

Bank Loan and Advances: Antidote for Restructuring the Agricultural Sector in Nigeria, 1985-2012

CHRIS O. UDOKA

ABSTRACT

The importance of agricultural structural transformation accompanying economic growth is often stressed by development economist. This led to the question whether agricultural financing matters in the growth process. The main objective of the study was to examine the impact of bank's loans and advances on the growth of the agricultural sector in Nigeria. Using an ex-post facto design, the data were analyzed with the ordinary least square (OLS) method. From the analysis, it was revealed that there was a significant relationship between banks' loans and advances and agricultural production growth in Nigeria. It was further discovered that there was a significant relationship between agricultural credit guarantee scheme fund (ACF) and agricultural growth index (GAPI) in Nigeria. Interest rate was also found to have a significant effect on agricultural growth and development in Nigeria. Based on the findings, the study recommended that government and other monetary authorities should use selective credit control measures to persuade banks to grant more loan and advances to agricultural productivity through the supply of necessary inputs to farmers, marketing facilities, extension services officers, farm infrastructure, transport services, adequate technology and to eradicate the problem posed by land ownership.

INTRODUCTION

Agriculture in Nigeria is the most dominant sector and indeed, a major source of livelihood for its citizens (Ijaiya & Abdulaheem, 2000). It accounts for about 70 percent of the sectors that generate employment for the working population (Abubi, 2000). Binswanger and Townsend (2001), posits that agriculture is one of the sectors that includes economic growth and development. This is justified by the fact that, it is this sector which provides food, domestic savings, employment opportunities, rural development and the improvement of the Gross Domestic Product (GDP).

Agriculture is the process of cultivating the land, raising animals for the purpose of providing food, provision of feeds for animals and raw materials for industries. It is an essential sector that helps to create employment opportunity, reduction of poverty, improves income distribution, speeds up industrialization and thus eases the pressure on the Balance of Payments (Okah, 2007).

The role of agriculture in transforming the socio-economic framework of an economy cannot be overemphasized. This according to Anyanwu (2002) is because agriculture has been the main source of gainful employment from which the Nigerian nation feeds its teeming population, provides industries with local raw materials and serves as a reliable source of government revenue. As posited by Reynolds (1975), agricultural development increases the supply of food available for domestic consumption; enlarges the size of domestic market for the manufacturing sector; activates the ideas needed for industrial employment and providing the foreign exchange needed for the export of agricultural products, thereby facilitating economic growth.

Agricultural production and exportation play a dominant role in attracting foreign exchange. Obadan (2000) noted that production of palm oil accounted for about 96.4 per cent of the total export earnings while non-oil export products accounted for about 97.3 per cent of export before the discovery of crude oil in Nigeria. He observed further that from the 1970s, the Nigerian economic became mono-cultural, having been transformed from one, dependent on fairly diversified portfolio of agricultural products to an economy heavily dependent on crude oil for economic growth and sustenance.

According to Ojo (2003), the advent of crude oil production and related activities especially in the early 1970s changed radically the structure of Nigerian economy. The huge foreign exchange

*Address for correspondence

udaokaco@yahoo.com

earnings from crude oil export, encouraged importation of finished goods to the detriment of domestic manufactured ones, while the agricultural sector was rendered less competitive over time through over-valued currency, inappropriate pricing policies and scarcity of farm labour, caused mainly by the migration of youths to urban areas in search of white collar employment.

However, since the availability of adequate credit is central to the improvement of agricultural production in the economy, the Federal Government of Nigeria has prioritized the agricultural sector and thus directs that commercial banks devout a certain percentage of their loanable fund to the sector. To encourage the commercial banks to meet this target, the Central Bank of Nigeria introduced the Agricultural Credit Guarantee Scheme (ACGS) in 1977 to guarantee credit disbursement by commercial banks to the sector. The loan amount was raised and guaranteed rate was raised to 75 percent against default payment of loans. However, despite this incentive and others, the agricultural sector contribution to the total Gross Domestic Product (GDP) is still very low. Thus, to enhance an increase in agricultural contribution, farmers have to adopt a capital intensive strategy and this called for an additional demand for banks loans and advances. It is against this backdrop that this study is embarked upon to determine how bank loans and advances could aid the restructuring of the agricultural sector in Nigeria.

