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The Determinants Of Rural Farmers Decision To Obtain Commercial Banks' Credit In Etsako, Edo State

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Abstract

Agriculture in Nigeria continues to be the highest contributor to the nation's Gross Domestic Product (GDP), and the major contributor to agricultural growth and development globally is adequate funding. There are however some factors that inform farmers' decision to obtain agricultural credit from commercial banks in Nigeria. Those factors were the focus of this study with emphasis on rural farmers in Etsako in Edo state of Nigeria. Considerations were given to some perceived factors as influencing farmers' decision to obtain agricultural credit from commercial banks. Such factors considered include: Information on funding sources ; the farmers' educational background; collateral security; the level of contact with agric extension agents; policy instability on agricultural credit to farmers; The high level of interest charge on agric loans and farmers' perception of banks' loans. Eight farm based communities were selected from the three Local Government Areas of Etsako Central, Etsako East and Etsako West in Edo North which gave a total number of 24 farm communities across 335 farms. The 24 farm communities had 1,096 households. The methodology of the study involves the use of the Yamane model and the Chi Square Statistical tool, for sample determination and data analysis respectively; with the questionnaire serving as the main source of data collection. Data analyzed showed that a strong relationship exists collectively among the listed factors and the decision of rural farmers to obtain agricultural credit from commercial banks given the gap between the Chi Square calculated value of 294.73 and the tabulated value of 27.09. Recommendations were however made to enable farmers' make inform decisions to access commercial banks' credit to run their farms. Among such recommendations include: the organization of awareness training for the rural farmers; the need for all commercial banks and financial lending institutions to open a window for agricultural loans, among others.

Key Words: Determinants; Rural Farmers Decision; Commercial Banks' Credit; Etsako, Edo State

1. Introduction

Agricultural development and transformation cannot be achieved without serious financial commitment and one of the core problems confronting Nigeria's agriculture today is poor funding. Essient (2016), is of the view that the government alone can no longer fund the nation's agriculture. Farmers were therefore advised to seek funding elsewhere to complement government's efforts. Other credit awarding institutions like commercial banks, micro- finance banks, credit and thrift societies, co – operative societies etc have been described as avenues farmers could exploit to boost agricultural funding in the country (Olumese, 2015).

The sector's poor performance is therefore attributed to its poor funding. For example, it has been argued that only about forty percent of the cultivable area in Nigeria is transformed; for example, in 2009, Nigeria produced 145,000 metric tons of cocoa beans but had the potential in terms of cultivable land to produce millions of metric tons, (Oluwadamilare, 2015). This implies that the nation's cultivable land has been under utilised for the purpose of agricultural production.

Credit for agriculture purpose can foster technological advancement in agricultural sector and hence lead to increased productivity and crop yield. It has been an important instrument for improving the welfare of the poor directly through smoothening consumption which reduces the people vulnerability to short term credit (Audu, Sule, Guza, Hamisu and Shettima, 2018)

Okwara et tel. (2016) view that agricultural is an important industry and like other industries requires capital. Due to the peculiarities of agriculture, especially its uncertainties, low return, high rate of risks etc. a large number of producers cannot meet up with the needed finance without recourse to borrowing.

Finance is critical to the sustainability and improvement of agricultural production in every economy. Since the government had failed through the bank of agriculture to adequately finance agriculture in Nigeria, it has become necessary for the farmers to seek alternative sources of financing their projects. And the readily available alternatives are the commercial banks and other credit awarding institutions.

To raise agricultural production farmers have to borrow. It is thus in the interest of agricultural and general progress the credit be made to farmers in adequate amount and in proper cost (Yehuala, 2008). Credit enhances productivity and promotes the standard of living by breaking the vicious cycle of poverty of small scale farmers (Ololade, 2013 in Okwara, Lemchi, Ohajianya, and Nwosu. 2016).

Some of the studies that have analysed their work using order logistic regression model in their different quality of life in Africa and elsewhere include: Ayehu (2005), Afera, (2015), Naz, Ali, sadia and Aziz, B. (2010), Quang, et al. (2014), and Farah, (2016), Audu, Sule, Guza, Hamisu and Shettima, (2018) None of such studies analysed the factor affecting farmers Decision to obtain commercial Banks credit in rural Etsako. This necessitates this research in other to bridge the gap created in order to properly address the rural farmers challenges in Etsako, Edo state. The aim of this paper is to dwell on those factors (positive or negative) that are of influence on the decision of farmers from commercial banks.

