



Assessment of the Contributions of the Bank of Agriculture to Cassava Production in Isoko North Local Government Area of Delta State, Nigeria

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Authors' contributions

This work was carried out in collaboration between authors KNT and BIOA. Author KNT designed the study, wrote the protocol and supervised the work, performed the statistical analysis and managed the analyses of the study and also wrote the first draft of the manuscript. Author BIOA managed the literature searches and edited the manuscript. Both authors read and approved the final manuscript.

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ABSTRACT

The study was conducted to assess the contribution of the Bank of Agriculture to cassava production in Isoko North Local Government Area. A simple random sampling technique was employed in the selection of six (6) towns and twelve (12) local cassava farmers from each of this six towns. The sample size was seventy two (72). Both primary and secondary data were used in the study. Data analysis was done using descriptive statistics and the chi-square test was used to test the hypothesis. The study showed that only 30.6% of the farmers had access to credit facilities. The average amount of credit obtained was N186, 500. A proportion of 54.2% of the respondents obtained N51, 000 to N100, 000. About 13.9% obtained N161, 000 to N 200,000. A negligible proportion of 8.35% obtained above N210, 000. The average farm size of the farmers is 3.5 hectares. The results of the chi-square test shows that the farmers that had access to credit have statistically significant higher output and farm size than those farmers that did not have access.

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However, there was no significant difference in the farm capital and expenditure values between those farmers that had access and those that did not. Although the Bank of Agriculture has made some significant contribution in the provision of credit for cassava production, the credit facilities are not adequate for the farmers to expand their farm holdings in order to increase cassava production in the study area.

Keywords: Impact; financing; cassava; production; farmers; bank of agriculture.

1. INTRODUCTION

The importance of finance to agricultural production cannot be overemphasised. According to Awotodunbo [1] financing agricultural production is the source of funding to increase and make agricultural produce available. The availability of credit is very useful to the farmer in order to finance production costs such as labour and purchase of inputs which is required to increase production.

Cornejo and McBride [2] reported that access to credit is very important for any meaningful agricultural production to take place. Credit may have a direct or indirect impact on productivity; the adoption of agricultural technologies; increased capital for farm investment; hired labour; improved household welfare; improved health care and better nutrition. Cornejo and McBride [2] also noted that access to credit is the key determinant for good planting materials since the type of planting material plays a significant role in determining the quantity of roots at harvest, improve cassava productivity and yields stability.

There is a need for the agricultural sector to be properly financed through microcredit. Awotodunbo [1] noted that agricultural credit enhances productivity and raises the standard of living by breaking the vicious cycle of poverty of small scale farmers. One of the reasons for the decline in the contribution of agriculture to the Nigerian economy is the lack of a stable national credit policy and the paucity of credit institutions which can assist farmers [3]. According to the report of the CBN (2007) [4] both direct and indirect efforts have been made at the federal, state and local government levels in Nigeria to finance agriculture through moral persuasion and other monetary policies such that commercial banks, merchant banks and other non-banking financial institution are being urged to finance agriculture. It was on this note that the federal government established the Bank of Agriculture (BOA).

The Bank of Agriculture is the single largest development finance institution in Nigeria. It was established in 1973 with the name Nigeria Agricultural and Co-operative Bank (NACB). Later that same year there was a merger of the former People's Bank of Nigeria (PBN) with NACB Ltd [5]. In 2000 NACB was renamed the Nigeria Agricultural Co-operative and Rural Development Bank (NACRDB), and in 2010 NACRDB was renamed the Bank of Agriculture (BOA). According to the Delta State Ministry of Agriculture and Natural Resources (2011) and Delta State Poverty Alleviation Programme (2014) [6] the primary purpose for the establishment of the bank was to increase agricultural financing at both rural and urban levels as well as micro financing of small and medium scale enterprises in Nigeria.

2. STATEMENT OF PROBLEM

In this current system of global economic innovative development in agriculture financing is paramount to rural agricultural transformation. However, rural farmers access to microcredit are limited due to the unnecessary strings attached to the credit services especially the collaterals requirement for assessing the borrower's credit worthiness [7].

Farmers have often complained of limited access to financial services, and where these services are made available, they are often at a very high cost. Capital has for a long time been considered as a primary means of rekindling and enhancing the growth potential of the rural economy, especially farming activities [8]. Many researchers have conclusively acknowledged that access to micro credit in the rural areas is a major constraint militating against rural agricultural production [9].

Awotodunbo [1] and Okorie [10] noted that small scale enterprises like cassava farming in Nigeria are confronted with inadequate capital despite the fact that it makes up the bulk of food consumed locally and for export. The constraints

to growth in the cassava industry include: inadequate and untimely supply of modern inputs; lack of credit facilities; high transportation cost arising from high and rising fuel prices; and poor storage facilities.

