the agricultural sector and its capacity in proving the needed employments and industrial raw materials because of the quick and huge oil revenues. Nigerian shifted attention to oil and governments showed little or no interest in using the oil money to provide mechanized agriculture. For instance, in 2013, there was subsidy from the government and a bag of fertilizer was discounted by about 85%, and in the same year, Nigeria recorded rise in agricultural GDP from N16,816.55 billion in 2013 to N18,018.61 billion in 2014, which may be partly attributable to the fertilizer subsidy.

Agricultural subsidy is a financial assistance mainly from the government given to farmers and those in agro-allied businesses to reduce the costs of agricultural production, including farming, storage and processing. This means that agricultural subsidies can be in forms of grants to farmers, low or interest free loans, reduction in the costs of farm inputs like: fertilizer, seeds, machineries, pesticides, etc. All these will help to encourage people to participate in agriculture and reduction in prices of agricultural products.

With the dwindling oil prices and discovery of other ways of power generating capabilities, governments seem to be waking up from their slumber, as there is now a re-shift of attention to agriculture. Unfortunately, the high prices of agricultural products show that the impact of the recent attention mainly in the form of subsidies to the agricultural sector is yet to be felt and that was this study tried to establish.

### **Statement of the Research Problem/Justification**

Before oil came agriculture was the main source of revenue to Nigeria and with the oil boom of 1970s, there was total shift to the oil industry and total neglect to the agricultural sector which brought about the collapse of the generating powers of the agricultural sector and its capacity in proving the needed employments and industrial raw materials. Because of the quick and huge oil revenues, Nigerian shifted attention to oil and

governments showed little or no interest in using the oil money to provide mechanized agriculture. With the dwindling oil prices and discovery of other ways of power generating capabilities, governments seem to be waking up from their slumber, as there is now a re-shift of attention to agriculture. The high prices of agricultural products show that the impact of the recent attention to the sector is yet to be felt. Over the years the governments have come with one form of strategy or the other to encourage and boost agricultural production in Nigeria.

There is no doubt that it is difficult to have access to improved varieties of agricultural inputs mainly because of the cost implication. Unfortunately, these inputs are critical in order to have increased crop yields (World Bank, 2014). The difficulty in accessibility and availability to subsidies form major constraints to smallholder farmers in accessing farm inputs and loanable funds from conventional lending institutions in Nigeria. Again there is high cost of inputs like fertilizer mainly due to over reliance on imported fertilizers, which most farmers cannot afford. With the Abuja Declaration, the Governments engaged in subsidizing of agricultural so as to produce staple crops by supporting smallholder farmers to purchase subsidized fertilizers and improved varieties of seeds for planting. The aim of the subsidies being to increase productivity by making farm inputs affordable to farmers, (Druilhe and Hurlé, 2012). In Nigeria, farmers face a lot of challenges and problems accessing government sponsored subsidies. The challenges among others include: cost involved as a result counter- part funding from farmers, delay in the distribution of vouchers for purchase, farmers' unwillingness to use government recommended farm inputs (Druilhe and Hurlé, 2012). It is in line with these stated problems that the researchers intend to examine the contribution of subsidies to increased food productivity so as to address the issue of food insecurity in Nigeria.

### **Objectives of the Study**

The general objective is to determine the extent to which agricultural subsidies have impacted on food security in Nigeria.

The specific objectives are:

1. To determine the significant impact of availability of agric subsidy on food security in Nigeria.
2. To ascertain the significant impact of accessibility of agric subsidy on food security in Nigeria.
3. To determine the impact of awareness of agric subsidy on food security in Nigeria.

### **Research Hypotheses**

HO<sub>1</sub> There is no significant impact of adequacy of agric subsidy on food security in Nigeria.

HO<sub>2</sub> There is insignificant impact of accessibility of agric subsidy and food security in Nigeria.

HO<sub>3</sub> Awareness of agric subsidy has no significant effect on food security in Nigeria.

## **Literature Review**

### **Conceptual Framework**

As Ellis, (1992), put it, subsidies are meant to support rural agriculturists and to reduce taxes on farm produce through reduction in export tariff, guided exchange rate system and local price control.

