

## AGRICULTURAL CREDIT AMONG ORGANIC FARMERS IN OYO STATE, NIGERIA: ALLOCATION, UTILIZATION AND CONSTRAINTS

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### **Abstract**

*Credit diversion has grown to constitute a big problem in agricultural credit system, thereby affecting agricultural production. This study focused on credit accessibility, allocation and utilization among organic farmers in Oyo state, Nigeria. Data were collected from 120 organic farmers using a multistage sampling procedure. Descriptive Statistics, T-test, Probit and Tobit regression analytical approaches were used for data analysis. Results from data analysis showed that the amount of credit received was significantly lower than the amount of credit demanded by the organic farmers. Results further showed that the annual income of the organic farmers, source of credit, experience of difficulty with conditions attached to credit disbursement, amount of credit demanded, and experience of inflexibility with credit source on credit conditions significantly influenced credit accessibility, while age, annual income, number of days between loan application and receipt, value of interest rate and accessing total amount of credit demanded significantly influenced credit allocation by the farmers. This study argues that organic farmers do divert part of the loans obtained for non-farm purposes and therefore recommends that credit officials should map out a workable follow-up programme that will ensure that farmers obtaining loan from their institutions use the loan for the intended purpose.*

**Keywords:** Allocation, Constraints, Credit, Organic farmers, Utilization.

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### **Introduction**

In most developing countries, Nigeria inclusive, agricultural credit is considered an important factor for increased agricultural production and rural development because it enhances productivity and promotes standard of living by breaking the vicious cycle of poverty especially for small scale farmers (Benjamin, 2013). Credit provided by both the government and private institutions is an important input that can ensure an increased production and a sustainable growth if it is well utilized by the end users; the farmers. In fact, the lack of adequate, accessible, and affordable credit is a major factor responsible for the systemic decline in the contribution of agriculture to Nigerian economy (Oladeebo and Oladeebo, 2008). Every segment of agricultural production requires the availability of adequate capital since capital determines access to all other resources on which farmers depend (Diagne *et al.*, 2009).

Agricultural credit has been proven by past studies to be a vital tool for agricultural development (Diagne *et al.*, 2009). However, over the years, it has been reported that credit is not only needed by farmers for farming purposes but also for family consumption and general family welfare expenses during the off-season period. This observation accounts for the suspected diversion of agricultural credit for non-farm utilization. Furthermore, studies have shown that the

usefulness of agricultural credit granted to farmers either by a formal or informal institution will not only be dependent on its availability, accessibility and affordability but on its efficient and appropriate allocation and utilization by the farmer for the intended purpose (Oboh, 2008).

Awoko (2004) revealed that high rate of default arising from poor management procedures, loan diversion and unwillingness to repay loans have been threatening the sustainability of most public agricultural credit schemes in Nigeria. It is also a matter of fact that farmers, organic farmers inclusive, are facing financial constraints in accessing agricultural credit. Different studies have analyzed the use of credit among resource-poor rural dwellers and concluded that credit was allocated mainly for agricultural and non-agricultural productive activities as well as for consumption purposes though at varying allocative proportions (Benjamin, 2012). However, constraints to organic agriculture financing due to lack of access to credit may be reduced if innovative and committed farmers are identified.

Organic agriculture has become a major industry driven by increasing consumer demand (Alawode and Abegunde, 2015). It therefore requires the availability of adequate capital since capital determines access to all other resources on which farmers depend for their

operation. Logically speaking, credit is expected to enhance the productivity of farmers; it is expected to enable them to use and adopt more easy, flexible and improved technology that can increase their expected yield per hectare and also enable them to support the level of expansion desired in cultivation (Admasu and Paul, 2010). However, accessibility to credit alone without good management by beneficiaries cannot guarantee the expected improvement in farmer's food production level, income and hence prompt loan repayment. Farm level credit if well applied, enhances capital formation and diversified agriculture, increases resource productivity, size of farm operations, innovations in farming, marketing efficiency, value added and net farm incomes (Afolabi, 2010). These results can be actualized if the individual farmer utilizes its credit efficiently.