2. Background Literature

The importance of finance in rural agricultural development has long been realized before independence (Idodeh, 2000). For example, as at 1959 various approaches such as farm settlement and school leavers' farms were established with incentives to improve rural income and welfare by the western regional government. According to Essient (2016), farmers in the rural areas are responsible for up to 70 percent of food production in Nigeria. In recognition of this, many programmes had been developed to enable the rural farmers expand their potentials through the growing of more crops to improve income generations. Some of such programmes in Nigeria include the establishment of

Nigeria Agricultural Co-Cooperative and Rural Development Bank, now Bank of Agriculture (BOA) in 1973; the Agricultural Development Projects (ADPs) in 1975; the National Grain Reserve Programme (NGRP) in 1975; Operation Feed the Nation in 1976; the Nigerian Agricultural Credit Guarantee Scheme in 1977; Green Revolution in 1979; the Directorate For Food, Road and Rural Infrastructure (DFRRI) in 1986, and among others access to adequate credit as a source of capital increase the ability of farmers to acquire agricultural inputs essential for production and also increase their risk bearing ability (Henry and Joyce, 2012)

Nwaru (2004) in Shallone and Simon (2013) also view agricultural credit as the temporary transfer of purchasing power from a person who owns it to a person who owns it to a person who wants it, allowing the latter the opportunity to command another person's capital for agricultural purposes but with confidence in his willingness and ability to repay at specified date agricultural credit can be in or of cash, farm implements, consultancy services, research, technology and so on. The demand for credit productive investment according to Umar (2016) usually comes from those poor who are less risk averse and enables them to overcome liquidity constraint making it possible to undertake investment that can boost production, employment and income.

Going by these benefits of agricultural credit, the farmers borrow rate from the formal financial institutions especially commercial banks is very discouraging. At the micro level scholars have attempted to provide explanations as to why farmers are reluctant to borrow. In other words what are those factors that influence farmers decision on agricultural borrowing?

Faqir (1983) used a logit model to predict the odds of small holder farms to use credit conditional upon information about economic attributes of the farm and personal characteristics of the farmer. He came to the conclusion that among other things, farm size, experience in farming, formal educational level, frequency of contact with extension agents, perception on credit.

According to Ayamga, Sarpong, and Asuming (2006) they tried to find out why rural house hold refuse to borrow despite provision of financial institutions in form of micro credits institutions. They came to the conclusion that age, value of farm output, non farm income, number of micro credit institutions, level of education and distance of these institution influence individual's decision to participate in the credit scheme.

3. Financing Agriculture in Nigeria

Finance is one of the inputs required for agricultural development as it represents the power to purchase all other inputs; thus, it is a single most important determinant of the level of development in agriculture. Several studies have been carried out on commercial banks and the finance of agriculture in the country. According to Elegham (1983), the non availability of credits to local farmers posed a serious problem to the sector. Amechi, (2004) revealed that commercial banks in Nigeria were only willing to grant loans to large-scale farmers because small farmers default in the act of loan repayment; they also have no provision for collateral security required by banks.

The importance of project supervision or monitoring of facilities is to ensure that all conditions attached to the approval of credits facilities are complied with. Credit Supervision is also aimed at identifying emergent problems before they got out of control. Problems detected earlier through warning signals could be easily solved to avoid total loss of the project. Agricultural facilities granted need to be closely monitored. This is occasioned by the nature of the industry, especially the production aspect that is highly risky because of its precarious nature.

Agricultural facilities are also known to be specific-purpose oriented (i.e planting, fertilizing, harvesting, transporting etc.). As a result of adequate follow-up, the possibility of default (usually) referred to as "danger sign" are easily detected early enough.

