

---

## MANAGEMENT OF AGRO-ALLIED PROGRAMMES AND ECONOMIC DEVELOPMENT IN AKWA IBOM STATE, NIGERIA

**Akpan E. I., Alfred J.M. Edema, Morgan, Morgan**

Department of Business Management, University of Calabar , Calabar - Nigeria

---

**ABSTRACT:** *The paper investigated how agro-allied programmes and economic development are managed in Akwa Ibom State, Nigeria. It explored the implications of three agro-allied programmes - coordination of farmers loan scheme; organizing of poultry and fish production scheme; and monitoring of fertilizer distribution scheme - on the economic development of the state, using dimensions of Gross Domestic Product (GDP), unemployment rate, and poverty rate. The paper adopted ex-post facto design using multiple regression models for testing the hypotheses formulated to determine the cause and effect relationship between the independent and dependent variables with the aid of Statistical Package for Social Science (SPSS) software version 20. It relied largely on secondary data extracted and compiled from the budget estimate on agro-allied programmes in Akwa Ibom State. Findings from the study revealed that coordination of farmers' loan scheme, organizing of poultry and fish production scheme and monitoring of fertilizer distribution scheme have significant positive effect on gross domestic product as well as unemployment rate in Akwa Ibom State. Thus, it was recommended that management of Akwa Ibom Agricultural Development Programme should ensure proper planning and coordination of farmers' loan scheme such that the loans get to the farmers; increase capacity building of farmers to ensure efficient utilization of the loans on agro-allied businesses necessary for economic development; and put in place appropriate monitoring mechanism to check corrupt practices in the fertilizer distribution scheme to ensure that fertilizers get to the farmers before planting season.*

**KEYWORDS:** management; agro-allied programmes; economic development

---

### BACKGROUND TO THE STUDY

Successive governments in recent decades have increasingly assigned agro-allied sector an ambitious role in their strategic planning frameworks. Virtually all the strategic development documents for both the states and the federal government on poverty alleviation and job creation in Nigeria have always had agro-allied programmes. Attempts to elevate agro-allied programmes to a center-role have been met with varying degrees of success and at most times, outright failure, due in part to the insincerity of the executors, poor management of agro-allied programmes, endemic corruption, incoherent and misguided government policies and politicizing essential agro-allied issues. The Nigerian political elites have been constantly reminded that job creation is in itself a fundamental issue and that unemployment is not only a threat to Nigeria's nascent democracy, but it could also trap millions of generations of Nigerian youths in a vicious circle of poverty (Mhlanga, 2016).

However, the rising unemployment and poverty rate in the face of dwindling fortunes of crude oil has continued to be of concern to successive administration in Nigeria and Akwa Ibom State in particular. This situation has lead to the establishment of the Akwa Ibom Agricultural Development Programme (AKADEP) with a clear policy mandate to institute agro-allied programmes aimed at reversing the

unemployment and poverty rates, diversify and improve the economic development of the State. Thus, among agro-allied programmes initiated by AKADEP are farmers loan scheme; poultry, livestock and fish production scheme; fertilizer distribution scheme; Akwa Ibom State food reserve programme; commercial agricultural development programme; farm tractors and implements scheme; seed development and distribution scheme; and Akwa Ibom State central abattoir and meat hygiene project. On the side of Akwa Ibom State government, millions of naira yearly have been budgeted and channeled to AKADEP through the State Ministry of Agriculture, which acts as the supervisory body to ensure the actualization of government's objectives. Unfortunately, despite the lofty objectives behind the establishment of AKADEP, several years after its commissioning, the targeted goals have not been achieved, as poverty and unemployment in the state is still on the rise. Also, the GDP and the State economy continue to depend to a large extent on oil and federal allocation (Ekaette, 2014).

Furthermore, there has been increasing concern from both the government and other stakeholders on the management of AKADEP's agro-allied programmes. Poor leadership, lack of adequate planning, organizing, coordination and monitoring mechanisms have been identified as some of the challenges militating against the achievement of AKADEP's objectives. Also, issues of corruption and political interference in the execution of AKADEP's agro-allied programmes have continued to generate interest. As indicated by Inyanga (2015), lack of basic management technique in the management of AKADEP has continued to undermine government effort towards enhancing economic development through agro-allied programmes in Akwa Ibom State. It is rather unfortunate that while some government agencies in developed nations are strategizing ways of managing agro-allied programmes to curb food importation and capital flight, create jobs and reduce poverty, others in developing countries, Nigeria and Akwa Ibom State, in particular, are continuing to undermine government efforts through poor management of their agencies.

### **Statement of the problem**

Poverty and unemployment are identical banes, which affect people in various depths and levels at different times and phases of existence. The extent of association between poverty and unemployment in developing countries like Nigeria is often a subject of considerable debate. Nigeria and Akwa Ibom State, in particular, is endowed with huge physical, human and natural resources, yet the majority of its populace live below both the absolute and relative poverty lines. The national survey of 2007 and 2008 show that slightly above half of the population (51.6 percent) live below US\$1 dollar per day and the relative national poverty incidence was found to be 54.4 percent (National Bureau of Statistics, 2008). However, about 64.4 and 83.7 percent of the population live below \$1.25 and \$2 a day, respectively with an unemployment rate at 18.80 percent (UNDP, 2015). This situation is worse in the rural areas where over 70 percent of the people reside and earn their living through small agro-allied businesses than in the urban areas. This invariably leaves agro-allied businesses as a critical sector capable of affecting the majority of Nigerians in diverse ways. Therefore, the continued increase in unemployment and poverty rates in Akwa Ibom State could be, to a large extent, the failure in the management of agro-allied programmes to fully impact positively on the people and economic development of the state.

The interventions by the Akwa Ibom State government through the establishment of AKADEP under the supervision of the Ministry of Agriculture to focus on agro-allied programmes, poverty, unemployment, Human Development Index (HDI) and GDP of the state remain observably low. The increasing poverty

and unemployment in Akwa Ibom State is partly indicative of the inefficacy and poor management of agro-allied programmes by AKADEP. Also, poor planning, organizing, corruption and government interference in the management of AKADEP have been identified as major challenges affecting the management of agro-allied programmes by AKADEP. Unfortunately, AKADEP's design to help in the management of agro-allied programmes is perceived to be poorly coordinated and managed, and as such, scarcely able to achieve the objective of facilitating the growth and development of small agro-allied businesses in the State. Specifically, AKADEP administration mechanisms used for managing agro-allied programmes are considered to be weak and non-responsive to the challenges of monitoring and controlling the distribution of loans and fertilizer to farmers. These lead to a situation where non-farmers benefit from the loans and fertilizers schemes. It is against this backdrop that the study is undertaken.

