EFFECT OF MICRO FINANCE ON PROMOTING RURAL ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

There has been a growing awareness on the need to develop the rural areas especially in developing countries where rural communities have earlier experienced decades of neglect. Special interest therefore is in accelerating the processes of rural community transformation by various governments in the areas of poverty alleviation, provision of rural infrastructure, agricultural extension, and the development of microfinance establishments that will improve the lives of the rural inhabitants and community organizations. It is against this background that this study examined the impact of micro finance activities on agricultural contribution to Nigeria’s gross domestic product. Time series data for 12 years period 1999-2010 were collated from Central bank on Nigeria statistical bulletin. The least square (LS) regression model was applied and the result reveals that micro finance activities have negative and non-significant impact on agricultural contribution to gross domestic product in Nigeria. Therefore, the paper recommends that since rural poverty is often a product of poor infrastructure that hinders development and mobility as the rural areas tend to lack sufficient roads that would increase access to agricultural inputs and markets. Therefore, as a means to improving rural economic growth in Nigeria, there should be a conscious effort by government to industrialize the rural areas as this will serve as a motivation for micro finance institutions to locate their offices in the rural areas.

Keywords: Microfinance, Rural, Economic growth and Nigeria
INTRODUCTION

In the last three decades, there has been growing awareness of the spatial dimension in the development of the rural areas especially in developing countries, where rural communities have earlier experienced decades of neglect [1]. There is therefore, special interest in the accelerating processes of rural community transformation by various governments in the areas of poverty alleviation, provision of rural infrastructure, agricultural extension, and in the development of micro finance establishments that will affect the lives of the rural investors and community organizations among others. Based on these and other strategies, the Central Bank of Nigeria (CBN) in 1990 established an economic policy that would encourage the extension of banking business to the rural area of the country in order to mobilize rural savings. This was aimed at developing and fostering rural transformation [2 and 3]. The whole idea of rural banking stemmed from a realization of the abundant latent resources available in the rural areas. The need to channel these resources to production and make such business activity contribute to economic development shifted research focus and government policy to promoting rural banking habit. An increase in rural investment as a result of provision of loans and advances will gear up output levels, and this will in turn raise the consumption level and possibly improved accessibility to public goods and services within the rural environment [4, 5 and 6].

According to Smith and Yeboah, (2005), [7], throughout most of the post-World War II period, governments across the developing world have intervened in rural financial markets in order to promote income expansion and alleviate rural poverty. In many of these efforts, especially during the 1950s, 1960s, and 1970s, the authorities pursued the direct credit approach, which is targeted at increasing production and productivity or adopting new technologies without external assistance in the form of credit, since they were assumed to be too poor to save. But private banks could not (or would not) lend on appropriate terms to this sector, and thus farmers
were forced into the hands of moneylenders. The development led to the establishment of government owned specialized institutions to provide subsidized credit to the target population.

The uniformly disappointing results of these so-called traditional rural credit projects were first exposed in critiques of the direct credit approach associated with the Ohio State School of rural credit in the late 1970s and early 1980s [8, 9, 10 and 11]. Thus another view called the New View of rural credit was developed out of these literatures which advocated more careful study of rural financial markets in terms of the demand for financial services, institutional design, informal financial sector practices, and the role of government policy. In the process, the goals of rural financial markets reform came to be understood, which [12], argue that the rational is to enhance the efficiency of financial intermediation, and expand access to financial services on a sustainable basis for small farmers, small-scale enterprises, and the rural poor.

By the early 1990s, two general approaches to financial market reform had taken shape. The first, known as Financial Liberalization, which was based upon the theory of Financial Repression. The second has been labelled the Financial Systems Approach or, alternatively, the Financial Systems Development Approach. Restrictive government policies theorists in the former tradition was said to be the principal cause of the shallow, fragmented, and inefficient financial systems plaguing many developing countries [13]. To enhance the efficiency of the financial system and to create more access to financial services for marginalized groups, the prescription was straightforward: liberalize the financial system by eliminating restrictions on interest rates, mandatory sectoral credit allocations, and credit ceilings [14 and 15].

