Agricultural Financing and Optimising Output for Sustainable Economic Development in Nigeria: An Empirical Analysis

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Abstract

This study empirically analyse Agricultural financing and optimising Output for sustainable economic development in Nigeria. Agricultural financing is proxied by the endogenous components of government secured Agricultural Credit Guarantee Scheme (ACGS) loans and Output is proxied by Gross Domestic Product. Data were sourced from CBN statistical bulletin, 2012 and analysed using Multiple Regression techniques. Research findings indicate that though there is a positive relationship between ACGS funds and Output growth in Nigeria, the trends in their growth rate as revealed by their graphs is not commensurate. The graphs characteristics suggest that Agricultural sector contribution to GDP growth was very minimal during the period under review. However, other statistical parameters passed the test of significance. We therefore conclude that there is a positive relationship between the variables though it appears insignificant. We recommend that Government should take proactive decisions by making deliberate efforts to improve the finances of stakeholders in the Agricultural sector rather than just policies. Also, we recommend that regulatory authority surveillance on sectorial credit allocation by banks should be strengthened considering the consequences and implications of the shortage of food production for domestic consumption, earnings from Agricultural exports and the adverse effects on the living standard of citizenry.

Keywords: agricultural sector; ACGS loans; output; gross domestic product; Nigeria

INTRODUCTION

In every business enterprise, access to finance is an incentive for increasing average inputs of inventories, labour and capital. The consequent reason is that the provision of finances has positive effects on productivity and contributes to the overall growth of national Output and if the growth of Output is maintained, it leads to sustainable economic development. Indeed, funding agricultural activities contributes significantly to national Output. Nzotta and Okereke (2009) argued that finance affects economic growth positively and lack of it leads to stagnation or even decline in any economic system. Governments of nations recognize that finance is an essential tool for increasing productivity and the general performance of a nation’s economy. Agricultural financing serves to stimulate agricultural activities and provides supports for farmers and other stakeholders in the sector. Ultimately, it transforms a nation’s overall Output capacity positively. According to Food and Agriculture Organization Statistics of United Nations, (FAOSU 2012), Agriculture contributes immensely to the economy of nations in many ways, in the provision of food, supply of adequate raw materials and provision of market for the products of a growing industrial sector.

Thus, the sector constitutes a major source of employment generation and foreign exchange earnings. However, it is a known fact that the Nigerian economy is lopsided, over-depending on the oil and gas sector for its economic resources. This has overtimes resulted in the neglect of Agriculture and thus demeaned Agricultural sector contributions to national Output capacity. Prior to the oil boom era, Agricultural products were the main export goods in Nigeria. With the discovery of oil and gas, the sector exhibits great depression, being unable to expand and as well as contribute meaningfully to Output growth. Agricultural activities are now totally hinged on poor rural farmers whose efforts are mostly for subsistence purposes. They lack necessary modern equipment for large-scale farming, essentially, because they have no access to funding and cannot even augment working capital through credit facility. According to Rahji and Adeoti (2010), access to capital through credit facility is an important factor in Agriculture just as other resources such as Labour, Land, Equipment and Raw materials. Shepherd (2002) affirmed that credits as capital funds determine access to all the resources and factors of production on which farmers depend. Overtimes, it has
been observed that the funding problem in the Agricultural sector in Nigeria is not necessarily as a result of non-availability of finance; rather, it is the reluctance of banks to grant unsecured loans, credit facilities without appropriate collateral securities. Usually, these collateral securities are beyond the reach of rural farmers and as a result, farmers are handicapped, being unable to acquire necessary working tools and raw materials. Consequently, there is acute reduction on agricultural activities and productivity.

In Nigeria, various policies have been implemented by government to attract attention and funding to Agricultural activities. Some of these policies include: the ‘Green Revolution’ in the 1980s; capturing ‘Agriculture’ as a preferred sector of the economy in order to attract special credit allocation by banks and initiating specialized Agricultural lending. Iheancho, Abdullahi & Ibrahim, (2006) observed that while it may appear that some of these policies have achieved little in their targeted goals, the operation of some others leave one to wonder if they are actually achieving their intended objectives as rural poverty is on the increase though a large portion of the population is engaged in Agricultural activities. One bold move by government in Nigeria to alleviate the problem of funding is the introduction of Agricultural Credit Guarantee Scheme (ACGS). The scheme allows government to act as an intermediary between farmers and credit providers. The government stands as a guarantor for Agricultural loans in order to mitigate the risk involved in granting the facility. For this reason, ACGS loans are considered as the major source of finance for Agricultural activities in Nigeria. ACGS loans are categorized into ‘Loans to Individual Farmers, Loans to Informal Groups, Loans to Co-operatives, and Loans to Companies’. From the foregoing, this study seeks to empirically explore Agricultural financing with a view to optimising Output capacity for sustainable economic development in Nigeria.