### **Objectives of the study**

The purpose of this paper is to investigate the impact of the management of agro-allied programmes on economic development in Akwa Ibom State, Nigeria. Specifically, the paper seeks to:

- i) Determine the extent to which coordination of farmers loan scheme; organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme affect unemployment rate in Akwa Ibom State.
- ii) Examine the extent to which coordination of farmers loan scheme; organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme affect poverty rate in Akwa Ibom State.
- iii) Investigate the extent to which coordination of farmers loan scheme; organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme affect GDP in Akwa Ibom State.

### **Research questions**

The following research questions were developed to guide this paper:

- i) To what extent does coordination of farmers' loan scheme, organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme affect unemployment rate in Akwa Ibom State?
- ii) To what extent does coordination of farmers' loan scheme, organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme affect poverty rate in Akwa Ibom State?
- iii) To what extent does coordination of farmers' loan scheme, organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme affect GDP of Akwa Ibom State?

### **Research hypotheses**

The following are hypotheses developed for this paper:

H<sub>01</sub>: Coordination of farmers' loan scheme, organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme do not have significant effect on unemployment rate in Akwa Ibom State.

H<sub>02</sub>: Coordination of farmers' loan scheme, organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme do not have significant effect on poverty rate in Akwa Ibom State.

H<sub>03</sub>: Coordination of farmers' loan scheme, organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme do not have significant effect on the GDP in Akwa Ibom State.

**Scope of the paper**

This paper focuses on the management of agro-allied programmes by Akwa Ibom Agricultural Development Programme (AKADEP) 2000 - 2017. The variables utilized in the paper were coordination of farmers' loan scheme; organising of poultry and fish production scheme; and monitoring of fertilizer distribution scheme. Economic development was evaluated in the dimension of GDP, unemployment and poverty rate.

**THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

The endogenous growth theory by Paul Romer, 1986 underpins the thinking of this paper. The endogenous growth is an economic theory which argues that economic growth is generated from within a system as a direct result of internal processes. More specifically, the theory notes that the enhancement of a nation's human capital will lead to economic growth through the development of new forms of technology and the efficient and effective management of the production of goods. The theory holds that investment in human capital, innovation, and knowledge is a significant contributor to economic development. The theory also argues on positive externalities and spillover effect of agro-allied businesses and a knowledge-based economy, which will lead to job creation, poverty reduction and enhanced economic development. The endogenous growth theory emphasizes that the long run growth rate of an economy depends on policy measures aimed at enhancing the entrepreneurial creativity of people, especially in the agro-allied sector to generate employment and ensure food security (Gordon, 2015).

The relevance of the theory to this paper is that right policies and proper management of programmes, particularly in the agro-allied sector could promote job creation, reduce poverty and enhance economic growth.

**Management of agro-allied programmes**

Agro-allied programmes are schemes designed to facilitate credit, ensure seeds, tractors and fertilizer distribution to farmers and build the capacity of economically active unemployed people (entrepreneurs) who are unable to access loans to engage in self-employment agro-allied schemes such as poultry, livestock or fish farming production or to finance other agro-allied businesses, in order to generate employment, reduce poverty and improve economic growth (Essien, 2016). This suggests that agro-allied programmes are credible means of empowering the youth, creating jobs and reducing poverty. Agro-allied programmes encourage unemployed youths (entrepreneurs) especially in Akwa Ibom State to seek opportunities, to initiate ideas, to create something new, with new techniques, bringing about new agricultural products that meet the taste and preferences of consumers and ensure food security (Ekaette, 2014).

However, Daniel (2013) observes that poor planning, coordinating, organizing and monitoring have continued to hamper a number of agro-allied programmes in Nigeria and especially in Akwa Ibom State. For instance, AKADEP, with its clear policy directive has failed to achieve its objectives of reducing poverty and creating employment as both poverty and unemployment remain uncontrollably high. This situation underscores the importance of management in enhancing the effectiveness of agro-allied programmes. Management is an activity that is performed in terms of carrying out specific functions to obtain or achieve effective acquisition, allocation, and utilization of human efforts and physical resources to accomplish predetermined goals (Daniel, 2013). Therefore, managing becomes essential to ensure the coordination of efforts and resources for the achievement of agro-allied programmes objectives.

According to Ekpodum (2016), management of AKADEP as well as the Ministry of Agriculture who supervises its activities is faced with a number of challenges in managing the state agro-allied programmes. Such challenges according to him include endemic corruption, lack of organizing, coordination, and proper monitoring mechanism. Others include political interference, poor planning, and documentation, etc. These issues instigate the importance of effective management in the execution of agro-allied programmes in Akwa Ibom State.

Similarly, Johnson (2015) carried out a study on the effect of agro-allied schemes and economic growth in Ondo State, Nigeria. The primary purpose of the study was to examine the influence of loan to farmers and fertilizer distribution on economic growth and food security in Ondo State. The study adopted the survey research design, and the population of the study was 5000 farmers randomly selected from Ondo agro-allied scheme. Data for the study was collected mainly from primary source using questionnaire instrument. Ordinary least squares regression analysis was used in data analysis and test of hypotheses. Based on the test of hypotheses, the study found that loan to farmers and proper fertilizer distribution significantly affected economic growth and food security in Ondo State. The study concluded that agro-allied schemes play an essential role in economic growth and ensure food security.

Also, Ayodele (2016) carried out a study on the effects of monitoring on fertilizer distribution scheme and performance of farmers in Ogun State, Nigeria. The study adopted the survey research design. The sampling technique adopted for the study was the simple random techniques. Hat and draw (balloting) method were employed in selecting 100 farmers in Ogun state for the study. Data for the study was collected mainly from primary source using questionnaire instrument and Pearson moment correlation analysis was used in data analysis and test of hypotheses. Based on the analysis the study revealed that there was a significant relationship between effective monitoring of fertilizer distribution scheme and farmers performance in Ogun State. The study concluded that proper monitoring plays a critical role in fertilizer distribution and ensures that fertilizer gets to farmers, which enhanced their productivity.

