# IMPACT OF THE AGRICULTURAL SECTOR ON ECONOMIC GROWTH IN NIGERIA (1981-2017)

**Faruk Abubakar**[1]
Department of Public Administration, Faculty of Administration
Ahmadu Bello University, Zaria – Nigeria.
afaruk80@gmail.com

**Tijani Amoto Abdulmalik**[2]
Department of Public Administration, Faculty of Administration
Ahmadu Bello University, Zaria – Nigeria.
tijaniabdulmalik24@gmail.com

**Abstract**
*The study examined the impact of agricultural sector on economic growth in Nigeria from 1981-2017. To achieve the objective, the study adopted Vector Autoregressive (VAR) Model econometric technique. The study proxy gross domestic product (GDP) for economic growth and as dependent variable and the independent variables are agricultural output (AGOUT) and deposit money bank loan to agriculture (DMBLA). To achieve the objectives, the study relied on secondary sources of data from Central Bank of Nigeria (CBN) statistical bulletin. The study adopted ex-post factor research design and the data collected were subjected to unit root test using Augmented Dickey Fuller (ADF) test to ensure the stationarity of the data. Having established that all the variables were stationary at first difference, it was further subjected to Johansen Co-integration test to check for long run relationship among the variables. The result from the co-integration test shows that there is no long run relationship and as such Vector Autoregressive (VAR) Model was estimated. The result from VAR Model revealed that there is significant relationship between agricultural output and economic growth for the period under study. The study also revealed that there is no significant relationship between deposit money bank loan to agriculture (DMBLA) and economic growth. The study recommended among other things that there is need for government to provide more minimal interest free loans to farmers especially those that are into commercialized farming as this will encourage mechanized farming and increase economic growth.*

**Keywords:** Economic growth, agricultural output, agricultural credit, vector auto regression, Nigeria.

## Introduction

Economic growth is one of the indicators of assessing government in a modern society. This is so crucial for every country in order to promote the welfare of her citizens which is one of the primary objectives of government. Though, this is usually examined with special reference to Gross Domestic Product (GDP) which takes account of all economic transaction of a nation for a period of time. Arguably, this may not reflect the reality especially as it relates to 'standard of living of the people'. Be that as it may, economists in a bid to find a convincing measure of economic growth often proxy economic growth with Gross Domestic Product (GDP) in order to examine the well being of a country and her citizens. Sugimoto (2011) stated that the rudimentary measure of the output arising from economic engagements can be referred to as the Gross Domestic Product (GDP); to stretch this further, he noted that it is crucial to ascertain what makes up an economic engagement as it gives an insight to the scope of the national accounting system.

The economy of Africa is no doubt an agrarian economy where most of the African countries rely heavily on agriculture as a means of survival. Chauvin, Porto and Mulangu (2017) rightly observed that:

> *Africa has almost 60% of the world's arable land but this land remain uncultivated, this makes the continent a major net importer of food and presently one in four people living in Sub-Saharan Africa (SSA) suffers from undernourishment. In most SSA countries, almost half of those that are employed are in agriculture and in many of these economies the share of agricultural employment is as high as two-thirds of total employment* (p.1).

The chunk of African population engaged in agriculture and by implication, economic growth will be a distance dream for this continent if necessary measures are not taking to develop the sector (agriculture). In realizing the role agriculture plays in Africa, precisely in 2003, the African Union and the New Partnership for Africa's Development (AU/NEPAD) convened in Maputo, Capital of Mozambique and launched the Comprehensive Africa Agriculture Development Programme (CAADP) with the objective of accelerating agricultural growth in the continent. The major aim was to achieve at least 6% annual growth in the agricultural, this led to the coming together of the heads of state of Africa countries where an agreement was reached to commit 10% of their national budget to the development agriculture (AU/NEPAD, 2003).