Students of rural financial markets working in the tradition of the latter approach focus on the key structural features of the economic environment
within which rural financial institutions operate. These features were incomplete information, missing markets, and imperfect contract enforcement which influence the nature of savings and credit transactions in important ways. The ability of rural financial institutions to cope with these features thus determines its ability to provide desired financial services to the target population on a widespread and sustained basis. Thus, outreach and financial self-sustainability, therefore, are the two major criteria to be used when evaluating rural finance institutions performance [16]. If rural finance institutions do achieve significant outreach on a sustainable basis, analysts in this tradition argue that it is likely to have the desired impact on rural income and poverty [17, 18 and 19].

Advocates of the Financial Systems Approach have grouped themselves into two separate schools of thought. The first, which is called the ‘Linkage school’ argues that each financial-system segment (formal, informal, semiformal) has specific comparative advantages in providing financial services. Reform efforts should focus on exploiting these advantages by creating savings and credit linkages among existing formal, semiformal, and informal financial institutions. Each segment, then, should be encouraged to operate freely within its specialized market niche [20]. The second strand of Financial Systems Approach thought can be termed the ‘Learn from Success School’. Advocates of this view argue that locally-successful informal financial sector practices should inform the design and policies of formal rural finance institutions. In addition, the experiences of the so-called non-traditional rural finance institutions, which combine features of formal and informal finance to serve small savers and borrowers effectively in many developing countries, should be drawn upon when designing rural financial market reforms. By adopting and adapting key features of local informal financial practice and successful non-traditional rural finance institutions, therefore, the outreach and self-sustainability of formal-sector rural finance institutions can be enhanced [21 and 22].
Performance appraisal parameters of micro finance banking in Nigeria have relied mainly on qualitative parameters, though they are some merits such as providing theoretical frameworks, however, they are difficult to measure with precision, thus this study seeks to use quantitative measures to appraise the impact of micro finance banks activities on rural economic growth in Nigeria. Also, the essence of this study is not to reinvent the wheel but contribute to geography, hence the study will use established quantitative parameters to evaluate the effectiveness of Microfinance in promoting rural economic growth in Nigeria.

**Statement of Problem**

The core objectives of National Integrated Rural Development Plan (2000) for Microfinance banks are; to ensure significant reduction of poverty and ultimately its eradication in the shortest possible time; mobilize and empower rural population to create wealth through increased agriculture, industrial and other productive activities; promote the expansion of the productive base of the rural economy through the creation of non-agricultural enterprises; provide rural support services needed to bring about increased production of goods and services; provide access to extension services, input, credit and marketing services; and to raise rural productivity in general. The Integrated Rural Development Plan identifies poverty reduction, mobilisation of savings and financing agriculture as the three cardinal transmission channels through which micofinancing will enhance rural economic growth and development.

Evidence in Latin American, Asian and African countries show that saving mobilization is one of the key activities in building a sound financial system, [23, 24 25 and 26], however, in developing countries, savings are often under mobilized. Two commonly cited underlying causes are: (1) prevalence of inappropriate saving products and poor services by depository institutions; and (2) lack of confidence in the safety or liquidity
of financial institutions by rural people [27, 28 and 29]. Therefore, to effectively and efficiently mobilize savings, saving products appropriate for rural savers need to be developed and depository institutions need to improve their services to this category of the population. Also, the institutions need to win the confidence of the rural people by building easy and friendly saving and withdrawal procedures.

In Nigeria, the government through its legislation seem to exacerbate the micro credit banking crisis. For example, in 1990, the government established the Community bank to promote banking habit among the rural people and accelerate rural development through financial intermediation. In 2005, the government through the Central Bank of Nigeria mandated the existing Community Banks to migrate to Microfinance Banks [30]. The regulatory framework for Microfinance banks changed the ownership structure of the Community Banks by allowing a single individual to own a microfinance bank. The regulation also increased the minimum share capital for microfinance banks to N2 billion Naira for unit banks and 10 billion for state banks [30]. Such policy has the ability of creating unlevel playing ground between the poor and the rich. The reform targets economically active poor without effectively address the deluge of problems the defunct Community banks encountered.