4. Sources of Agricultural Financing in Nigeria

According to Amechi (2004), the major sources of agricultural financing are:

a. Bank of Agriculture

In Nigeria, we have the Nigerian Agricultural and Cooperative Bank (NACB) now Bank of Agriculture (BOA), which was established in 1973 primarily to finance agricultural projects. Its cardinal aims according to Ugwuanyi (2013) are:

i. To stimulate interest in agricultural Production.

ii. To improve agricultural Production technique

iii. To improve storage and marketing of agricultural produce.

iv. To grant loans on fairly easy terms to finance agricultural projects.

State and local governments may serve as intermediaries by receiving the loan from the federal government and the BOA for transmission to the farmers or relevant farmer's organization.

b. Commercial/Microfinance Banks

According to Amechi (2004); Commercial and microfinance banks can also finance agricultural projects. She further said; "In Nigeria, the federal government directs such banks to allocate a part of their lending's to agriculture at reduced interest rates. Such banks usually set up departments of agriculture and employ agriculturists to manage them. Such loans can be on:

Short-Term: Where the loans are used to finance Annual and biennial crops and quick maturing Livestock Projects such as pigs and poultry.

Medium-Term: Where the loan matures in two or three years. Such loans are normally invested on biennial and some perennial crop which mature in about three years such as Cassava, Citrus, Oil palm etc.

Long-Term: Where the loan matures in three or more years. They are used to finance long-spanning perennial crops such as Cocoa, Kola, rubber, etc.

However, the financing of agriculture by commercial banks has not been encouraging over the years. Commercial banks view agricultural financing in Nigeria as development financing with little or no return.

c. **Self-Financing**:

According to Anyantonwu (1986), this is where a farmer decides to reinvest his savings in another agricultural project or expanding an already existing one. This however, is a slow process since saving money depends on a lot of factors -economic and fiscal factors. It leads to small-scale farming and is only suitable for subsistence farming.

d. **Government Sources:**

Government (Federal, State and local) do give agricultural loan to farmers either directly or indirectly through some agencies like Ministries of Agricultural, banks, the Agricultural Development Programme (ADP) and others.

e. **Thrifts and Co-Operative Societies:** Farmers have always been advised to organized themselves into co- operative and thrifts societies to enable them easy access to soft loans to enable them carry out their farm projects.

5. METHODOLOGY OF THE STUDY

This study is primary data based. Data were collected from the study area. Etsako comprises of three Local Government Areas in Edo state (East, West and central). Eight farm based rural communities were randomly selected from each of the Local Government Areas with a given number of farm households as shown in table 1 below

Table 1: Distribution of Rural Households Population and Selected Communities of the three Local Government Areas.

L.G.A	COMMUNITY	POPULATION OF HOUSEHOLDS	(%)
Etsako central	Ekperi	26	2.4
Etsako central	Uduchiz	42	3.8
Etsako central	Anegbette	49	4.5
Etsako central	Osomhegbe	17	1.5
Etsako Central	Fugar	81	7.3
Etsako Central	Udaba	20	1.8
Etsako Central	Ugbekpe	48	4.4
Etsako Central	Ogbona	47	4.2
Etsako East	Agenebode	88	8.0
Etsako East	Imiakebho	46	4.2
Etsako East	Okpella	61	5.5
Etsako East	Weppa Wano	38	3.5
Etsako East	Uzanu	88	8.0
Etsako East	Ukpeku	44`	4.0
Etsako East	Ogwoyo	31	2.7
Etsako East	Unubu	49	4.5
Etsako West	Ibviakpi	38	3.5
Etsako West	Aviele	36	3.3
Etsako West	Ugbeno	49	4.4
Etsako West	Iyamho	42	3.8
Etsako West	Ugieda	64	5.7
Etsako West	Odamhe	38	3.5

Etsako West	Ighiku	36	3.3
Etsako West	Apana	35	3.2
Total	24	1,096	100%

Source: Field Survey, 2019.

Random Sampling technique using Yamane (1964) model was adopted as thus:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size; N = population size; e = error of significance = 0.05;
1 = constant

$$n = \frac{1,096}{1+ 1,096 \times 0.05^2}$$

$$n = \frac{1,096}{1,096 \times 0.0025}$$

$$n = \frac{1,090}{2.74}$$

$$n = 400$$

The sample size of 400 was distributed to the participating population using proportional stratification (Onwe 1998; Asika, 1991 and Osuala, 1993) as shown in table 2 below.