Statement of the Problem

The importance of agriculture can be measured in terms of its contribution to export earnings. The contribution of agriculture increased in absolute terms in 1960 to 1995. In monetary terms the contributions were from N282.4 million in 1960 to N13852.7 million in 1995. Its relative share however declined from 83.2 percent in 1960 to only 1.8 in 1995. The reasons usually adduced for this features are its poor performance in terms of productivity arising from use of crude tools and implements and the relative importance of petroleum sector. Apart from these factors, the relative decline of agriculture can be blamed on the decline in the world demand for primary products, which constitute the bulk of Nigeria's non oil export. The domestic industrial growth which has led to increase in the use of major proportions of some of these products as raw materials is another factor. A strategy for increasing output is therefore needed to ensure increased agricultural productivity that will be enough to carter for both export demand and domestic consumption. This strategy demands the provision of adequate capital in the form of bank loans and advances for the restructuring of the agricultural sector in Nigeria.

This study seeks majorly to examine the extent to which bank's loans and advances have impacted on the growth of agricultural sector in Nigeria. The specific objectives of the study include:

- 1. To examine the effectiveness of banks credit (loans and advances) on agricultural growth in Nigeria.
- 2. To evaluate the role of Agricultural Credit Guarantee Scheme Fund (ACGSF) on the performance of agricultural sector in Nigeria.
- 3. To empirically investigate the impact of real interest rate on agricultural growth in Nigeria.

Research Hypotheses

- H_01 : There is no significant relationship between bank loans and advances and agricultural sector growth in Nigeria.
- H_02 : Agricultural Credit Guarantee Scheme Fund does not contribute to the growth of agricultural sector in Nigeria.
- H_03 : There is no significant relationship between real interest rate and agricultural sector growth in the Nigerian economy.

In other to achieve these objectives, the study is divided into five sections. Section one is the introduction, section two is on review of related literature. The third section is on methodology, upon which the study is built. This is closely followed by data presentation, analysis and discussion of findings. The remaining sections draw managerial implications that emerged from the findings.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Theoretical Framework

There are two major theories underlying agricultural financing by banks. They include the structural hypothesis and financial repression hypothesis.

The Structural Hypothesis

This theory was propounded by Gerschenkron (1962); the theory emphasizes imperfections in banking systems and deficiencies on the demand side of financial services in the initial stages of economic development. According to him, as the relative backwardness of the economy increases, the role of the banks in industrial capital formation declines. To drive home his point, Gerschenkrons categorized the countries of Europe according to degrees of historical backwardness with Britain coming first on the list as the most developed. Russia came last as the most backward and Germany midway in the classification. In a comparative developed economy like that of Britain, the role of banks in financing growth and development according to the believers of this view, was minimal because alternative sources of finance were available while in a moderately backward economy, the banks were expected to play a more prominent role as a source of capital for promoting industrialization.

In the case of extremely backward or developing economies which Nigeria is inclusive, Gerschenkron argued that because of economic structure of those nations, banks could not supply the capital necessary for industrialization. This according to him is caused by standards of honesty and fraudulent bankruptcy.

Financial Repression Hypothesis

This is associated with the work of Mckinnon (1973) and Shaw (1973). The theory emphasizes that financial development would contribute most significantly to economic growth if the authorities were not to interfere in the operations of the financial institutions. According to the proponents of the theory, poor performance by banks and other financial institutions is thus often attributed to interest rate regulation, ceiling on deposit and loan rates and official guidelines pertaining to lending operations. Such interferences results in a low and often negative real case of return on financial assets and therefore inefficient savings mobilized and channeled into investment projects.

To this end, the theorists advocated a positive real interest rate and financial liberalization which would ensure an optimal financial structure for development as well as eliminating the fragmentation of market. It is on these premises that this study choose to base its theoretical framework on the financial repression hypothesis.