STATEMENT OF THE PROBLEM

It has been observed that the Nigerian economy over-dependence on the oil and gas sector for economic resources has greatly demeaned Agricultural sector contributions to national Output. Agriculture which was the mainstay of the economy is now exhibiting great depression, being unable to expand and as well as contribute meaningfully to national Output capacity. To counter depression in Agricultural activities, government instituted Agricultural Credit Guarantee Scheme (ACGS) which is considered as the major source of finance for Agriculture in Nigeria. Against this backdrop, this study seeks to empirically explore Agricultural financing, vis-a-vis ACGS loans contributions to national Output with a view to optimising Output capacity for sustainable economic development in Nigeria.

STATEMENT OF HYPOTHESIS

The Null hypothesis considered as a useful tool in testing the relationship between variables is adopted and formulated based on the literature reviewed. It states thus:

Ho: There is no relationship between ACGS loans and Output capacity in Nigeria.

The study is divided into five sections as follows: Section 1 above dealt with the introduction, Section 2 reviews related literatures to the study, Section 3 is the research methodology and model specification, Section 4 presents data, graphic representation and analysis of empirical results while Section 5 is summary, conclusion and recommendations deduced from the research findings.

THE REVIEW OF LITERATURE

Prior to the oil boom era in the 1970s, Agriculture was the mainstay of the economy and the major foreign exchange earning sector in Nigeria. The sector has been characterized by diversity of Agricultural activities comprising of crop farming, livestock rearing, fishing and forestry, etcetera and it played very vital and essential roles in Output growth and structural economic changes in the past. Though the country now relies heavily on the oil industry for its revenues and foreign exchange earnings, Nigeria is still predominantly an agricultural society. According to Central Bank of Nigeria report (CBN 2009) Agriculture employed about two-thirds of Nigeria’s total labour force, and contributed 42.2 percent of Gross Domestic Products (GDP), representing 88 percent of non-oil earnings in 2007. Specifically, some roles that the sector has played in the Nigerian economy from 1960s include the provision of food and domestic market products for consumption; generating foreign income through low level exports; source of employment generation particularly for rural dwellers, source of raw materials for industrial sector activities et cetera. Therefore, providing funds for the sector to augment working capital and for the purchase of necessary tools and materials in order to enhance Output is of great importance to government ovetimes. Besides providing funds for Agricultural activities to enhance Output capacity provision of food is also of paramount significance. The consequence of shortage of food for
sustaining development, the has been that the country relies heavily on the importation of food for its teeming population. Available data from Food and Agriculture Organization Statistics of United Nations, (FAOSU, 2012) shows that the total value and volume of Agricultural imports has been higher than the total exports during selected years ranging from 1965–2008 as shown on table 2.1 below.

The trends in the Import and Export data on table 1.1 are more visible in a column graph as shown in figure 1.1 below. The column graph representation clearly displayed the disparity between imports and exports of Agricultural products in value and volume. The obvious consequence of the import/export imbalance is that Balance of trade (BOT) in the Agricultural sector for the period 1965 to 2008 has negative contributions to Output (GDP).

Table 1.1: Imports and Exports of Nigerian Agricultural Products Measured in value based quantity (1000$) from 1965–2008

<table>
<thead>
<tr>
<th>YEAR</th>
<th>IMPORTS</th>
<th>EXPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>245,655</td>
<td>160,661</td>
</tr>
<tr>
<td>1970</td>
<td>248,954</td>
<td>214,463</td>
</tr>
<tr>
<td>1975</td>
<td>238,101</td>
<td>507,029</td>
</tr>
<tr>
<td>1980</td>
<td>269,500</td>
<td>532,029</td>
</tr>
<tr>
<td>1985</td>
<td>1,727,116</td>
<td>929,530</td>
</tr>
<tr>
<td>1990</td>
<td>1,628,539</td>
<td>338,285</td>
</tr>
<tr>
<td>1995</td>
<td>1,880,582</td>
<td>613,815</td>
</tr>
<tr>
<td>2000</td>
<td>1,145,374</td>
<td>326,497</td>
</tr>
<tr>
<td>2005</td>
<td>1,662,270</td>
<td>586,039</td>
</tr>
<tr>
<td>2008</td>
<td>2,179,236</td>
<td>328,475</td>
</tr>
</tbody>
</table>

Source: Food and Agriculture Organization Statistics of United Nations, (FAOSU 2012)

Figure 1.1 Column graph Representation of Imports and Exports of Nigerian Agricultural Products Measured in value based quantity (1000$) from 1965–2008.