Nigeria as one of the signatories to the 2003 Maputo declaration is yet to commit the 10% benchmark as agreed by heads of state of this continent. The annual expenditure shows that the percentage of expenditure is far below the 10%. In Nigeria, from 1992-2016 the budget to the agricultural sector is less than 4% except for 2001 with 5.69%, 2005 4.44% and 2009 7.33% of the total budget (CBN Statistical Bulletin, 2017). However, some of the countries that signed the Maputo declaration have started implementation as Nigeria has been left behind. Prominent among these countries include Burkina Faso with 18%; Niger and Mali

both with 15% commitment; Malawi with 13.8% while Ethiopia, Senegal and Zambia spend 11.9%; 10.8% and 11.5% respectively (Daily Trust, 2018).

Considering the natural resources endowment in Nigeria, the country has to invest heavily in agriculture in order to ensure economic growth and also ensure food sufficiency for the ever increasing population of the country. Odetola and Etumnu (2013) stretched this further by stating that, In Nigeria, because 70% of the population engaged in agricultural production, developing the economy will not be achieved without developing the sector. It is no doubt that the agricultural sector needs to be properly developed to ensure that the sector plays it role in ensuring economic development, provision of food, generation of employment among other things.

The role banks play in providing financing support in form of loan to enterprises make them fundamental tools of ensuring economic progress and development. Abdulmalik, Abdallah and Dan-Sadiq (2018) described finance as the bedrock of every organic system. This shows that the amount of finance available in any functional system can make the system to work effective in achieving the desired goal. Olokoyo (2011) noted that irrespective of the sources of commercial banks' income, they would be interested in giving out loans and advances to their numerous customers. However, this is not done out of generosity but a way of generating income to the financial institutions in the long run.

Lack of credit supply to the agriculture sector is of concern as agricultural credit is an important part of ensuring agricultural development. Introducing an accessible credit facility will be the quickest way for boosting agricultural production in an economy. Therefore, it has become the prime policy of all the successive governments, to meet the credit requirements of the farming community (Enilolobo & Ode-Omenka, 2018). Governments have tried to come up with numerous programmes and policy to mitigate the challenges faced by farmers in getting access to credit facilities. Though, in spite these efforts, farmers have had limited success in accessing the much needed credit for investment in the activities of their farms. Although, "experience gained from the implementation of credit schemes have shown that they have succeeded in increasing the level of funding to the agricultural sector, however, the impact has not been as significant as anticipated" (Adejumo & Omonona, 2017, p. 6).

In order to motivate the financial institutions in giving out loan to farmers, the government launched the Agricultural Credit Guarantee Scheme (ACGS) to provide guarantees against inherent risk in agricultural lending. The scheme was launched to provide guarantee on loans granted by financial institutions to farmers who engage in agricultural production and agro-allied processing. This measure could not achieve the intended objectives because agriculture requires huge capital outlay because it is both labour and capital intensive venture (Nwankwo as cited in Enilolobo & Ode-Omenka, 2018). The inability of farmers to secure loan has led to high increase in cost of food items. It is on this note, Awotide, Abdoulaye, Alene and Manyong (2015) stated inter alia "the

attendant increases in the costs of production and consumer prices rising faster and higher than the price of farm produce has adversely affected smallholder farmers' livelihoods"(p.5).

Empirical literatures have established a relationship between agriculture sector and economic growth (Emeh, 2017; Enu, 2014; Idoko & Jatto, 2018; Kenny, 2019; Oyakhilomen & Zibah, 2014; Tobechi, 2018; Wang & Huang, 2018). The sector's contribution to GDP in Nigeria in 1950s on an average was 69 percent, though, this figure dropped to 49 percent in 1970s, precisely in 1982, it declined to a mere 22 percent (Ahungwa, Haruna & Abdusalam, 2012). In the 20s, the share of this contribution has deteriorated further following the total neglect of the sector with attention on petroleum product. The National Bureau of Statistics (NBS) 2016 report, declared that on an annual basis, the contribution of to GDP in Nigeria in 2012 was 23.91 percent, this figure was almost maintained in 2013 that witnessed 23.33 percent, while 2014 and 2015 recorded 22.90 and 23.11 percent respectively.