In order to achieve the objectives of this study answers were sought to these questions:

- 1 Is there a provision of credit to cassava farmers by the Bank of Agriculture and at what level?
- 2 Do those farmers that have access to credit from the bank have higher cassava productivity than those that do not?
- 3 What is the contribution of the bank to cassava production in the study area?

2.1 Objective of the Study

The main objective of this study is to assess the contribution of the Bank of Agriculture to cassava production in the study area.

Specific objectives include:

- 1 To ascertain whether credit is provided to cassava farmers by the Bank of Agriculture.
- 2 To examine the average amount of credit given to the farmers
- 3 To assess the proportion of credit beneficiaries and non beneficiaries from the bank

2.2 Hypothesis

H₀: There is no significant difference between those farmers that benefited from the credit facilities of the bank and those that did not.

3. RESEARCH METHODOLOGY

The study was carried out in Isoko North Local Government Area of Delta State. Delta State is located on Southern Nigeria. Isoko North Local Government Area is one of the 25 Local Government Areas in Delta State. Isoko North LGA has its headquarters at Ozoro, and is one of the major oil producing areas of the state [5]. It was created in 1991 when the defunct Isoko LGA was split into the North and South. It occupies an area of about 12,000km² with the area mainly on land and a small riverine terrain [7]. According to the 1991 population census figure, it has a population of about 155,000 people. It is divided into eight major towns

namely, Ozoro, Emevor, Owhe, Iyede, Ofagbe, Ellu, Oyede and Okpe-Isoko. As the name implies, the people are Isoko and their occupation includes peasant farming, palm produce processing, fishing and petty trading [11]. The area comprises of twelve (12) major villages and is roughly located between latitude 60 51'N to 60 161'N and longitude 60 71'E to 60 121'E. It has a land mass of 380 km² and population of 200,792 according to the 2006 National Census. It is one of the most populous Local Government Area in the state. Important crops cultivated in the area include cassava, groundnut, maize, yam and others. Farming activities are usually carried out through family and hired labours and starts around March with clearing of lands.

3.1 Sample/Sampling Techniques

A simple random sampling technique was employed in the selection of six (6) towns from the study. Ozoro, Emevor, Owhe, Ofagbe, Oyede and Iyede town. Twelve (12) cassava farmers were randomly selected from each of the selected towns. The sample size was made up of seventy (72).

3.2 Method of Data Collection

Both primary and secondary data were used for the study. The secondary source involves the review of relevant textbooks and past studies. The primary data was obtained from the questionnaires administered to the respondents

3.3 Method of Data Analysis

Data analysis was done using descriptive statistics. Hypothesis was tested with the chi-square analysis:

$$\chi^2 = \frac{\sum (O_i - E_i)^2}{E_i}$$

Where O_i = observed frequency
 E_i = expected frequency

4. RESULTS AND DISCUSSION

Table 1 shows that 80.6% of the cassava farmers are females while only 19.4% are males. The proportion of males to females is 14 to 58. This result is in agreement with Akinyele [12] who reported that there are more female than male cassava farmers in Nigeria. The table also shows

that all respondents interviewed are married. The reason for this is because they require the assistance of family members in farm labour and other farm activities this is in agreement with the findings of Akpan [13] who reported that majority of the farmers in Nigeria have large family sizes because they are helpful for the farm operations and activities.

Table 1 also show that the ages of the respondents fall within 31-40, 41-50 and above 51 year respectively. This means that cassava farm business is dominated by adults and the elderly ones in the study area. This also agrees with Ayodele and Adeusi [14] noted that the Nigerian farm business is mostly dominated by the older men and women in the society. Table 1 further indicate that 50% of the respondents had no formal education and the other 50% had formal education in which 38.9% of them attended both primary and secondary schools, 11.1% attended Colleges/ Universities. This implies that half of the farmers are illiterates and as such no meaningful achievement can be made to increase cassava productivity.

The table further shows that 62.5% of the cassava farmers have small cassava farm size of less than 1 hectare while 33.3% have 1-3 hectares, 4.2% have 4-6 hectares. The study also revealed that the sources of finance available to the farmers are personal/family savings (72.2%) and Bank of Agriculture (27.8%).

Table 2 shows that 66.7% were aware of the financial assistance of the Bank while 33.3% were not aware. This means that the majority of the cassava farmers in Isoko North Local Government Area are aware of the financial assistance provided by the Bank of Agriculture.