Source: Author’s computation using Food and Agriculture Organization Statistics of United Nations (FAOSU 2012) data; 2014

Provision of funds for Agricultural activities to enhance Output capacity has again and again being re-enforced adopting various strategies in the past. For example, some CBN’s monetary policy compels all banks to lend at least a certain percentage of their deposits to the Agricultural sector as a preferred sector in the economy. However, available statistics as per the AGCS loans appear to suggest that those policies and provisions are hardly implemented or adequate respectively. The Green Revolution never saw the light of day. According to CBN Report (2004), the trend in the share of Agricultural sector contribution to Output capacity (GDP) shows a substantial variation and long-term decline from 60 percent in the early 1960s to 48.8 percent in the 1970s, to 22.2 percent in the 1980s and 26 percent in 2000. This trend is worrisome as it appears to indicate that the effort of government is not yielding desired goals. Olaitan (2006) argued that efforts by the government to transform the Agricultural sector for better performances have overtime induced provisions for the increase of finances in order to enhance farming activities. Although, government may have made provisions for credit guidelines in favour of Agricultural activities, it has been observed over the years that such provisions have been grossly inadequate to finance the production of livestock, forestry and fishery subsectors in order to appreciably improve the sector’s contribution to GDP. In his opinion, Nwachukwu et al. (2008) suggests that government should provide credit incentives to farmers or subsidize production cost in order to encourage and increase Output capacity.

Fundamentally, inadequate production capacity in the agricultural sector is predominantly as a result of inadequate funding amongst other things. According to Iheancho et al., (2006), inadequate funding by government as evidenced by their annual budgets constitutes a major problem in Nigeria’s Agricultural sector performance. In their opinion, about 65 percent of Nigeria’s economically active population lack access to formal financial services, that lack of adequate financial resources is the most effective factor that hinders the importation of machinery and capital goods used for large scale production. As a result, Manystong et al., (2005), pointed out that a little less than 50 percent of cultivable agricultural land in Nigeria is under utilization. Rural poverty is on the increase, giving a picture of a rich nation with poor citizens. Traditional farmers and small entrepreneurs engaged in Agricultural activities are rural dwellers who lack large scale production skills and utilize primitive production tools. Resultantly, yields from their efforts are low. Again, in their view Iheancho et al., (2006) affirmed that irrespective of the intervention of various agricultural programmes by government, the existence of endemic
poverty among the populace still constitutes quite a number of hassles for the growth of the sector.

Government through the CBN instituted Agricultural Credit Guarantee Scheme (ACGS) to cater and promote Agricultural activities. The scheme is considered an appropriate funding strategy capable of providing the required finance for farmers and Small and Medium Enterprises (SMEs). ACGS loans therefore constitute the major source of Agricultural funding in Nigeria. Olaatan (2006) posits that ACGS provides credit finance to a large number of farmers in the rural areas as financial empowerment aimed at increasing Agricultural production. ACGS loan scheme is designed to make access to finance much easier as it extends credit facilities from banks to farmers at 75 percent of total fund borrowed are without collateral security but guaranteed by government. It is on this note that this study seeks to empirically explore Agriculture financing with a view to optimising Output capacity for sustainable economic development in Nigeria.

RESEARCH METHODOLOGY
Variables and Data for the Regression Estimation
Agricultural Credit Guarantee Scheme (ACGS) is the most important schemes in terms of funding the activities of the Agricultural sector in Nigeria. This explains why in this study Agricultural financing is proxied by the endogenous components of ACGS funds, namely, Loans to Individual Farmers (LI), Loans to Informal Groups (LG), Loans to Co-operatives (LC), and Loans to Companies (LY) and while these represent and our independent variables, Output is proxy by Gross Domestic Product (GDP) which represents our dependent variable.