Studies have however shown that average percentage of farmers that access agricultural credits from various sources do not utilize all on farm activities, some of the farmers divert portions of the credit to household expenditure like feeding, children welfare and paying of bills. Hence, credit diversion which has grown to be the backbone of poor credit repayment system among farmers constitutes a big problem in agricultural credit system. Afolabi (2010) revealed that 66.99% of the sampled farmers in Oyo State, Nigeria used their loans on farm operations such as payment for hired labour, purchase of implements, fertilizers, seeds and other farm inputs, about 31.07% utilized their loan for household purpose which include paying for children education and medical treatment, while 1.94% spent their loan proceeds on meeting the expenses of feeding and clothing the family.

It is against this background that this study carried out an investigation into the credit situation of organic farmers in Oyo state, Nigeria. This study aimed at analysing credit allocation, utilization and credit constraint conditions of organic farmers in the state. Basically, attempts were made to answer some questions; What proportion of credit received by organic farmers were allocated for farming purpose? What are the factors influencing credit allocation for farming purpose? What factors are responsible for credit constraint condition of organic farmers? Also, how effective is the utilization of the credit received? Provision of answers to these questions will go a long way in providing information that will enable financial institutions understand credit usage by organic farmers, thereby formulating appropriate lending policies accordingly.

### Methodology

This study was carried out in Oyo state. Oyo state is

one of the six states that make up the South-west geopolitical zone of Nigeria. The state is recognized as the food basket of the Southwestern Nigeria (Terdo et al., 2016). It approximately has a land area of 28,454 kilometres, with a population density of 211 people per square kilometer, claiming 4% of Nigeria's total population.

The climate is equatorial, notably with dry and raining seasons with relatively high humidity. The vegetation pattern is that of rain forest in the south and guinea savannah in the north. The people are predominantly farmers, most of who engage in cultivation of arable crops such as cassava, yam, maize, while some engage in livestock production such as piggery, poultry and fish farming.

The study was carried out on organic farmers, both male and female, who access credit from different sources be it formal or informal sources. Following Alvares et al. (1999) and Alawode and Abegunde (2015), this study conceptualized organic farmers as farmers who avoid or largely exclude the use of synthetically manufactured fertilizers, pesticides or growth regulators, or rely on crop rotation, animal manure, legumes, green manure, off-farm organic wastes and aspects of biological pest control measures and soil productivity for soil nutrient management and control of insects, weeds and other pests.

Structured questionnaires and interview schedule were used to elicit information from respondents in the study area. Multi-stage sampling technique was used; the first stage involved a purposive selection of ten local government areas from the state based on availability of organic farmers, the second stage was the random selection of two villages from each of the selected local government areas, while the third stage involved the random selection of six organic farmers from each village, giving a total of 120 respondents for the study.

Descriptive statistics were used to analyse the amount of credit demanded, and the amount received by the individual farmer and also to estimate the percentage of credit allocated to the farm and non-farm sectors based on the amount of credit received, and its utilization. A paired sample t-test was used to test for any significant difference between the amount of credit applied for and the amount received by farmers. Probit Regression Model was used to analyse the factors that influence credit constraint condition of farmers, while Tobit was used to estimate the factors that influence the rate of credit allocation to the farm sector.

The probit equation is expressed as:

$$Y_{ij} = \alpha + \beta Q_j + \delta X_i + \varepsilon_{ij}$$

$Q_j$  = farmers' characteristics

$X_i$  = information on credit

$Y_{ij}$  is a dummy variable, which is equal to one if a farmer is credit constrained and zero if otherwise. A credit constrained farmer is the farmer who has not received the loan applied for or has received only a part of the loan applied for from the credit source.

Key elements in  $Q_i$  include:

$Q_{j1}$  = Age of farmer measured in years

$Q_{j2}$  = Annual income of the farmer N

$Q_{j3}$  = Level of education (Years spent in school)

$Q_{j4}$  = Nature of farming (1 = Full-time, 0 = Part-time)

$Q_{j5}$  = Farmer's main occupation (1 = Farming, 0 = Otherwise)

Key credit elements in  $X_i$  include:

$X_{i1}$  = Experience of difficulty with terms and conditions for accessing credit (1 = Yes, 0 = No)

$X_{i2}$  = Available credit sources

$X_{i3}$  = Amount of credit demanded

$X_{i4}$  = Experience of inflexibility with credit sources on credit conditions (1 = Yes, 0 = No)