### **Coordination of farmers' loan scheme**

Farmers' loan scheme is a programme designed to ensure access to credit facilities for farmers and other agro-allied entrepreneurs to improve their businesses (Jackson 2015). Proper coordination plays a vital role in ensuring that the right farmers access the loan. Coordination is a process of ensuring proper arrangement and organizing of activities to achieve desired goals (Asogwa, & Anah, 2017). However, proper coordination of farmers' loan scheme provides opportunities for stimulation of agro-allied activities by ensuring that the loans get to the farmers and serve as a driver of growth of agro-allied businesses for employment generation. According to Ashraf (2015), farmers' loan scheme enhances agro-allied businesses, and helps to bring down the rate of poverty through greater job creation and as well ensures food security. However, several government initiatives on agro-allied programmes in Nigeria and Akwa Ibom State in particular have been hindered by poor coordination and endemic corruption (Inyanga 2015). Corruption has continued to be a bane in Nigeria's agricultural development and this situation has led to unavoidable poverty and increased unemployment in the country (Essien, 2016). For instance AKADEP has been accused of several corruption cases in its execution of agro-allied programmes and this situation has continued to hinder the actualization of its objectives.



Mortimore and Ariyo (2006) opined that the level of corruption in Nigeria have gone beyond mere corruption but leaning more on the side of insanity on the part of eminently corrupt Nigerians, and has become a major precipitator of the unavoidable development gaps experienced by the nation, especially through the endemic agricultural budget deficit. No amount of developing finance flow would make any positive impact on the Nigerian economy, unless and until the problem of economic corruption was effectively contained (Ashraf, 2015).

However, Jackson (2015) carried out a study on the effect of corruption in agricultural loans scheme on the performance of farmers in Edo State. The main purpose of their study was to examine the effect of corruption in seed distribution and performance of farmers in Edo State. The study adopted the survey research design and the population of the study was 120 farmers randomly selected from the three senatorial districts in Edo State. Data for the study was collected mainly from primary source using questionnaire instrument. Simple linear regression analysis was used in data analysis and test of hypotheses. Based on the result of the analysis, the study concluded that corruption in loan scheme and seed distributions have significant negative effect on the performance of farmers in Edo State.

Furthermore, Umar (2016) carried out a study on the impact of corruption on the management of integrated loan scheme for rice farmers in Kebbi State, Nigeria. Survey research design was adopted for the study and the population of the study was 1,300 rice farmers randomly selected from 10 rice corporative societies in Kebbi. Taro Yamane formula was used to determine a sample size of 235 farmers for the study and the Cronbach's alpha coefficient reliability technique was used in establishing the reliability estimate of the research instrument, which indicated reliability range of 0.70-0.92 in sub-variables and was considered reliable for data collection for the study. Data for the study was collected mainly from primary sources using questionnaire instrument, interviews and observations. Ordinary least square regression technique was used in data analysis and test of hypotheses. Based on the test of hypotheses, the study found that corruption negatively impact on the management of integrated loan scheme for rice farmers in Kebbi State and this lead to low rice production in the state.

### **Organizing of poultry and fish production scheme**

Poultry and fish production scheme are major agro-allied programmes aimed at reducing poverty and create employment as well as increase GDP of a state. Poultry and fish production play a vital role in ensuring food security and enhance foreign earnings through exportation of poultry and fish products. This activity calls for organizing. Organizing is a process of allocating task and establishing relationship patterns to ensure a smooth running of a programme (Nwakanma, 2012). However, studies have shown that the problem of organizing, hence, poor capacity utilization of poultry and fish farmers is attributed to poor management of agencies, which oversee these schemes in Nigeria (Fadumila, 2017). Without proper organizing, (Inyanga 2015) there is high tendency of failure of poultry and fish production scheme as this situation could expose the scheme to undue political interference which may jeopardize the scheme.

Furthermore, Obaadia (2014) indicated that if undue political interference is not checked and reduced in the running of agricultural programmes, it may lead to food crisis in Nigeria. Also, high unemployment rate and poverty in the face of several agro-allied interventions are an indication that politicians who either directly manage these schemes or interfere with them due to their influence and connection have negatively affected agro-allied programmes in Nigeria and Akwa Ibom State in particular.

A study carried out by Jameson (2010) on the relationship between political influence in agricultural management and performance of farmers in Akwa Ibom, found that undue political influence led to high level of corruption, mismanagement and wastage of resources in the management of agricultural programmes in the state. This situation lead to the sorry state of agriculture, increasing unemployment and poverty in the state despite huge budgetary allocations aimed at reversing this negative trend.

Similarly, Ata-Udo (2015) carried out a study on the effect of organizing on livestock and fish production scheme in Akwa Ibom State. The study adopted the survey research design. The population of the study was 730 employees randomly selected from five state agencies in Akwa Ibom State. Data for the study was collected mainly from primary source using questionnaire instrument and ordinary least square regression analysis was used in data analysis and test of hypotheses. Based on the test of hypotheses, the study found that proper organizing has significant positive effect on livestock and fish production scheme. Also, Daniel (2013) in his study on the effect of poultry, livestock and fish production programmes on the performance of farmers in Akwa Ibom State, found that poultry, livestock and fish production have significant influence on the performance of farmers and lead to poverty reduction and job creation.

### **Monitoring of fertilizer distribution scheme**

Monitoring is the systematic process of collecting, analyzing and using information to track programme's progress in order to achieve its objectives and to guide management decisions. Monitoring usually focuses on processes, such as when and where activities occur, who delivers them and how many people or entities they reach (Umar, 2016). Monitoring is conducted after a programme has begun and continued throughout the programme's implementation period. Monitoring is a continuing function that uses a systematic collection of data on specific indicators to provide the management and the main stakeholders of an ongoing intervention with indications of the extent of achievement of objectives and progress in the use of allocated funds. Monitoring is a regular part of project or programme management. It focuses on the implementation of the project, comparing what is delivered with what was planned (Fadumila, 2017). According to Jackson (2015), monitoring plays a vital role in fertilizer distribution schemes by ensuring that the fertilizer gets to target farmers, which helps strengthen their yield and provides improved production. Where there is lack of proper monitoring mechanism, fertilizer distribution scheme is bound to suffer as some sharp practices may strife and this situation may negatively affect the productivity of farmers and may lead to increase in poverty. For instance, AKADEP for sometimes was accused of lack of proper monitoring mechanism in the distribution of fertilizer under its agro-allied programmes. This situation has lead to diversion of fertilizer by corrupt officials of the agency which have a direct implication on farmers output, poverty and unemployment rate (Essien, 2016).

