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ANALYSIS OF FARMERS' ACCESSIBILITY TO INSTITUTIONAL CREDIT: A CASE STUDY OF AKWA IBOM STATE INTEGRATED FARMERS' CREDIT SCHEME

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ABSTRACT: *The recent call for economic diversification through strengthening and consolidating the agricultural sector becomes imperative for the over dependent on the oil and gas sector. The level of agribusiness activities further reveals access to credit (finance) as serious concern to farmers in order to actualize the diversification agenda. In this light, this study analysed farmers' accessibility to institutional credit at the Akwa Ibom State Integrated Farmers' Credit Scheme. For the purpose of primary data collection, a questionnaire was designed and administered to each of the selected farmers in the communities. In addition, in-depth interview (IDI) was conducted with officials of the Akwa Ibom State Integrated Farmers' Credit Scheme. Out of the 250 copies of the questionnaire administered to the respondents, 196 copies had valid responses and were found useful for the analysis representing a response rate of 78.4 per cent, composed of 79 (40.3%) credit beneficiaries and 117 (59.7%) non-credit beneficiaries. This study employed both descriptive, inferential statistics and logistic regression model in analysing the data that were collected. The study further indicated that the farmers had relatively adequate access to land as the majority (60.8%) of the respondents owned between 1-5 hectares of land, and about 30.2 per cent owned between 6-10 hectares of land while 1.0 per cent of the respondents had more than 10 hectares of land. Farmers with large farm sizes were more inclined to borrow as 42.3 per cent of farmers with large farm size applied for credit as against 7.1 per cent for small-scale farmers. The study also revealed that the credit accessed from the AISIFCS was adequate and majority (80.1%) of the beneficiaries stated that they did not receive the actual amount of loan requested. Also institutional credits had positive impact on agricultural productivity while age, gender, household size, membership of cooperative, and access to ICT did not significantly contribute to the likelihood of having access to credit from ASIFCS. Marital status, educational qualification, income, size of farm in hectares, distance to nearest bank in km, farming experience in years and access to extension services significantly contributed to the probability of having access to credit from the Akwa State Integrated Farmers' Credit Scheme (AISIFCS). Therefore, the study showed that the main constraints to local farmer's capacity in accessing institutional credits include lack of collaterals, high interest rate, high level of bureaucracy, and the mode of repayment among others.*

KEYWORDS: Farmers, Accessibility, Institutional, Credit Scheme, Integrated & Agricultural Productivity

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INTRODUCTION

Agriculture remains the pillar for social and economic development in Nigeria. The agricultural sector is not only the most important non-oil economic activity in Nigeria; it is also the single largest employer of labour force to the tune of about 70 per cent (National Bureau of Statistics, 2006). Thus, the agricultural sector is often seen to be very important for reducing poverty (Agenor *et al.,* 2004). The roles of the Nigerian agricultural sector, according to the Nigerian Agricultural Policy Document, include provision of food for the growing population, foreign exchange earnings, employing a significant part of the labour force, and providing income for farming households (Federal Ministry of Agriculture and Natural Resources, 2001).

However, the agricultural sector in Nigeria is characterized by small-scale subsistence farming with average land holding of 0.5 hectare per farm household, yet using backward farming system which ultimately results in low productivity (Kahsay and Kugbei, 2004; Gebreselassie, 2006). The low level of productivity and hence the inability of the agricultural output to improve the livelihoods of the rural poor is due to various factors. These include: limited access to credit services, poor infrastructure, small land holdings (Ogato *et al.,* 2010) and the nature of land tenure systems (Devereux, 2000).

Access to credit is one major link in the chain of agricultural development. According to *Shephard* (1997), credit determines access to all of the resources on which farmers depend. Credit serves as a source of funds to farmers that can be utilized in production process. *Ogundeji* (1998) stated that agricultural business like any other business can be financed through personal savings, friends or family assistance, or through credit institutions. Credit institutions are formal organizations granting loan/credit facilities to farmers for the purpose of agricultural production. If well applied, credit should increase the size of farm operations, introduce innovations in farming, encourage capital formation, improve marketing efficiency and enhance farmers' consumption (Nwagbo, 1989). For farmers to increase food production, they need better access to agricultural support system such as credit, technology, extension service etc. They also need organization that channels these services (FAO, 2007; IFAD, 2007).

