



# **Appraisal of the Sources and Uses of Agricultural Credits for Increased Food Productivity by Farmers in Delta State, Nigeria**

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## **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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## **ABSTRACT**

The study appraised the sources and uses of agricultural credits for increased food productivity by farmers in Delta State, the specific objectives were to: describe the socio economic characteristics of farmers, examine the level of accessibility of agricultural credits to farmers and verify the uses of available agricultural credits by farmers, in Delta State, Nigeria. Descriptive survey design was used to appraise the farmers. A sample size of two hundred and eighty-eight (288) respondents were randomly selected from three local government areas in Delta State and used for the study. Descriptive statistics such as percentage, arithmetic mean and weighted mean scores were used to analyze the collated data. Also, inferential statistical tools such as: Linear regression and Analysis of Variance (ANOVA) were employed for test of significance at 0.05% level of probability. The findings showed as regards the socio economic characteristics of the farmers that the mean age of the respondents was 46 years old and were mostly married women in Burutu and Ugelli LGAs, except in Aniocha LGA where the married men constituted the majority. It showed that household size (3.781\*), years of experience (2.778\*), age (2.233\*), marital status (1.362\*), contact with extension

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agents (1.129\*), level of education (1.109\*) and farm size (0.914\*) had positive relationships with the farmers' accessibility to agricultural credits at 5% significant level. The findings indicated that Personal savings, Loan from Cooperative societies, Bank of Agriculture (BOA), Micro Finance Bank and the Commercial Agriculture Credit Scheme among other formal and informal sources of agricultural credits were highly accessible to farmers in the area. It further showed that accessed agricultural credits were highly used to: Purchase farm tools/equipments (spade, wheelbarrow, hoe, cutlasses, etc. (GM = 3.40), Purchase farm inputs (seeds, fertilizers, pesticides, herbicides, feeds (GM 3.22), Construct fish ponds (GM = 2.89), Purchase processing equipments (GM = 3.10), Pay children school fees (GM = 3.03), Building family house (GM = 2.98), House management (GM = 2.96), and buy car or motor cycle (GM = 2.95) among other uses. The study therefore recommends among others that: Adequate Extension personnel be recruited and trained by the State government for supervision and recouping of government agricultural loans, State government should design a method that would capture only the real farmers on the farm to access agricultural credits for expansion of farms and for real farming, Extension agents should be encouraged to school, supervise and help farmers to form and participate actively in farmers cooperative societies for easy access of credits for their mutual benefits, and A drastic measure to be put in place by the government of the day to punish defaulters who bridge the revolving loans from circulation in the State.

*Keywords: Appraisal; sources; uses; agricultural credits; farmers; increase; productivity.*

## 1. INTRODUCTION

The operation of the agricultural sector is centered on money/credit that is grossly inadequate and where the dominant operators of the sector are the peasant and half educated farmers who are mostly women in certain segments. Without money farming operations will end at a subsistence level that reduces agriculture in developing nations as a mere activity to make ends meet, but not as a business that make and maximize profit. Yet, outstanding economies do not neglect agriculture as the only sector of the economy that sustains all lives in terms of food generation and as source of raw materials for the manufacturing sector. Agriculture is still very much at the centre of both economic and technological developments of the most developed countries of the world [1] and has continued to receive unreserved attention of the government and the citizenry, in order to preserve it through fertile policies, regulations, credit leverages, provision of conducive environments and proper implementation of such policies for continuous production of food and its sustainability.

Over the years following the exploitation of crude oil and gas, agriculture has been neglected and relegated to the background of poverty by the Nigerian leaders and the society, paying passive attention and leap services to every process that relates to food production, hence the country remains in a perpetual rental state, importing everything even tissue papers and toothpicks to

survive. Recently, through agitations and advocacy, the federal and some state governments realized the place of food in any economy and have introduced and established some agro credit schemes for farmers to use for food production, food value chains and distribution.

The decline in the Nigerian economy, particularly in the area of agricultural productivity, has often been blamed on lack of credit facilities, which prevented many farmers from adopting improved practices, since some of them lack the collateral to secure loan or credit from financial institutions [2]. According to Alfred [3], acquisition and utilization of credit for agricultural purposes promote productivity and consequently improve food security status of a community.