As indicated by Bronson (2016), monitoring is a systematic, timely and purposeful observation and data collection to check if programmes activities are being implemented as planned. Monitoring is important because it provides the only consolidated source of information showcasing programmes' progress. By monitoring progress against defined goals, a fertilizer distributor or administrator can assess what is working and what is not, and from there can be determined what changes should be made to the programmes.

Monitoring is very critical for building a strong fertilizer distribution network between farmers and government agency (Bronson, 2016). This is because monitoring helps to track implementation and

outputs systematically, and measure the effectiveness of programmes. It helps determine exactly when a programme is on track and when changes may be needed and form the basis for modification of interventions and assessing the quality of activities being conducted. Thus, monitoring can be used to demonstrate that programme efforts have had a measurable impact on expected outcomes and have been implemented effectively. It is essential in helping managers, planners, implementers, policy makers and donors acquire the information and understanding they need to make informed decisions about programme operations (Essien, 2016).

Thus, study by Donaldson and McDavid (2015) on the effect of monitoring and evaluation and the performance of fertilizer distribution in Thailand found that proper monitoring and evaluation enhanced effective distribution and reduced corrupt practices. Again Cynthia and Nora (2014) had a study on the relationship between monitoring and the performance of agricultural programmes in Kenya. The study adopted the survey research design. The population of the study was 523, and a simple random technique was used in selecting a sample of 170. Data for the study was collected mainly from primary source using a questionnaire instrument. Chi-square statistical technique was used in data analysis and test of hypotheses. The study found that there was a significant relationship between monitoring and the performance of agricultural programmes in Kenya.

### **Economic development**

Economic development is the process by which a nation improves the economic, political, and social well-being of its people. It is the expansion of capacities that contribute to the advancement of society through the realization of potential for individuals, firms and communities (Jackson, 2015). Economic development is measured by a sustained increase in prosperity and quality of life, employment rate, GDP, innovation and the utilization of capabilities towards the responsible production and diffusion of goods and services. Economic development requires effective institutions grounded in norms of openness, tolerance for risk, appreciation for diversity, and confidence in the realization of mutual gain for the public and the private sector. Economic development is essential to creating the conditions for economic growth and ensuring economic future of a nation or State.

According to Njoku and Ihugba (2011), economic development is a concerted effort on the part of the State to influence the direction of private sector investment toward opportunities that can lead to sustained economic growth and employment generation. Sustained economic growth can provide sufficient incomes for the local labour force, profitable business opportunities for employers and tax revenues for maintaining an infrastructure to support this continued growth. There is no alternative to private sector investment as the engine for economic growth, but there are many initiatives that a state can support to encourage investments where the community feels they are needed the most.

As indicated by Mhlanga (2016), economic development being a multivariate concept and having many dimensions, there is no single measure of development that completely captures the process. Clearly, these indicators or measures of development should be valid and amenable to measurement and comparison. Per capita, income and GDP have been the earliest and also the popular measure of economic development. Some economists have emphasized certain social indicators as a measure of development such as levels of literacy, health, and employment, while others have emphasized on reduction in poverty as an important indicator of development. It has now become a common practice to measure development



in terms of composite indices such as the Human Development Index (HDI) and the Human Poverty Index (HPI) etc. Some of the measures of economic development used in this paper are gross domestic product, unemployment and poverty rate.

### **Unemployment rate**

Unemployment occurs when a person who is actively searching for employment is unable to find work. Unemployment is often used as a measure of the health of the economy. The most frequent measure of unemployment is the unemployment rate. The unemployment rate is a measure of the prevalence of individuals who do not have gainful economic job, and it is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in the labour force (Patterson, 2015). Unemployment is one of the developmental problems currently facing all developing economies of the world and Nigeria is not an exception. It is the consequence of the surplus of labour supply over labour demand. The higher the unemployment rate in an economy the higher would be the poverty level and associated welfare challenges. Though unemployment occurs to people of all categories, its effect has bitten hard on the youth in Nigeria and Akwa Ibom State in particular.

According to Patterson (2015), there are several kinds of unemployment which include; cyclical unemployment, which occurs when the economy enters a recession or as a result of general fall in the number of goods demanded. Structural unemployment, which occurs when there is a mismatch between the number of people who want to work and the number of jobs that are available. The frictional unemployment occurs as a result of advancement in technology where workers are replaced with machines in the process of production etc. Though unemployment is a global challenge, it is worse in developing countries of the world, Nigeria inclusive with its attendant social, economic, political, and psychological consequences. It contributes to low GDP and leads to an increase in crime and violence, psychological effect, adverse effect on health and political instability (Njoku & Ihugba, 2011). This situation calls for a concerted effort in developing agro-allied programmes aimed at reversing the negative unemployment rate and reduce poverty.

### **Poverty rate**

A concise and universally accepted definition of poverty is elusive largely because it affects many aspects of the human conditions, including physical, moral and psychological. Different criteria have, therefore, been used to conceptualize poverty. Most analyses follow the conventional view of poverty as a result of insufficient income for securing basic goods and services. Others view poverty, in part, as a function of education, health, life expectancy, child mortality, etc. Blicher (2015) identifies the poor, using the criteria of the levels of consumption and expenditure. Other experts see poverty in very broad terms, such as being unable to meet basic needs. As indicated by World Bank (2010) poverty is a situation where an individual lives below one dollar per day and two dollars per-household.