**The Tobit equation is expressed as:**

$$Q_{ij}^* = \alpha + \beta C_j + \delta Z_i + \varepsilon_{ij}$$

$C_j$  = farmers' characteristics

$Z_i$  = information on credit

$$Q_{ij} = Q_{ij}^* \text{ if } Q_{ij}^* > 0$$

$$Q_{ij} = 0 \text{ if } Q_{ij}^* \leq 0$$

$Q_{ij}$  denotes the observed dependent variable;  $Q_{ij}^*$  denotes the latent which is not observable. The observations  $Q_{ij}^*$  at zero or below zero are censored.

$$Q_{ij} = \alpha + \beta C_j + \delta Z_i + \varepsilon_{ij}$$

Key elements in  $Q_i$  include:

$C_{j1}$  = Age of farmer measured in years

$C_{j2}$  = Gender of farmer

$C_{j3}$  = Annual income of farmer

$C_{j4}$  = Household size

$C_{j5}$  = Marital status of farmer

$C_{j6}$  = Farmer's major occupation

$C_{j7}$  = Level of education of farmer

$C_{j8}$  = Size of farm owned

Key elements in  $X_i$  include:

$Z_{i1}$  = Visit before loan disbursement

$Z_{i2}$  = Visit after loan disbursement

$Z_{i3}$  = Delay in loan receipt (number of days between loan application and loan receipt)

$Z_{i4}$  = Got total amount demanded

$Z_{i4}$  = Value of interest rate

## Results and Discussion

### Socio-Economic Characteristics of Farmers

Table 1 shows that 55.8% of the farmers were male as against 42.8% female farmers. This agrees with the findings of Alawode and Abegunde (2015) that organic

farming is being carried out mostly by males. In addition to this, according to Babalola (2014), the predominance of male farmers is an indication that agribusiness is labour intensive. Table 1 also shows that 47.5% of the respondents fell within the age brackets of 41-60 years, followed by 46.7% of farmers less than 40 years of age, with the mean age of 42.9 years. These age groups, given all necessary assistance, have the strength to increase hectareage cultivation and output. About 90% of the respondents were married, 8% were single while 4% were widowed. The high percentage of married respondents means that the farmers with their families were settled for farm work, which could prompt the involvement of their household in their farming activities. Majority (93.3%) of the respondents were literate with 47.5% having secondary education, 25.8% having tertiary education and 5.0% having adult education. Since the majority of the farmers had up to secondary school education which indicates a considerable level of literacy among the farmers in the study area, it is expected that this will positively influence their adoption of innovations and utilization of credit.

In terms of household size, 50% of the farmers had a household size of 6-10 persons per family, while they had a mean household size of 6 persons. Majority (78.3%) of the respondents were engaged in farming as their major occupation, about 13.3% were mainly employed as civil servants or in one private establishment or the other, while 5% were involved in trading. This affirms the fact that most of the residents of the study area are into farming as their major source of income, implying that allocations could be invested more into organic farming to expand production size. About 47.5% of the farmers earned less than ₦300,000 annually, 45.8% earned between ₦301,000 - 600,000 annually, while only 5.8% earn between ₦601,000 - ₦900,000 annually. The mean annual income is ₦367,000, implying that their monthly income is approximately ₦30,500. Results show that 93.3% of the farmers cultivated between 0.5 and 5 hectares while only 5.0% cultivate between 6 and 10 hectares of farmland. The mean farm size cultivated by the farmers was 2.64. This reveals that expansion of production will be easier if credit is well available, timely and appropriately channeled. Results further show that 46.7% had between 11 and 20 years of farming experience while 49.2% had less than 10 years of farming experience. The mean years of farming experience was about 13 years.