Agricultural credit is any of several credits used to finance agricultural transactions, including loans, notes, bills of exchange and banker acceptances. These types of financing are adapted to the specific financial operating expenses; intermediate-term credit is used for farm machinery and long term credit is used for real-estate financing. It covers all loans and advances granted to borrowers to finance and service production activities relating to agriculture, fisheries, forestry and also for processing, marketing, storage and distribution of products resulting from these activities.

Adeleke and Arawomo [4] noted that credit can be obtained for agricultural purposes from formal

and informal sources. The informal type of agricultural credit refers to credit from moneylenders, friends, relatives and the like. Whenever small farmers need emergency loans or small investment funds, they often resort to moneylenders. In the formal setting of most developing countries, including Nigeria, commercial banks and other specialized agencies are charged with the responsibility of providing credit to farmers. Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB), now called the Bank of Agriculture (BOA) is a typical example of a specialized bank established for the purpose of advancing agricultural credit.

Credit can further be used as an income transfer mechanism to remove the inequalities in income distribution among the small, medium, and large scale farmers. Moreover, credit encourages savings and savings that could be channeled to farmers for use in agricultural production are held by financial institutions [4]. Credit also creates employment opportunities for rural farmers. It is an agreement, by which something of value-goods, services, or money-is given in exchange for a promise to pay at a later date. Credit is a transaction between two parties in which one, acting as creditor or lender, supplies the other, the debtor or borrower, with money, goods, services, or securities in return for the promise of future payment.

Shreniner and Yaron, [5], demonstrated that credit encompasses not only government funds but also funds of non-governmental organizations that use matching grants to attempt or encourage community and sector development for income generation, equal opportunity and local empowerment. Public funds are subsidized funds and private funds regardless of their prices, are not subsidized, unless a contribution is tax free or the market price is affected by an explicit or implicit state guarantee of the liabilities of a development finance institution. Agriculture can thus supply the base or by products for industry, satellite industries can develop from the patent body, and a continuous supply of utilities is guaranteed overtime.

Mgbakor ,Zendu and Ndubisi (2014) stated that credit is the use of or possessing of fund and services without immediate payment. It can be in form of money borrowed or agricultural credit which includes trade credit and bank credit. Agricultural credit therefore can be in various

forms for example: seed, fertilizer with deferred payment, use of tractors, labours, storage facilities and so on. However, it is the credit in monetary term that has been prominent in Nigeria Agriculture. The term credit also means the capacity of borrow. The provision of credit means that the control of resources that belongs to somebody else is transferred to the borrowers at a cost represented by the payment of interest. The resources will have been made available by savings or taxation or credit creation. Credit enables the entrepreneur to train the right caliber of manpower, attract skilled ones where possible and provides them with a conducive environment for optimum performance. In any developing country demand for agricultural subsidies usually exceed the available resources while government spending in this direction is generally limited and this constitutes problem for small-holders farmers in Nigeria. Agriculture credit refers to public or private funds in the form of equity, gift or loan for improving social welfare through expansion of agricultural sector [5].

## 2. STATEMENT OF THE PROBLEM

Agriculture is one of the sectors that has been seen to contribute immensely to the economic growth of any sub Sahara Africa. This is because of the value chain in the sector. Agriculture over the years is a major source of income and employment to many people. According to Etonihu, Rahman and Usman [6], illustrated that agricultural growth in Nigeria is increasingly recognized to be central to sustainable economic development. The sector plays a very significant role in addressing food insecurity, poverty alleviation and human development challenges. However, in more recent years, there has been a marked deterioration in the productivity of Nigeria's agriculture. Many reasons have been advanced for the declining agricultural productivity in Nigeria. One of the factors attributed to the declining productivity of the sector is farmers' limited access to credit facilities.

Credit is needed as an important indirect input among others to enhance productivity in agriculture [7]. With modernization and mechanization of farming systems, farming communities require more farm investment. Since most of the farmers in developing countries are small and marginal with fragmented land holdings, they need credit for such investment. Due to lower rate of savings in the economy, the farmers lack sufficient owned-

equity and hence resort to external borrowings [8].