### **Appraisal of Some Past Subsidy Programmes in Nigeria**

Over the years the governments have come with one form of strategy or the other to encourage and boost agricultural production in Nigeria. For instance, in 2013, there was subsidy from the government and a bag of fertilizer was discounted by about 85%, and in the same year, Nigeria recorded rise in agricultural GDP from N16,816.55 billion in 2013 to N18,018.61 billion in 2014, which may be partly attributable to the fertilizer subsidy. Apart from subsidies to farmers, governments have also at one time or the other come up with programmes or policies to promote agriculture like the setting up of the Agric Bank, Agric Credit Guarantee Scheme, Operation Feed the Nation, among others. The Agricultural Development Program (ADP) was established 1975 to distribute farm inputs to farmers within their neighborhood so as to achieve food security.

In area of subsidies, a lot of attention has been on fertilizer subsidy, for instance in 2006, there was an Africa Fertilizer Summit in Abuja, Nigeria through the coming together of the African Union (AU), the New Partnership for African Development (NEPAD) and the Federal Government of Nigeria. A major outcome of the summit was the Abuja Declaration on Fertilizer for African Green Revolution. This mandated African Union member nations to increase fertilizer output to an average of 50 kg/ha by 2015. There was also the need to create Smart subsidy programmes for small holder farmers to have access to subsidized fertilizers in the midst of deficiencies in universal subsidies. The smart subsidies should target the existing poor farmers without agricultural inputs; support private input supply outlets; have established exit time limit; not hijacked by the fortunate few, among others, (Naranye 2003). There are policies for the effective distribution of fertilizer, which include: low cost, high usage for production, Celia (2007).

### **Operation Feed the Nation (OFN) of 1976**

The OFN was a programme of the Federal Government aimed at addressing the problems of increasing import bills, rural-urban migration and food shortages. With this programme, the federal government subsidized farm inputs like fertilizer, seeds and increased soft bank credits to farmers.

**Agricultural Development Programme (ADP) of 1972.** The AD was a World Bank assisted programme which involved the application of knowledge and skills in the provision of roads, water supply and other infrastructural facilities in the rural areas to farmers. They also engaged in training of man power in the use of agricultural technologies of farm inputs.

**Developing Agricultural Inputs Markets in Nigeria Project (DAIMINA).** DAIMINA project was a small scale project that adopted vouchers in order to address the objectives of agro dealer development, including access to agricultural input. With the project, fertilizers are bought from importers by the government at the commercial price, which the governments bought and sold to farmers. The small agro dealers were able to deliver fertilizers at subsidized prices to farmers. (Gregory, 2006).

**Anchor Borrower's Programmes (ABP) of 2015:** ABP was established by the Central Bank of Nigeria to provide subsidized farm inputs both in kind and cash to small scale farmers for increased production and agro processors in order to help to address the in-balance in the Balance of Payment of the country. The farmer hands over his produce to the Agro processor (Anchor) who pays him the cash equivalent. Among other functions of the ABP are helping in increasing bank's financing to the agricultural sector; reduction in the importation of agricultural products so as to conserve external reserves; encourage, promote and create new entrants in farming and agro allied businesses. They are help in the reduction in the level of poverty among small farmers and assisting farmers in the growth out of subsistence. The Central Bank of Nigeria disburses small loans to the small-scale farmers to be used in the production of cereals, cotton, roots and tubers, sugar cane, oil palm, cocoa, rubber, legumes, tomato and livestock. The loan is expected to be repaid when the produce is delivered to the Processor (Anchor). Basically, all agricultural subsidies are aimed at addressing the issue of food security, so as to improve the standard of living of the farmers and contribute to the country's GDP including exportation of farm products.

#### **Ills of fertilizer subsidy in Nigeria:**

According to (Ayoola, 2002), the following evils are associated with fertilizer subsidies: Farmers see themselves relying on the government; it creates extra burden on the government in terms of cost; it discourages private sector participation and in most cases hijack by politicians.

Extension of agricultural credit facility to farmers has not been very fruitful in Nigeria because conventional banks shy away from lending to these classes of people because of the inherent risks in lending to them. Largely, there is poor record keeping and lack of information and title documents to properties among others. (Swinnen et al,1999). According (Ranjula, 2001), only about 5% of Nigerian farmers are served by conventional lending institutions in Nigeria while in Africa it is estimated that about 5% of farmers don't receive 80% of credits applied for. Obviously, no aspect of the economy will grow without robust credit facilities. In rural areas where there are no formal financial lending institutions, the farmers resort to informal sources for borrowing with its stiff lending conditions. In such areas subsidy becomes a better option.