Empirical Review

The importance of banks loans and advances to agricultural production is well established in many countries of the world. For instance, in the study conducted by Ijaiya & Abudulraheen (2000) on the relationship between bank credits and agricultural outputs in Pakistan, it was revealed that there existed a significant relationship between bank credit in Pakistan and the agricultural outputs. Fosu (2002) also argued that direct credit programmes were associated with the adoption of modern technologies such as green-houses in Morocco and tube wells in North West Bangladesh and these innovations were linked with increase in production gains in the agricultural sector.

May as cited in Obilor (2002), discovered that countries that emphasized on agricultural sector ended up with faster industrial growth than those that focused on industrial alone. Implying that, agriculture is the fastest road to industrialisation.

Eyo (2008) and Udensi, Orebiyi, Ohajianya & Eze, (2012) studied macroeconomic environment variables affecting agricultural sector growth in Nigeria, using macroeconomic policies model of credits to the agricultural sector, nominal interest rates on the loan, exchange rate, world prices of agricultural produce, foreign private investment, government expenditure and inflation rate. It was discovered that nominal interest rate is positively related to the index of agricultural sector, but at lower nominal interest rate, credit facilities are no more widely available. The index of agricultural output is also positively related to world prices of Nigeria major agricultural commodities. By implication it means that world prices enhance agricultural output growth in Nigeria. It was also revealed that the index of agricultural production was positively related to government expenditure on agriculture while the index of agricultural production had a negative relationship with the level of inflation. This suggests that higher inflation level reduces agricultural production. It was based on their findings recommended that macroeconomic policies that enhance favourable exchange rates, reduces the interest rate on loans to farmers, reduce the rate of inflation and increase foreign private investment in agriculture should be implemented to enhance the growth potential of the agricultural sector.

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Sources of Agricultural Financing in Nigeria

There are numerous ways of financing agriculture in Nigeria. Among which are agricultural banks, deposit money banks, self-financing and government financing. The Nigerian Agricultural and Cooperative Bank (NACB) which was established in 1973 for instance, is aimed at stimulating the interest of Nigerians towards agricultural production, improve production technique, storage facilities and overall marketing of agricultural products in Nigeria as well as granting loans on fair terms to farmers. The chief financier of NACB is the federal government through the CBN.

Another major source of financing agricultural is the deposit money banks. These were formerly known as commercial banks in Nigeria. Their loans are short-term and are used to finance annual and biennial crops such as cassava, citrus and oil palm as well as quick maturing livestock with medium term maturity of two or three years and in few cases long term perennial crops such as cocoa, kolanut and rubber which last for three or more years.

Self-financing is another major source of agricultural financing, this occurs when a farmer decides to reinvest his saving in agricultural project or expands an already existing one. This attracts a slow process since saving depends on a lot of factors such as economic and fiscal policies.

Government, both in federal, state and local level play a major role in financing agricultural projects in Nigeria. In short, they are the father of all other sources of finance. They give loans to farmers either directly or indirectly through some agencies like Ministries of Agriculture, Agricultural Banks and Agricultural Development Programme (ADP).

Finance, Agriculture and Economic Growth Nexus

On a priori basis, the theories that link finance and economic growth can be traced back to the work of Schumpeter (1912) and more recently to Goldsmith (1969); Shaw (1973) and Mckinnon (1973); King & Lovine (1993) as cited in Obansa & Maduekwe (2006). These studies showed a positive relationship between finance and economic growth. Demetriades & Hussein (2000) revealed that finance is a leading factor in the process of economic growth; they further found that for the majority of the countries, causality is bi-directional while in some cases finance follows economic growth. Luinsel & Khan (2001) state that the causality between financial development and output growth is bi-directional for all countries they studied. Rajan & Zingales (2003) studied the structure and sources of company finance and they concluded that the development of the financial sector facilitates the growth of corporate sector. In contrast, Robinson (1952) as cited Olokoyo (2009) stated that "where enterprise leads, finance follows."