In an effort to increase production rate among farmers, their purchasing power to acquire modern agricultural technologies should be improved. Most of the Nigerian farmers are smallholder trapped in vicious cycle of poverty. It has been argued that when agricultural credits are made accessible to farmers it will go a long way in breaking this cycle of poverty and liberating the farmers to improve their adoption of modern farm technologies which could enhance productivity and farmers' income. According to Priyanka, Yadav and Sharma [9], most of the farming households are faced with paucity of funds at their ends. To fulfill their credit requirements, both institutional and non-institutional finances are available in a developing economy. When credit is not available on time and at reasonable rates from institutional (formal) sources, farmers are forced to pay exorbitant rates of interest to non-institutional (informal) lenders. Traditionally, when agriculture was mainly subsistence based, informal moneylenders used to cater for credit needs of farmers which were comparatively small. After the Green Revolution across the world, which initiated tremendous changes in the cropping pattern, the credit needs of farmers have increased spontaneously; and it was during this period that institutional sources of credit emerged as major players.

In the presence of these formal and classified financial institutions in the country which supposed to be the most essential source for agricultural credits, yet investment into agriculture is still at a very low level in Delta State. The striking questions are these: are farmers in Delta State aware of these financial institutions? How accessible are these financial institutions to farmers in the State? How do farmers use the accessible agro credits in Delta State? While some farmers claimed that the banks are not supportive in giving out credits for farming, some of the financial institutions claimed that the uses of agricultural credits are diverted by these farmers without repayment, thereby making it difficult for agro credits to freely circulate in the system. It is on this backdrop, that the study seeks to investigate the sources and uses of agricultural credits by farmers in Delta State, with a view to:

- i. describe the socio economic characteristics of farmers in Delta State,

- ii. examine the level of accessibility of the sources of agricultural credits to farmers in the study area, and
- iii. verify the uses of available agricultural credits by farmers in the study area.

The following research hypotheses were formulated to direct the study:

1. **Ho:** Socioeconomic characteristics of farmers have no significant relationship with the accessibility of agricultural credits in Delta State.
2. **Ho:** The level of accessibility of agricultural credits to farmers does not differ significantly among the LGAs in Delta State.
3. **Ho:** The uses of available agricultural credits by farmers do not differ significantly among the LGAs in Delta State.

### 3. METHODOLOGY

Delta State is one of the 36 States of the Federal Republic of Nigeria. It was created in 1991 from the southern part of former Bendel State. Asaba is the capital city of Delta State. The state covers a land mass of about 6,833 square miles (17,698 square km) and a population 4,098,391 (National Population Commission 2006). Agriculture is the mainstay of the State's economy; yams, cassava (manihot), oil palm produce, rice, and corn (maize) are grown for local consumption, where subsistence farmers are the major operators of agricultural industry in the State. Delta is a major exporter of petroleum, rubber, timber, and palm oil and palm kernels via the Niger delta ports of Burutu, Forcados, Koko, Sapele, and Warri.

The study adopted descriptive survey design in order to give a proper procedure since the study was tailored to examine a cross section of farmers that are sourcing and using agricultural credits in Delta State, which Okeke and Olise [10] recommended for describing characteristics of a population or phenomenon being studied. Purposive sampling procedure was used to select three Local Government Areas (LGAs) and three communities from each of the three (3) LGAs under study. Purposive sampling technique was employed on the basis that these selected communities would provide the actual information desired for this study, which Odinwa, Nlerum and Isife [11] recognized as a fastest technique to be used when a researcher wants to get a speedy insight into a social-economic incident. From the three LGAs, a total of nine (9)

communities and 32 respondents from each community were randomly selected given a total of two hundred and eighty-eight (288) respondents and used for the study. The instrument for data collection was questionnaire structured in an open ended format to accommodate the socio-economic characteristics of the respondents. The other objectives were structured using a three and four points Likert type rating scales. Likert rating scale according to Madukwe and Akinnagbe [12] is used when objects under investigation are ranked to reflect the intensity of feelings of the respondents. Data collected were analyzed using both descriptive and inferential statistical tools. The descriptive statistics were percentage, arithmetic mean and weighted mean derived from Ordinal and Likert type rating scales. While the inferential statistics used were linear regression analysis and Analysis of Variance (ANOVA) to verify the hypotheses for significance.