Additionally, towards the last quarter of 2010, the Nigerian Deposit Insurance Corporate conducted a nationwide investigation on all the microfinance banks in country. The findings led to the complete closure of about 224 microfinance banks [31]. However, the remote cause of such crisis could be traced to the lagging supervision and liberal licensing of microfinance banks. This is because Central Bank of Nigeria was giving microfinance bank licences without proper regulatory and supervisory requirements. This situation led to the proliferation of microfinance banks
without complying with the regulatory issues like, regular rendition to Central Bank, keeping proper book of account, among others.

This development triggered wide spread criticisms on the microfinance model by depositors and customers of the affected microfinance banks. Though, the Nigeria Deposit Insurance Corporation promised full protection for depositors, and publishes regularly, depositors that are yet to collect their claims. The Nature of microfinance clients makes the NDIC promise mere window dressing as some of them cannot read nor write, let alone having access to national dailies.

With such policy vacillation, the ability of micro finance banks in achieving the National Integrated Rural Development Plan (2000) in the Nigeria economy is not certain and also constitutes a very good research area. The essence of this paper is to fill this research gap. From the foregoing therefore, this paper in line with the National Integrated Rural Development Plan (2000) seeks to examine the impact of micro finance activities on rural economic growth using on agricultural contribution to gross domestic product in Nigeria as indicators.

**Objectives of the Study**

The specific objective of this paper is to investigate the impact of Microfinance on Rural economic growth in Nigeria. To achieve this objective, the paper strives to achieve this specific objective;

To ascertain the impact of microfinance activities on agricultural contribution to gross domestic product in Nigeria

**Research Questions**

Below is the research questions which this paper seek to answer, this is;

To what extent has microfinance activities impacted positively and significantly on agricultural sector contribution to Nigeria’s gross domestic product?
Research Hypotheses
In line with the objective of this paper, the hypothesis is formulated as; Microfinance banks activities do not have positive and significant impact on agricultural sector contribution to Nigeria’s gross domestic product.

Scope of the study
The paper will cover the period 1999-2010. Sustained democratic dispensation began in 1999 in Nigeria, thus the aim of this paper is to examine the impact of micro finance institutions activities on economic growth in Nigeria from 1999-2010 with the rural areas in mind. Also as stated earlier, this paper is not intended to reinvent the will but to contribute to geography, thus, the focus will be to examine the impact of microfinance institutions activities on the enhancement of rural economic growth in Nigeria.

Significance of the study
The study will be significant to the following groups;

1. Policy makers
Policy decisions are made based on necessity, preliminary data and estimates that contain considerable desire to achieve it intended objectives, thus this study will assist policy makers in formulating policies that will impact on achieving better living standards on the rural populace of Nigerians.

2. Academic Purpose
This study will trace the history of rural banking policies in Nigeria, especially since the introduction of micro-finance banking in Nigeria. Therefore, it will contribute to the volume of literatures in this area of finance.
3. General And Interested Public

This study will be significant to the general and interested public because it will help them to explore options available from rural banking institutions in accessing loans and advances as to increase their economic wellbeing.

RESEARCH METHODOLOGY

Research Design

According to Onwumere (2005), [32], a research design is a kind of blueprint that guides the researcher in his or her investigation and analyses. The paper adopts the *ex-post facto* research design. The choice hinges on two reasons. Firstly, the paper relies on data obtained from the Central Bank of Nigeria Statistical Bulletin, as such the events under investigation have already taken place and the researcher does not intend to control or manipulate the variables. The inability of the researcher to manipulate these variables is a basic feature of *ex-post facto* research design [32]. Secondly, as described by Kerlinger (1970), [33], the *ex-post facto* research design also called causal comparative research is used when the researcher intends to determine cause-effect relationship between the independent and dependent variables with a view to establishing a causal link between them; the study is an impact study thus the adoption of the *ex-post facto* research design.