According to Donaldson and McDavid (2015), poverty is a state or condition in which a person or community lacks the financial resources and essentials for a minimum standard of living. It is the scarcity or the lack of certain (variant) amount of material possessions or money. Poverty is a multifaceted concept, which may include social, economic and political elements. Absolute/extreme poverty or destitution refers to the complete lack of the means necessary to meet basic personal needs such as food, clothing, and shelter. However, in recent times there are increasing concerns about poverty reduction in Nigeria. This

has led to a situation where Federal, States and Local Government areas continued to develop agro-allied programmes aimed at combating poverty and creating employment opportunities for the youth. However, some of these programmes have been challenged by issues such as endemic corruption, political interference, and poor management. Therefore, there is a need for effective management of agro-allied programmes to ensure job creation, reduce poverty and improve the general economic condition of the society (Jackson, 2015).

### **Gross domestic product (GDP)**

Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific period. Though GDP is usually calculated on an annual basis, it can be calculated on a quarterly basis as well. GDP includes all private and public consumption, government outlays, investments, private inventories, paid-in construction costs and the foreign balance of trade. Put simply, GDP is a broad measurement of a nation's or a state's overall economic activities (Ogunibeg, 2015).

However, GDP is commonly used as an indicator of the economic health of a country or state, as well as a gauge of a nation's standard of living. Since the mode of measuring GDP is uniform from country to country, GDP can be used to compare the productivity of various nation /state with a high degree of accuracy. Adjusting for inflation from year to year allows for the seamless comparison of current GDP measurements with measurements from previous years or quarters. In this way, a nation's GDP from any period can be measured as a percentage relative to previous periods. GDP can be tracked over long spans of time and used in measuring a nation's economic growth or decline, as well as in determining if an economy is in recession. According to Jameson (2010), there are three primary methods by which GDP can be determined in a nation or state. All, when correctly calculated, should yield the same figure. These three approaches are often termed the expenditure approach, the output (or production) approach and the income approach. Providing a quantitative figure for GDP helps a government make decisions such as whether to stimulate a stagnant economy by pumping money into it or, conversely, to slow down an economy that is getting over-heated.

### **RESEARCH METHODOLOGY**

The paper adopted ex-post facto design using multiple regression models for testing the hypotheses formulated to determine the cause and effect relationship between the independent and dependent variables. It relied largely on secondary data extracted and compiled from the budget estimate on agro-allied programmes in Akwa Ibom State (2000 - 2017) by AKADEP and trends in annual GDP, unemployment and poverty rate (2000-2017), among others; given the following:

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots (i)$$

$$\text{Where } \beta_1, \beta_2, \dots, \beta_3 \text{ are regression coefficients} \dots\dots\dots (ii)$$

$$Y = ED = f(\text{MAP}) \dots\dots\dots (iii)$$

Where MAP symbolize management of agro-allied programmes which is evaluated by Coordination of Farmers Loan Scheme (CFLS); Organising of Poultry and Fish Production Scheme (OPFPS) and Monitoring of Fertilizer Distribution Scheme (MFDS) while ED symbolizes economic development which is measured in terms of Gross Domestic Product (GDP); Unemployment rate (UR) and Poverty rate (PR). Therefore, in linear form we have:

$$ED = \beta_0 + \beta_1 CFLS + \beta_2 OPFPS + \beta_3 MFDS + \varepsilon \dots\dots\dots (iv)$$

Where

ED = (UR, PR and GDP,)

OPFPS<sub>1</sub> = Organising of Poultry and Fish Production Scheme

MFDS<sub>2</sub> = Monitoring in Fertilizer Distribution Scheme

CFLS<sub>3</sub> = Coordination of Farmers Loan Scheme

$\varepsilon$  = Error term.

$\beta_0$  = Regression parameter estimates

$\alpha$  = Alpha level

Sub-model

UR =  $f(CFLS, OPFPS, MFDS)$ ;

UR =  $\alpha + \beta_0 + \beta_1 CFLS + \beta_2 OPFPS + \beta_3 MFDS + \varepsilon \dots\dots\dots (v)$

PR =  $f(CFLS, OPFPS, MFDS)$ ;

PR =  $\alpha + \beta_0 + \beta_1 CFLS + \beta_2 OPFPS + \beta_3 MFDS + \varepsilon \dots\dots\dots (vi)$

GDP =  $f(CFLS, OPFPS, MFDS)$ ;

GDP =  $\alpha + \beta_0 + \beta_1 CFLS + \beta_2 OPFPS + \beta_3 MFDS + \varepsilon \dots\dots\dots (vii)$

### 8.1. Data analysis and test of hypotheses

Hypothesis one

H<sub>01</sub>: Management of agro-allied programmes (farmers' loan scheme; poultry and fish production scheme and fertilizer distribution scheme) does not have significant effect on unemployment rate in Akwa Ibom State.

Table 1 shows multiple regression result of effects of three variables of management of agro-allied programmes (Coordination of Farmers Loan Scheme (CFLS); Organizing of Poultry and Fish Production Scheme (OPFPS); and Monitoring of Fertilizer Distribution Scheme (MFDS)) on the unemployment rate (UR). The analysis indicates that coordination of farmers loan scheme has a significant positive effect on UR with a coefficient value of 0.318 at  $t=1.582$  ( $p=.000$ ); organizing of poultry and fish production scheme have significant positive effect on UR with a coefficient value of 0.564 at  $t=.937$  ( $p=.001$ ); while monitoring of fertilizer distribution scheme does not have a significant effect on UR with a coefficient value of 0.656 at  $t=.866$  ( $p=.011$ ). From the results, it is evident that both the CFLS and OPFPS have a higher than proportionate change on UR, and was found to be statistically significant at 000 and 001 percent level of significance, while MFDS was statistically insignificant and have no effect on the dependent variable as a significant value of 011 was higher than  $p<0.05$  level of significance.

The coefficient of multiple determinants R square of .253 and adjusted R<sup>2</sup> value of .251 showed that the regressands were able to explain 25.1 percent variations in UR while the remaining 74.9 percent was not explained by the model. The result of the coefficient was as follows; 0.318, 0.564 and 0.656 for CFLS, OPFPS, and MFDS respectively. The result indicates that a percentage increase in CFLS, OPFPS, and MFDS will lead to a proportionate increase of 0.318, 0.564 and 0.656 percent respectively in economic development as indicated by UR. However, MFDS is found to have an adverse effect on UR, indicating that a percentage increase in MFDS will lead to 0.656 percent decrease in UR.

