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Assessment of the Performance of Bank of Agriculture in Micro-Credit Delivery to Rural Farmers in Ohafia Local Government Area of Abia State, Nigeria

Mbam, Boniface Nwangele

Department of Agricultural Economics, Management and Extension, Ebonyi State University, P.M.B 053, Abakaliki, Ebonyi State, Nigeria

Abstract: ***The study assessed the performance of Bank of Agriculture in micro-credit delivery to rural farmers in Ohafia Local Government Area (L.G.A.). Both primary and secondary data were employed in the collection of data for the study. Primary data were collected using a well structured questionnaire that was administered to the 120 randomly selected farmer-loan beneficiaries while the secondary data were collected from the existing BOA in the area. Both descriptive and inferential statistics were employed in the analysis of data collected. Objectives i, ii and iii were analyzed using descriptive statistics, objective iv was realized using simple regression analysis while part of objective v was analyzed using mean score (4-point Likert scale) and the other with factor analysis. The result of the analysis showed that majority (98.3%) of the loan beneficiaries procured micro-scale loans, about 2% of the loan beneficiaries obtained small and medium scale loan while no respondent acquired large scale loan. The result also showed that the difference in mean between the amount applied and amount granted by BOA to the rural farmers for the past 5years was ₦2, 556,042. Equally, the result showed that majority (83.3%) of the beneficiaries utilized the credit for crop production while the least (3.3%) utilized the credit obtained for festivities. The result of the regression analysis revealed that the BOA credits have influence on the loan beneficiaries' incomes in the area as was testified by coefficient of determination (r^2) (0.683) which was positive and statistical significant at 5% level. Furthermore, the result showed that the major factors that constrained the delivery of credit by the bank to farmers in the area were high illiteracy rate, loan default, lack of disbursable fund, high administrative cost, low repayment rate, loan diversion, political instability and high cost of infrastructural development. Conversely, lack of collateral, high interest rate, inaccessibility of credit, high transaction cost, credit rationing, lack of proper insurance cover, bribery and corruption, lack of awareness and excessive bureaucracy were the constraints to credit acquisition from BOA by the rural farmers. Based on the findings, it was recommended among others that more funds should be provided by the Government to enable institutions disburse credit to the farmers at a single digit interest rate and also there should be timely disbursement of credit to farmers for effective utilization.***

Keywords: Assessment, performance, micro-credits, delivery, rural, farmers

1. Introduction

In recent times, literature has come to reflect a growing awareness of the special interest in the development of the rural areas especially in developing countries where rural communities have earlier experienced decades of neglect. There is therefore special interest in accelerating processes of rural community transformation by various Governments in the areas of poverty alleviation, provision of rural infrastructure, agricultural extension, and in the establishment of microfinance institutions in order to impact the lives of the rural investors and community organizations among others. Though the rural economy is synonymous with agriculture especially in the developing countries such as Nigeria, the sector is not given adequate attention it deserves (Ajakaiye, 2004). This is in spite of the fact that apart from oil, agriculture is the major contributor to Nigeria's Gross Domestic Product (GDP) and rural farmers plays a dominant role in this contribution (Rahji and Fakayode 2009). However, their productivity and growth are hindered by limited access to agricultural inputs especially finance and has resulted in the declining performance of the nation's agricultural sector (Okpara and Obike, 2016). This has manifested in the country increasingly spending high proportion of its foreign exchange earnings on importation of goods and services resulting to the slow rate of economic development (Bamidele, Aboyami and Esther, 2010). To address this problem, various Governments of Nigeria embarked on various policies and programmes aimed at developing agriculture. Some of these policies and programmes were Operation Feed the Nations (O.F.N) in 1976, Agricultural Credit Guarantee Scheme of 1977, the establishment of the defunct Marketing/Commodity Storage Boards in 1978, National Directorate for Employment (N.D.E.) in 1990s, Nigeria Agricultural Insurance Company (N.A.I.C.) in 1993, and the Agricultural Development Programme (A.D.P) of the mid-nineties. Furthermore, due to the high rate of discrimination against farmers in the disbursement of credit and high rate of interest coupled with other stringent conditions like the issues of collateral and the short term nature of credit granted by commercial banks among other factors, the Government adopted a policy measure that was expected to ensure easy flow of credit and financial services to the agricultural sector. This was what necessitated the establishment of Nigerian Agricultural and Co-operative Bank (NACB) in 1973, which was later changed to Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB), as a result of the merger with People's Bank and Family Economy Advancement Programme (FEAP) in 2000 now Bank of Agriculture (BOA) from October, 2010 (Okpukpara, 2009; Oladeebo and Oladeebo, 2008; C.B.N, 2005).