Nature and Sources of Data

The data for the study are secondary data. Secondary data are data which have been processed, collated and existed in published form (see Onwumere, 2005). The secondary data were extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin and National Bureau of Statistics (NBS). The relevant data include Microfinance loans and advances and agricultural contribution to gross domestic product.
Population and Sample Size

The idea of sampling or determining sample size is to obtain a part of the population from which some information about the entire population can be inferred. In line with the nature of this type of study the population of the study is the Microfinance banks in Nigeria. This constitutes the total sample size for this research. The sample size consists of all microfinance data that are relevant to this paper. Specifically, the relevant data include; aggregate loan and advances; aggregate deposit and other macroeconomic data like gross domestic product (real) of agriculture.

Description of Research Variables

The variables for the study are made-up of dependent and independent variables. Below is a breakdown of the respective variables and their justifications.

Independent Variable

Micro-Finance Activity (MFA): The core function of banks is the channelling of fund between savers surplus and savers deficit. It is generally argued that the size of banks determines its ability to effectively carry out this operation. Financial intermediation is the ratio of aggregate deposit mobilised divided by total aggregate loans. Scholars have never disagreed on the appropriateness or robustness of this proxy in determining intermediation function. This study will adopt the measure as a proxy of financial intermediation [34].

\[
\text{Micro-finance activity} = \frac{\text{Aggregate loans and advances}}{\text{Aggregate Deposit}} \quad (i)
\]
Dependent Variables

Rural Economic Growth (REG)

Gross domestic product is often used as a measure of economic growth on economic-wide basis. This measure captures the rural and urban economic activities. However to capture rural economic growth, it is suggested that studies should adopt measures that are peculiar to the rural economy. This thinking has influenced researchers to use the agricultural contribution to gross domestic product since the bulk of agricultural activities are in the rural areas [35]. The agricultural sector employs 90% of the rural population. This study adopts this as a measure of rural economic growth in Nigeria.

\[
\text{ACGDP} = \frac{\text{Agricultural Sector GDP Output}}{\text{Aggregate Gross Domestic Product}} \quad \text{................................. (ii)}
\]

Model Specification

In order to specify the model for the study, equation (iii) is transformed to suit the hypothesis stated as follow, thus, given that Microfinance activities do not have positive and significant impact on rural economic growth, it is represented as;

\[
\text{REG} = a + bMFA + \mu \quad \text{................................................................. (II)}
\]

Technique for Analysis

The hypotheses stated in chapter one was tested using the Ordinary Least Square Regression model. The justification for adopting this analytical technique is based on the following premise; the ordinary least square is assumed to be the best linear unbiased estimator [36]; it has minimum variance, and similar works in other jurisdiction adopted this technique in their paper. The variables are scaled to overcome the problem of
heteroskedasticity associated with Ordinary Least Square. The simple regression equation is stated thus;

\[ Y = B_1 + B_2X_2 + B_1 + u \]

Where, \( Y \) =dependent variable; \( X \) =explanatory variable; \( B_1 \) =intercept of \( Y \); \( B_2 \) =slope coefficients; \( U \) =stochastic variables (Gujarati, 1995).

**PRESENTATION AND ANALYSIS OF DATA**

**Introduction**
This section presents the data and test the hypothesis. The section is divided into two subsections. Section one is the presentation of relevant proxy data while section two is the test of hypothesis. The hypothesis was tested using three steps. Step one is the restatement of the hypotheses in null and alternate forms, step two is the analysis of results while step three is the decision. In this study the decision criteria is that whenever the null hypotheses is rejected, the alternate hypotheses is accepted otherwise accept.
Data Presentation

Table 4.1 presents the nominal value of the respective data.