Table 2: Proportional Stratification

COMMUNITY	POPULATION OF HOUSEHOLD	%	PROPORTIONAL STRATIFICATION
Ekperi	26	2.4	0.024x400 = 9
Uduchiz	42	3.8	0.038x400 = 15
Anegbette	49	4.5	0.045x400 = 18
Osomhegbe	17	1.5	0.015x400 = 6
Fugar	81	7.3	0.073x400 = 29
Udaba	20	1.8	0.028x400 = 7
Ugbekpe	48	4.4	0.044x400 = 17

Ogbona	47	4.2	0.042x400 = 16
Agenebode	88	8.0	0.080x400 = 32
Imiakebho	46	4.2	0.042x400 = 16
Okpella	61	5.5	0.055x400 = 22
Weppa Wano	38	3.5	0.035x400 = 14
Uzanu	88	8.0	0.080x400 = 32
Ukpeku	44	4.0	0.040x400 = 16
Ogwoyo	31	2.7	0.027x400 = 11
Unubu	49	4.5	0.045x400 = 18
Ibviakpi	38	3.5	0.035x400 = 14
Aviele	36	3.3	0.033x400 = 13
Ugbeno	49	4.4	0.044x400 = 17
Iyamho	42	3.8	0.038x400 = 15
Ugieda	64	5.7	0.057x400 = 23
Odamhe	38	3.5	0.035x400 = 14
Ighiku	36	3.3	0.033x400 = 13
Apana	35	3.2	0.032x400 = 13
Total	1,096	100%	400

Source: Field Survey, 2019.

The main instruments for the collection of primary data were questionnaire. In addition, personal contacts were made with respondents to discuss and explain issues raised in the questionnaire which might have been difficult for them to understand. A total number of 400 questionnaires were distributed out of which 365 were retrieved. Of the 365 retrieved questionnaires, 335 were found useful for the purpose of this study. The data collected from the field were analyzed using the Chi-Square non parametric tool. The choice of Edo North is predicated in the agrarian nature and occupation of the people who are predominantly farmers.

Table 3: Distribution of Farm size Among Respondents

Farm size	No. of Respondents	Percentages

Large Scale	5	1.5
Medium Scale	13	3.9
Small Scale	97	28.9
Micro scale	220	65.7
Total	335	100

Source: Field Survey, 2019.

Table 3 shows that out of the 335 farms surveyed, 5 or 1.5% are large scale farms; 13 or 3.9% are medium scale farms; 97 or 28.9% are small scale farms while 220 or 65.7% are micro scale farms, which represents a majority of the farms located in the study area and indicated that most of the respondents are small farm holders.

6. RESULTS AND DISCUSSION

Table 4: Contingency Table

Factors influencing farmers' decision to obtain commercial banks' credit	S/A	A	D	S/D	Total
Information on funding sources	56	74	105	100	335
Farmers' educational background	112	94	91	38	335
Availability of collateral security for loans	185	91	42	17	335
Level of contact with agric extension agents	112	78	82	63	335
Policy instability on Agric credits	72	81	62	120	335
The level of interest charge on agric loans	96	118	76	45	335
Perception of banks' loans	68	75	84	108	335
Total	701	611	542	491	2,345

Source: Field Survey, 2019

Key: S/A = Strongly Agreed; A = Agreed; D = Disagreed; S/D Strongly Disagreed.

X^2_{cal} = 294.73, See Appendix for details

Determination of degree of freedom

DF = (r-1) (c-1)

Where: r = Number of rows,

c = Number of columns

At 95% confidence interval and 0.05 level of significance, the degree of freedom that applied in this case as indicated in table 4 above is (r-1) (c-1) = (4-1) (7-1) = (3) (6) = 18

Therefore X^2_{tab} under 18 degrees of freedom is 28.9

Interpretation of Result

Given the above result, where the X^2_{cal} value of 294.73 is far above the X^2_{tab} value of 28.9, a relationship does exists between the determining factors as indicated in the study and the farmers' decision to obtain commercial banks' agricultural credit. The relationship appears to be very strong considering a very high X^2_{cal} value of 294.73. Therefore, the effect of the determining factors on the decision of the farmers to access credit from commercial banks appear to be very strong.

