

**NSAP****47th Annual Conference**
(JOS 2022)**CONFERENCE PROCEEDINGS**THEME
SECURING ANIMAL AGRICULTURE AMIDST GLOBAL CHALLENGES**DETERMINANTS OF MICRO-CREDIT UTILIZATION ON PRODUCTIVITY OF POULTRY FARMERS IN UDU LOCAL GOVERNMENT AREA OF DELTA STATE**

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This study was carried out to examine the determinants of micro-credit utilization on productivity of poultry farmers in Udu Local Government Area of Delta State. The specific objectives of the study were to describe the socio-economic characteristics of respondents; ascertain the source of agricultural credit to poultry farmers, and estimate the socio-economic factors influencing the accessibility of credit by poultry farmers. Purposive sampling technique was used to select one hundred respondents from five randomly selected villages. Descriptive statistics such as frequency table, mean, percentage while regression was used to analyze the data collected from the respondents. Result showed that majority of the respondents (66.7%) were males while 34.4% of the respondents are within the productive age range of 35-44years. The regression result showed that 58% variation in the dependent variable was accounted for by the independent variables in the model. The constraints faced by poultry farmers in credit accessibility were delay in loan acquisition with highest mean score of 3.45, and cumbersome process with mean score of 3.33. It is therefore recommended that establishment of sufficient rural finance institutions and strengthening of the available micro finance institution. Government should help to reduce the interest rate charged on credit so that farmers can apply for credit from formal sources.

Keywords: Micro-credit, access, utilization, smallholders and Poultry.

INTRODUCTION

Agriculture is an important sector of the Nigerian economy, contributing about 21.2 % to GDP and 36.5 % to employment. Industries and services contribute around 18 and 60 percent to GDP respectively, the two sectors employing about 12 and 52 % of the labor force, in that order (World Bank, 2018). The Nigerian agricultural sector is heterogeneous, comprising small through medium to large farmers and farms with different levels of efficiency. Smallholder farmers however, dominate the agricultural and livestock production landscape. They mainly cultivate rice and cassava, and keep cattle, small ruminants and poultry (Makun, 2018). The livestock sub-sector (LSS) has always been an important component of Nigeria's economy. In addition to its contribution to the Gross Domestic Products (GDP) of the country, it contributes substantially also to the supply of animal protein, Federal Department of Livestock and Pest Control Services ((FDLPCS, 2013). By its population and capacity for animal production, with 25% of livestock herds in the sub-region, Nigeria is by far the leading livestock producer in Central and West Africa. Livestock production particularly is known to be of massive importance to the poor and one of the principal components of the rural and national economy. The Food and Agricultural Organization (2017) acknowledged that livestock keeping diversifies production and reduces the risks of economic losses resulting from crops destroyed by adverse climatic conditions or diseases. It is a natural and economic capital which contributes to human diets and livelihoods through home consumption and income generation, acting as a live bank, imparting social status, and providing draft, transport, and fertilizer, especially for resource-poor farmers (World Bank, 2018). Given the relative importance of the livestock sector to rural smallholders, one question that arises is the extent to which farmer's access credit to facilitate their taking advantage of developing livestock production and other livelihood activities.

In Nigeria for example, Ogbuabor and Nwosu (2017) acknowledged that credit is needed to increase farm output significantly, hence farm family income and credit helps the poor towards accumulating their wealth to invest in farming. It is an instrument that could possibly transform the traditional agricultural sector into modern form and create employment opportunities. Hence, credit is a critical component that could tackle productivity problems and reduce extreme poverty, supporting the generation of self-employment in the rural sector farming and non-farming activities for investment in working capital, and one of the core strategies for alleviating poverty in most developing countries (Tiken Das, 2018).

The most significant problem in the food sector in Nigeria is that of low animal protein in the diets of a large proportion of the population, especially in the rural areas where about 70% of its population lives (FAO, 2017). Other factors responsible for the precarious food insecurity include land, agricultural research and policy, technology, infrastructure, and access to support services such as extension services. Ojo and Adebayo, (2012) and FMARD, (2008) confirm inadequate financing to also be the significant problem. For instance, the allocation of credit to the Nigerian agricultural sector by commercial banks declined from about 10.8% of total lending in 1985 to only about 3.7% in 2014 ((Udoka *et al*, 2016). It is confirmed that the declining trend in credit provision by the financial sectors is due to the risks and uncertainties in Nigerian agriculture, especially to small holders (Famogbiele, 2013).

METHODOLOGY

Area of Study

The study was carried out in Udu Local Government Area of Delta State and it is located in the South Central part of Delta State in the South-South zone of Nigeria. It lies between latitude 4°30'N to 6°35'N and longitude 4°30'E and 5°00'E with population of 196,200 as projected by National Bureau of Statistics (NBS and FMARD, 2012). The annual mean temperature is about 26°C and the mean annual rainfall is 185mm with September being wettest month. Relative humidity of the air is high with a range of 65-90% (Udo, 2004). The predominant occupations of the people are farming, poultry production, fishing, and petty trading. Cassava farming serves as the major food crop in the area. Other food crops include: maize, yam, pepper, cocoyam and vegetable. With frequent cases of oil spillage in the area especially in Ukpiovwin and Oghior, most farmers have abandoned their farmlands.

Sampling Technique and Procedure

A two stage sampling techniques was used for the study. Firstly, purposive sampling technique was used to select five villages from the local government due to high population of livestock farmers in those villages. In the second stage, Twenty (20) livestock farmers was then be randomly selected from each village to make a total of One hundred respondents. Primary data were used for this study and it was collected with the aid of a well-structured questionnaire administered to the selected farmers.