According to this view, economic development creates demands for particular types of financial arrangements. In spite of the above arguments finance remains the key to the region's investment and hence growth. As World Bank (2003) argued, savings determines the rate at which productive capacity and income can grow. In particular, long term finance tends to associate with higher productivity and growth. Okoi (2002) argue that capital flows (external funds) can magnify existing distortions in capital allocation, that is, if domestic financial systems do not function properly, capital flows will not end up in the right places and will cause problems in the places they end up. Furthermore, Okoi (2002) noted that some capital flows are subject to quick reversal especially one a macroeconomic stabilization has been completed, thus leading to a positive GDP growth and large capital inflows (also see Joel, 2005). Such inflows come from foreign borrowing, portfolio investments, deposit inflows and foreign direct investments and finance both investment and consumption.

The Role of the Nigerian Agriculture and Cooperative Bank in Agricultural Financing

The concept of agricultural financing in Nigeria has over the years been largely a private indigenous activity. Of recent, government has intensified efforts and interest in the sector to infuse foreign private participation. According to Ugwuanyi (2000), agricultural financing is the sourcing of fund and making it available for agricultural production and uses. Agricultural financing simply means the acquisition and utilization of funds for agricultural purposes. It involves the efficient sourcing of funds sourced for agricultural and agro-allied productions so that the investor will be able to pay both the interest and principle as and when due and generate enough return from his investment.

According to Anyanwu (2002), government at federal, state and even local level has made both direct and indirect effort to finance agriculture through moral suasion and other monetary policies. Infact, commercial banks, merchant banks and other non-banking financial institutions through one incentive or the other are being urged to finance agriculture. However, when it seemed that the efforts to these financial institutions are not encouraging, government went a step further in establishing specialist financial institutions and specifically charged them to finance agricultural activities alone. One of such specialized banks is the Nigeria Agricultural and Cooperative Bank, which is now known as Nigeria Agricultural, Cooperative and Rural Development Bank (NACRDB).

The major role of NACRDB in agricultural financing include: the Provision of loans and advances to individual farmer, cooperative organizations, limited liability companies as well as other aspect of agricultural sector; Provision of direct finance and investment to agricultural and agro-allied industrial ventures and the guarantee of viable agricultural and agro-allies ventures in view of making them raise fund locally or internationally.

Problems of Agricultural Financing in Nigeria

The problem of agricultural financing in Nigeria according to Ugwuanyi (2000) could be explained in two different settings: The problems associated with agriculture itself and problems created by the farmers themselves.

Problems associated with agriculture itself

- (i) **Unsystematic Risks:** These are risks which are beyond the control of the farmer. They have to do with natural hazard, flood, drought and so on.
- (ii) **Time Lag:** This comes as a result of changes in weather or climate, for example, failure of rain to come at the usual time could have serious consequences as farming seasons could be delayed, resulting in default in loan repayment or serving of loans.
- (iii) **The Nature of Land and Immobility of Labour:** The almost inelastic nature of land and the immobility of qualified farm workers equally contribute to the risky nature of agriculture, making it difficult for those in business to have access to credit especially from financial institutions.
- (iv) **Slow Rate of Return:** Some agricultural activities require a very long gestation period, resulting in slow rate of return especially in the early years of investment. It follows from the above that Agricultural investors (farmers) take long to break-even, hence, in the initial stage of investment, agricultural investors (farmers) find it very difficult in serving their loans.

Problems created by farmers

- (i) Loan diversion: The causes of loan diversion are many and varied. For example the burden of extended family system can compel a farmer to use a part or all the loans he has just received from a bank to pay the hospital bill of a mother-in-law. Also, unfavourable investment climate in agriculture sector and delays in the disbursement of approved agricultural credit can also lead to loan diversion.
- (ii) **Unwilling cooperative attitude:** To be able to pay the principal and interest on borrowed funds and to make farmers access new agricultural credits at affordable rate, farmers are encouraged to form cooperative societies. Interestingly, studies have shown that where such cooperatives are formed at all, the spirit and absolute loyalty of the farmers is not there.
- (iii) **Ignorance about the source of funds:** Many farmers are illiterate and ignorant of the current happenings in relation to the availability of agricultural credits, as they have refuse to unlearn the crude methods of farming and agricultural financing and adopt new innovation in agricultural finance and happenings.
- (iv) Lack of management or management skills: Many farmers lack the desired managerial expertise or skills needed for effective agricultural operation. Many embark on agricultural investment without conducting feasibility study to evaluate the commercial viability and economic desirability of their proposed investment. Approaching any financial institution for loan without a feasibility report therefore triggers fear of default of loan repayment and imposes a strong constraint that leads to the non accessibility of credits by agricultural operators.