**Table 1: Distribution of respondents by socio-economic characteristics**

| <b>Variable</b>                            | <b>Frequency</b> | <b>Percentage</b> |
|--|------------------|-------------------|
| <b>Gender</b>                              |                  |                   |
| Male                                       | 67               | 55.8              |
| Female                                     | 53               | 42.2              |
| <b>Age</b>                                 |                  |                   |
| <40 yrs                                    | 56               | 46.7              |
| 41-60 yrs.                                 | 57               | 47.5              |
| 61-80 yrs.                                 | 6                | 5.0               |
| >80 yrs.                                   | 1                | 0.8               |
| Mean age = 43                              |                  |                   |
| <b>Marital Status</b>                      |                  |                   |
| Single                                     | 8                | 6.7               |
| Married                                    | 108              | 90.0              |
| Divorced                                   | 0                | 0                 |
| Widowed                                    | 4                | 3.3               |
| <b>Level of Education</b>                  |                  |                   |
| Primary                                    | 18               | 15.0              |
| Secondary                                  | 57               | 47.5              |
| Tertiary                                   | 31               | 25.8              |
| Adult Education                            | 6                | 5.0               |
| None                                       | 8                | 6.7               |
| <b>Household Size</b>                      |                  |                   |
| < 5  | 58               | 48.3              |
| <b>6 – 10</b>                              | 60               | 50.0              |
| > 11                                       | 2                | 1.7               |
| Mean = 6                                   |                  |                   |
| <b>Secondary Occupation of Respondents</b> |                  |                   |
| Civil Service / Private                    | 16               | 13.3              |
| Business                                   | 3                | 2.5               |
| Transportation                             | 1                | 0.8               |
| Trading                                    | 6                | 5.0               |
| Farming                                    | 94               | 78.3              |
| <b>Annual Income (Naira)</b>               |                  |                   |
| < 300, 000                                 | 57               | 47.5              |
| 301,000 - 600,000                          | 55               | 45.8              |
| 601,001 - 900,000                          | 7                | 5.8               |
| > 901,000                                  | 1                | 0.8               |
| Annual Annual Income = 367,000             |                  |                   |
| <b>Farm Size (Hectares)</b>                |                  |                   |
| < 5  | 112              | 93.3              |
| 6 – 10                                     | 6                | 5.0               |
| > 15                                       | 2                | 1.7               |
| ..   | 59               | 49.2              |
| 11 – 20                                    | 56               | 46.7              |
| ≥ 21                                       | 5                | 4.2               |
| Mean Farm Size = 2.64                      |                  |                   |

Source: Field survey, 2017

### **Analysis of Credit Demanded and Credit Received**

Table 2 reveals that dependence on co-operative societies for agricultural credit was the highest (50.8%). About 14.2% depended on family/friends as source of credit, 10.0% depended on commercial banks while 16.7% depended on other means such as Animal

Traction and Tools Project loan, SEAP loan, Church loan and Islamic Cooperative loan. This further establishes the findings of Adebayo and Adeola (2008) that Co-operative Societies were the most dependable sources of credit to farmers. Farmers find it easy to access loan from cooperative societies than commercial banks because of its availability and easy access coupled with a relatively easier lending procedure.

*Agricultural credit among organic farmers*

**Table 2: Various Credit Sources of Respondents**

| Credit Source             | Frequency | Percentage |
|---------------------------|-----------|------------|
| Family/friends            | 17        | 14.2       |
| Commercial banks          | 12        | 10.0       |
| Cooperative societies     | 61        | 50.8       |
| Money Lenders             | 8         | 6.7        |
| Esusu/local contributions | 2         | 1.7        |
| Others                    | 20        | 16.7       |

Source: Field survey, 2017

Table 3 shows that 70.8% of the respondents were able to receive the total amount of loan demanded for while the remaining 29.2% could not

**Table 3: Credit Status of Respondents**

| Total Loan Received | Frequency | Percentage |
|---------------------|-----------|------------|
| Yes                 | 85        | 70.8       |
| No                  | 35        | 29.2       |

Source: Field survey, 2017

Table 4 shows the results of the t-test analysis used to determine whether there is a significant difference between the amount of credit applied for and amount received by the respondents. The results indicate that there is a significant difference between the amount of credit applied for and the amount of credit received by the individual farmers in the study area. Even though from table 3, it is clearly evident that majority of the farmers (70.8%) obtained the total amount of loan

demanded as against 29.2% of farmers who did not. The average value of credit received was significantly lower than the average value of credit applied for. This is in agreement with the findings of Oboh and Ekpebu (2011) that the mean value of credit received by arable crop farmers in Benue State, Nigeria was significantly lower than the mean value of credit demanded at one percent (1%) level of significance, despite a good number of the farmers claiming they were able to obtain the total credit they applied for.