<table>
<thead>
<tr>
<th>Year</th>
<th>ALA (N,m)</th>
<th>AD (N,m)</th>
<th>AO (N,m)</th>
<th>GDP (N,m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>2958.3</td>
<td>4140.32</td>
<td>114570.7</td>
<td>312183.5</td>
</tr>
<tr>
<td>2000</td>
<td>3666.6</td>
<td>7689.4</td>
<td>117945.1</td>
<td>329178.7</td>
</tr>
<tr>
<td>2001</td>
<td>1314</td>
<td>3294</td>
<td>122522.3</td>
<td>356994.3</td>
</tr>
<tr>
<td>2002</td>
<td>4310.9</td>
<td>9699.2</td>
<td>190133.4</td>
<td>433203.5</td>
</tr>
<tr>
<td>2003</td>
<td>9954.8</td>
<td>18075</td>
<td>203409.9</td>
<td>477533</td>
</tr>
<tr>
<td>2004</td>
<td>11353.8</td>
<td>21407.9</td>
<td>216208.5</td>
<td>527576</td>
</tr>
<tr>
<td>2005</td>
<td>28504.8</td>
<td>47523.7</td>
<td>231463.6</td>
<td>561931.4</td>
</tr>
<tr>
<td>2006</td>
<td>16450.2</td>
<td>34017.7</td>
<td>248599</td>
<td>595821.6</td>
</tr>
<tr>
<td>2007</td>
<td>22850.2</td>
<td>41217.7</td>
<td>266477.2</td>
<td>634251.1</td>
</tr>
<tr>
<td>2008</td>
<td>42753.06</td>
<td>61568.1</td>
<td>283175.4</td>
<td>672202.6</td>
</tr>
<tr>
<td>2009</td>
<td>58215.17</td>
<td>76662.04</td>
<td>299996.9</td>
<td>716949.7</td>
</tr>
<tr>
<td>2010</td>
<td>51986.15</td>
<td>74055.53</td>
<td>185660.13</td>
<td>773588.7</td>
</tr>
</tbody>
</table>

Source: CBN Statistical Bulletin 2010

Note:
- ALA = Aggregate Loans and advances
- Ad = Aggregate Deposit
- AO = Agricultural Output
- GDP = Gross Domestic Product

The nominal values of the model proxies was presented in table 4.1. In 1999, the aggregate loans and advances was N2, 958.3m and this rose to N3, 666.6m in 2000. In 2001, the aggregate loans and advances fell to N1, 314m but again picked up in 2002 when the aggregate loans and advances rose to N4, 310.9m. This again increased in 2003 when it was N9, 954.8m. The increased continued through to 2005, however, it fell in 2006 to N16,
450.2m but increased to N22, 850.2m in 2007 and continued the increase to 2009 when it rose to N58, 215.17m but fell to N51, 986.15m in 2010.

The aggregate deposit also showed fluctuation from 1999 to 2010. In 1999, the aggregate deposit for all microfinance banks in Nigeria was N4, 140.32m and this increased to N7, 689.4m in 2000. However in 2001, the aggregate deposit fell to N3, 294m but increased to N9, 699.2m in 2002. The increase continued in 2003 when the aggregate deposit rose to N18, 075m and through to 2005 when it was N47, 523.7m. In 2006, the aggregate deposit fell to N34, 017.7m however, it increased to N76, 662.04m but fell to N74, 055.53m in 2010.

The agricultural output in Nigeria was N114, 570.7m in 1999 and rose to N117, 945.1m in 2000. The increased in agricultural output continued in 2001 through to 2009 when it was N122, 522.3m, N190, 133.4m, N203, 409.9m, N216, 208.5m, N231, 463.6m, N248, 599m, N266, 477.2m, N283, 175.4m and N299,996.9m. However in 2010, agricultural output fell to N185, 660.13m.