(v) Other problems of agricultural financing in Nigeria include inadequate collateral, government policies that affect availability and quality of agricultural credit.

METHODOLOGY

A research design constitutes the core of formal research. This is because it does not only guide the conduct of the enquiry, but also provides the design for the testing of the formulated hypotheses. Thus, a research design according to Etuk (2010) is a framework controlling the collection, measurement and analysis of data by ensuring accuracy and economy. To this end, an expost facto design is used in this study. The choice of design is based on the fact that it does not provide the study an opportunity to control the variables mainly because they have already occurred and cannot be manipulated.

The data for this study are mostly from secondary sources. This is evidently true as the data were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin of various years.

Model specification

The primary objective of this study is to estimate the impact of bank loans and advances on agricultural development in Nigeria. To achieve this objective, the ordinary least square (OLS) multiple regression statistical method is used to estimate the various models. The model is given as:

GAPI = f(BLA, ACL, INTR)

Where:

GAPI = Growth in agricultural production index

BLA = Bank Loans and Advances

ACL = Agricultural Credit Guarantee Scheme FUND

INTR = Interest Rate

 $GAPI = b_0 + b_1BLA + b_2ACL + b_3INTR + \mu_1$

Where:

 $b_0 = Constant term$

 $b_1 - b_3$ = Parameters to be estimated

 μ_1 = Stochastic error term

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

Data Presentation

Presented in table 1 below is the data on the impact of banks loans and advances on agricultural production in Nigeria (1985-2012).

OBS	GAPI	BLA	ACLP	INTR
1985	26774.10	1310.200	48213.10	10.0000
1986	28043.80	1830.300	73964.30	10.00000
1987	39363.46	2427.100	108780.8	12.75000
1988	58083.30	3066.700	1266346.9	12.75000
1989	69922.67	3470.500	134066.7	18.50000
1990	84585.09	4221.400	103395.2	18.50000
1991	97717.29	5012.700	80859.60	14.50000
1992	145569.9	6978.900	93391.80	17.50000
1993	232338.1	10753.00	81273.80	26.00000
1994	349991.2	17757.70	106901.0	13.50000
1995	621045.9	25278.70	166645.1	13.50000
1996	843089.5	33264.10	227664.5	13.50000
1997	955395.8	27939.30	242028.3	13.50000
1998	1059686	27180.70	220288.5	14.31000