Specification of the Econometric Model
An econometric model is specified below to reflect the theoretical relationship between the dependent variable and the independent variables. The empirical estimation was carried out using IBM Statistical Package for Social Science (SPSS), Statistics 20 and results analyzed using the parameters of Multiple Regression techniques. The mathematical expression of the regression model is given as:

\[ Y = f(X_1, X_2, X_3, X_4) \]  \hspace{1cm} (Eqn 1)

Where: \( Y \) = Dependent variable and \( X_1, X_2, X_3, X_4 \) = Independent variables

In the views of Ojamieruaye and Oaikhenan; (2001;53), the multiple regression theory postulates that there exist a stochastic relationship between a variable \( Y \) and a set of other variables (say, \( X_1; X_2; \ldots \ldots \ldots X_4 \)). In other words, \( Y \) referred to as the dependent or explained variable depends on other observed variables, \( (X_1; X_2; \ldots \ldots \ldots \ldots \ldots ; X_4) \) called the explanatory variables, and an unobserved disturbance or error term usually denoted by ‘\( \mu \)’. The disturbance or error term signifies that the relationships between economic variables are generally inexact. For the purpose of this study, the econometric version of the Multiple Regression Model (MRM) is expressed as follows:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu \]  \hspace{1cm} (Eqn 2)

Where: \( Y \) = Dependent variable and \( X_1, X_2, X_3, X_4 \) = Independent variables
\( \beta_1; \beta_2 \ldots \ldots \beta_7 \) = The parameters of the independent variables of the model or slope coefficients
\( \beta_0 \) = is the intercept (the expected value of \( Y \) when all the independent variables assume zero as value.
\( \mu \) = Disturbance or error term (a random or stochastic variable)

Using equation 2 above, we specify a model to link GDP and the explanatory variables namely, Loans to Individual Farmers (LI), Loans to Informal Groups (LG), Loans to Co-operatives (LC), and Loans to Companies (LY) in the Multiple Regression Model (MRM). Thus, we have:

\[ GDP = \beta_0 + \beta_1 LI + \beta_2 LG + \beta_3 LC + \beta_4 LY + \mu \]  \hspace{1cm} (Eqn 3)

Where: \( GDP \) = Gross Domestic Product (Output)
\( LI \) = Loans to Individual farmers; \( LG \) = Loans to Informal Groups; \( LC \) = Loans to Cooperatives and \( LY \) = Loans to Companies
\( \beta_1; \beta_2; \ldots \ldots \beta_7 \) = The parameters for the independent variables or slope coefficients
\( \beta_0 \) = The intercept; the expected value of GDP when all the explanatory variables assume zero as value.
\( \mu \) = Disturbance or error term (a random or stochastic variable).

The apriori expectations with respect to signs are: \( \beta_0 > 0, \beta_1 > 0, \beta_2 > 0, \beta_3 > 0 \) \hspace{1cm} and \( \beta_4 > 0 \)

DATA PRESENTATION AND ANALYSIS
Data Presentation
The data for our empirical estimation were sourced from 2012 edition of CBN Statistical Bulletin for the period 1982 to 2012 and for ease of understanding and interpretation; these data were utilized to compute a graph as shown in figure 1.2 below. While GDP grew moderately from 1993 and sloping sharply from 2002,
no growth is observed in Loan to Informal Groups (LG), Loans to Co-operatives (LC), and Loans to Companies (LY) variables such that their graph lines crawl along the X-axis. The impliedly means that ACGS credit allocation to these groups of beneficiaries were quite small in value for all the years under review. The graph characteristics thus appear to suggest that there is no significant relationship between Output and these variables and that there is the likelihood that their impacts on GDP were very minimal during the period under review.

Figure 1.2: Graphic representation of data for GDP and ACGSF Loans to all categories of beneficiaries in Nigeria

Source: Author’s computation; 2014.

However, the variable, ‘Loan to Individual farmers’ exhibited a different growth trend from the other three independent variables. While GDP growth picked in 1993 grew at a faster rate from 2002 and sloping sharply to 2012, Loan to Individual farmer variable growth picked in 2001 and grew moderately alongside GDP. The implication of the growth characteristics of this variable indicates the possibility that more funds, though meager, may have been made available to individual farmers. This also suggests that the variable may have made moderate contribution to Output (GDP) growth during the period under review. Based on the growth relationship between GDP and the independent variables, we infer and conclude that the Agricultural sector may not have made significant contributions to Output level during the period under review.