Over the years, government at the national and sub-national level have established several institutional mechanisms to address agricultural credits constraints among farmers in Nigeria. However, the mere existence of credit institutions in an area does not guarantee access to credit to farmers in the region, especially the small-scale farmers. Hence, this study analyses farmers' accessibility to institutional credit using the Akwa Ibom State Integrated Farmers' Credit Scheme as a case study.

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RESEARCH METHODOLOGY

This study was conducted in Akwa Ibom State, Nigeria. It lies between latitudes 4°32' and 5°33' North; and Longitudes 7°25' and 8°25' East. In terms of structural make up, Akwa Ibom State is triangular in shape and covers a total land area of 6,900 sq. km, encompassing the Qua Iboe River Basin, the western part of the lower Cross River Basin and the Eastern part of the Imo River Basin. With an ocean front which spans a distance of 129 kilometers from Ikot Abasi in the west to Oron in the east, Akwa Ibom State presents a picture of captivating coastal, mangrove forest and beautiful sandy beach resorts. It has a population of 3,920,203 people (National Population Commission, 2006) and is in the tropical rain forest belt.

The farmers were selected from the existing Local Government Councils in the State. The selection involved a multi-stage random sampling technique. Firstly, Akwa Ibom State was divided into the existing LGAs. Secondly, the thirty one LGAs were divided into six AZ (Akwa Ibom State Ministry of Economic Development, 2004). Thirdly, two AZ were randomly selected from the six AZ. Fourthly, two LGAs were randomly selected per AZ giving a total of four LGAs. This was followed by a listing of the communities in the four LGAs and a random selection of two communities from each LGA to give a total of eight communities. The listing of farmers was done for each of the community. Since the selected communities consist of unequal population, the final random selection of credit beneficiaries and non-beneficiaries farmers was made proportion to the size of the population of each community. As such, the final sample size comprised 125 credit beneficiaries and 125 non-beneficiaries.

For the purpose of primary data collection, a questionnaire was designed and administered to each of the selected farmers in the communities. In addition, in-depth interview (IDI) was conducted with officials of the Akwa Ibom State Integrated Farmers' Credit Scheme. This is important to identify their constraints in the supply of credits to the farmers.

This study employed both descriptive and inferential statistics in analysing the data that were collected. Objectives i, ii, iii and v were achieved using means, frequency distributions and percentages, while a logistic regression model was employed to analyse the relationship between the socio-economic characteristics of farmers and their accessibility to institutional credit in Akwa Ibom State (objective iv).

Degree of Farmers' Accessibility to Credit

The level or degree of Farmer's access to credit was calculated following an equation used by Hussain and Thapa, (2012). The equation is expressed as follows:

$$CAR_i = \frac{ci/C}{li/L} \qquad \text{...1.1}$$

Where,

CAR_i = Credit Accessibility Ratio

C = total distributed credit to all sample households

L = total land holding size belonging to all sample households

C_i = total credit given to i^{th} household

l_i = land holding size that belongs to i^{th} household

Adequacy of Credit

Similarly, Hussain and Thapa (2015) estimated adequacy of credit received by farmers by specifying the equation below.

$$CADR = \frac{\acute{X}}{\acute{Y}} \times 100 \quad \ldots\ldots 1.2$$

Where,

CADR = groups credit adequacy Ratio

Ẋ = annual average amount of credit received by group Z

Ý = average annual amount demanded by Z group

Where,

$$\acute{X} = \sum_{i=1}^{n} X \quad \ldots\ldots 1.3$$

And

$$\acute{Y} = \sum_{i=1}^{n} Y \quad \ldots\ldots 1.4$$

Where,

n = the number of farmers in a group

Model Specification

The nature of the dependent variable (credit access) led to the choice of a binary choice model adopted in this study. Binary choice models are commonly used when outcomes are divided into two mutually exclusive categories. For this study, the logit model, which is one type of binary