However, in 1974, the contribution of agriculture to GDP declined to 34%. This decrease has led to extreme poverty and food insufficiency, pathetically, the contribution of agriculture to GDP as at 1996 accounted for less than 5% of Nigeria's GDP. The recent increase in massive food importation is not unconnected with the failure of the sector to provide food for the teeming population (Sunday, 2017).

The neglect of agricultural sector is evidenced considering the dependence of the economy on a mono-cultural product which is petroleum since the discovery of oil. Unfortunately, Nigeria learnt the hard lesson when the price of crude oil that was initially projected to be sold for $57 per barrel crashed to as low as $12 per barrel following the outbreak of Covid 19 pandemic that ravaged countries all over the world (Vanguard, March 10 & 20 April, 2020). However, while the demand for oil decreases drastically that led to crash in the international market, food production was still in high demand as people need for to survive. This study became imperative to find out the contribution of agricultural sector to Nigerian economy over the years using time series data. However, following the empirical studies, deposit money bank loan to agriculture is considered necessary to be included in the variable to stretch the argument in the existing literature.

**Research Objectives**

The major objective of the study is to examine the impact of agricultural sector on economic growth in Nigeria from 1981-2017. The specific objectives are:

i. To determine the impact of agricultural output on economic growth in Nigeria.
ii. To ascertain the extent at which deposit money bank loan to agriculture on economic growth in Nigeria.

**Research Hypotheses**

$H0_1$: Agricultural output has no significant effect on economic growth in Nigeria.
$H0_2$: Deposit money bank loan to agriculture has no significant effect on economic growth in Nigeria.

**Literature Review**

**The Endogenous Growth Theory**

Endogenous growth theory was propounded by Paul Romer. This theory emerged in 1980s to offer opposing explanation to the neoclassical growth theory. The endogenous growth theory posits that an investment in human capital as well as innovation contributes significantly on economic growth. The proponents are of the view that the factors responsible for improvement in productivity can be explained with faster innovation and more investment in human being which is known as human capital. They stretch further that, to achieve growth, public institutions and private institutions will have to invest in private individuals as well as business establishments to create necessary innovation to promote productivity.

In contrasting the new (endogenous) growth theory with traditional neoclassical theory, "it is important to know that many endogenous growth theories can be denoted by the equation; Y = AK, as in the Harrod Domar model. Where A is intended represents any factor that affects technology and K includes both physical and human capital" (Todaro & Smith, 2015, p. 159).

Therefore, the investment here is inform of credit facilities as well as government expenditure in agriculture and research institute that give improved seedling to farmers and also agricultural credit facilities to farmers in order to increase productivity and increase GDP over the years.

The importance of savings and human capital investments for achieving rapid growth to several implications for growth are in direct conflict with traditional theory. The most interesting aspect of endogenous growth models is that they help explain flows of capital that ensure economic growth in a country.

Though, this theory is usually criticized for its unrealistic to be checked by empirical evidence. The theory is said to make so much assumptions about how immeasurable things affected other immeasurable things.

**Empirical Review**

Notable research efforts have been made on the impact of agricultural output on economic growth (GDP), these studies have shown conflicting results based on their findings. The conflict in research findings is not unconnected to demographic difference, methodological difference, nature of data used and estimation techniques.

Sunday (2017) investigated the impact of government expenditure on agricultural output and Nigeria economic growth using time series data from 1980-2015. The result revealed

that the variables have long run relationship because of evidence of two cointegrating equations while the speed of adjustment of the ECM result is 90.9%. The findings revealed that government spending on agriculture and agricultural output significantly impacts on Nigeria economic growth. The researcher recommended higher increase agricultural allocations. However, the present study extended this result by including deposit money bank loan to agriculture and the effect on economic growth.