Since inception, the Bank of Agriculture has been involved in providing the specialized services of agricultural financing with the aid of its network of branches offices

throughout the country in reaching out to large, medium and most importantly the small scale farmers who produce the bulk of food consumed in country (Adegeye and Taiwo 2004). Furthermore, the bank helps in stimulating the production, storage and marketing of agricultural products by making credit available to farmers on easy terms for both short and long term farming operations.

However, despite the mandates of the bank to provide credit to farmers, empirical data seems not to have shown the performance of the bank in micro-credit delivery to rural farmers in Ohafia L.G.A. of Abia State. In view of this, it becomes imperative to research on the performance of Banks of Agriculture in micro-credit delivery to rural farmers in Ohafia Local Government Area of Abia state. In order to proffer possible solution to these problems, the study identified the types of credit delivered by the BOA in relation to farmers access to the loan in the study area; characterized the various uses of BOA credit obtained by rural farmers in the area; determined the effect of micro-credit obtained on the rural farmers output in the study area; determined the difference between the amount of credit applied for and the amount granted by BOA in the study area and identified constraints to micro- credit delivery by BOA to rural farmers in the study area.

2. Methodology

2.1 The Study Area

The study area was Ohafia Local Government Area of Abia state which is one of the 17 Local Government Areas in the state with 3 communities namely Ohafia, Abiriba and Mkporo. Geographically, Ohafia lies within latitude 5.37^{1}N and 7.50^{1}E and longitudes 5.62^{1}N and 7.83^{1}E. The land map covers an area of about 89 square kilometers with an estimated population of 785, 358 people (NPC 2006). The Local Government Area is bounded in the north by Arochukwu L.G.A; in the east by Afikpo L.G.A of Ebonyi state and in the West by Bende L.G.A. of Abia State.

The climatic condition of the area are influenced by two major winds which are north-east and south-west trade winds which give rise to dry and rainy seasons respectively. The rainy season starts from late April to early October and the dry season lasts from October to early April. The people in the area are predominantly farmers as the area has abundant natural resources; however, they are also engage in other non-farming activities such as trading, artisans, teaching and civil service. Among the crops produced in the area is yam, cassava, rice, sweet potatoes, maize, vegetables, cocoyam to mention but a few. They also engaged in livestock and fish production. A branch of Bank of Agriculture is located and operational in the area where most of the farmers carry out their loan transactions.

2.2 Sampling Techniques

In Ohafia L.G.A., there were a total of 350 farmers that benefitted from Bank of Agriculture credit in 2015 and from the list of the beneficiaries, a simple random sampling technique was adopted in the selection of 120 rural farmer micro-credit beneficiaries that formed the sample size of the study. The data for the study were collected using two sources - primary and secondary sources. Primary data were collected using a well structured questionnaire that was administered to the 120 randomly selected respondents, while the secondary data (data on amount of loan applied and granted) were collected from the existing data in the BOA office in the area.

2.3. Data Analysis

Both descriptive and inferential statistics were employed in the analysis of data collected. Objectives (i), (ii) and (iii) were analyzed using descriptive statistics, objective (iv) was realized using simple regression analysis while the first part of objective (v) (institutional related constraints) was analyzed using mean score analysis derived from 4-point Likert scale whereas the second part (farmer related constraints) was actualized with the aid of factor analysis.

2.4 Model Specifications

$Y = f(x)$ (implicit form)…… (i)
$Y = a_0 + a_1X_1 + et$ (explicit form)…….. (ii)
Where;
Y= Credit obtained (Naira)
a_0= Intercept
a_1= Regression coefficient
X= Farmers output (Kg)
et= stochastic disturbance or error term