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choice model, was adopted which produced the t-ratios that were compared with t-critical values to test the hypothesis of the study, which states that there is no significant relationship between the socio-economic characteristics of farmers and accessibility to institutional credit in Akwa Ibom State. Logit regression analysis is a bivariate technique that allows for estimating the probability that an event occurs or not, by predicting a binary dependent outcome of a set of independent variables. Following Maddala (1983) and Brooks (2008), the logistic probability model is econometrically specified as:

$$P_{i=}\ F(Z_i) = F(\propto\ + \sum_{i=n}^{n} \beta_i X_i) = \frac{1}{1+ e^{-Zi}}$$

…… 1.5

Where P_i is the probability that individual access credit given X_i and X_i represent the *i* explanatory variables, *e* denotes the base of natural logarithm and βi are parameters to be estimated. The logit transformation function of P given Z is required to get linearity necessary for the logistic regression and this is derived by taking the natural logarithm of odd ratio in equation 1.5 which results in the logit model given by:

$$Z_i = \ln[P_i/(1 - P_i)]\ \alpha + \beta_0 + \beta_1 X_i\ +\ \ \beta_2 X_2 \ldots\ \ \ \beta_{12} X_{12} + \varepsilon\ \ldots\ldots\ldots\ldots\ldots\ldots\ldots 1.6$$

Where Z is the indicator of farmers' access to credit or not, P is the probability of the event occurrence, X_i is a vector of socio-economic characteristics of farmers, α is a constant and βi are corresponding vector of regression and ε is a disturbance term.

The dependent variable (z) is the access to credit from the Akwa State Integrated Farmers' Credit Scheme (AISIFCS) while the independent explanatory variables (X_i) include:

X_1 =Age (in years)

X_2 = sex (dummy, 1 for male, 0 for female)

X_3= Marital status (dummy, married=1, single =0)

X_4= Education level (Number of years spent in school)

(X_5) = Monthly income (Naira)

X_6= Household size (Number of people in household)

X_7 = Size of farm (hectares)

X_8= Distance to nearest bank (in km)

X_9=membership of cooperatives (Dummy, 1 for member, 0 non- member)

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X_{10}= farming experience (Years)

X_{11}= access to extension facilities (dummy, 1 for access, 0 non-access)

X_{12}= access to ICT (dummy, 1 for access; 0 non-access).

The a priori expectations with respect to the independent variables are such that Age (X_1), Sex (X_2), Income (X_5), household size (X_6) and distance to bank (X_8) will negatively affect the probability of access to credit. All other dependent variables are expected to exert positive influence on the probability of access to credit. In other words;

X_1, X_2, X_5, X_6, X_8 and $X_{10} < 0$ while; X_3, X_4, X_7, X_{11} and $X_{12} > 0$

RESULTS AND DISCUSSIONS

Socio-economic Characteristics of Respondents

The socio-economic characteristics of respondents considered in this study include sex, age, marital status, educational qualification, occupation, average monthly income of respondents, farming experience and number of hectares owned by respondents. The respondents comprised credit beneficiaries and non-credit beneficiaries. The results of the socio-economic characteristics of the respondents in the study area are as presented in Table 1.1. The results showed that majority (64.6%) of the respondents who were credit beneficiaries were males and about 40.3 per cent of them were between the ages of 31 to 50 years. While 19.0 per cent of them were above 60 years of age, only 10.1 per cent of them were between 20 and 30 years old.

For non-credit beneficiaries' respondents, majority of them were males (69.2%), while only 30.8 per cent were females. Also, while 46.2 per cent of the respondents were between the ages of 31-50 years, about 18.8 per cent were above 60 years of age, and only 9.4 per cent fell between the age brackets of 20-30 years. The low proportion of the respondents within this category of 20-30 years is attributed to the design of the study which emphasized on only household heads as the respondents for the study. Generally, the average age of the respondents was 47 years for credit beneficiaries and 44.3 years for non-credit beneficiaries.

The results in table 1.1 further revealed that majority (76.0%) of the respondents who were credit beneficiaries were married and the average household size was 5 persons. Specifically, 49.3 per cent of the respondents had household sizes of 4-6 persons and 19.0 per cent of them had household sizes of 7-9 children, while 16.5 per cent and 15.2 per cent of the respondents had 0-3 and 10 and above household sizes respectively. For non-credit beneficiaries' respondents, majority (76.1%) of them were also married and about 67 per cent of them had between 4-9 household sizes. Also,

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while 16.2 per cent of the respondents had household sizes of 1-3 persons, about 16.2 per cent of them had household sizes of 10-12 persons.