Ho<sub>1</sub> was done using Linear regression model which was explicitly represented as:

$$Y = f(x_1 \ x_2 \ x_3 \ x_4 \ x_5 \ x_6 \ x_7 \ x_8 \ x_9 \ x_{10} \ x_{11} + e)$$

Where Y = Farmers' Awareness of Agro Credits ; x<sub>1</sub> = sex; x<sub>2</sub> = age (years); x<sub>3</sub> = marital status; x<sub>4</sub> = education; x<sub>5</sub> = nature of farming; x<sub>6</sub> = farm size (ha); x<sub>7</sub> = household size (no); x<sub>8</sub> = types of plantain; x<sub>9</sub>= annual income (₦); x<sub>10</sub> = contact with ext agent; x<sub>11</sub> = experience (years); b<sub>0</sub> = constant; e = error term.

### 3.1 Linear Function

$$Y = b_0 + b_1x_1 + b_2x_2+ b_3x_3 + b_4x_4 + b_5x_5 \dots\dots\dots + b_{11}x_{11} + e.$$

Test of Ho<sub>2</sub> and Ho<sub>3</sub> were done using ANOVA. The inferential statistic used was to ascertain if the farmers' levels of awareness and utilization of agro credits in Delta State differed significantly among the various LGAs. All hypotheses were tested at 0.05 alpha level of significance, where f-calculated is greater than the alpha level (0.05), the null hypotheses was rejected; otherwise, the null hypothesis was accepted. The results were presented using appropriate tables.

## 4. RESULTS AND DISCUSSION

### 4.1 Socio-Economic Characteristics of Farmers in Delta State

The findings on the socio-economic characteristics of farmers in Delta State (Table 1)

showed that middle adult (46 years) and mostly married female farmers in Delta State constituted the majority (54.88%) with exception of Aniocha LGA where the male were the majority (52.08%). The finding is normal because in Africa the women are the active operators of agricultural industry. The finding agrees with Chukuigwe [13], Odinwa and Nlerum [14] who reported that African, women constitute over 70% of the agricultural workforce and produce 80% of the continent's food.

In this concern most of the respondents (82.64%) had formal education (from primary to PhD). Though, the proportion of those with tertiary education (20.83%) was far less than those with secondary and primary education (44.79%) and may account for the reasons why awareness and utilization of proven agricultural credits in Nigeria were not fully accessed in Delta State. This agrees with Odinwa and Nlerum [14] who observed that the core reason for low agricultural productivity via low assessment of agro-credits and a continued dependency on food items from Northern Nigeria for survival in Orashi region of Nigeria was the low educational background of the farmers.

The analysis further indicated a mean household size of six (6) persons per farm household, a mean farm size of 1.04 hectares per farm family and a mean annual income of three hundred and ninety-three, seven hundred and seventy-six naira (₦393,776) for farmers in the study area. These findings are clear indication that the farmers in Delta State are poor. This supports the position of Odinwa, Albert and Emah [1] who opined that 'agricultural productions in Nigeria have been in the hands of small scale farmers who are characterized by illiteracy, low business minded and poverty'.

In terms of regularity of contact of farmers with extension agents, the result showed that: Quarterly contact (31.94%), none contact (22.57%) and bimonthly contact (16.67%) were more pronounced in the area. These types of contacts are not contacts that can produce worthwhile results in agricultural development. Findings of Odinwa, Isife and Nlerum [11] supports this when they said that skeletal contacts with farmers were not enough to encourage or motivate ill-considered farmers to adopt long gestation crop practices like yam and cassava so as to boost productivity. Also, because of this, Mezirow [15] emphasized that "Extension agents need to know both the general

and specific literacy levels of their targeted audience of farmers in designing and delivering innovative package” which can only be achieved through regular contact with the farmers.