#### **Empirical Review**

In their study, Agunwa, Inaya, and Proso (2015), looked at the 'Impact of Commercial Banks' Credits on Agricultural Productivity in Nigeria'. The main objective was to

determine the relationship between commercial banks' credit and agricultural productivity in the Nigerian economy. In its methodology, the study adopted the Ordinary Least Square (OLS) technique of data analysis. The findings showed: that there is positive relationship between commercial banks' credits and agricultural productivity; that there is negative relationship between banks' lending interest rate and agricultural productivity; also a significant positive relationship between government spending and agricultural productivity in Nigeria. The study recommended that government should put in policies that will bring down interest rate to the agricultural sector; making the Agricultural Credit Guarantee Scheme (ACGS) more active in its functions so as to make commercial banks participate more in agricultural financing.

Egwu (2006), conducted a research on the 'Impact of Agricultural Financing on Agricultural Output, Economic Growth and Poverty Alleviation in Nigeria', using the Ordinary Least Square Regression technique. The findings showed that credit to agricultural sector and Agricultural Credit Guarantee Scheme Fund Loan to Nigeria's agricultural sector (ACGSF) was significant, thereby alleviating the poverty rate of farmers which also contribute to the GDP of Nigeria. It was recommended that the Central Bank of Nigeria should reduce the cash reserve ratio of banks so as to make more loanable funds available to the agricultural sector for farmers to borrow more; the need to revisit 'Land Use Act' for farmers to have easy access to lands including using it as collateral for agric loans.

Adetiloye (2012), studied on 'Agricultural Financing in Nigeria' with the main objective of assessing the Agricultural Credit Guarantee Scheme Fund (ACGSF) for food security in Nigeria between 1978 and 2006, using the t-test, paired t-test and granger causality for data analysis. The findings showed that credit to the agricultural sector is significant with minimal growth rate; that settlement of claims by the ACGSF is negatively significant that goes with much protocol; that The Nigeria is food insecure and this has resulted to increase in the import of food into the country. It was recommended that Nigerian youths should be encouraged to participate more in agriculture and the ACGSF should be restructured for efficient services.

In their research work, Abula and Mohammed (2013), looked at the 'Impact of Fertilizer Subsidy on Cassava Production in Nigeria from 1986 to 2010'. The main objective was to estimate relative price elasticity of fertilizer demand in Nigeria, using fertilizer price for the period under review and land area used for cassava production in Nigeria as the independent variables with annual Cassava output as the dependent variable. The study employed the Ordinary Least Square technique and the findings showed that fertilizer subsidy has positive impact on Cassava outputs in Nigeria. It was recommended that government should look into the land tenure system in Nigeria for farmers have access to land and that the National Fertilizer Company of Nigeria (NAFCON) be revitalized to enhance its efficiency in local production of Fertilizer.

In their study, Iganiga and Unemhilian (2011) examined the 'Impact of Federal Government Agricultural Expenditure on Agricultural Output in Nigeria'. The main objective of the study was to determine the impact of agric expenditure of the government on output proxied as: total commercial, credit to agriculture, consumer price index, annual average rainfall, population growth rate, food importation and GDP growth rate. The analysis was done using Cobb Douglas model and the findings showed that the federal government expenditure has positively impacted on agricultural output; that investment in agricultural sector is advisable; agric credit facilities should be monitored to avoid possible diversion; adequate river basins and irrigation facilities should be encouraged for production throughout the year; foods that can be produced locally should not be imported.

Awe (2012), studied on the 'Mobilization of Domestic Financial Resources for Agricultural Productivity in Nigeria'. The main objective was to determine the extent the various sources of finance have contributed to agricultural productivity in Nigeria, using Vector Auto Regressive Model (VAR) for a period between 1980 – 2009. The various sources were proxied as subsidy and agricultural credit and findings revealed that there is positive relationship between the variables and agricultural productivity. It was recommended that the Federal government should review her recurrent expenditure on agriculture for enhanced agricultural productivity; that the Federal government and the Commercial Banks should do everything possible to make sure the agricultural sector is not starved of funds.