The overall significance of the model as indicated in the ANOVA F-statistic reveals a value of 1.577 which is found to be statistically significant at  $P < 0.05$  ( $P = 0.000$ ), thus ascertaining the validity of the model. The DW statistic which is a measure of autocorrelation has a value of 2.574 which shows that the model is free from positive or negative autocorrelation. Based on this result the null hypothesis  $H_0$  was rejected and the alternative  $H_1$  accepted. This implies that coordination of farmers' loan scheme and organizing of poultry and fish production scheme have a significant positive effect on unemployment rate while monitoring of fertilizer distribution scheme was statistically insignificant on the unemployment rate.

TABLE 1: Regression result of management of agro-allied programmes and unemployment rate

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.256	3.366		2.453	.001
	CFLS	.318	.833	.403	1.582	.000
	OPFPS	.564	.602	.232	.937	.001
	MFDS	.656	.757	.228	.866	.011
ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.904	3	3.635	1.577	.000 <sup>b</sup>
	Residual	32.256	14	2.304		
	Total	43.160	17			
Model Summary <sup>b</sup>						
Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson	
1	.503 <sup>a</sup>	.253	.251	1.10012	2.574	

a. Predictors: (Constant), MFDS, OPFPS, CFLS

b. Dependent Variable: UR

@ $P < 0.05$

Source: SPSS output (2019)

## Hypothesis two

Ho<sub>2</sub>: Management of agro-allied programmes (farmers' loan scheme; poultry and fish production scheme and fertilizer distribution scheme) does not have significant effect on poverty rate in Akwa Ibom State.

TABLE 2: Regression result of Management of agro-allied programmes and poverty rate

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error			
1	(Constant)	40.050	6.834		5.861	.000
	CFLS	.410	1.691	.068	.243	.002
	OPFPS	.463	1.221	.103	.379	.001
	MFDS	1.614	1.538	.303	1.050	.002

ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	15.736	3	5.245	.552	.002 <sup>b</sup>
	Residual	132.956	14	9.497		
	Total	148.691	17			

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson
1	.325 <sup>a</sup>	.206	.204	1.08169	2.022

a. Predictors: (Constant), MFDS, OPFPS, CFLS

b. Dependent Variable: PR

@P<0.05

Source: SPSS output (2019)

Table 2 shows multiple regression result of effects of three variables of management of agro-allied programmes (Coordination of Farmers' Loan Scheme (CFLS); Organizing of Poultry and Fish Production Scheme (OPFPS); and Monitoring of Fertilizer Distribution Scheme (MFDS)) on Poverty Rate (PR). The analysis indicated that coordination of farmers loan scheme has a significant positive effect on the poverty rate with a coefficient value of 0.410 at  $t=.243$  ( $p=.002$ ); organizing of poultry and fish production scheme have a significant positive effect on poverty rate with a coefficient value of 0.463 at  $t=.379$  ( $p=.001$ ); and monitoring of fertilizer distribution scheme have significant effect on poverty rate with a coefficient value of 1.614 at  $t= 1.050$  ( $p=.002$ ). From the results, it is evident that CFLS, OPFPS, and MFDS all have a statistically significant effect on poverty rate as a significant p-value of .002, .001 and .002 respectively are all less than  $p<0.05$  level of significance.

The coefficient of multiple determinants R square of .206 and adjusted R<sup>2</sup> value of .204 showed that the regressands were able to explain 20.4 percent variations in poverty rate while the remaining 79.6 percent was not explained by the model. The results of the coefficient are as follows: 0.410, 0.463 and 1.614 for CFLS, OPFPS, and MFDS respectively. The results indicate that a percentage increase in CFLS, OPFPS,



and MFDS will lead to a proportionate increase of 0.410, 0.463 and 1.614 percent respectively in economic development as indicated by the poverty rate.

The overall significance of the model as indicated in the ANOVA F-statistic revealed a value of .552 which is found to be statistically significant at  $P < 0.05$  ( $P = 0.002$ ), thus ascertaining the validity of the model. The DW statistic which is a measure of autocorrelation has a value of 2.022 which shows that the model is free from positive or negative autocorrelation. Based on this result the null hypothesis  $H_0$  was rejected, and the alternative  $H_1$  accepted. This implies that coordination of farmers' loan scheme, organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme all have a significant positive effect on poverty reduction.

Hypothesis three

$H_{03}$ : Management of agro-allied programmes (farmers' loan scheme; poultry and fish production scheme and fertilizer distribution scheme) does not have significant effect on the GDP in Akwa Ibom State.

TABLE 3: Regression result of management of agro-allied programmes and GDP

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.508	1.584		4.739	.000
	CFLS	.129	.392	.093	.329	.001
	OPFPS	.167	.283	.163	.589	.001
	MFDS	.350	.356	.289	.981	.042
Anova <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.535	3	.178	.349	.001 <sup>b</sup>
	Residual	7.145	14	.510		
	Total	7.680	17			
Model Summary <sup>b</sup>						
Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson	
1	.264 <sup>a</sup>	.170	.168	.1441	2.107	

a. Predictors: (Constant), MFDS, OPFPS, CFLS

b. Dependent Variable: GDP

@ $P < 0.05$

Source: SPSS output (2019)

Table 3 shows multiple regression result of effects of three variables of management of agro-allied programmes (Coordination of Farmers Loan Scheme (CFLS); Organizing of Poultry and Fish Production Scheme (OPFPS); and Monitoring of Fertilizer Distribution Scheme (MFDS)) on Gross Domestic Product (GDP). The analysis indicates that coordination of farmers loan scheme has a significant positive effect on GDP with a coefficient value of 0.129 at  $t = .329$  ( $p = .001$ ); organizing of poultry and fish production scheme have a significant positive effect on GDP with a coefficient value of 0.167 at  $t = .589$  ( $p = .001$ ); while monitoring of fertilizer distribution scheme does not have a significant effect on GDP with a

coefficient value of 0.350 at  $t = .981$  ( $p = .042$ ). From the results, it is evident that both the CFLS and OPFPS have a greater than proportionate change on GDP, and was found to be statistically significant at 1 percent level of significance, while MFDS is statistically insignificant and has no effect on the GDP as significant value of 0.042 is higher than  $p < 0.05$  level of significance.