**Table 1a. Socio-Economic Characteristics of Farmers in Delta State**

<b>Variables</b>	<b>Aniocha n = 96</b>	<b>Burutu n = 96</b>	<b>Ughelli North n = 96</b>	<b>Mean</b>
<b>Gender</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
Male	50 (52.08)	42 (43.75)	38 (39.58)	45.12%
Female	46 (47.92)	54 (56.25)	58 (60.42)	54.88%
<b>Age</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
21 – 30	13 (13.54)	10 (10.42)	16 (16.67)	<b>46 years</b>
31 – 40	23 (23.96)	27 (28.13)	17 (17.71)	
41 – 50	38 (39.58)	38 (39.58)	42 (43.75)	
51 – 60	13 (13.54)	11 (11.46)	13 (13.54)	
61 and above	09 (09.38)	10 (10.42)	08 (08.33)	
<b>Marital Status</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
Single	29 (30.21)	18 (18.75)	23 (23.96)	24.31%
Married	67 (69.79)	78 (81.25)	73 (76.07)	75.69%
<b>Level of Education</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
No Formal education	16 (16.67)	18 (18.75)	16 (16.67)	17.36%
Primary education.	26 (27.08)	11 (11.46)	17 (17.71)	18.75%
Secondary education	22 (22.92)	33 (34.38)	20 (20.83)	26.04%
NCE/OND	14 (14.58)	20 (20.83)	15 (15.63)	17.01%
Bachelor Degree	10 (10.42)	8 (08.33)	18 (18.75)	12.50%
Master	7 (07.29)	6 (06.25)	8 (08.33)	07.29%
PhD	1 (01.04)	-	2 (02.08)	01.04%
<b>Nature of Farming</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
Full-time	40 (41.67)	38 (39.58)	32 (33.33)	38.19%
Part-time	56 (58.33)	58 (60.42)	64 (66.67)	61.81%
<b>Farming Enterprise</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
Crop farming	32 (33.33)	25 (26.04)	13 (13.54)	(24.31)
Livestock farming	11 (11.46)	15 (15.63)	24 (25.00)	(17.36)
Fish farming	23 (23.96)	24 (25.00)	14 (14.58)	(21.18)
Bee farming	5 (05.21)	3 (03.13)	2 (02.08)	(03.47)
Mixed farming	9 (09.38)	7 (07.29)	9 (09.38)	(08.68)
Floriculture	3 (03.13)	3 (03.13)	7 (07.29)	(04.51)
Processing of Farming produce	10 (10.42)	7 (07.29)	12 (12.50)	(10.07)
Marketing of Farm produce	3 (03.13)	12 (12.50)	15 (15.63)	(10.42)

**Table 1b. Socio-economic characteristics of farmers in delta state continues**

<b>Household Size</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
2- 3 Persons	20 (20.83)	17 (17.71)	25 (26.04)	<b>6 persons</b>
4-5 Persons	33 (34.38)	27 (28.13)	33 (34.38)	
6-7 Persons	25 (26.04)	26 (26.04)	22 (22.92)	
8 and above	18 (18.75)	26 (26.04)	16 (16.67)	
<b>Farm Size in Hectare</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
0.1- 0.5ha	29 (30.21)	16 (16.67)	14 (14.58)	<b>1.04ha</b>
0.6 - 1.0ha	30 (31.25)	28 (29.17)	39 (40.63)	
1.1 - 1.5ha	15 (15.63)	28 (29.17)	18 (18.75)	
1.6 – 2.0ha	17 (17.71)	18 (18.75)	20 (20.83)	
2.1ha and above	05 (05.21)	06 (06.25)	05 (08.47)	

<b>Household Size</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
<b>Years of Experience</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
1 - 5 Years	27 (28.13)	26 (26.04)	25 (26.04)	<b>11 Years</b>
6 - 10 Years	28 (29.17)	23 (23.96)	27 (66.10)	
11-15 Years	12 (12.50)	17 (17.71)	19 (18.64)	
16 -20 Years	21 (21.88)	20 (20.83)	21 (21.88)	
21 Years and above	08 (08.33)	10 (10.42)	04 (04.17)	
<b>Annual Income</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
Below ₦ 150, 000	--	--	--	<b>₦393,776</b>
₦150, 000 – ₦250, 000	20 (20.83)	22 (22.92)	21 (06.17)	
₦251, 000 – ₦350, 000	28 (29.17)	16 (16.67)	19 (50.85)	
₦351, 000 – ₦450, 000	13 (13.54)	25 (26.04)	20 (20.34)	
₦451, 000 – ₦550, 000	20 (20.83)	21 (21.88)	29 (16.95)	
₦551, 000 and above	15 (15.63)	12 (12.50)	07 (07.29)	
<b>Regularity of contact with Ext. Agent</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	<b>(f) (%)</b>	
None	25 (26.04)	22 (22.94)	18 (18.75)	22.57%
Daily	--	--	--	
Weekly	08 (08.33)	06 (06.25)	05 (05.21)	06.60%
Fortnightly	04(04.17)	13 (13.54)	10 (10.42)	09.38%
Monthly	13(13.54)	12 (12.50)	11(11.46)	12.50%
Bimonthly	16 (16.67)	14 (14.58)	18 (30.51)	16.67%
Quarterly	30 (31.25)	28 (29.17)	34 (69.49)	31.94%