In their research work, Muftaudeen and Hussainatu (2014), investigated the 'Impact of Macroeconomic Policies on Agricultural Output' with emphasis on crop production in Nigeria. The study used the Multivariate Vector Error Correction model to analyze the relationship between the variables for the period between 1978-2011. It was found out that there is study revealed a co-integrating relationship among the variables. It was recommended that an expansionary fiscal policy is needed for food security in Nigeria.

## **Theoretical Review**

### **The Infant Industry Argument**

This research is anchored on the Infant Industry Argument propounded in the 1840's by the German economist and politician Friedrich List. His argument being that the small industries cannot compete in a free market and so need to be protected mainly against competition from abroad. With the protection, they are able to develop economies of scale in production. In order to protect the small firms, subsidy can be in the form of import restrictions. The restriction can be removed when the infant industry has become fully developed.

## **Methodology**

### **Research Design**

The researchers adopted field survey design so as to assess the effect of subsidies on food security in Nigeria. This investigation was a descriptive one. The research also

determines the causes and consequences of differences that exist among groups of individuals with particular emphasis to productivity, food security, use of improved inputs, farmers' acceptability to the use of the inputs, readily availability of the subsidies and farmers' satisfaction during harvest. The independent variable in this study is the agricultural subsidy proxied as: adequacy of subsidy and accessibility to subsidy and awareness of subsidy. There was also a control group of those who did not benefit from subsidies and they were compared with those that benefited from the subsidies (the experiment group). The dependent variable is food security proxied as: quantity of food produced.

### **Population, Sample Size and Sampling Technique**

The population was made up of all people in Aba and Onitsha who have either benefited from subsidy or not. It is an infinite population with unknown size. The study will adopt random sampling technique and this will give every respondent the chance of being selected. In order to determine the sample size the researchers will use the Cochran formula:

$$n = \frac{Z^2 pq}{e^2}$$

Where n = sample size

Z = 1.96 for 95 confidence level

p = Estimated population proportion of attribute of interest

q = 1 – p

e = margin of error

The variability in the population proportion (p) is assumed to be 0.6 with 99% confidence level and 1% margin of error.

$$\begin{aligned} &= \frac{(2.58)^2 (0.8)(0.2)}{0.01^2} \\ &= 10650.24 \\ &= 10650 \end{aligned}$$

### **Model Specifications**

There are a lot of factors that may likely affect the effectiveness of subsidies as a tool for food security. Some of these factors were used in this study as proxies of subsidy to explain subsidy as the independent variable. This study will employ a modified model from the one used by Punita and Somaiya (2006). Their model was used to examine the 'Impact of Monetary Policy on Banks' Profitability in India' and was specified thus:

where: PT (dependent variable) is bank profitability. The independent variables include: BR = Bank Rate, LR = Lending Rate, CRR = Cash Reserve Ratio, SLR = Statutory Liquidity Ratio, U = stochastic error term.



The model will be modified to suit the study, thus:

Where: FOS = Food Security  
 AAS = Availability of Agric Subsidy  
 ACS = Accessibility to Agric Subsidy  
 AWS = Awareness of Agric Subsidy  
 U = Error term.  

$$FOS = a_0 + b_1AAS + b_2ACS + b_3AWS + \dots u_1$$

### Data Analysis

The study adopted Pearson Product Moment Correlation SPSS 25.0 in the analysis of the research hypotheses.

### Data Presentation and Analysis of Result

This chapter covers the data presentation based on this research work and its analysis.

### Data Presentation

Data on responses based on availability, accessibility and awareness on Agric subsidy.