Analysis of Regression Results

The analysis of empirical results obtained from the regression estimation was carried out using the following statistical parameters: the Pearson correlation coefficient which serves to measure the strength of linear relationship between the variables; the t-test coefficient of the independent variables which attest to the significance of individual independent variable; the coefficient of determination, the adjusted R square ($R^2$) which measures the proportion of variation explained by the independent variables and the F-statistics of the Analysis of Variance (ANOVA), the indicator of the overall significance of the model.

Pearson Correlation Coefficient

Below are the Pearson Correlation coefficient results of our empirical regression estimation.

Table 1.2: Pearson Correlation Coefficient Matrix.

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>LI</th>
<th>LG</th>
<th>LC</th>
<th>LY</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LI</td>
<td>.987</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LG</td>
<td>.693</td>
<td>.727</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC</td>
<td>.787</td>
<td>.854</td>
<td>.549</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>LY</td>
<td>.794</td>
<td>.826</td>
<td>.437</td>
<td>.736</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source: Regression Estimation Report using IBM SPSS Statistics: 20; 2014

The Pearson correlation coefficient matrix on table 1.2 above displays the coefficients which measure the strength of linear relationship between the variables. The closer the coefficient is to 1, the stronger the relationship. It could be observed that a large proportion of the coefficients are high, indicating that there is a strong linear relationship between the variables. In particular, the coefficient between GDP and Loan to Individual farmers (LI) variable stood at .987, meaning that at 98.70%, the linear relationship is near perfect. The correlation coefficient between GDP and Loan to Individual (LI), Co-operative (LC) and Company (LY) variables are all indicating strong linear relationship at 69.30%, 78.70% and 79.40% respectively. Based on these results, we reject the Null hypothesis of no relationship and accept the alternative hypothesis of a relationship. Therefore, we conclude that there is a strong linear relationship between Agricultural Financing (ACGS loans) and Output (GDP) in Nigeria, that the provision of finance though minimal has made an equal minimal contribution to GDP.

The t-test coefficient

Table 1.3 below displays the t-test coefficients which attest to the significance of individual independent variable in the empirical model. Loan to individual farmers (LI) variable exhibited a positive coefficient which conforms to apriori expectation, meaning that it impacted positively on GDP. The positive sign of LI coefficient suggests that provision of adequate finances to individual farmer has the potential of increasing
Output capacity significantly that could pave way for wealth creation and for sustainable economic development. Basically, farmers’ products, food and industrial raw materials in particular are necessary in terms of raising the living standard of citizenry and sustaining local industries. LI coefficient at 24.729 passed the test of significance and indicates that it is relevant to policies formulated to affect GDP. The coefficients of Loans to Informal Groups (LG), Loans to Co-operatives (LC), and Loans to Companies (LY) variables standing at -4.344, -6.710 and -3.130 respectively failed the test of statistical significance at all significant levels.

Table 1.3 The t-test coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1218455.980</td>
<td>248104.185</td>
<td>4.911</td>
</tr>
<tr>
<td></td>
<td>LI (Ln to ind.farm)</td>
<td>5.591</td>
<td>.226</td>
<td>1.360</td>
</tr>
<tr>
<td></td>
<td>LG (Ln to inf.gp)</td>
<td>-16.205</td>
<td>3.730</td>
<td>-1.23</td>
</tr>
<tr>
<td></td>
<td>LC (Ln to Coop)</td>
<td>-21.714</td>
<td>3.236</td>
<td>-2.29</td>
</tr>
<tr>
<td></td>
<td>LY (Ln to Coy)</td>
<td>-22.472</td>
<td>7.179</td>
<td>-3.107</td>
</tr>
</tbody>
</table>

Source: Regression Estimation Report using IBM SPSS Statistics: 20; 2014

The coefficients of Loans to Informal Groups (LG), Loans to Co-operatives (LC), and Loans to Companies (LY) variables counter apriori expectation. The negative sign characteristics of the coefficients of these variables appear to reflect the adverse effect of inadequate funding to these categories of beneficiaries. It shows that these categories of farmers are financially handicapped and need funds to improve productivity and thus Output capacity. These variables failed the test of statistical significance and based on this empirical findings, it casts doubts as to whether they can be considered as being relevant to policies that are formulated to affect GDP.

The coefficient of determination, the adjusted R square (R²)

Table 1.4 below shows the coefficient of determination, the adjusted R square (R²) result of our empirical estimation.