Again the gross domestic product of Nigeria was also revealed in table 4.1. In 1999, the total goods and services produced in Nigeria was N312, 183.5m and this increased to N329, 178.7m in 2000. In 2001, it again rose to N356, 994.3m and in 2002, it was N433, 203.5m. In 2003, the total goods and services produced in the country as revealed from the table was N477, 533m while in 2004 it rose to N527, 576m, and in 2005 it was N561, 931.4m. In 2006, Nigeria GDP rose to N595, 821.6m and the increase continued through to 2007, 2008, 2009 and 2010. It was N634, 251.1m, N672, 202.6m, N716, 949.7m and N773, 588.7m respectively.

**Determination of Research Variables**

The tables below depict the result of the model variables.
Table 2 Determination of Microfinance Activities

<table>
<thead>
<tr>
<th>Year</th>
<th>ALA (N,m) (a)</th>
<th>AD (N,m) (b)</th>
<th>MFA (a)/(b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>2958.3</td>
<td>4140.32</td>
<td>0.71451</td>
</tr>
<tr>
<td>2000</td>
<td>3666.6</td>
<td>7689.4</td>
<td>0.476838</td>
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<tr>
<td>2001</td>
<td>1314</td>
<td>3294</td>
<td>0.398907</td>
</tr>
<tr>
<td>2002</td>
<td>4310.9</td>
<td>9699.2</td>
<td>0.444459</td>
</tr>
<tr>
<td>2003</td>
<td>9954.8</td>
<td>18075</td>
<td>0.55075</td>
</tr>
<tr>
<td>2004</td>
<td>11353.8</td>
<td>21407.9</td>
<td>0.530356</td>
</tr>
<tr>
<td>2005</td>
<td>28504.8</td>
<td>47523.7</td>
<td>0.599802</td>
</tr>
<tr>
<td>2006</td>
<td>16450.2</td>
<td>34017.7</td>
<td>0.483578</td>
</tr>
<tr>
<td>2007</td>
<td>22850.2</td>
<td>41217.7</td>
<td>0.554378</td>
</tr>
<tr>
<td>2008</td>
<td>42753.06</td>
<td>61568.1</td>
<td>0.694403</td>
</tr>
<tr>
<td>2009</td>
<td>58215.17</td>
<td>76662.04</td>
<td>0.759374</td>
</tr>
<tr>
<td>2010</td>
<td>51986.15</td>
<td>74055.53</td>
<td>0.701989</td>
</tr>
</tbody>
</table>

Source: CBN Statistical Bulletin and Researcher Computation

Note:
ALA = Aggregate Loans and advances
Ad = Aggregate Deposit
MFA = Microfinance Activity

From table 4.2 above, the ratio values of the model proxies was presented. The highest financial intermediation function of the micro finance banks in Nigeria was recorded in 2009, 1999, 2010, 2008 and 2005 respectively where aggregate loans and advances divided by aggregate deposits was 0.759, 0.714, 0.701, 0.694 and 0.599 respectively. The year where the least financial intermediation function of micro finance banks in Nigeria was recorded were 2001, 2002, 2000, 2006 and 2004 in ascending order respectively. But in 2007, the micro finance banks activity was 0.554 while it was 0.550 in 2003. The figure present diagrammatically the nominal and
ratio values of aggregate loans and advances, aggregate deposit and microfinance banks activities in Nigeria from 1999 to 2010.

Figure 1 Graphical presentation of Table 4.2

![Graphical presentation of Table 4.2](image)