**Table 4:** The results of the paired t -test showing a significant difference between amount of credit applied and amount received by farmers

| Variables        | Individual Mean | t-value | Degree of Freedom | Significant |
|------------------|-----------------|---------|-------------------|-------------|
| Loan applied for | 181000N         | 5.204   | 119               | 0.000       |
| Loan received    | 164000N         |         |                   |             |

**Analysis of Credit Allocation**

Table 5 reveals that 40.8% of the respondents used their total loan for agricultural purpose while the remaining 59.2% diverted part of it for non-farm purpose. On a comparative basis, farmers that demanded low credit amount allocated more of their credit to the farm sector and by implication, less to the non-farm sector. On the other hand, farmers that demanded for credit above ₦200,000 allocated a less percentage of their credit to the farm sector. However, in the overall scenario, it was observed that none of the categories allocated less than 50% of their credit to the farm sector. There lies a probability that quite a number of the farmers may have already factored in an additional amount to cater for some of their pressing needs before demanding for a high amount of credit.

Results indicate that as farmers' credit portfolio increases, the percentage of credit allocated to the farm sector decreases while the percentage of the credit diverted to the non-farm sector increases. The average amount of credit allocated to the farm sector by all the farmers in the study was 80.56% (₦ 15,737,396) leaving the balance of 19.44% (₦ 3,797,604) to the non-farm sector. This is referred to as the average budget share (ABS). Although, the ABS value of 80.6% for the farm sector is relatively high, the value of 19.44% for the non-farm sector confirms the findings of past literatures that there is a level of diversion of agricultural credit for other purposes outside farming. This finding is consistent with the findings of Rabo, Kushwaha and Abubakar (2001), in which about 36.7%

of farmers' institutional credit intended for farm activities in Bauchi State in Northern Nigeria was diverted. This finding is also consistent with earlier

finding by Oboh and Ekpebu (2011), which reveal that 43.9% of the loan received by arable crop farmers in Benue State, Nigeria meant for farm activities was diverted and spent on non-farm activities.

**Table 5: Proportion of Farmers that used their Total Loan for Farm Activities**

| Total Loan for Farming | Frequency | Percentage |
|------------------------|-----------|------------|
| Yes                    | 49        | 40.8       |
| No                     | 71        | 59.2       |
| Total                  | 120       | 100        |

Source: Field survey, 2017

**Table 6. Allocation of Credit Received by Farmers between the Farm and the Non-Farm Sectors**

| Amount of Credit Received (₦) | Percentage of Credit Allocated for Farm purpose | Percentage of Credit Allocated for Nonfarm purpose | Total |
|-------------------------------|---|--|-------|
| ≤ 200,000                     | 81.72   | 18.28  | 100   |
| 201,000-400,000               | 75.88   | 24.12  | 100   |
| 401,000-600,000               | 72.56   | 27.44  | 100   |
| Total Amount (₦ 19,535,000)   | 80.56   | 19.44  | 100   |

Source: Field survey, 2017

### Factors Influencing Credit Constraint Conditions of Farmers

Table 7 shows the maximum likelihood estimates of the Probit Regression Model. In the model, coefficients of five out of nine explanatory variables were found to be significant. Results reveal that the annual income, experience of difficulty with conditions attached to credit disbursement, amount of credit demanded and experience of inflexibility with credit source on credit conditions are significant variables that influence credit constraint condition of the farmers.

Annual income of farmers was found to be a significant variable at 5% and has a negative coefficient. The negative sign for the coefficient of this variable indicates that farmers with high annual income have a likelihood of being less credit constrained compared with farmers with low annual income. This result agrees with the study of Akramet *al.*(2008). In his study, he observed a negative relationship between annual income and credit constrain condition of farmers. Logically, it is expected that an average farmer with a high annual income will be able to sustain his family members well and may not have to supplement family expenditure with the credit they have obtained and because of this, bank officials and lenders will be willing to grant such farmers high amount of credit because they would be able to pay back.

Experience of difficulty with conditions attached to credit disbursement. This variable was found to be significant at 1% and has a positive coefficient. The positive sign for this variable implies that experiencing difficulty in one area or the other as regards conditions attached to credit disbursement increases the likelihood of respondents being prevented from receiving the total amount of credit demanded or accessing the credit at all.

Amount of credit demanded was found to be significant at 1% and has a positive coefficient. Amount of credit demanded by the farmers was expected to have a positive impact on the credit constrained condition of the farmers. This implies that there is an increased probability that a farmer demanding for a high amount of credit may not receive the total amount demanded when evaluated in the light of other social-economic characteristics like annual income, household size, farm size, farming experience among others.