3. Results and Discussion

Types of micro-credit disbursed by the BOA to farmers

It was necessary to identify the type of credit that farmers obtained from BOA for agricultural production in the study area. Analysis of this as shown on Table 1 showed that majority (98.3%) of the farmer-loan beneficiaries acquired micro-scale loan (₦1 - 250,000), about 2% obtained small and medium scale loan (₦ 250,000- ₦ 5000,000) while none of the beneficiaries acquired large scale loan. This implied that most of the loan beneficiaries were small scale farmers who may not have possessed enough collateral and other loan requirements to opt for large scale loan. This could be the reason why more than 80% of the country's agricultural production came from resource-poor small-scale farmers who operate on less than one hectare land, and yet are able to put food on the entire citizenry's tables despite all odds (David, 2011). Meanwhile, the merger nature of the credit disbursed may not be surprising as Owor and Shem (2012) in their study on informal credit and factor productivity in Africa found that most state owned banks in Africa operate on a soft budget, leading to their failure to develop the capacity for risk assessment and monitoring of their loan portfolios, with saving mobilization often not actively pursued. This result is further justified as Shah, Khan, Jehanzeb Khan (2008) reported that majority (57%) of the farmers beneficiaries obtained short term loan, about 37% acquired medium term loan while 7.1% procured long term loan for their farming endeavour thus, conforming to scenario of the area where more than 97% of the farmers have subsistence holdings and very poor economic background.

Table 1: Distribution of the farmer-loan beneficiaries according to the type of loan obtained from BOA

Type of loan obtained	Range of loan (₦)	Frequency	Percentage
Micro-scale loan	1- 250,000	118	98.3
Small/medium scale loan	250,000-5000000	02	1.7
Large scale loan	>5000000	0	0
Total		120	100

Source: Field survey, 2015

Differential in the amount of loan applied and granted by BOA to farmers

This section analyzed the difference in mean between the amount of loan applied for and the amount granted to farmers by BOA for the past 5 years. The result of the analysis revealed that the amount applied was higher than the amount disbursed was as shown by a mean difference of ₦2, 556,042. This implied that the bank did not grant the total amount money requested by the loan beneficiaries for agricultural production in the area. The reason for this may not be far from the general paucity of fund which could be attributed to economic recession in the country today as most of the financial institutions find it difficult in granting adequate credits to intending loan applicants which most of the time are too meager to carry out the proposed farm business. This probably could lead to the disruption of investment plans of proposed farm businesses thereby resulting to non performance of the farms. This result is in consonance with the findings of Adeniji and Joshua (2008) who inferred that none of the loan beneficiaries who applied for loan from Nigerian Agricultural Cooperative and Rural Development Bank (now BOA) in the year 2007 got above what they applied for and worse-still, few respondents got exactly the amount they applied for, while the majority got below the amount the applied for between 2004-2006. Also, this result further authenticated the earlier findings of Ebewore (2010) which inferred that there was discrepancy between the actual loan amount disbursed to farmers and what they actually desired which are usually in the range of 100,000-200,000. However, despite the discrepancies between the amount applied and amount granted to the farmers, there was a drastic increase in the amount granted from ₦3929900 in 2009 to ₦ 10,768,950 in 2013 thus, justifying the findings of Oyeyinka and Bolarinwa (2009) that credit disbursement to farmers has been given priority by Nigerian Agricultural Cooperative and Rural Development Bank now BOA in order to actualize one of its corporate objective of ensuring that farmers have access to credits for agricultural production in Nigeria. However, the result negate the findings of Adetiloye (2012) that credit disbursement to agricultural sector was averagely better between 1978 and 1994 when there was sectoral allocation and guided deregulation and that the lethargy in disbursing loan to the sector progressively grew worse as the banks preferred to pay penalty than to oblige. For instance, from 1996 to 1999, a sharp drop in credit to agriculture became noticeable and has since not improved substantially.

Table 2: Amount of loan applied for and the amount of credit granted to the farmers by BOA for the last 5years

Years	Amount applied (₦)	Amount granted (₦)
2009	5,653,450	3,929,900
2010	8,102,260	4,000,000
2011	7,780,350	5,065,000
2012	10,375,600	8,935,700
2013	13,568,200	10,768,950
Total	45,479,860	32,699,650
Mean	9,095,972	6,539,930
Std. dev.	3008635.6	3125030
difference	2,556,042	