With respect to education, the respondents can be described as a fairly literate population for both categories of farmers. The results in table 1.1 also showed that about 44.4 per cent of the respondents who were credit beneficiaries had primary education while 16.5 per cent of them had secondary education qualification. Similarly, 22.7 per cent of the respondents had tertiary education qualification while only 16.5 per cent of them had no formal educational qualification. For non-credit beneficiaries' respondents, majority (44.4%) of them also had basic primary education, while 22.3 per cent of them had tertiary education, only 16.2 per cent had no formal education.

With fairly educated respondents as these implies higher probability to accessing credit as the wealth of knowledge acquired in school increases their money management, savings, budgeting skills and ultimately repayment abilities.

Table 1.1 further revealed that 16.5 per cent of the respondents who were credit beneficiaries and 17.1 per cent of non-credit beneficiaries earned between ₦1001 and ₦10,000 Naira per month respectively. Also, 27.8 per cent of credit beneficiaries earned between ₦10,001 and ₦20,000 Naira per month, while 27.4 per cent of non-beneficiaries' respondents fell within the same income range. In addition, 26.6 per cent of credit beneficiaries and 26.5 per cent of non-beneficiaries respondents earned between ₦20,001 and ₦30,000 Naira per month respectively. In terms of purchasing power parity for Nigeria, the majority of the respondents earned $3.56-$10.69 (PPP) per day, a figure above the international poverty line of $1.25 (PPP) per day (World Bank Data Bank, 2012). Table 1.1 also showed an average income of N26, 389.00 for all the respondents, implying that the farmers earned above the minimum wage.

Table 1.1: **Socio-economic Characteristics of Respondents**

Variables	**Credit Beneficiaries n = 79**		**Non-Credit Beneficiaries n = 117**	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Sex:				
Male	51	64.6	81	69.2
Female	28	35.4	36	30.8
Age in Years:				
21-30	8	10.1	11	9.4
31-40	19	24.0	30	25.6
41-50	16	20.3	24	20.6
51-60	21	26.6	30	25.6

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61-70	15	19.0	22	18.8
Mean Age	**47.0 Years**		**44.3 Years**	
Marital Status:				
Married	60	76.0	89	76.1
Single	10	12.7	15	12.8
Divorced	3	3.8	4	3.4
Separated	1	1.2	0	0.0
Widowed	5	6.3	9	7.7
Household Size (No. of Persons):				
1-3	13	16.5	19	16.2
4-6	39	49.3	58	49.6
7-9	15	19.0	21	18.0
10 -12	12	15.2	19	16.2
Mean Household Size	**5 Persons**		**6 Persons**	
Education Level (No. of years spent in School):				
(No formal education)	13	16.5	19	16.2
1-6	35	44.3	52	44.4
7-12	13	16.5	20	17.1
13-18	18	22.7	26	22.3
Mean Years in School	**6.8 Years**		**6.8 Years**	
Income of Respondents Per Month (N' 000)				
1000- 10, 000	13	16.5	20	17.1
11, 000-20, 000	22	27.8	32	27.4
21, 000-30, 000	21	26.6	31	26.5
31, 000-40, 000	6	7.5	9	7.7
41, 000-50, 000	4	5.1	6	5.1
51,000 & above	13	16.5	19	16.2
Mean Income	**₦26,455.00**		**₦26,324.00**	

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Farming Experience (Years):				
< 5	6	7.6	8	6.8
5 – 10	14	17.7	20	17.1
11 – 20	31	39.3	48	41.0
21 – 30	23	29.1	32	27.4
>30	5	6.3	9	7.7
Mean Years of Farming	**17.6 Years**		**17.9 Years**	
Farm Size (Hectares)				
< 1 Hectare	6	7.6	10	8.5
1 – 5	48	60.8	71	60.7
6 – 10	24	30.4	35	29.9
> 10	1	1.2	1	0.9
Mean Hectares	**4.7 Hectares**		**4.5 Hectares**	