Emeh (2017) investigated the impact of agricultural sector on economic growth of Nigeria using time series data. To achieve the broad objective, the study employed the Ordinary Least Square (OLS) technique to examine the relationship between the RGDP, agricultural output, deposit money bank loans to agriculture, inflation rate and interest rate on agricultural credit in Nigeria using time series data 1984-2015. The estimated result revealed that agricultural output and inflation rate has no significant relationship on RGDP while interest rate on agricultural credit and deposit money bank loans to agriculture exerts significant relationship RGDP. The study recommended amongst other things more attention should be placed on self-employment in agriculture. However, the present study replicated the findings of this study but extended the years covered and also used different estimation technique.

Ahungwa, Haruna and Abdusalam (2014) focused their attention on the contribution of agriculture to the GDP of Nigeria. The study made use of secondary data being a time series analysis. The findings revealed from regression results showed that agriculture exerts a positive relationship with GDP and contributes significantly to GDP. The study recommended the need for government to create an enabling environment by giving incentives to farmers. The result of the study was extended by subjecting the data to unit root test using ADF to determine a suitable statistical analysis.

Idoko and Jatto (2018) examined the impact of government expenditure on agriculture and economic growth in Nigeria. The study made use of secondary data collected from Central Bank of Nigeria using time series data. The results revealed that there exists a positive and significant relationship between government expenditure on agriculture and economic growth in Nigeria. It recommended that government should formulate policies aiming at encouraging government spending and domestic savings across the country. Though, the result of the study was extended by including deposit money bank loan as additional explanatory variable.

Abubakar, Yusuf and Abdulmalik (2020) examined the impact of state government expenditure on agricultural output in Kogi State. The study made use of time series data from 2000-2018. The study employed Vector Autoregressive (VAR) model and Augmented Dickey Fuller test was adopted for the unit root test. The result revealed that there is no significant impact between both government capital expenditure and recurrent expenditure on agricultural growth. The Johansen long run result shows no evidence of long run relationship among the variables.

Tobechi (2018) examined the effect of agricultural output on economic growth of Nigeria with the objectives of examining the effect of agricultural components on economic growth in Nigeria. Secondary data was obtained from the CBN statistical bulletin covering 1981-2016. The findings revealed that crop production exerts positive and significant relationship with GDP. Based on these results, the study recommended the need to improve infrastructure for higher agricultural output in the country. However, there is need to examine the effect of deposit money bank loan on economic growth

Udoka and Anyingang (2015) investigated the impact of public spending on the growth of Nigeria economy using time series data from 1980-2012. The study revealed among other things that total spending had positive impact on economic growth and also both recurrent expenditure and capital expenditure had significant relationship on the economy. It was recommended that the government should increase its spending on components of public expenditure. Though, the present study extend the result by investigated the contribution of agriculture to GDP using time series data.

Adebayo, Ibrahim and Seyi (2017) assessed the impact of agricultural financing policy and deposit money bank loan on agricultural sector productivity in Nigeria. The study used time series data covering the period of 1981 and 2015. The study found that deposit money bank loans and agricultural financing exerts positive and significant effect on agricultural productivity in Nigeria while lending rate shows a significant negative impact on agricultural productivity. It is recommended that financial institutions should assist the agricultural financing policy of the government by making agricultural finance accessible. The result is expanded by including the impact of agricultural output on economic growth in Nigeria.

Ahmad (2011) examined the role of credit facilities to agricultural sector in Pakistan. The study used secondary data for the analysis. The data was sourced from Pakistan ministry of finance. The empirical findings revealed that there is a significant impact between credit in agriculture sector and agricultural output in Pakistan. The study recommended that agriculture credit should be enhanced to the large proportion of rural population. Though, the study was carried out in Pakistan and as such, there is need for similar study to be replicated in Nigeria.