Source: Field survey, 2016

Uses of micro-credit obtained from BOA by the farmers

Analysis was done to identify the various uses of credit obtained from BOA and the result (Table 3) showed that the majority (83.3%) of the beneficiaries utilized the loan for crop production, about 63% and 58% deployed theirs in livestock production and family upkeep respectively while only few (3.3%) utilized the loan acquired for festivities. This implied that most of the farmers invested the credit obtained from the bank for agricultural production activities in order to improve the quality of life of their families thus, justifying the findings of Ayanda and Ogunsekan (2012) that majority (66,99%) of the rural farmers utilized their loans for the procurement of crop production inputs such as labour, implements, fertilizer, seeds and other inputs while about 31% utilized theirs for family upkeep such as payment of children's education and medical treatment. Also, Fakayode (2009) in his study of an appraisal of Ekiti State Agricultural Credit Agency Scheme in Nigeria found that about 52.3% of the credit beneficiaries utilized the loan acquired for food crop production including maize, rice, yam and cassava while about 7.2% utilized theirs in non farming activities such as feeding, school fees, medication which was aimed at maintaining the welfare of their individual households. Similarly, the authenticity of this result was confirmed as earlier findings of Riaz, Khan, and Ahmad (2012) inferred that the major concern of the micro-credit beneficiaries prevailed about addressing their needs pertinent to raising seasonal crops such as procurement of fertilizers, herbicides and other desired inputs in order to enhance their food production.

Table 3: Distribution of farmer-loan beneficiaries according to the use of credit obtained from BOA

Areas of investment	Frequency	Percentage
Crop production	100	83.3
Livestock production	75	62.5
Processing of farm produce	50	41.7
Market and distribution of farm produce	29	24.2
Purchasing of farm equipment	11	09.2
Purchasing capital assets	07	5.8
Nonfarm economic activities	40	33.3
Purchasing of household equipment	21	25.0
Family upkeep	69	57.5
Expansion of farm size	52	43.3
Festivities	04	3.3
Saving for the hard day	05	4.2

Source: Field survey, 2015
*** Multiply Responses recorded**

Effect of Bank of Agriculture credit on the income of the farmer-loan beneficiaries

A simple regression analysis was adopted to determine the effect of BOA credit on the income of the loan beneficiaries. The result of the analysis showed that the BOA credits have

influence on the loan beneficiaries' incomes in Ohafia Local Government Area of Abia State, Nigeria. This was testified by coefficient of determination (R^2) of 0.683 which was positive and statistical significant at 5% level, implying that about 68% of total variation in farmers' output *vis a vis* income was explained by the explanatory variable (amount of loan acquired) included in the model. Also the F-ratio was 9.386 which implied that the regression is a good fit and as such is in line with *a priori* expectation. This result in tandem with the assertion of Ashaolu, Momoh, Philip and Tijani (2011) who cited Hazarika and Alwang, (2003); Khan, (1994) as arguing that improved access to credit by rural farmers can lead to both improved and increased productivity, increase in agricultural production and income. Also, with this result, the findings of Nudamatiya, Giroh and Shehu (2010) which showed that 53% of change in income of the beneficiaries can be attributed to credit use with about 47% explained by the factors not captured in the model can be proved to be correct. Similarly, Lu and Hassan (20110 in their study on the effect of micro-credit programme on rural poverty alleviation in Monirampur Upazila in Bangledesh reported that credit programmes are performing well enough to bring better quality of life for the borrowers in the area by increasing their income, food consumption and living standard.

Table 4: Effect of BOA credit on the income of the farmers in the area

Variable code	Variable name	Regression coefficient	Standard error	T-value	Level of significant
a_0	Constant	2.357	0.295	7.981	*
X	Amount of loan acquired	1.296	0.097	2.993	**

Source**:** Field Survey, 2015
R^2 = 68.3
Adjusted R^2 = 64.7
Standard error of the estimate = 0.463
F-cal = 9.386
* = significant at 1%
** = significant at 5%
Final regression equation
Y = 2.357 + 1.296
(0.295) (0.097)

Constraints Associated with Micro-Credit Delivery to Farmers by the BOA

Constraints to the administration cum delivery of credit to the farmers by the BOA was analyzed with the aid of means score analysis (Table 6). The result showed that high illiteracy rate, loan default, lack of disbursable fund, high administrative cost, low repayment rate, loan diversion, political instability and high cost of infrastructural development constrained the bank from administering credits to farmers in the area. This result is in tune with the assertion of Ebewore (2010) that the constraints to micro-credit delivery ranged from low loan repayment, low education, insufficiency of disbursable fund, logistic problem to unlimited loan application. Also, Mbam (2016) found that low repayment rate, loan diversion, insufficiency of fund, low interest rate, high administrative cost and lack of basic infrastructures were the major constraints to the administration/delivery of micro-credit to farmers by micro-credit institutions. Similarly, the study carried out by Okojie, Monye-Emma, Eghafona, Osaghae, and Ehiakhamen (2010) conformed to this finding as they reported that farmers' access to credit were influenced negatively by high interest rate, high rate of collateral, loan default and dearth of information on credit availability in the area among other constraints.