Source: Field survey data, 2014

Analysis of farming experiences of the respondents indicated that about 39.3 per cent of credit beneficiaries and 41.0 per cent of non-beneficiaries had between 11-20 years farming experience, while 56.6 per cent of both categories of respondents (that is 29.1% and 27.4% respectively) had between 21-30 years farming experience, only 14.0 per cent of the respondents had over 30 years of farming experiences. The average farming experience of the farmers was 17.6 and 17.9 years for credit beneficiaries and non-credit beneficiaries respectively (Table 1.1). Generally, the farmers can be described as having good farming experience based on the above number of years they have put into farming. This makes the respondents to be experienced and knowledgeable about the subject matter under investigation in this study.

Furthermore, Table 1.1 also showed the number of hectares owned by the respondents and it indicated that majority (60.8% and 60.7% respectively) of both categories of respondents owned between 1-5 hectares of land and about 60.3 per cent owned between 6-10 hectares of land while, 2.1 per cent of the respondents had more than 10 hectares of land. The average hectares per farmer was 6.3 hectares. It can be concluded that the respondents had access to land for their agricultural activities. Against this fact, it was germane to examine the level of access of the respondents to services and facilities in their respective communities. This is important as it impacts on agricultural productivity within the study area.

Accessibility and Adequacy of Credit from the Akwa Ibom State Integrated Farmers' Credit Scheme

In order to examine the level of accessibility and adequacy of credit from the AISIFCS, it was important to determine the amount of credit requested and the amount subsequently granted by the

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scheme. Table 1.1 showed the amount of credit obtained by the respondents and the distribution across the three classes of loan could be described as fair with an average loan size of N315, 000.

Table 1.2: **Distribution of Beneficiaries by Level of Credit Accessed from the Akwa Ibom State Integrated Farmers' Credit Scheme**

Credit Amount (N)	No. of Respondents	Percentage
200,000-300,000	38	48.5
301,000-400,000	18	23.0
401,000-500,000	23	28.6
Total	**79**	**100.0**
Mean = N315,822		

Source: Field survey data, 2014

The result indicated that the credit given to respondents ranged from N201, 000 to a maximum of N500,000 per respondent. Specifically, 48.5 per cent of the respondents received between N201,000 and N300,000. Also, 23.0 per cent of the respondents received between N301,000 and N400,000 while 28.6 per cent received between N401,000 and N500,000. On the average, N315,822 was obtained by the respondents (Table 1.2).

In the context of the above finding, the adequacy of loan obtained was further investigated to know if respondents received the actual amount of money requested and their responses are represented in table 1.3

Table 1.3: **Perception of Beneficiaries with Respect to Accessed Credit**

Perception of Beneficiaries	No of Respondents	Percentage of Respondents
Actual Received	16	19.9
Actual Not Received	63	80.1
Total	**79**	**100.0**

Source: Field survey data, 2014

Table 1.3 showed that majority of the respondents (80.1%) did not receive the actual amount of money requested from the Akwa Ibom State Integrated Farmers' Credit Scheme. Specifically, 80.1

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per cent of the respondents did not receive the actual money requested from the credit institution. This scenario has implications on the capacity of the farmers to actually utilize the funds for the purpose for which it was planned. Hence, the respondents' degree of credit access and adequacy were empirically determined by estimating equation 3.1 and 3.2 and the result is presented in table 1.4.

Table 1.4: **Estimation of Credit Access and Adequacy Ratios**

Classes of Loan Requested (₦)	**Total Loan requested (₦)**	**No. of Respondents**	**Total Loan amount granted (₦)**	**Percentage Received**	**Total land holding (Acres)**	**Credit Access Ratio**	**Credit Adequacy Ratio (%)**
200,000	3200000	16	3200000	100	70	0.71	0.100
300,000	6600000	22	5792336	87.8	50	0.97	0.87
400,000	7200000	18	6660000	92.5	120	0.90	0. 92
500,000	11500000	23	10350000	90.0	180	0.93	0.90
Total=1,400,000	**28,500,000**	**79**	**26, 002, 336**	**92.6**	**420**	**0.87**	**0. 92**

Source: Field survey data, 2014

These results indicated that respondents had high level of access with an average credit ratio of 0.87 indicating that less than 15 per cent of the respondents had restricted access. Similarly, the degree of credit adequacy was very high with respondents within the range of ₦200, 000.00 credit having 100 per cent adequacy ratio. The average adequacy ratio was estimated at about 92 per cent. The credit access ratio for the first group that requested ₦200,000 was 0.71 while that of the group that requested N500, 000 naira was 0.93.