Table1. Macroeconomic and financial indicators

1999112997531045.70241839.018.00002000119457441028.90361449.013.500002001159801855846.10728545.414.310002002336009159849.7010509819.000002003362855362102.801155101515.7500020043908926.67738.60208374515.0000020054779430.48561.50949385513.0000020065947992.49393.40426243012.2500020076766334149578.944254628.75000020097378332135701.383285666.00000020107684331128406.026759256.25000020117531331255205.3444408012.0000020127607831191805.735600039.130000					
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2002336009159849.7010509819.00002003362855362102.801155101515.7500020043908926.67738.60208374515.0000020054779430.48561.50949385513.0000020065947992.49393.40426243012.2500020076766334149578.944254628.75000020087990339.106353.864979599.80000020097378332135701.383285666.00000020107684331128406.026759256.25000020117531331255205.3444408012.00000	2000	1194574	41028.90	361449.0	13.50000
2003362855362102.801155101515.7500020043908926.67738.60208374515.000020054779430.48561.50949385513.0000020065947992.49393.40426243012.2500020076766334149578.944254628.75000020087990339.106353.864979599.80000020097378332135701.383285666.00000020107684331128406.026759256.25000020117531331255205.3444408012.00000	2001	1598018	55846.10	728545.4	14.31000
20043908926.67738.60208374515.0000020054779430.48561.50949385513.0000020065947992.49393.40426243012.2500020076766334149578.944254628.75000020087990339.106353.864979599.80000020097378332135701.383285666.00000020107684331128406.026759256.25000020117531331255205.3444408012.00000	2002	3360091	59849.70	105098	19.00000
20054779430.48561.50949385513.0000020065947992.49393.40426243012.2500020076766334149578.944254628.75000020087990339.106353.864979599.80000020097378332135701.383285666.00000020107684331128406.026759256.25000020117531331255205.3444408012.00000	2003	3628553	62102.80	11551015	15.75000
20065947992.49393.40426243012.2500020076766334149578.944254628.75000020087990339.106353.864979599.80000020097378332135701.383285666.00000020107684331128406.026759256.25000020117531331255205.3444408012.00000	2004	3908926.	67738.60	2083745	15.00000
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20087990339.106353.864979599.80000020097378332135701.383285666.00000020107684331128406.026759256.25000020117531331255205.3444408012.00000	2006	5947992.	49393.40	4262430	12.25000
20097378332135701.383285666.00000020107684331128406.026759256.25000020117531331255205.3444408012.00000	2007	6766334	149578.9	4425462	8.750000
20107684331128406.026759256.25000020117531331255205.3444408012.00000	2008	7990339.	106353.8	6497959	9.800000
2011 7531331 255205.3 4444080 12.00000	2009	7378332	135701.3	8328566	6.000000
	2010	7684331	128406.0	2675925	6.250000
2012 7607831 191805.7 3560003 9.130000	2011	7531331	255205.3	4444080	12.00000
	2012	7607831	191805.7	3560003	9.130000

Source: CBN Statistical Bulletin, Vol. 22, 2012

Data Analysis

The data is analyzed using economic, statistical and econometric criteria.

Table2. The regression results of the impact of banks loans and advances on agricultural production in Nigeria.

Dependent variable: LGAPI

Variable	Coefficient	Std Error	t-stat	Prob.
С	-0.291607	0.732094	-0.398318	0.6939
LBLA	1.121888	0.067700	16.57147	0.0000
LACLP	0.177719	0.061473	2.891023	0.0080
LINTR	0.016265	0.870692	0.870692	0.3925

Source: view Computation

(BLA) - Financial indicators of banks loans and advances to agricultural sector

(ACL) - Agricultural Credit Guarantee Scheme Fund

(INTR) - Interest Rate

(GAPI) - Financial indicators of agricultural production growth

R² - 0.971452 R²(adj) - 0.967884

SER - 0.352162

F-stat - 272.2335

DW - 1.713089

The above result is a product of time series data. Viewing the result, it is clear that the sizes of bank loans and advances and agricultural credit guarantee scheme fund do conformed to the a priori expectation. This is evidently true as the parameters entered the model with positive signs. This could be interpreted to mean that one percent increases in bank loans and advances and agricultural credit guarantee scheme fund resulted in 1.121888 and 0.177719 increases in agricultural productivity in Nigeria respectively. The result also revealed that the size of the parameter of interest rate did not conform to economic theory. This is so as the parameter entered the model with a positive sign. This implies that a one percent increase in interest rate resulted in an increase in agricultural productivity.

The goodness of fit of the model as indicated by the R^2 -adjusted value 0.971452 or 97.15% showed that the model fits the data well, the total variation in the observed behavior of agricultural productivity is jointly explained by the variation in bank loans and advances, Agricultural Credit Guarantee Scheme Fund and Interest rate up to 97.15%. The remaining 2.85% is accounted for the stochastic error data.

The overall significance of the model was also tested using the ANOVA or F-statistics. Here, the high significance of the F-statistics value of 272.233 did not occurs by chance, it actually confirmed that the model fitted the data well.

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The test for the existence of auto-correlation was performed using Durbin-Watson statistic. The test for the existence of serial autocorrelation showed that there is the presence of autocorrelation problem in the model as the computed durbin Watson did not fall within the du and 4-du region

Econometric Criteria

From the results, the DW statistic (1.713089) shows that model is free from serial correlation of residuals. This implies that the model is econometrically consistent for production and forecasting.

Test of Hypotheses

In order to test the already stated hypotheses, the following decision rule is specified:

Decision Rule

The decision rule is to reject the null hypothesis if the t-calculated is > t table and accept the null hypothesis if the t-calculated is < t table.