Dim and Ezenekwe (2013) examined agriculture sector on economic development in Nigeria. The study adopted secondary data using time series analysis. The study revealed that the impact of agricultural expenditure was found to be positive but insignificant. The study recommended that there should be increase and monitoring of agricultural public spending in Nigeria. However, the present study extended this result by examining the effect of deposit money bank loan on economic growth in Nigeria.

## Methodology

### Research Design

The study adopted Ex-post factor research design. This is to investigate the empirical relationship between the dependent and explanatory variables as observed over time. The econometric analysis techniques of stationarity test, Co-integration and Vector Auregresssive (VAR) Model were employed appropriately.

### Types and Sources of Data Collection

Secondary data was obtained from Central Bank of Nigeria Statistical Bulletin. Time series data relating to the dependent and explanatory variables were obtained from the bulletin for a period covering 1981 and 2017.

### Model Specification

The functional and econometric relationship between the dependent variable and the independent variables are seen in the equation below:

$RGDP = f(AGOUT, DMBLA) \ldots \ldots\ldots\ldots\ldots\ldots (i)$

The equation was further presented as follows:

$LNRGDP_t = \hat{a}_0 + \hat{a}_1 LNAGOUT_t + \hat{a}_2 LNDMBLA_t + \grave{i}_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (ii)$

Where:

RGDP = Real Gross Domestic Product; AGOUT= Agricultural output; DMBLA = Deposit Money Bank Loan to Agriculture; $\hat{a}_0$ = Constant; t = Time series dimension; U = Error term. LN; Natural log

**Note:** All variables for the analysis are in their natural log form.

### Technique of Data Analysis

The study employed unit root, Co-integration and Vector Autoregressive (VAR) model estimation technique. The Augmented Dickey-fuller (ADF) unit root test was used for the stationarity test. Co-Integration Test of Johansen's procedure was used to determine whether or not the two variables are cointegrated in the long run. Vector Autoregressive (VAR) model estimation technique was used to ascertain the short run relationship amongst the variables upon discovery of no long run relationship.

## Data Presentation, Analysis and Discussion of Findings

### Research Data Presentation

Table 1: Data on RGDP, AGOUT and DMBLA in Nigeria from 1981 to 2017.

| YEAR | RGDP (N) | AGOUT (N) | DMBLA (N) |
|---|---|---|---|
| 1981 | 15,258.00 | 2,364.37 | 0.6 |
| 1982 | 14,985.08 | 2,425.96 | 0.8 |
| 1983 | 13,849.73 | 2,409.08 | 0.9 |
| 1984 | 13,779.26 | 2,303.51 | 1.1 |
| 1985 | 14,953.91 | 2,731.06 | 1.3 |
| 1986 | 15,237.99 | 2,986.84 | 1.8 |
| 1987 | 15,263.93 | 2,891.67 | 2.4 |
| 1988 | 16,215.37 | 3,174.57 | 3.1 |
| 1989 | 17,294.68 | 3,325.95 | 3.5 |
| 1990 | 19,305.63 | 3,464.72 | 4.2 |
| 1991 | 19,199.06 | 3,590.84 | 5.0 |
| 1992 | 19,620.19 | 3,674.79 | 7.0 |
| 1993 | 19,927.99 | 3,743.67 | 10.8 |
| 1994 | 19,979.12 | 3,839.68 | 17.8 |
| 1995 | 20,353.20 | 3,977.38 | 25.3 |
| 1996 | 21,177.92 | 4,133.55 | 33.3 |
| 1997 | 21,789.10 | 4,305.68 | 27.9 |
| 1998 | 22,332.87 | 4,475.24 | 27.2 |
| 1999 | 22,449.41 | 4,703.64 | 31.0 |
| 2000 | 23,688.28 | 4,840.97 | 41.0 |
| 2001 | 25,267.54 | 5,024.54 | 55.8 |
| 2002 | 28,957.71 | 7,817.08 | 59.8 |
| 2003 | 31,709.45 | 8,364.83 | 62.1 |
| 2004 | 35,020.55 | 8,888.57 | 67.7 |
| 2005 | 37,474.95 | 9,516.99 | 48.6 |
| 2006 | 39,995.50 | 10,222.47 | 49.4 |
| 2007 | 42,922.41 | 10,958.47 | 149.6 |
| 2008 | 46,012.52 | 11,645.37 | 106.4 |
| 2009 | 49,856.10 | 12,330.33 | 135.7 |
| 2010 | 54,612.26 | 13,048.89 | 128.4 |
| 2011 | 57,511.04 | 13,429.38 | 255.2 |
| 2012 | 59,929.89 | 14,329.71 | 316.4 |
| 2013 | 63,218.72 | 14,750.52 | 343.7 |
| 2014 | 67,152.79 | 15,380.39 | 478.91 |
| 2015 | 69,023.93 | 15,952.22 | 449.31 |
| 2016 | 67,931.24 | 16,607.34 | 525.95 |
| 2017 | 68,490.98 | 17,179.50 | 528.24 |