Meanwhile, from the perception of respondents, the amount of credit received was said to be inadequate as indicated by about 91 per cent as presented in table 1.3. The results of the estimated equations 3.1 and 3.2 seem to contradict respondents' perception with respect to level of credit accessibility and adequacy. This is, however, not unexpected as opinions sometimes may not reflect the true situation of any given phenomenon.

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Table 1.5: **Perception of Beneficiaries with Respect to Credit Adequacy**

Perception of Beneficiaries	No of Respondents	Percentage of Respondents
Adequate	7	38.5
Not Adequate	72	91.1
Total	**79**	**100.0**

Source, Field survey data, 2014

As revealed in Table 1.5, majority (91.1%) of the credit beneficiaries indicated that the credit was not adequate. This further corroborates the findings in Table 1.3 which indicated that over 80.0 per cent of the respondents who are loan beneficiaries indicated that they did not receive the actual money they requested. The credit adequacy ratio as shown in Table 1.4 indicates that the farmers with small landholding had higher credit adequacy ratio than farmer with larger landholdings. Table 1.4 further reveals that farmers with the smallest landholding of 70 acres had 100 per cent adequacy ratio while farmers with lager landholding of 180 acres had only 90 per cent access.

Generally access to credit is higher for smaller landholding farmers than for larger landholding because farmers with small land holdings do not require large capital to invest in their agro businesses, whereas large landholdings farmers will require huge capital to invest in such lands. This implies that such farmers can easily obtain credit facilities as credit institutions, cooperative societies or individuals will readily grant small amount of credit or materials to farmers than large amount of capital. Overall, credit adequacy ratio for all farmers was 0.92 per cent.

Determinants of Access to Institutional Credits

This section sought to identify the determinants and constraints to access to institutional credit among farmers in Akwa Ibom State. Equation 3.6 was estimated to determine factors affecting respondents' accessibility to institutional credit. The result of the logistic regression is presented in Table 1.6.

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Table 1.6: **Logistic Regression Results of Determinants of Access to Credit**

Variables	Coefficients	S.E	exp(b)
Constant (β_1)	-2.609	1.439	0.74
Age (X_1)	-1.94	0.160	0.824
Gender (X_2)	-0.93	0.386	0.911
Marital Status (X_3)	0.438**	0.183	1.549
Education (X_4)	0.549**	0.231	1.732
Income (X_5)	-0.316**	0.139	0.729
Household Size (X_6)	-0.421	0.317	0.656
Size of Farm (X_7)	0.806**	0.342	2.238
Distance (X_8)	0.373**	0.119	1.452
Membership of Coop. (X_9)	0.746	0.483	2.108
Farming Experience (X_{10})	-0.639	0.173	0.528
Extension Facilities (X_{11})	1.545***	0.489	4.689
Access to ICT (X_{12})	0.126	0.184	1.134
Model $X^2(1) = 63.415$, $P < 0.01$***, $p < 0.05$**			

Source: Authors computation, 2014

The result revealed that the estimated values of marital status (X_3), educational qualification (X_4), income (X_5), size of farm in hectares (X_7), distance to nearest bank in km (X_8), farming experience in years (X_{10}) and access to extension facilities (X_{11}) significantly contributed to the probability of having access to credit from the Akwa Ibom State Integrated Farmers' Credit Scheme (AISIFCS). It is of interest to note that age (X_1), gender (X_2), household size (X_6), membership of cooperative

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(X_9), and access to ICT (X_{12}), did not significantly contribute to the likelihood of having access to credit from the AISIFCS.