**Table 1:** Nature of Agric Subsidy

Response	Availability	Accessibility	Food Security	Awareness	Total
Strongly Disagree (S.D)	500	600	500	580	2,180
Disagree	550	400	300	600	1,850
No Opinion	570	520	400	600	2,090
Agree	380	500	360	380	1,620
Strongly Agree	850	800	560	600	2,710

**Source:** Researcher's Field Survey (June, 2021 to April, 2022) 10,450

### Data Analysis

#### Analysis on table 1 using SPASS on Appendix A and Appendix B.

From Appendix A;

- i). From the model summary, R square adjusted = 0.998 which shows that there is a significant impact among the agricultural subsidies on food security. This also reflected in the ANOVA table.
- ii). From the correlation carried out, the correlation coefficient of Accessibility to subsidy on food security ( $r = 0.956$ ) which reflects a strongly positive correlation. This means that enhanced accessibility to agric subsidies by farmers will lead to increase in food production which will bring down costs of agricultural products. The chain reactions will be increase in employment, raw materials, reduction in urban-rural migration, crimes among others.
- iii). From the correlation carried out, the correlation coefficient of Awareness of agric subsidy on food security ( $r = 0.309$ ) which reflects a weak correlation. The weak correlation shows that there has not been enough awareness on agric subsidy in

- the country. That is awareness of its availability, types and procedures for getting it. When enough awareness is created it will lead to increase in food production which will bring down costs of agricultural products. The chain reactions will be increase in employment, raw materials, reduction in urban-rural migration, crimes among others.
- iv). From the correlation carried out, the correlation coefficient of Availability of agric subsidy on food security ( $r = 0.651$ ) which reflects a positive correlation. Even if agric subsidies are accessibly, it can only be meaningful if it is available. Availability here means seeing and getting it when one needs it. Its availability will mean increase in food production which will bring down costs of agricultural products. The chain reactions will be increase in employment, raw materials, reduction in urban-rural migration, crimes among others.
  - v). From the histogram and P-P plot on Appendix A, it shows that food security is normally distributed.
  - vi). From Appendix B, the distribution of variables of model were also achieved.
  - Vii). The descriptive analysis {measure of central tendency (mean) and dispersion (standard deviation)} were shown.

## **Summary of Findings, Conclusion and Recommendation**

### **Summary of Research Finding**

Findings emanating from this study are as follows:

- i. From the test of hypothesis one, from the correlation carried out, the correlation coefficient of Accessibility to subsidy on food security has strong positive correlation. This was confirmed through correlation ( $r$ ) of 0.956 which reflects a strongly positive correlation. This means increase in accessibility will lead to enhanced food security thereby bringing down the level of poverty among others.

From hypothesis two, from the correlation carried out, the correlation coefficient of Awareness of agric subsidy on food security reflects a weak correlation at  $r = 0.309$ . The weak correlation shows that there has not been enough awareness on agric subsidy in the country and this has adversely affected food security in Nigeria with its negative effects: decrease in food production, high costs of agricultural products, rising unemployment, scarcity of raw materials, increase in urban-rural migration, crimes among others.

from the correlation carried out, the correlation coefficient of Availability of agric subsidy on food security ( $r = 0.651$ ) which reflects a positive correlation. This will mean seeing and getting it when one needs it which will increase food production; bring down costs of agricultural products; increase in employment, raw materials, reduction in urban-rural migration, crimes among others.

- ii. The equation in the third model regressed SMEs' growth on interest rate. The regression coefficient carries positive sign and its t-value (0.231618) is statistical and per value 0.0000 significant at 5% level. This implies that interest rate affects the growth of SME as significantly.
- iii. There is high cost of accessing agric subsidies in Nigeria which by right should be

- without a cost. The high cost usually arises from the fact that subsidy agencies and officials are corrupt.
- iv. Poor accessibility to agric subsidies adversely affects the growth of agriculture in Nigeria. As more subsidies are made available to farmers, there is increase in the food security of the country.
  - v. The growth in food security remains the major target of levels of government and private individuals. The level of accessibility to agric subsidy remains one of the determinant factors of economic growth via growth in agriculture and allied products. Again, the attainment of high level of accessibility, availability and awareness depends on the strength and stability of the agricultural ministries and agencies, evidenced by in budgetary allocations, donor agencies, policies on lands, corruption among others.
  - vi. There is a significant impact among agricultural subsidies on food security. It also reveals that accessibility and availability of agricultural subsidies have greater impact on food security than awareness of agricultural subsidy.