Experience of inflexibility with credit source on credit conditions was also found to be a significant variable which influences credit constraint conditions of farmers positively. This variable was found to be significant at 1%. This suggests that inflexibility with credit conditions from credit sources increases the tendency organic farmers not to be able to access the credit demanded, hence the farmer is said to be credit constrained.

**Table 7. Probit regression results of the factors influencing credit constrained condition offarmers**

| Variables  | Coefficient          | P-value  | Marginal effect    | p-value |
|--|----------------------|----------|--------------------|---------|
| Age  | .0164141 (.0140895)  | 0.244    | .0047607 (.00406)  | 0.241   |
| Annual income  | -2.69e-06 (1.28e-06) | 0.036**  | -7.81e-07 (.00000) | 0.034   |
| Educational level  | .2097047 (.1433312)  | 0.143    | .0608227 (.04178)  | 0.145   |
| Experience of difficulty with conditions attached to credit disbursement | .2990713 (.1002161)  | 0.003*** | .0867425 (.02974)  | 0.004   |
| Credit sources   | -.2298153 (.122673)  | 0.061*   | -.0666555 (.03524) | 0.059   |
| Amount of credit demanded  | 4.43e-06 (1.56e-06)  | 0.005*** | 1.28e-06 (.00000)  | 0.005   |
| Experience of inflexibility with credit source on credit conditions      | .5545608 (.155727)   | 0.000*** | .1608446 (.04391)  | 0.000   |
| Secondary occupation   | -.1191684 (.1120198) | 0.287    | -.0345636 (.03254) | 0.288   |
| Major occupation   | .0787177 (.0666658)  | 0.238    | .0228312 (0.1914)  | 0.233   |
| Cons   | -2.764142            | .9292065 |                    |         |
| No of observations =120  |                      |          |                    |         |
| Prob>chi2 = 0.000  |                      |          |                    |         |
| Pseudo R2 = 0.3400   |                      |          |                    |         |
| LR chi2 = 49.25  |                      |          |                    |         |
| Log likelihood = -47.811286  |                      |          |                    |         |

\*\*\*significant at 1%, \*\*significant at 5%, \*significant at 10%

Source: Field survey, 2017

### **Factors Affecting Rate of Credit Allocation to the Farm Sector**

Variables considered here were age, gender, household size, annual income, visit before loan disbursement, visit after loan disbursement, delay in loan receipt, total loan received, value of interest rate, marital status, credit source, major occupation and secondary occupation. Results from Table 8 show that six out of the thirteen variables were found to have significant influence on credit allocation to the farm sector.

Age was found to be significant at 10% and has a positive coefficient. This positive coefficient implies that as the age of the farmer increases, there is a corresponding increase in the credit allocation for farming purpose. This result is consistent with the study of Oboh and Ekpebu (2011), who revealed that credit allocation to the farm sector increases with the age of the farmers.

Annual income also maintained a positive relationship with credit allocation to the farm sector. This variable was found to be significant at 5% and has a positive coefficient. This suggests an increased allocation of credit obtained for farming purpose with an increase in the annual income of the farmers. Hypothetically, it is expected that farmers with higher annual income will be able to care for their family members' pressing needs well and may not have to supplement family welfare with the credit they have obtained. This agrees with the findings of Mejeha (2005) that low income households tend to divert part of their loans for the sustenance and upkeep of family members. It was therefore argued that as farmers' income increases, the rate of credit allocation to the farm sector increases and vice versa. This is expected, because as the annual income of the farmers increases it is logical to believe that there will be more funds to take care of other pressing needs

thereby reducing the proportion of credit diversion.

Number of days between loan application and receipt is termed as delay in loan receipt in the context of this writing. This variable was found to significantly influence credit allocation to the farm sector. It has a negative coefficient. This indicates that the more there is a delay in the disbursement of the credit applied for, the lesser the portion that will be allocated for farm use. This agrees with the findings of Nweze (1991) that untimely release of loan tends to tempt farmers to divert the loan for unintended use. It is therefore logical to argue that farmers who do not receive the credit they applied for in time are likely to allocate less of the credit to their farming activities.