Source: Field Survey Data, 2021

**Table 2. Relationship between the socio-economic characteristics of farmers and their access to agricultural credits in Delta State**

<b>Variables</b>	<b>Coefficient</b>	<b>Std error</b>	<b>t-Values</b>	<b>Probability</b>
(Constant)	3.148	1.921	1.638	.000
Gender	-0.039	0.151	0.092	.927
Age	0.103	0.068	2.233*	.131
Marital Status	0.158	0.116	1.362*	.175
Level of Education	0.160	0.070	1.109*	.023
Nature of Farming	-0.746	0.158	-2.312*	.000
Farming Enterprise	-0.026	0.083	-2.140*	.754
Household Size	-0.418	0.111	3.781*	.000
Farm Size	0.114	0.124	0.914*	.362
Years of Experience	0.226	0.081	2.778*	.006
Annual Income	-1.130	0.701	-1.612*	.109
Regularity of contact with Ext. Agent	0.190	0.168	1.129*	.260

Source: Field Survey, 2021 \*P < 0.05

The regression result (Table 2) on the relationship between the socio-economic characteristics of farmers and their accessibility to agricultural credits in Delta State showed that: Household size (3.781\*), years of experience (2.778\*), age (2.233\*), marital status (1.362\*), contact with Extension agents (1.129\*), level of education (1.109\*) and farm size (0.914\*) had positive relationships with their access to agricultural credits at 5% significant level. This means that besides household size, years of

experience and marital status that increased in the level of education, increased contact with extension agents and increase in farm size of farmers will increase access and utilization of available agricultural credits for increased productivity in the area. This is in line with Yorgas [16] who noted that marital status, education, group membership, etc, will greatly influence the awareness / access and adoption of innovation of any kind in agriculture.

## 4.2 Level of Accessibility of Agricultural Credits to Farmers in Delta State

The findings on the level of accessibility of agricultural credits to farmers in Delta State (Table 3) indicated in the degree of accessibility that: Personal saving (GM = 2.49); Loan from Cooperative societies (GM = 2.45); Bank of Agriculture (BOA GM = 2.38); Micro Finance Bank (GM = 2.23), and Commercial Agriculture Credit Scheme (Union Bank of Nigeria, Unity Bank, First Bank of Nigeria. GM = 2.19) among other formal and informal sources of agricultural credits were highly accessible to farmers in the area. The accessibility of these sources stem from the fact the farmers are aware of their existence, importance and how to go about them. Yorgas [16] in support of this findings stated that accessing credit from the formal credit institutions require customers to have all the knowhow including having account with the banks and tangible or intangible collateral security for ease of access.

However, the result showed that Agricultural Financing Scheme (GM = 1.96); Non - Governmental Organizations (GM = 1.92); Loan from Money lenders and Industrial End Users Out Growers Scheme with equal mean (GM = 1.89); World Bank (GM = 1.58) and Electronic Wallet (GM = 1.45) were not accessible to farmers in the area. The non accessibility of these sources of credits could also stem from the unawareness factor or from the frightening interest charges attached to loans from these sources. This finding was in agreement with Onyebinama [17] who noted that in Nigeria, generally, commercial banks and other formal Credit Institutions fail to cater to the credit needs of rural populations because of their lending terms and conditions. Also, in support of this finding were Yorgas [16] and Ogebe and Ogah [18] who observed that it has been the rules and regulations of the formal financial institutions that since the poor are not bankable, and since they cannot afford the terms, they are therefore considered not creditworthy to access loans.

The test of significance (Table 4) on the level of accessibility of agricultural credits to farmers in Delta State showed that the level of accessibility of agricultural credits to farmers did not differ significantly among the various local government areas in Delta State. This means that the views of Aniocha, Burutu and Ughelli LGAs' farmers on

the low accessibility of agricultural credits in the State are the same, hence requires a common approach to avert it.