The result further showed that the estimated coefficient of marital status (0.438) was significant at 5 per cent and its exp(b) value of 1.549 implies that as more people get married, the odds of having access to credit from ASIFCS increases (Table 4.7). As stated earlier, marriage is one of the indices of social responsibilities as a married person is said to be more social and economic responsible in the management of resources and commitment to social group objectives and this is expected to enhance their credit accessibility status. The estimated coefficient of educational qualification (0.549) was significant at 5 per cent and its exp(b) value of 1.732 suggests that as the number of years in school of the operators increases, the odds of having access to credit from ASIFCS also increases because an educated farmer is expected to have increased knowledge in money management, saving, budgeting and entrepreneurial skills and ultimately, repayment abilities.

The estimated coefficient of income (-0.316) was also significant at 5 per cent level of significance and it exp(b) value of 0.729 implies that as the income of the operators increases, the odds of accessing credit from ASIFCS decreases. This suggests that increase in income will make the operators less dependent on the loan from AISIFCS for his or her farm business, as such farmer is capable of investing part of his/her income in the farm business and as such is may not borrowed much and is also considered as being capable of repaying the borrowed funds and thus increasing the possibility of accessing credit from the AISIFCS.

The estimated coefficient of farm size in hectares (0.806) was significant at 5 per cent and it exp(b) value of 2.238 infers that as the farmers expand their farm size, their likelihood of accessing credit from AISIFCS increases. Precisely, the odd of having access to loan from AISIFCS by those that increase their farm size is about 2.5 times higher than that of those that do not expand their farm size as this implies increased productivity for export and more income, thus having repayment potentials.

The estimated coefficient of distance to nearest bank in km (0.373) was significant at 5 per cent and it exp(b) value of 1.452 implies that the nearer the farmer's location to the ASIFCS, the more likely the increase in odd of having access to credit from ASIFCS. The estimated coefficient of farming experience in years (-0.639) was significant at 1 per cent level of significance and it exp(b) value of 0.528 implies that as the operators advance in farming experience the odd of having access to credit from the ASIFCS increases. This finding may suggest that the farmers' experience on the job may substitute for obtaining loan from the ASIFCS as their wealth of experience on how to reduce cost is paying off or they are well established and their demand for credit may be minimal as a result.

The estimated coefficient of access to extension facilities (1.545) was significant at 1 per cent and it exp(b) value of 4.689 implies that those that have access to extension facilities stand a better

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chance of about 4.7 times odd of having access to credit from the ASIFCS than those that do not have access to extension facilities.

All the independent variables complied with the a priori expectation except for gender and distance of respondents' residence to bank. This finding suggests that the sex of respondent does not really matters in accessing institutional credit because efficient management of resources does not depend on gender and the issue of gender sensitivity counts. The coefficient of marital status, educational qualification, income, farm size, distance to nearest bank, farming experience and access to extension facilities significantly contributed to the probability of having access to institutional at the AIIFCS. The coefficient of age, gender, household size, membership of cooperative and access to ICT, do not significantly contribute to the likelihood of having access to credit.

This study has revealed further that agricultural credit is very important for sustainable agricultural development to be achieved in any country of the world. Rural credit has proven to be a powerful instrument against poverty reduction and development in rural areas. Farmers are particularly in need of such instrument because of the seasonal pattern of their activities and the uncertainty they face. Agricultural credit enhances productivity and promotes standard of living by breaking vicious cycle of poverty of small scale farmers. Credit is not only needed for farming purpose, but also for family consumption expenses especially during the off season period. Amongst the challenges faced by smallholder farmers in production is inaccessibility to credit.

Constraints to Local Farmers' Capacity in Accessing Institutional Credits

While the flow of institutional credit depends on the availability of funds with the financial institutions, rate of interest, and government policies, a number of socio-economic variables constrained the capacity of local farmers to access institutional credits. To capture the different constraints militating against local farmers in Akwa Ibom State in accessing institutional credit, farmers were asked to identify the constraints and Table 1.7 shows the different constraints to local farmer's capacity in accessing institutional credits in Akwa Ibom State.