Source: Researcher’s Excel Computation

<table>
<thead>
<tr>
<th>Year</th>
<th>AO (N,m) (a)</th>
<th>GDP (N,m) (b)</th>
<th>ACGDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>114570.7</td>
<td>312183.5</td>
<td>0.366998</td>
</tr>
<tr>
<td>2000</td>
<td>117945.1</td>
<td>329178.7</td>
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<td>2001</td>
<td>122522.3</td>
<td>356994.3</td>
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<td>2002</td>
<td>190133.4</td>
<td>433203.5</td>
<td>0.438901</td>
</tr>
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<td>2003</td>
<td>203409.9</td>
<td>477533</td>
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<td>2004</td>
<td>216208.5</td>
<td>527576</td>
<td>0.409815</td>
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<td>2005</td>
<td>231463.6</td>
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<td>0.411907</td>
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<td>2006</td>
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<td>0.417237</td>
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<tr>
<td>2007</td>
<td>266477.2</td>
<td>634251.1</td>
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<tr>
<td>2008</td>
<td>283175.4</td>
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<td>0.421265</td>
</tr>
<tr>
<td>2009</td>
<td>299996.9</td>
<td>716949.7</td>
<td>0.418435</td>
</tr>
<tr>
<td>2010</td>
<td>18566.13</td>
<td>773588.7</td>
<td>0.024</td>
</tr>
</tbody>
</table>

Source: CBN Statistical Bulletin and Researcher Computation

Note:

AO = Agricultural Output

GDP = Gross Domestic Product
ACGDP = Agricultural Contribution to GDP

On agricultural sector contribution to Nigeria’s gross domestic product, the highest contribution was in Nigeria was recorded in 2002, 2003, 2008, 2007, 2009, 2006 and 2005 respectively where agricultural sector contribution to Nigeria’s gross domestic product were 0.438, 0.425, 0.421, 0.420, 0.418, 0.417 and 0.411 respectively. The year where the least contribution of the agricultural sector to gross domestic product in Nigeria was recorded in 2010, 2001, 2000, 1999, 2004 and in ascending order respectively. The figure below present diagrammatically agricultural output, gross domestic product and agricultural contribution to Nigeria’ gross domestic product from 1999 to 2010.

Figure 2 Graphical presentation of Table 4.3

Source: Researcher’s Excel Computation
Table 4 Descriptive Statistics of Variable Nominal Values V

<table>
<thead>
<tr>
<th></th>
<th>ALA</th>
<th>AD</th>
<th>AO</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>21193.17</td>
<td>33279.22</td>
<td>192755.7</td>
<td>532617.8</td>
</tr>
<tr>
<td>Median</td>
<td>13902.00</td>
<td>27712.80</td>
<td>209809.2</td>
<td>544753.7</td>
</tr>
<tr>
<td>Maximum</td>
<td>58215.17</td>
<td>76662.04</td>
<td>299996.9</td>
<td>773588.7</td>
</tr>
<tr>
<td>Minimum</td>
<td>1314.00</td>
<td>3294.00</td>
<td>18566.13</td>
<td>312183.5</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>20012.19</td>
<td>26871.16</td>
<td>83873.67</td>
<td>153882.4</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.755445</td>
<td>0.434179</td>
<td>-0.629030</td>
<td>-0.036347</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.142380</td>
<td>1.775289</td>
<td>2.514172</td>
<td>1.797215</td>
</tr>
</tbody>
</table>

| Jarque-Bera | 1.509150 | 1.126981 | 0.909372 | 0.725987 |
| Probability  | 0.470210 | 0.569219 | 0.634647 | 0.695591 |
| Observation  | 12       | 12       | 12       | 12       |

Source: Researcher’s E-view Computation

Test of Hypothesis

In this section, the hypothesis formulated for the study is estimated.

Step One: Restatement of Hypothesis in Null and Alternate forms

**Ho:** Micro finance activities do not have a positive significant impact on agricultural sector contributions to Nigeria’s gross domestic product.

**Ha:** Micro finance activities have a positive significant impact on agricultural sector contributions to Nigeria’s gross domestic product.
Step Two: Analysis of Result

Table 5 E-VIEW Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFA</td>
<td>-0.259897</td>
<td>0.292281</td>
<td>-0.889203</td>
<td>0.3948</td>
</tr>
<tr>
<td>C</td>
<td>0.520990</td>
<td>0.171505</td>
<td>3.037759</td>
<td>0.0125</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.773274</td>
<td></td>
<td></td>
<td>0.371347</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.619398</td>
<td>S.D. dependent var</td>
<td>0.113417</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.114512</td>
<td>Akaike info criterion</td>
<td>-1.345262</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.131130</td>
<td>Schwarz criterion</td>
<td>-1.264444</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>10.07157</td>
<td>F-statistic</td>
<td>0.790682</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.442114</td>
<td>Prob(F-statistic)</td>
<td>0.394781</td>
<td></td>
</tr>
</tbody>
</table>