Method of Data Analysis

Descriptive statistics such as mean, frequency distribution and percentages was used to analyze the socio-economic characteristics of livestock farmers and sources of agricultural credit to livestock farmers. Linear regression analysis was used to estimate the determinants of credit utilization by livestock farmers. The model is given below:

$$Y = a + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8 + ei \dots\dots\dots$$

Where: Y = amount of credit obtained (naira);

X₁ = age of farmers (years);

X₂ = gender (1 = male, 0 = female).

X₃ = marital status (1 = married, 0 = single);

X₄ = household size (number);

X₅ = education level (number of schooling years);

X₆ = farming experience (years);

X₇ = occupational status (years)

X₈ = stock size (number of birds)

a = constant intercept;

B₁...B₈ = the coefficient corresponding to X₁...X₈;

ei = stochastic error.

RESULTS AND DISCUSSION



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Table 1 present socio-economic characteristic of the respondents. The table reveals that the majority (66.7%) of the respondents were male, 34.4% of the respondents fell within the productive age range of 35-44 years, while majority (78.9%) of them are married. The findings further revealed that 96.7% had formal education, while only 3.3% never attended school. This implies that there were more educated people in poultry production in the study area. However, this does not suggest that in poultry production, education is a barrier but rather an added advantage for efficient management. With this level of education, there is tendency of the farmers being able to increase the level of technology adopted and skill acquisition. 48.9% of the respondents' source credit from formal credit institutions, the source of credit often chosen by farmers is dependent on the ease of accessibility and other factors. The result showed that most of the farmers chose the formal sources over the informal sources. This may be probably due to the fact the poultry farmer's needs huge amount of money for poultry farms which informal sources may not be able to provide.

Table 1: socio-economic characteristics of the Respondents

Characteristics	Frequency	Percentage (%)
Gender		
Male	60	66.7
Female	30	33.3
Age (years)		
Less than 35	6	6.7
35-44	31	34.4
45-54	30	33.3
55yrs and above	23	25.6
Marital Status		
Single	19	21.1
Married	71	78.9
Education Level		
Adult Education	11	12.2
Never Attended	3	3.3
Secondary School	26	28.9
Tertiary Education	50	55.6
Credit Source		
No access	23	25.6
Formal credit Institution	44	48.9
Semi-formal credit Institution	8	8.9
Non- formal Institution	15	16.7
Total	90	100.0

Source: Field Survey, 2021

Table 2 shows the constraints faced by poultry farmers, it could be seen that the major constraints facing poultry farmers in credit accessibility is delays in loan acquisition which highest mean score of 3.43, followed by cumbersome process with mean score of 3.33. Loan diversion was ranked third with the mean score of 3.30.

Table 2: Constraint Faced in the Acquisition of Credit

Constraints	Very high (%)	High (%)	Low (%)	Very low (%)	Mean Score	Rank
Cumbersome process	32 (35.6)	57 (63.3)	1 (1.1)	0 (0)	3.33	2 nd
Long distance from financial institution	30 (33.3)	36 (40.0)	13 (14.4)	11 (12.2)	2.94	7 th
Delays in loan acquisition	48 (53.3)	34 (37.8)	7 (7.8)	1 (1.1)	3.43	1 st
Loan diversion	42 (46.7)	37 (41.1)	7 (7.8)	4 (4.4)	3.30	3 rd
Lack of collateral security	46 (51.1)	30 (33.3)	3 (3.3)	11 (12.2)	3.23	4 th
Credit default rate	35 (38.9)	40 (44.4)	13 (14.4)	2 (2.2)	3.20	5 th
Gender bias in credit acquisition	14 (15.6)	14 (15.6)	27 (30.0)	35 (38.9)	2.07	8 th
Lack of education	38 (42.2)	30 (33.3)	6 (6.7)	16 (17.8)	3.00	6 th

Source: Field Survey 2021



Table 3 shows the result of the regression analysis. The R^2 for the specified model is 0.58 implying that 58% variation in the dependent variable is being accounted for by the independent variables in the specified model. Household size (X_4) is significant at 10% level implying that it is a major factor determining the amount of credit received. The positive sign associated with variables such as gender (X_2), marital status (X_3), household size (X_4), years of experience (X_5), cooperative membership (X_6) and years of participation in cooperative (X_7) implies that there is positive relationship between these variables and amount of credit received. The implication is that increase in amount credit received is as a result of an increase in each of the variables, e.g. For household size as the household increase the farmers need more money to increase production in order to take care of the family.

Table 3: The Result of the Regression Analysis

Model	Unstandardized B	Coefficients Std Error	T
Constant	-913779.570	1332600	-0.686
Age (X_1)	-5327.816	1.3605.068	-0.392
Gender (X_2)	342396	243181.102	1.408
Marital Status (X_3)	41927.281	297051.516	0.141
Household Size (X_4)	95146.866	54223.064	1.755*
Farming Experience (X_5)	21575.514	22997.008	0.938
Cooperative Membership (X_6)	540325.483	464785.754	1.163
Years of Participation (X_7)	90230.912	95942.280	0.940
Stock Size (X_8)	-7654	1015566.891	-0.75

Dependent Variables: Amount of Credit Received $R^2 = 0.58$, $R^{-2} = 0.33$, $F - \text{Value} = 1.383$, *Significant level @ 10%

CONCLUSION

The study showed that credit availability will enhance productivity of the poultry farmers in the study area. Improved access to credit will help poor rural households engage in more productive income-generating activities both on and off the farm and raise their living standards. Therefore, there should be more interventions by the government leading to increased access to extension services and credit, which will enhance the affordability of inputs rightly used by farmers.

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