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Table 1.7: **Constraints to Local Farmers' Capacity in Accessing Institutional Credit**

Constraints	Credit Beneficiaries		Non-Credit Beneficiaries	
	Frequency	Percentage	Frequency	Percentage
Lack of collateral	55	69.6	103	88.0
High interest rate	41	51.9	111	94.9
Mode of repayment	21	26.6	50	42.7
Lack of information	10	12.7	88	75.2
Lack of guarantor	20	25.3	110	94.0
High Level of Paperwork (Bureaucracy)	33	41.8	97	82.9
Delay in disbursement	66	83.5	15	12.8

Source: Field survey data, 2014; ***Multiple responses were recorded**

Results of the study showed that 69.6 and 88.0 per cents of credit beneficiaries and non-credit beneficiaries faced difficulties in presenting required collaterals before accessing credit from the AISIFCS , while 51.9 and 94.9 per cents of both categories of respondents identified high interest rate charged on the funds as the main constraint in their capacity to access credit. In addition, 41.8 per cents of credit beneficiaries and 82.9 per cent of non-credit beneficiaries identified high level of bureaucracy as a constraint to accessing credit from the AISIFCS. Similarly, 26.6 percent of credit beneficiaries and 42.7 per cent of non-credit beneficiaries cited mode of repayment as the main constraint faced. Furthermore, the absence of information on the modalities for accessing credit was identified by 12.7 per cent of credit beneficiaries and 75.2 per cent of non-credit beneficiaries as their constraint to credit accessibility at the AISIFCS. Availability of credit at the right time is a significant determinant of agricultural productivity (Udoh, 2005). The delay in the disbursement of loan is a potential factor contributing towards restricting the agricultural productivity growth as 83.5 per cent of the sampled farmers who were credit beneficiaries reported that there was delay in disbursement mainly due to clerical procedures at the bank's end.

CONCLUSION

Availability of income is one of the most important preconditions for the survival of any household. This becomes even more important considering the rural nature of the study area where poverty is known to be pervasive and widespread. Evidence from this study has shown that marital status, educational qualification, income, size of farm, distance to nearest bank, farming experience and access to extension services significantly contributed to the probability of farmers having access to credit from the Akwa Ibom State Integrated Farmers Credit Scheme (ASIFCS).

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REFERENCES

Agenor, P. R., Izquierdo, A. and Fofack, H., (2004). IMMPA: A Quantitative Macroeconomic Framework for the Analysis of Poverty Reduction Strategies. The World Bank, Washington, DC.

Brooks, C. (2008). Introductory Econometrics for Finance. Cambridge: Cambridge University Press

Devereux, S., (2000). Food Insecurity in Nigeria: A Discussion Paper for DFID. October

Federal Department of Agriculture/Federal Ministry of Agriculture and Natural Resources (FDA/FMANR), (2001). The Nigerian Agricultural Policy.

Gebreselassie, A., (2006). Land , Land Policy and Smallholder Agriculture in Nigeria : Options and Scenarios. Development, (March), 1-20.

Hussain, A., and Thapa, G. B. (2015). Fungibility of Smallholder Agricultural Credit: Empirical Evidence from Pakistan. European Journal of Development Research. doi:10.1057/ejdr.2015.55

IFAD (2009). International Fund for Agricultural Development. Rural Poverty Portal. Rural Poverty in Peru. Retrieved from http://www.ruralpovertyportal.org/web/guest/country/home/tags/peru

Maddala G.S (1983). Limited Dependent and Quantitative Variables in Econometrics. New York, Cambridge University Press.

National Bureau of Statistics, (2006). The Nigerian Statistical Factsheets on Economic and Social Development. Federal Republic of Nigeria.

Nwagbo, E. C., (1989). Impact of Institutional Credit on Agriculture in Funta Local Government Area of Katsina State, Nigeria. Samaru Journal of Agricultural Research 6, 79-86.

Ogato, G. S., Boon, E. K., and Subramani, J., (2010). Improving Access to Productive Resources and Agricultural Services through Gender Empowerment: A Case Study of Three Rural Communities in Ambo District, Ethiopia. Human Ecology, 27(2), 85-100.

Ogundeji, A., (1998). How to Run a Small Scale Business, Able Press Publication, Nigeria.

Shephard, W. G., (1997). Market Power and Economic Welfare, Random House, New York, P. 51.

World Bank (2009). Finance for All? Policies and Pitfalls in Expanding Access. Washington, DC: World Bank.

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