Table 1.4: The coefficient of determination, the adjusted R square (R²)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>996</td>
<td>.992</td>
<td>.991</td>
<td>1165868.369</td>
<td>937</td>
</tr>
</tbody>
</table>

Source: Regression Estimation Report using IBM SPSS Statistics: 20; 2014

The empirical result exhibited by the coefficient of determination, R square (R²) indicates that the independent variables put together accounted for a large proportion of variation in Output (GDP). The R² indicates .991 and that shows that the explanatory variables accounted for 99.10% of systematic variations in Output, meaning that 99% variations in GDP were explained by the independent variables. This result outcome is amazing and appears to suggest that if adequate funds are made available to the Agricultural sector, its contribution to Output capacity will be overwhelming.

The F-statistics of the Analysis of Variance (ANOVA)

We have in table 1.5 below the F–statistics coefficient of the Analysis of Variance (ANOVA) which attests to the overall significance of the model.
Table 1.5: The F-statistics of the Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4448861074814194.50</td>
<td>4</td>
<td>1112215268705484.60</td>
<td>818.257</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>36699724458289.270</td>
<td>27</td>
<td>1359249054010.714</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4485560799272484.00</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: GDP
b. Predictors: (Constant), LY(Ln to Coy), LG(Ln to inf.gp), LC(Ln to Coop), Ll(Ln to ind.farm).


The results indicate that the F-statistics of the model is 818.257, the magnitude of which is considered high enough to conclude that the estimated model passed the test of overall significance at all significant levels. Based on this outstanding result complemented by an equally good R square (R²) result, we are compelled to reject the null hypothesis of no relationship and accept the alternate hypothesis of a relationship. In clearer terms, there is a strong positive linear relationship between Agricultural financing (ACGS loans) and Output capacity in Nigeria. Again, it suggests that provision of adequate funds for Agricultural activities has the potential of increasing Output capacity maximally with the potential of sustaining economic development in Nigeria.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary
This research study seeks to explore Agricultural financing and optimising Output capacity for sustainable economic development in Nigeria. Agricultural Financing is proxied by the endogenous components of government secured Agricultural Credit Guarantee Scheme (ACGS) funds, namely, Loans to Individual Farmers, Loans to Informal Groups, Loans to Co-operatives, and Loans to Companies. While these variables represent our independent variables, Output is proxied by Gross Domestic Product (GDP) and represents our dependent variable. Data for empirical estimation were sourced from CBN statistical bulletin of 2012 and analysed using Multiple Regression techniques parameters.

Conclusion
The research findings were robust. While trends in graphs revealed minimal impact on Output capacity (GDP growth), the Pearson coefficients indicate strong linear relationship between variables and the Coefficient of determination, R square (R²) indicates that the variables put together accounted for .991 of systematic variations in Output (GDP); meaning that 99.10% variations in GDP was explained by the independent variables. Equally good was the F-statistics result which stood at 818.257, the magnitude of which is considered high enough to conclude that the estimated model passed the test of overall significance at all significant levels. Based on these findings we reject the null hypothesis of no relationship and accept the alternate hypothesis of a relationship. We therefore conclude that though there is a strong linear relationship between the variables; that ACGS loans impacted positively but minimally on Output capacity and that the impact of ACGS funds on Output during the period under review is so minimal and insignificant to sustain economic development in Nigeria. However, the result indicate that there are possibilities of improvement if adequate funds are provided and channeled to the sector.

Recommendations
The findings sprout up the need to strategize on modalities to fund Agricultural activities that would overtimes increase Output capacity required for sustainable economic development in Nigeria. Since the Agricultural sector is also classified as a preferred sector of the economy in Nigeria, we recommend that government (Federal and State) should consciously and deliberately pay serious and special focus on the financial needs of stakeholders in this sector in their annual budgets and ensure strict compliance. This may include making financial provisions for the training of local farmers and students of tertiary Agricultural institutions to acquire mechanized farming skills and be given agricultural incentives to motivate the younger generation into lucrative farming ventures. In particular we also recommend that regulatory authority surveillance on special credit allocation by banks such as the ACGS funds under discussion should be strengthened through rigorous policy implementation strategies, followed by moral suasion and/or sanctions for defaulting banks. Lastly, we recommend that government should encourage farmers’ Cooperative
societies and sensitize them on the need to provide micro-credits to members. This has become necessary because the continuous decline of Agricultural sector activities may facilitate non availability of food and others Agricultural products in the near future. With drying oil wells in Nigeria, a depressed Agricultural sector have dire consequences and implications on food production, productivity in terms of Output capacity, foreign exchange earnings, the living standard of citizenry, the development of the nation and global economy in general. A hungry nation is an angry nation!

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