**Source:** CBN Statistical Bulletin (2018).

**Discussion of Results**

The study examined the relationship between agriculture output and deposit money bank loan to agriculture on economic growth in Nigeria from 1981 to 2017. The estimation technique adopted was Vector Autoregressive (VAR) model.

**Table 2: Summary of Unit Root Result using ADF**

| Variables | ADF Statistics | Critical Value(5%) | Order of Integration |
|---|---|---|---|
| **LNRGDP** | -3.339751 | -2.948404 | I (1) |
| **LNAGOUT** | -5.796345 | -2.948404 | I (1) |
| **LNDMBLA** | -6.839198 | 2.948404 | I (1) |

**Source:** Researchers' computation using Eviews10

Table 2 above shows the results of the unit root test using Augmented Dickey Fuller (ADF) statistics. The decision rule state that if the ADF statistics is > than the critical value at 5% then there is no unit root in the data, but its stationary. noted that "empirical work based on time series data assumes that the underlying time series is stationary". The result shows that RGDP, AGOUT and DMBLA were stationary at 1st difference. This indicates that the variables are all integrated of order I(1); a necessary and compulsory precondition for the use of Co-integration test in order to test the long run relationship of the variables.

**Long run Johansen Test of Co-integration**

Table 3: Test of co -integration

| Hypothesized No. of CE(s) | Eigenvalue | Trace Statistic | 0.05 Critical Value | Prob.** |
|---|---|---|---|---|
| None | 0.418738 | 24.19704 | 29.79707 | 0.1922 |
| At most 1 | 0.121986 | 5.207661 | 15.49471 | 0.7864 |
| At most 2 | 0.018524 | 0.654423 | 3.841466 | 0.4185 |

**Source:** Researchers' computation using Eviews10

Table 3 above showed that there is no co-integration judging from both Trace statistics and Max.Eigen Statistics. The result presented in Table 3 shows that both trace statistics and maximum Eigen statistics indicated the variables are not co-integrated, meaning that the variables do not have long-run relationship at 5% level of probability. This is because the trace statistics and Max Eigen statistics values are less than the 5% critical value. Hence, there is no cointegration as the null hypothesis of no cointegrating equations cannot be

rejected. Given that there are no co-integrating equations, the requirement for estimating short-run VAR model is satisfied. However, the lag selection criteria from the VAR model using Akaike Information Criterion (AIC) suggested lag one. Though, this is not reported in the main work.