Source: Appendix

From the table above, it indicates that Micro finance activities in Nigeria for the period of this study had a negative and non-significant impact on agricultural sector contributions to Nigeria’s gross domestic product (coefficient of MFA = -0.259, t-value = -0.889). The coefficient of determination represented by 77.3% indicated that the variation observed in the model was captured appropriately. While the Durbin Watson d test statistic was 1.44, the probability was 0.394 > 0.05 indicating that the impact of MFA on agricultural sector contribution was insignificant.

Step Three: Decision

Based on the results, the null hypothesis which states that Micro finance activities do not have a positive significant impact on agricultural sector contributions to Nigeria’s gross domestic product is accepted while the alternate hypothesis is rejected.
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

From the analysis, the paper summarized that micro finance activities proxied by aggregate loans and advances in Nigeria for the period of this study had a negative and non-significant impact on agricultural sector contributions to Nigeria’s gross domestic product. This indicates that the introduction of micro finance banking in Nigeria have not contributed to agricultural productivity in Nigeria.

Conclusion

Micro-credit is the process of lending capital in small amounts to poor people who are traditionally considered unbankable to enable them to invest in self-employment [37]. The World Bank (2006), [38], describes micro-credit as a process in which poor families borrow large amounts (or lump sums) of money at one time and repay the amount in a stream of small, manageable payments over a realistic time period using social collateral in the short run and institutional credit history in the long run. Microfinance is expected to cater to the financing needs of rural dwellers thus enhancing the economic well being. In addition, microfinance borrowers are typically self-employed, household-based entrepreneurs who have relatively unstable income sources and can be divided into two groups: rural and urban. In rural areas, the borrowers are usually small farmers and others who are engaged in small income-generating activities such as food processing and petty trade; while in urban areas, microfinance activities are more diverse and borrowers include shopkeepers, service providers, artisans, street vendors, and small-medium enterprises [39].

According to Anyanwu (2004), [40], who was of the view that the unwillingness or inability of the commercial financial institutions to provide
financial services to the rural poor, coupled with the unsustainability of government sponsored development financial schemes contributed to the establishment of microfinance banks in Nigeria, therefore the core objectives for the establishment if micro finance banks are; to ensure significant reduction of poverty and ultimately its eradication in the shortest possible time; mobilize and empower rural population to create wealth through increased agriculture, industrial and other productive activities; promote the expansion of the productive base of the rural economy through the creation of non-agricultural enterprises; provide rural support services needed to bring about increased production of goods and services; provide access to extension services, input, credit and marketing services; and to raise rural productivity in general.

However, as shown by this study, Micro finance/Micro finance activities for the period of this study had a negative and non-significant impact on agricultural sector contributions to Nigeria’s gross domestic product which indicates that the introduction of micro finance banking in Nigeria has not contributed to agricultural productivity in Nigeria.

**Recommendations**

Based on the findings of this paper, it is recommended that rural poverty is often a product of poor infrastructure that hinders development and mobility as the rural areas tend to lack sufficient roads that would increase access to agricultural inputs and markets. Without roads, the rural poor are cut off from technological development and emerging markets in more urban areas. Poor infrastructure hinders communication, resulting in social isolation among the rural poor, many of whom have limited access to media and news outlets. It is therefore against these problems that most financial institutions would rather locate their offices in urban centre where there are these basic social infrastructure than be located in rural areas. Therefore as a means to improving rural economic growth in Nigeria there should be a conscious effort by government to industrialize the rural areas as this will
serve as a motivation for micro finance institutions to locate their offices in the rural areas.

REFERENCES


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