The coefficient of multiple determinants R square of 0.170 and the adjusted R<sup>2</sup> value of .168 shows that the regressands are able to explain 16.8 percent variations in GDP while the model did not explain the remaining 83.2 percent. The results of the coefficient are as follows; 0.129, 0.167 and 0.350 for CFLS, OPFPS, and MFDS respectively. The results indicated that a percentage increase in CFLS, OPFPS, and MFDS would lead to a proportionate increase of 0.129, 0.167 and 0.350 percent respectively in economic development as indicated by GDP. However, MFDS is found to have an adverse effect on GDP, suggesting that a percentage increase in MFDS will lead to 0.350 percent decrease in GDP.

The overall significance of the model carried out through the ANOVA F-test showed a value of .349 which was found to be statistically significant at  $P < 0.05$  ( $P = 0.001$ ), thus ascertaining the validity of the model. The DW statistic which is a measure of autocorrelation has a value of 2.107 which shows that the model is free from positive or negative autocorrelation. Based on this result the null hypotheses  $H_0$  was rejected while the alternative  $H_1$  is accepted. This implies that coordination of farmers' loan scheme and organizing of poultry and fish production scheme have a significant positive effect on GDP while monitoring of fertilizer distribution scheme was statistically insignificant on GDP.

## DISCUSSION OF FINDINGS

The test of hypotheses was done using multiple regression analysis to determine the cause and effect relationship between the variables of the paper. Based on the test of hypothesis one, the paper reveals that coordination of farmers loan scheme has a significant positive effect on the unemployment rate with a coefficient value of 0.318 at  $t = 1.582$  ( $p = .000$ ); organizing of poultry and fish production scheme have significant positive effect on UR with a coefficient value of 0.564 at  $t = .937$  ( $p = .001$ ) while monitoring of fertilizer distribution scheme does not have a significant effect on the unemployment rate with a coefficient value of 0.656 at  $t = .866$  ( $p = .011$ ). The coefficient of multiple determinants R square of .253 and adjusted R<sup>2</sup> value of .251 show that the regressands were able to explain 25.1 percent variations in unemployment rate while the remaining 74.9 percent was not explained by the model. The low percentage contribution of the regressands variables (25.1) could be attributed to the perceived challenges in the management of agro-allied programmes in Akwa Ibom State. The overall significance of the model as indicated in the ANOVA F-statistic revealed a value of 1.577 which is found to be statistically significant at  $P < 0.05$  ( $P = 0.000$ ), this implies that coordination of farmers loan scheme, organizing of poultry and fish production scheme and monitoring of fertilizer distribution scheme have significant positive effect on the unemployment rate. This finding is in consonance with the findings of Cuaresma (2016) who opines that proper management of agricultural programmes has a significant positive impact on food security and job creation through agro-allied businesses.

Also, the test of hypothesis two reveals that coordination of farmers loan scheme has a significant positive effect on the poverty rate with a coefficient value of 0.410 at  $t = .243$  ( $p = .002$ ); organizing of poultry and fish production scheme have a significant positive effect on the poverty rate with a coefficient value of

0.463 at  $t=3.79$  ( $p=.001$ ) and monitoring of fertilizer distribution scheme have significant effect on poverty rate with a coefficient value of 1.614 at  $t=1.050$  ( $p=.002$ ). The coefficient of multiple determinants R square of .206 and adjusted  $R^2$  value of .204 showed that the regressands were able to explain 20.4 percent variations in poverty rate while the remaining 79.6 percent was not explained by the model. The low percentage (20.4) contribution of coordination of farmers loan scheme; organizing of poultry and fish production scheme; and monitoring of fertilizer distribution scheme to poverty reduction could be attributed to the perceived challenges in the management of agro-allied programmes which borders on issues of poor monitoring of fertilizer distribution to ensure that fertilizer get to farmers. The overall significance of the model as indicated in the ANOVA F-statistic revealed a value of .552 which is found to be statistically significant at  $P<0.05$  ( $P=.002$ ), this implies that management of agro-allied programmes (coordination of farmers loan scheme, organising of poultry and fish production scheme and monitoring of fertilizer distribution scheme) have significant positive effect on poverty rate. This finding is in tandem with the findings of Hapia (2015) who found that there is a significant positive relationship between effective coordination of agro-allied programmes and poverty reduction and food security.

Furthermore, test of hypothesis three indicates that coordination of farmers loan scheme has a significant positive effect on GDP with a coefficient value of 0.129 at  $t=.329$  ( $p=.001$ ); organizing of poultry and fish production scheme have a significant positive effect on GDP with a coefficient value of 0.167 at  $t=.589$  ( $p=.001$ ); while monitoring of fertilizer distribution scheme does not have a significant effect on GDP with a coefficient value of 0.350 at  $t=.981$  ( $p=.042$ ). The coefficient of multiple determinants R square of 0.170 and the adjusted  $R^2$  value of .168 showed that the regressands were able to explain only 16.8 percent variations in GDP while the remaining 83.2 percent was not explained by the model. The low percentage contribution of coordination of farmers loan scheme; organizing of poultry and fish production scheme and monitoring of fertilizer distribution scheme to GDP could be attributed to the perceived challenges in the management of agro-allied programmes which borders on issues of poor coordination, low capacity building of farmers and undue political interference. The overall significance of the model carried out through the ANOVA F-test showed a value of .349 which was found to be statistically significant at  $P<0.05$  ( $P=.001$ ), this implies that coordination of farmers loan scheme, organizing of poultry and fish production scheme and monitoring of fertilizer distribution scheme have significant positive effect on gross domestic product. This finding supports the argument of Ogunibeg (2015) that agro-allied businesses in poultry, livestock, and fish production have a significant positive effect on GDP, increase employment opportunity and reduce poverty while also ensuring food security.

## CONCLUSION

It is pertinent to conclude that effective management of agro-allied programmes plays a vital role in job creation, poverty reduction and the overall economic development of Akwa Ibom State. Effective planning and coordination of farmers loan scheme, proper organizing of poultry and fish production scheme would to a large extent, enhance job creation, poverty reduction and contribute to GDP of Akwa Ibom State, while reducing issues of corruption and undue political interference in the scheme will help achievement of its objectives. Similarly, proper monitoring of fertilizer distribution scheme would ensure that fertilizer gets to the right farmers before the planting season while also eradicating sharp practices in the scheme. However, adequate funding and effective utilization of budgeted funds could improve the potential of agro-allied programmes in enhancing economic development in the State.