**Discussion of Vector Autoregressive Model (VAR)**

Table 4 Parsimonious Vector Autoregressive (VAR) Model

| **Dependent Variable: LOG(RGDP)** | | | | |
|---|---|---|---|---|
| | **Coefficient** | **Standard Error** | **t- statistics** | **P Value** |
| **RGDP(-1)** | 0.6750 | 0.0829 | 8.1357 | 0.0000 |
| **AGOUT(-1)** | 0.2494 | 0.0710 | 3.5101 | 0.0007 |
| **DMBLA(-1)** | 0.0100 | 0.0087 | 1.1540 | 0.2513 |
| **C** | 1.1707 | 0.3449 | 3.3941 | 0.0010 |

**Source:** Researchers' computation using Eviews10

$R^2$ = 0.996

$R^2$ (Adj) = 0.995

DW = 1.77

The Parsimonious Vector Autoregressive (VAR) model shows that the dynamic model is a good fit. Specifically, the $R^2$ value of 0.996 percent indicated that the variation in GDP explained by agricultural output (AGOUT) and deposit money bank loan to agriculture (DMBLA) is 99 percent. Hence, the explanatory power of the model estimated is 99 percent. 99% signifies a good fit for the model. The Durbin Watson (DW) value of 1.77 which falls within 1.5-2.5 indicates that there is no autocorrelation in the model.

The coefficient of agricultural output (AGOUT) is positively signed and statistically significant at 5 percent level with GDP which means that a percentage increase in agricultural output will increase the GDP by (0.249491) 24%. Also, the result showed that agricultural output (AGOUT) has a significant effect on GDP. Therefore, the study rejects the null hypothesis which states that 'there is no significant relationship between agricultural output and economic growth (GDP) in Nigeria for the period covered by this study. This implies that the study does not have enough statistical evidence to accept the null hypothesis and as such, the null hypothesis was rejected. However, the result of this

findings aligns with previous studies that also found out that agricultural output has positive and significant relation on economic growth (Ahungwa, et al., 2014; Idoko & Jatto, 2017; Sunday; Tobechi, 2018; Udoka & Anyingang,2015) but contradict Emeh, (2017). Though, this contradiction may not be unconnected to the fact that the study adopted Ordinary Least Square (OLS) estimation technique even when the using root result showed a mixture of I(1) and I(0) variables which suggested Autoregressive Distributed Lag (ARDL) model. Though, this critique does not invalidate the result of the findings.

Furthermore, the coefficient of deposit money bank loan to agriculture (DMBLA) is positive but statistically insignificant at 5 percent level with economic growth (GDP). This means that a percentage increase in deposit money bank loan to agriculture (DMBLA) will increase the GDP by (0.010085) 1%. The implication of the statistically insignificance of DMBLA with economic growth (GDP) is that DMBLA does not have effect on GDP in Nigeria during the period under study. Hence the study accepts the null hypothesis which says 'there is no significant relationship between deposit money bank loan to agriculture (DMBLA) and economic growth (GDP) in Nigeria. Therefore, the study has enough statistical evidence to accept the null hypothesis for the period under study. However, the result contradict the findings of Emeh (2017); Adebayo et al., (2017) and Ahmad, (2011). Though, the differences in findings may not be unconnected to estimation technique adopted and the domain of the study as Ahmad (2011) was carried out in Pakistan where there is different economic structure.

**Conclusion**

The study concluded that deposit money bank loan to agriculture does not contribute to economic growth in the country for the period under study. This conclusion extends the existing literature where there have been mixed results on the impact of agriculture output on economic growth as this study concluded that agriculture output has a positive and significant impact on economic growth. Based on the findings, the following recommendations were made:

Firstly, there is need to invest more in agriculture by increasing agricultural expenditure with the main objective of attracting young Nigerians into agriculture by encouraging mechanized farming through government support.

Secondly, since the findings from deposit money bank loan to agriculture shows an insignificant value, there is need for government to provide interest free loans to farmers especially those that want to go into commercialized farming. Where loans are granted to farmers, their activities should be properly supervised and monitored to ensure that the loans are not diverted into different ventures. In addition, farmers should be sensitized by various states' Agricultural Development Programme (ADP) extension workers to increase awareness on the availability of the loan to farmers, mode of accessing it and

penalty for defaulters in order to ensure compliance on repayment.

**Conflict of Interest**

The authors of this paper declared no conflict of interest in this research paper.

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