## 4.3 Uses of Available Agricultural Credits by Farmers in Delta State

The result on the uses of available agricultural credits by farmers in Delta State (Table 5) showed that accessed agricultural credits were highly used in the following order: Purchase of farm tools/equipments (spade, wheelbarrow, hoe, cutlasses, etc (GM = 3.40); Purchase of farm inputs (seeds, fertilizers, pesticides, herbicides, feeds) (GM = 2.22), Construct fish ponds (GM = 3.17), Purchase of processing equipments (GM = 3.10), Payment of children school fees (GM = 3.03), Purchase of marketing equipments (GM = 3.00), Building family house (GM = 2.98), House management (GM = 2.96), Buy car or motor cycle (GM = 2.95) and Purchase breeding stock ( chicks, piglets, fingerlins, etc. GM = 2.94) among other uses, such as: Hiring labour (GM = 2.89), Equipping family house (GM = 2.78), Building livestock pens (GM = 2.63), Sinking borehole (GM = 2.58), Buy farm land and Settle land cases with equal mean (GM = 2.51).The findings show that farmers in Delta State put money meant for farming into different uses, including payment of schools fees, building family houses, home management, buying cars etc. This may be the reason for non-repayment of loan when the money meant for farming is diverted to no money generating ventures like the payment of children school fees and equipping family houses. The findings agreed with Ukwuaba, Owutuamor and Ogbu, [19] who posited that farmers access credit for several reasons, such as farming, trading, education, feeding, etc., claiming that the reason for diverting agro credits to other uses was that the credits do not arrive at the right season, but must be used and pay back.

Test of Significance on the uses of agricultural credits to farmers in Delta State (Table 6) showed that the uses of accessed agricultural credits by farmers in Delta State did not differ significantly among the LGAs under study. This means that the views of Aniocha, Burutu and Ughelli LGAs' farmers on the uses of agricultural credits in the State are the same and demands for a common and a holistic measure to tackle the uses of agro credits in Delta State.



**Table 3. Mean distribution on the level of accessibility of agricultural credits to Farmers in Delta State**

<b>Sources of Credits</b>	<b>Aniocha n = 96</b>	<b>Mean Scores</b>	<b>Burutu n = 96</b>	<b>Mean Scores</b>	<b>Ughelli n = 96</b>	<b>Mean Scores</b>	<b>Grand Total N= 288</b>	<b>Grand Mean Score</b>	<b>Remark</b>
Personal saving	231	2.41	261	2.72	226	2.35	718	2.49	Access
Loan from Relatives /Friends.	190	1.98	193	2.01	194	2.02	577	2.00	Access
Loan from Money lenders.	183	1.91	179	1.86	183	1.91	545	1.89	No access
Non - Governmental Organizations	205	2.14	166	1.73	183	1.91	554	1.92	No access
Loan from the Produce Buyers.	204	2.13	205	2.14	205	2.14	614	2.13	Access
Loan from Co-operative Societies.	241	2.51	235	2.45	230	2.40	706	2.45	Access
Government bodies (Local, State or Federal)	113	1.17	184	1.92	192	2.00	489	1.70	No access
World Bank	224	2.33	224	2.33	207	2.16	455	1.58	No access
Bank of Agriculture (BOA).	233	2.43	227	2.36	226	2.35	686	2.38	Access
Micro Finance Bank	203	2.11	218	2.27	220	2.29	641	2.23	Access
Guaranteed Fund Credit Scheme	187	1.95	200	2.08	190	1.98	577	2.00	Access
Agricultural Produce Finance Bank	224	2.33	189	1.97	197	2.05	610	2.12	Access
Multi Channels Agricultural Financing Scheme	188	1.96	187	1.95	190	1.98	565	1.96	No access
Electronic Wallet (E – Wallet)	140	1.46	136	1.42	143	1.49	419	1.45	No access
Commercial Agriculture Credit Scheme (Union Bank of Nig, Unity Bank, First Bank of Nig.)	208	2.17	211	2.20	212	2.21	631	2.19	Access
Industrial End Users Out Growers Scheme.	183	1.91	179	1.86	183	1.91	545	1.89	No access