### **Policy Implication of the findings**

This study looked at the effects of agric subsidies on the growth of food security in Nigeria. Results from study confirmed previous evidence obtained by number of researchers on agric subsidies to farmers in Nigeria. The findings of this study evidenced that the variables used in the research are the major variables used for growth of food security. Despite the achievement in boosting food security in the economy using agric subsidy there have been difficulties like lack of availability, poor accessibility to subsidy, high level of corruption among officers in charge of the subsidies, other economic crisis and inept regulatory abilities among others. Consequently, since subsidies have made significant contributions to the growth of food in Nigeria, governments need to be strengthened in terms of increase in budgetary allocations among others. Through effective management of agric subsidies, enabling polices and operational guidelines there will be attainment of food security in no distance time.

### **Conclusions**

- i. The growth of agric subsidies affects the attainment of food security of Nigerian. This study was on the effect of agric subsidy on attainment of food security in Nigeria. from the model summary, R square adjusted = 0.998 which shows that there is a significant impact among the agricultural subsidies on food security. This also reflected in the ANOVA table.
- ii). from the correlation carried out, the correlation coefficient of Accessibility to subsidy on food security ( $r = 0.956$ ) which reflects a strongly positive correlation. This means that enhanced accessibility to agric subsidies by farmers will lead to increase in food production which will bring down costs of agricultural products. The chain reactions will be increase in employment, raw materials, reduction in urban-rural migration, crimes among others.
- iii). from the correlation carried out, the correlation coefficient of Awareness of agric subsidy on food security ( $r = 0.309$ ) which reflects a weak correlation. The weak

correlation shows that there has not been enough awareness on agric subsidy in the country. That is awareness of its availability, types and procedures for getting it. When enough awareness is created it will lead to increase in food production which will bring down costs of agricultural products. The chain reactions will be increase in employment, raw materials, reduction in urban-rural migration, crimes among others. iv). from the correlation carried out, the correlation coefficient of Availability of agric subsidy on food security ( $r = 0.651$ ) which reflects a positive correlation. Even if agric subsidies are accessibly, it can only be meaningful if it is available. Availability here means seeing and getting it when one needs it. Its availability will mean increase in food production which will bring down costs of agricultural products. The chain reactions will be increase in employment, raw materials, reduction in urban-rural migration, crimes among others.

- v). from the histogram and P-P plot on Appendix A, it shows that food security is normally distributed.
- vi). From Appendix B, the distribution of variables of model were also achieved.
- Vii). the descriptive analysis {measure of central tendency (mean) and dispersion (standard deviation)} were shown.

Based on the findings of this study, it is concluded that there is a significant positive correlation between subsidy to farmers and attainment of food security in Nigeria. This means that if governments can increase budgetary allocations to agric subsidies there will be rise in the attainment of food security in the economy.

### **Recommendations**

In order to improve on the effect of agric subsidies to farmers in Nigeria, the following recommendations are made:

1. There should be increase accessibility of agric subsidies to farmers in Nigeria. Governments should increase their budgetary allocations in the agricultural sector in general and agric subsidies in particular.
2. To increase the accessibility to agricultural subsidies there should be free-administrative bottlenecks. This will also help to reduce cost of obtaining agric subsidies by farmers.
3. Subsidy agencies and authorities should also bring out policies that will make subsidy donor agencies have cheap funds to give to farmers as subsidies.
4. There should be provision of good infrastructure like electricity, road, water etc. They should be able to create the enabling environment for both the subsidies and farmers to operate. The poor states of these facilities make the cost of farming very high and this reduces the benefits derivable from the agric subsidies. Food security will continue to be a mirage until government starts living up to her responsibilities by paying more concern to the farmers.
5. The size of subsidies to a single beneficiary should be reasonable for the farmers to expand their farms so as to increase outputs.
6. Agric ministries/agencies including donor institutions should involve farmers in

- the policy formulation and put up measures to increase the awareness of agric subsidies to farmers.
7. There should be a more serious regulatory framework to checkmate activities of fraudulent officers who divert subsidies and make farmers to pay for free agric subsidies.
  8. For governments and donor agencies to have more cheap funds, there should be special fund created for the payment specified amount of tax by big companies.

### **Contribution to Knowledge**

This research has contributed to knowledge in various ways:

The research has contributed to knowledge by providing vital information on the need for agric subsidies to farmers which will help in attainment of food security in Nigeria. This will serve as guide to the governments in decision making and also to future researchers on the same or related topics. In the contribution to knowledge the researcher is recommending that a special fund like the TeTfund be created for the provision of subsidies to farmers.

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