Table 5: Mean scores on constraints associated with credit delivery to farmers by BOA

Constraints	Means score	Decision
High rate of illiteracy	3.0	Accepted
Loan default	3.5	Accepted
Lack of collateral	2.3	Rejected
Lack of disbursable fund	3.8	Accepted
High administrative cost	3.1	Accepted
Low loan repayment rate	3.4	Accepted
Lack of trained personnel	2.4	Rejected
Low interest rate	2.0	Rejected
Low profit margin	2.7	Rejected
Loan diversion	3.2	Accepted
Political instability	3.3	Accepted
High cost of infrastructural development	3.0	Accepted

Source: Data analysis, 2015

Constraints associated with acquiring credit from BOA by the rural farmers

It was necessary to identify and analyze factors that constrained farmers from obtaining credits from the institution in order to obtain firsthand information on how they had been faring in their loan procurement businesses with the bank. This could help to through more light on the overall performance of the bank in its duty of credit delivery to farmers.

With the aid of Varimax Principal Component Analysis as was employed by Ashley *et al*. (2006) where variable with 0.40 and above were used as a bench mark for naming the factors; the factors were grouped into three components viz. Economic, Institutional and Administrative/information constraints. From the result of the analysis (Table 6), it was observed that lack of collateral, high interest rate, inaccessibility of credit, high transaction cost and inadequacy of fund were isolated as the economic constraints to loan acquisition from the bank. The institutional constraints isolated were lack of proper insurance cover, bribery and corruption and credit rationing whereas the administrative cum information constraints were excessive bureaucracy and lack of awareness. The study is consistent with what Girabi and Mwakaje (2013) obtained who found that the major factors constraining rural farmers' access to credit were high interest rate, low level of

education, lack of credit information, excessive bureaucracy and adverse risk among others. Also, the result is similar to the findings of Ugwumba and Omojola (2013) which reported that high interest rate, cumbersome loan processing procedures, delay in disbursement, lack of collaterals, lack of awareness of loan packages and unfriendly attitude of credit administrators towards the loan applicants were the major constraints to credit access among crop farmers in Ikole L.G.A. of Ekiti State of Nigeria.

Table 6: Varimax rotated component factors on constraints associated with obtaining BOA loan by the farmers in the area.

S/N	Variable	Factor1 (Economic constraint)	Factor2 (Institutional constraint)	Factor 3 (Administrative /informational constraint)
Vo_1	Lack of collateral	0.712	-0.201	0.317
Vo_2	High interest rate	0.459	0.169	0.302
Vo_3	Inaccessibility of credit	0.472	-0.723	0.313
Vo_4	Lack of awareness	-0.245	0.301	0.583
Vo_5	High transaction cost	0.503	0.096	0.209
$V0_6$	Excessive bureaucracy	0.012	0.381	0.644
$V0_7$	Credit rationing	0.215	0.496	-0.160
$V0_8$	Lack of insurance cover	0.253	0.524	0.395
$V0_9$	Bribery and corruption	-0.922	0.497	0.178
$V0_{10}$	Inadequacy of fund	.859	0.385	-0.086

Source: Data Analysis, 2015

4. Conclusion and Recommendations

Conclusively, the study found that the Bank of Agriculture has performed creditably in the delivery of credit to rural farmers in the area and this has affected positively the incomes of the beneficiaries in the area. Nevertheless, there were still some pockets of challenges that constrained both the institution and farmers alike from efficient and effective credit delivery and access respectively. Prominent among the institutional constraints include lack of fund, loan default, low repayment rate, political instability and loan diversion while the farmer-related constraints were inadequacy of disbursable fund, lack of collateral, high transaction cost, high interest rate and lack of proper insurance cover. It is hoped that if all these challenges are curbed to its' barest minimum that the institution would performed better in terms of sustainable credit delivery to farmers and this could help to reduce the high incidence of poverty that is endemic mostly in the rural areas of Nigeria. Based on the findings, it was recommended among others that more funds should be provided by the Government to the bank to enable institutions disburse credit to the farmers at a single digit interest rate and also there should be timely disbursement of credit to farmers for effective utilization. This would help to curb some challenges inherent in the administration cum acquisition of credit such as inadequacy of fund, excessive bureaucracy, high or low interest rate, credit rationing, loan diversion, loan default among other constraints.

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