Source: Field Survey Data, 2021 Decision Mean = 2.00

**Table 4. ANOVA result on the level of accessibility of agricultural credits to farmers in Delta State**

Source of Variance	SS	Df	MS	f-cal	f-Critical	Remarks
B/W Group variance	0.002	2	0.00			
W/Group variance	4.006	285	0.10			
Total	2.008	287		<b>0.01</b>	<b>3.22</b>	<b>NS</b>

Source: Field Survey, 2021  $P > 0.05$

**Table 5. Mean distribution on the uses of available agricultural credits by farmers in Delta State**

Uses of Credits	Aniocha n = 96	Mean Scores	Burutu n = 96	Mean Scores	Ughelli n = 96	Mean Scores	Grand Total N= 288	Grand Mean Score	Remark
Buy farm land	260	2.71	234	2.44	230	2.40	724	2.51	Used
Rent farm land	247	2.57	226	2.35	233	2.43	706	2.45	Not used
Build livestock pens	237	2.47	271	2.82	250	2.60	758	2.63	Used
Construct fish ponds	268	2.79	363	2.74	283	2.95	914	3.17	Used
Hire labour	287	2.99	273	2.84	272	2.83	832	2.89	Used
Purchase farm inputs (seeds, fertilizers, pesticides, herbicides, feeds)	338	3.52	317	3.30	272	2.83	927	3.22	Used
Purchase farm tools/equipments (spade, wheelbarrow, hoe, cutlasses, etc.	334	3.48	325	3.39	319	3.32	978	3.40	Used
Purchase breeding stock ( chicks, piglets, fingerlins, etc.)	290	3.02	285	2.97	273	2.84	848	2.94	Used
Purchase processing equipments	297	3.09	293	3.05	304	3.17	894	3.10	Used
Purchase marketing equipments	277	2.89	296	3.08	291	3.03	864	3.00	Used
Farm expansion	237	2.47	245	2.55	230	2.40	712	2.47	Not used
Pay children school fees	310	3.23	276	2.88	288	3.00	874	3.03	Used
Build family house	296	3.08	277	2.89	286	2.98	859	2.98	Used
Sink borehole	257	2.68	229	2.39	258	2.69	744	2.58	Used
Equip family house	275	2.86	260	2.71	248	2.58	783	2.72	Used
Pay bride price	231	2.41	230	2.40	225	2.34	686	2.38	Not used
Secure chieftency title	168	1.75	183	1.91	168	1.76	519	1.80	Not used
House management	285	2.97	296	3.08	272	2.83	853	2.96	Used
Public relations	241	2.51	246	2.56	228	2.38	715	2.48	Not used
Buy car or motor cycle	302	3.15	293	3.05	254	2.65	849	2.95	Used
Settle land cases	260	2.71	234	2.44	230	2.40	724	2.51	Used

Source: Field Survey, 2021 Decision rule = 2.50

**Table 6. ANOVA result on the uses of agricultural credits to farmers in Delta State**

Source of Variance	SS	Df	MS	f-cal	f-Critical	Remarks
B/W Group variance	0.17	2	0.09			
W/Group variance	8.09	285	0.14			
Total	8.26	287		<b>0.60</b>	<b>3.16</b>	<b>NS</b>

Source: Field Survey, 2021  $P > 0.05$

## 5. CONCLUSION

From the findings, farmers in Delta State are middle adult women with majority having basic education required to take advantage of available economic interventions. As such, they were aware of the important sources of agricultural credits and have been accessing them for agricultural purposes, though, not as much as they needed them because of collateral bottleneck in the area. But it is unfortunate that higher proportion of the accessed credits are usually diverted to non agricultural uses, like payment of school fees, building houses, buying cars, etc., due to the availability of some of these credits in off seasons and with little or no monitoring of the uses of these credits by the credit providers.

## 6. RECOMMENDATIONS

Based on the findings, the study therefore recommended the following:

1. Men and youths should be oriented and encouraged throughout the State to venture into farming and take advantage of the available agricultural credits in Delta State.
2. Adequate Extension personnel be recruited and trained by the State government for supervision and recouping of government agricultural loans.
3. Extension agents should be encouraged to supervise and help farmers to form and participate actively in farmers cooperative societies for easy access to credits and for their mutual benefits.
4. Government to make policy that would relax the collateral security to enable the poor farmers access to credits as at when due.
5. A drastic measure to be put in place by government to punish defaulters who bridge the revolving loans from circulation in the State.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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