## Recommendations

Based on the findings of the paper the following recommendations are made:

1. The management of AKADEP should ensure proper planning and coordination of farmers' loan scheme to ensure that the loans get to the farmers. Also, effort should be channelled towards increasing capacity building of farmers to ensure efficient utilization of the loans on agro-allied businesses to contribute to economic development in Akwa Ibom State.
2. The management of AKADEP should ensure proper organizing and training of agro-allied entrepreneurs on poultry and fish production to enhance their capacity. Also, there is a need to ensure the availability of required infrastructures and vaccinations to improve the productivity of agro-allied businesses so as to create more jobs in the State.
3. The management of AKADEP should put in place adequate monitoring mechanism to check corrupt practices in the fertilizer distribution scheme and ensure that fertilizer gets to the farmers before their planting season.

## REFERENCES

- Ashraf, E. (2015). Influence of control and monitoring in the management of agricultural programmes and farmers productivity in Cyprus. *European Journal of Economics and Sustainable Development*, 5(3), 201-204.
- Akwa Ibom Agricultural Development Programme (2017). *Budget estimate on agro-allied programmes 2000-2017*. Uyo: Akwa Ibom Agricultural Development Programme.
- Asogwa, E., & Anah, S. (2017). Impact of entrepreneurship development on economic growth of Enugu State: A study of registered entrepreneurs in Enugu State, Nigeria. *International Journal of Economics, Business and Management Research*, 1(2), 171-182.
- Ata-Udo, I. (2015). Effect of organizing on livestock and fish production scheme in Akwa Ibom State. *International Journal of African and Asian Studies*, 3(8), 67-78.
- Ayodele, O. (2016). The effects of monitoring in fertilizer distribution scheme and performance of farmers in Ogun State, Nigeria. *European Journal of Business and Management*, 6(28), 101-114.
- Bronson, B. (2016). *Agricultural management: Concept and application*. Boston: Allyn and Bacon.
- Blicker, O. (2015). *Issues in the management of agro-allied businesses*. Pretoria: Tutu Books Publication.
- Bureau of Statistic (2008). *Trends in annual GDP, unemployment and poverty rate*. Uyo: Bureau of Statistic Bulletin.
- Cuaresma, E. (2016). The impact of coordination of agricultural programmes on food security and unemployment in Kenya Tea Industry. *International Multidisciplinary Journal*, 7(1), 281-292.
- Cynthia, E., & Nora, S. (2014). The relationship between monitoring on the performance of agricultural programmes in Kenya. *Journal of Humanities and Social Science*, 3(7), 71-93.
- Daniel, B. (2013). Effect of poultry, livestock and fish production programmes on the performance of farmers in Akwa Ibom State. *Bowen Journal of Agriculture*, 2(2), 51-73.
- Donaldson, S., & McDavid, A. (2015). The effect of monitoring and evaluation and the performance of fertilizer distribution in Thailand. *American Journal of Agricultural Economics*, 8(6), 133-148.
- Ekaette, U. E. (2014). Food security in rural communities: An assessment of the effectiveness of government intervention in Eket and Onna local government areas of Akwa Ibom State, Nigeria (1989-2010). *British Journal of Education*, 2(4), 31-49.

- Ekpodum, A. (2016). *Agro-allied sector and challenges of youth unemployment in Nigeria*. Uyo: University of Uyo Press.
- Essien, O. (2016). *Funding a panacea for agro-allied sector growth in Nigeria*. Uyo: Ministry of Agriculture.
- Fadumila, S. (2017). Youth unemployment in Nigeria: A time for creative intervention through agro-allied programmes. *International Journal of Business and Marketing*, 1(4), 362-381.
- Gordon, S. (2015). *Agricultural mechanization in Sub-Saharan Africa*. London: McGraw Hill.
- Hapia, A. (2015). The relationship between agro-allied programmes and poverty reduction and food security in Ghana. *Journal of Emerging trends in Economics and Management Sciences*, 2(6), 504-510.
- Inyanga, E. (2015). *Entrepreneurship programmes for rural poverty reduction*. Port Harcourt: De-Caritas Publishers.
- Jackson, O. (2015). Effect of corruption in agricultural loans scheme on the performance of farmers in Edo State. *European Scientific Journal*, 22(6), 441-457.
- Jameson, P. (2010). The relationship between political influence in agricultural management and performance of farmers in Akwa Ibom. *African Journal of General Agriculture*, 2(1), 51-67.
- Johnson, T. (2015). The effect of agro-allied schemes and economic growth in Ondo State, Nigeria. *Journal of Management Science*, 4(3), 242-253.
- Mhlanga, N. (2016). *Private sector agribusiness investment in Africa*. Retrieved from [www.fao.org/agribusiness](http://www.fao.org/agribusiness).
- Mortimore, M., & Ariyo, A. (2006). *Land deals and commercial agriculture in Nigeria: The new Nigerian farms in Shonga District, Kwara State*. Proceedings of International Conference of Global Land Grabbing, Sussex, 6-8 April 2006.
- Njoku, A., & Ihugba, O. (2011). Unemployment and Nigerian economic growth (1985-2009). *International Association for Teaching and Learning (IATEL)*, 2(4), 32-41.
- Nwakanma, A. (2012). Empirical evaluation of the relationship between investment in agro-allied business and performance of farmers in Kwara State, Nigeria. *Journal of Sustainable Development*, 3(1), 263-279.
- Obaadia, G. (2014). Political interference and agricultural programmes. *Journal of Business Venturing*, 11(4), 3-22.
- Ogunibeg, O. (2015). The impact of agro-allied businesses on economic growth in Nigeria. *Journal of Business Studies*, 3(2), 207-214.
- Patterson, A. (2015). Agriculture as a tool for reduction of youth unemployment: Empirical analysis. *Journal of Sustainable Development in Africa*, 13(1), 358-373.
- Umar, M. (2016). Impact of corruption on the management of integrated loan scheme for rice farmers in Kebbi State, Nigeria. *EBSU Journal of Business Education*, 2(2), 501-524.
- United Nation Development Programme (2015). *Briefing note for countries on the 2015 human development report*. Retrieved from [www.hdr.undp.org/en/data](http://www.hdr.undp.org/en/data).
- World Bank (2010). *World development report on poverty*. New York: Oxford University Press.