Whether the farmer got the total amount of credit demanded for or not goes a long way to influence the allocation of credit to the farm sector. This variable was also found to be a significant variable at 5%. It has a negative coefficient, implying that credit allocation to the farm sector decreases with an increase in the amount of credit received. This means that farmers who got the total amount of credit demanded, allocated less of the credit to the farm sector while those that did not get the total amount of credit demanded allocated more portion of their credit for farm purpose. This finding is contrary to the findings of Nosiru (2010) who revealed that micro credit enabled farmers to buy the inputs they needed to increase their agricultural productivity and also to the findings of Rabo *et al.* (2001), that farmers who received low amounts of institutional credit meant for farm activities in Bauchi State in Northern Nigeria diverted the funds for non-farm activities.

The value of interest rate charged on the credit obtained was also found to significantly influence the amount of credit allocated to the farm sector. This variable was found significant at 5% and has a negative

coefficient. The negative sign and significance of the coefficient of this variable imply that with a lower interest rate, comes a higher allocation of credit to the farm sector by the farmers.

**Table 8. Tobit Regression Results showing the Factors Influencing Credit Allocation to the Farm Sector**

| Variables                     | Coefficient | Std. error | P-value |
|-------------------------------|-------------|------------|---------|
| Age                           | 1.362944    | .7991366   | 0.091*  |
| Gender                        | 19.27223    | 14.81483   | 0.196   |
| Annual income                 | .0000964    | .0000458   | 0.038** |
| Household size                | -4.27381    | 4.21628    | 0.313   |
| Visit before loan             | 1.937374    | 18.77067   | 0.918   |
| Visit after loan              | -34.3181    | 20.95296   | 0.104   |
| Delay in loan receipt         | -31.03864   | 16.50536   | 0.063*  |
| Got total loan demanded       | -42.90184   | 16.79801   | 0.012** |
| Value of int. rate            | -2.571467   | 1.108486   | 0.022** |
| Marital status                | 26.95616    | 15.3574    | 0.082*  |
| Major occupation              | 8.327639    | 9.619687   | 0.389   |
| Educational level             | 3.506758    | 6.72535    | 0.603   |
| Farm size                     | -.7805228   | 2.932308   | 0.791   |
| Cons                          | 36.24265    | 42.08603   | 0.391   |
| Number of observation (120)   |             |            |         |
| Chi <sup>2</sup> =37.41       |             |            |         |
| prob>chi <sup>2</sup> =0.0004 |             |            |         |
| Pseudo R <sup>2</sup> =0.0409 |             |            |         |

\*\*\*significant at 1%, \*\*significant at 5%, \*significant at 10%  
Source: Field survey, 2017

**Conclusion**

In agreement with existing literatures, this study has established that an average organic farmer do not use 100% of their credit for farm activities. There is always a probability that a reasonable proportion of the loan is diverted to non-farm activities. The major non-farm activities are feeding, school fees and general household welfare. The major farm activities are purchase of inputs, cultivation process, buying of more farm produce and processing. Most of the farmers in the study area were found to be more dependent on cooperative societies for their credit facilities because of the low interest rate, easy and understandable procedures, and ease of repayment and also because of other external benefits that comes to them because of their membership in the cooperative society.

Based on the findings made by this study, it is recommended that financial institutions such as

agricultural and community banks be fortified and strengthened. Though, the Federal Government of Nigeria, in the past recognized the need to finance agricultural business and directed all licensed banks through Central Bank of Nigeria (CBN) in 1977 to open bank branches in the rural areas; in a bid to encourage banking habit, provide agricultural credit with minimal interest and redress the lopsidedness in the availability of banking services in aiding agricultural activities. However, farmers are still constrained in their access to credit facilities from banks. Majority of the farmers in the study area that obtain loans from banks of agriculture gave a lot of complaints about the incomprehensible procedure involved and the demand placed on them to pay a deposit of ₦20,000 before loan receipt.

The procedures for securing loans should be reviewed in order to make it simple for farmers. The relevant



government agencies should mobilize farmers to form themselves into formidable groups so that they can derive maximum benefit of collective investment of group savings. Therefore, it is imperative that government should see into the re-evaluation of this program to make it work for farmers. Furthermore, delay in loan receipt was one of the significant factor that influence allocation of credit to the farm sector, therefore credits officials from different sources must ensure that farmers be granted the required amounts of loan demanded and at the proper time in order to enhance the rate of agricultural credit allocation to the farm sector to ensure increased productivity of crops grown for increased welfare and livelihood of these farmers and the citizens of the country as a whole. Furthermore, this study will recommend that credit officials should map out a workable follow-up programme that will ensure that farmers obtaining loan from their institution use the loan for the intended purpose.

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