Hypothesis One Result

t- Calculated for BLA	-	16.57147
t-critical	-	2.048

Based on these results and decision rule, the null hypothesis was rejected and alternate was upheld. It was concluded that there is a significant relationship between BLA and GAPI.

Hypothesis two Results

t- Calculated for ACLP	-	2.891023
t-critical	-	2.048

Based on these results and the decision rule, the null hypothesis was rejected and alternate was upheld. Thus, it was concluded that there is a significant relationship between ACLP and GAPI. **Hypothesis Three Result**

t -calculated for INTR	-	0.870692
t-critical	-	2.048

Based on these results and the decision rule, the alternative hypothesis was rejected and null was upheld. Thus, it was concluded that there is no significant relationship between INTR and GAPI.

Discussion of Findings

The study empirically examined the impact of banks loans and advances on agricultural production in Nigeria (1985-2012). Based on the analysis of the results, the study revealed that a significant relationship exists between loans and advances and growth in agricultural productivity. This by implication means that improvement in the funding of agricultural sub sector through banks loans and advances will certainly lead to a corresponding increase in agricultural production growth. This finding is supported by the finding of Balogun and Otu (2001) who found that capital inadequacy is the bane of many troubled agro-businesses in Nigeria.

The study also revealed that agricultural credit guarantee scheme fund has a significant effect on the growth of agricultural productivity. This by implication indicates that an increase in funding through agricultural guarantee scheme fund, will lead to the growth of agricultural sub sector in Nigeria. This finding is in agreement with the finding arrived at by Obilor (2002) who concluded that agricultural guarantee scheme fund is responsible for growth in agricultural productivity in Nigeria.

Another major finding of the study revealed that there is no significant relationship between interest rate variations and growth in agricultural productivity in Nigeria. This finding is in line with the finding obtained by Philip, Nkonja, Pender & Oni (2009) who discovered that a favourable interest rate regime for agricultural credits contributes to the growth of agricultural productivity. This by implication means that the lower the interest rates for agricultural production, the higher the growth of the sub sector. This is also in support with the finding of Tims (1999) who found that there is a bi-directional causality between rate of interest and growth in agricultural production.

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

Summary of Findings

This research study was carried out to evaluate the impact of banks loans and advances on the behavior and growth of agricultural sector in Nigeria. In order to validate the work theoretical and empirical literature relevant to the subject matter were reviewed. The Ordinary Least Square (OLS) was adopted to examine the performance of variables on agricultural sector in Nigeria. Consequently, the following findings were made

There is a significant relationship between banks loans and advances (BLA) and Growth in Agricultural Production Index (GAPI). There is a significant relationship between Agricultural Credit Guarantee Scheme fund by Purpose (ACLP) and GAPI. There is no significant relationship between Interest Rate (INTR) and GAPI.

CONCLUSION

In the light of the above findings, the following conclusions were made. Banks loans and advances are the major or sole determinant of agricultural productivity in Nigeria. This implies that the more banks credits and advances are given to farmers at reasonable interest rates, the higher the level of production in the sector. It could be also concluded that ACLP and GAPI are inextricably linked. This by implication means that ACLP played a major role in agricultural sector growth in Nigeria. Finally, it is pertinent to conclude that real interest rates contribute to the growth of agricultural production in Nigeria.

RECOMMENDATIONS

Based on the above finding, the following recommendations were advanced.

- (i) Government and other monetary authorities should use selective credit control measures in order to persuade banks to grant more loan and advances to agricultural sub sector.
- (ii) Efforts should also be made by government to increase agricultural productivity through the provision of necessary inputs to fanners, good marketing facilities, adequate extension services, good transport services and farm infrastructures
- (iii) Government should strengthen agricultural guarantee scheme and more institutions in order to monitor and grants more credits to agricultural sector in Nigeria.
- (iv) On the issues of loan default by farmers, the banks should carefully select and screen their big and small client's character referencing repeat and group lending arrangement are capable of offsetting default risk of potential borrowers.
- (v) Government should as a matter of policy eradicate the problem of land ownership in the country

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