7. Discussion of Findings

Seven core issues were raised in the questionnaire as influencing farmers' decision to access commercial banks' agric credit in the study area. The first issue which centered on Information on funding sources received 38.8 percent among the respondents while the remainder of 61.2% disagreed on the issue as a major factor that influence their decision to access agricultural credit by the respondents.

The second issue raised centered on the farmers' educational background in which 61.4% of the respondents agreed to be a major decision influencer. However, 38.6 percent of the respondents disagreed on this issue as an influencer of decision to obtain commercial banks' agric loans by the farmers..

The third issue bothered on collateral security. Most of the farmers regard this as the biggest obstacle to accessing agric credit as indicated by 82.4% of them. However, 17.6 percent of them disagreed on the issue. Thus, farmers noted that their inability to provide collateral security has discouraged them from accessing loans as almost all the credit awarding institutions that operate in the study area demand for such to forestall default.

The forth case revolves around the level of contact with agric extension agents . 56.7 percent of the farmers agreed that this is a major decision influencer while 43.3% disagreed.

The next centers on policy instability on agricultural credit to farmers. 45.7 percent of the farmers accepted policy issue as an obstacle to assessing funds while 54.3 percent disagreed. With this, most of the farmers do not accept that policy instability on agric credit discourages them from easy assess to commercial banks' credit.

The high level of interest charge on agric loans constitute a serious impediment to accessing credit according to 63.9% of the farmers. However, 36.1% of them disagreed on this issue.

The last issue raised centers on farmers' perception of banks' loans. 42.7% of the farmers accepted this to be an major decision influencer while 57.3% of them rejected it. This may have contributed to the reason why some of the farmers avoid approaching commercial banks for loans.

8. CONCLUSION/ RECOMMENDATIONS

The factors as raised in the study influence farmers' decision to access agric credit in rural Etsako in Edo North. The effect is very strong as shown in the Chi-Square result, which has obviously resulted in diminished agricultural performance in not only in the area of study but the entire country. Measures have to be put in place to encourage farmers to take inform decisions that would enable them access commercial banks' loans to fund their projects. Among such measures are:

For all commercial banks and financial lending institutions to open a window for agricultural loans. Additionally the central bank of Nigeria (CBN) through its special directives and moral suasion tools of controlling commercial banks to classify, expand and smoothing protocol in credit facilities to farmers.

The government at all levels should as a matter of urgency set up mechanisms to organize training and awareness campaign for farmers in the area. Furthermore government at all levels and other well meaning individuals should consider those socio-economics attributes that are significant in determining credit supply when planning. These would be a kind of positive multiplying effect to economic growth and development

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APPENDIX

Chi-Square (X^2) table

Observed (O)	Expected (E)	O-E	$(O-E)^2$	$(O-E)^2/E$
56	100.1	-44.1	1944.8	19.4
74	87.3	-13.3	176.9	2.0
105	77.4	27.6	761.8	9.8
100	70.1	29.9	894.0	12.6
112	100.1	11.9	141.6	1.4
94	87.3	6.7	44.9	0.5
91	77.4	13.6	184.9	2.4
38	70.1	-32.1	1030.4	14.7
185	100.1	84.9	7208.0	72.0
91	87.3	3.7	13.7	0.2
42	77.4	-35.4	1253.2	16.2
17	70.1	-53.1	2819.6	40.2
112	100.1	11.9	141.6	1.4
78	87.3	-9.3	86.5	0.9
82	77.4	4.6	21.2	0.3
63	70.1	-7.1	50.4	0.7
72	1000.1	-28.1	789.6	7.9
81	87.3	-6.3	39.7	0.5
62	77.4	-15.4	237.2	3.1
120	70.1	49.9	2490.0	35.5
96	100.1	-4.1	16.8	0.2
118	87.3	30.7	942.5	10.8
76	77.4	-1.4	1.9	0.03
45	70.1	-25.1	630.0	8.9
68	100.1	-32.1	1030.4	10.3
75	87.3	-12.3	151.3	1.7
84	77.4	6.6	43.6	0.6
108	70.1	37.9	1436.4	20.5
X^2	=			294.73