Table 3 indicates that 77.8% of the respondents had more difficulty in accessing loans from the bank while 22.2% had less difficulty. This means that majority of the cassava farmers are confronted with some difficulties in accessing loans from the bank. This is in agreement with the findings of Ojo [15], Njoku [16] and Goldsmith [17] that majority of the farmers in Nigeria do not have access to microcredit because of the collateral requirement, the bottlenecks in loan application processing and approval, the uncertainty of the output at harvest as well as the period of waiting of the harvest.

Table 1. Socio-economic characteristics of cassava farmers

Sex	Frequency	Percentage
Male	14	19.4
Female	58	80.6
Total	72	100
Age		
20 – 30	-	-
31 – 40	14	19.4
41 – 50	28	38.9
51 and above	30	41.7
Total	72	100
Marital status		
Single	-	-
Married	72	100
Total	72	100
Educational qualification		
No former education	36	50.0
Primary/ Secondary School	28	38.9
College/ University	8	11.1
Total	72	100
Size of cassava farm land		
Less than 1hectare	45	62.5
1- 3 hectares	24	33.3
4- 6 hectares	3	4.2
7 hectares and above	-	-
Total	72	100
Source of finance		
Personal/family savings	52	72.2
Bank of Agriculture	20	27.8
Other sources	--	-
Total	72	100

Source: Research Survey, 2015

Table 2. Awareness of financial assistance of bank of agriculture to cassava farmers

Option	Frequency	Percentage
Yes	48	66.7
No	24	33.3
Total	72	100

Source: Research Survey, 2015

Table 4 shows the proportion of beneficiaries and non-beneficiaries of credit facilities of the bank, only 30.6% benefited while 69.4% of the respondents did not benefit. This implies that

only few cassava farmers have access to credit facilities from the bank in the study area.

Table 3. Is there any difficulty in accessing loan from the bank of agriculture?

Option	Frequency	Percentage
Yes	56	77.8
No	16	22.2
Total	72	100

Source: Research Survey, 2015

Table 5 presents the distribution of the respondents according to the amount of credit obtained. The average amount of credit obtained was N186, 500. 54.2% of the respondents

obtained N51, 000 to N100, 000. About 13.9% of the respondents obtained N161, 000 to N200,000. A negligible proportion (8.35%) obtained above N210, 000. This reveals that the amount of credit obtained by the farmers is still very small and might not be sufficient to transform the farmers into commercial cassava producers.

The results from Table 6 reveals that the farmers that had access to credit have statistically significant higher output and farm size than those farmers that did not have access. However, there is no significant difference in the farm capital and expenditure values between those farmers that had access and those that did not.

Table 4. Numbers of beneficiaries and non-beneficiaries of credit facilities from the bank

Beneficiaries	Frequency	Percentage
Yes	22	30.6
No	50	69.4
Total	72	100

Source: Research Survey, 2015

Table 5. Distribution of respondents according to amount of loan obtained

Amount	Frequency	Percentage
< 50,000	-	-
51,000-100,000	39	54.2
110,000-160,000	17	23.6
161,000-200,000	10	13.9
210,000-500,000	6	8.3
> 500,000	-	0.0
Total	72	100.0

Source: Research Survey, 2015

Table 6. Test of the mean differences between those farmers that have access to credit from the bank and those that did not

Variable	Access to credit	No access to credit	Mean difference	chi-square test
Output (kg)	140.23 (10.40)	128.47 (9.73)	2.76 (0.67)	4.12 ^{***}
Farm size (ha)	3.05 (0.15)	2.98 (0.13)	0.07 (0.10)	3.50 ^{***}
Farm capital value (N)	71,480.56 (2170.24)	69,360.69 (631.70)	2,119.87 (1538.54)	1.38
Farm expenditure value (N)	16,250.48 (478.81)	15,780.86 (163.11)	469.62 (315.70)	1.49

Source: Field survey 2015

Note: figures in parentheses are the standard errors.

*** Significant at 5% level.

5. CONCLUSION

Although the Bank of Agriculture has made some significant contribution in the provision of credit for cassava production, the credit facilities are not adequate for the farmers to expand their farm holdings in the study area

6. RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made

- 1 The bank should remove all the difficult areas of the collateral required from farmers in order for them to access the credit facilities easily.
- 2 The bank should create more sensitization programmes so that more farmers will become aware of the bank activities this would encourage more farmers to participate in the credit scheme programme
- 3 More branches of the Bank of Agriculture should be established in all the local government headquarters and towns with major agricultural activities of the state so that the farmers can have access to credit facilities.
- 4 Other financial institutions and non-governmental organisations should assist to increase cassava output and productivity.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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