

Assessment of Credit and Investment Cooperative Society Among Arable Crop Farmers in Ifo Local Government Area of Ogun-state, Nigeria

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Abstract

This study examined the assessment of credit and investment cooperative society among arable farmers in Ifo Local Government Area of Ogun-state, Nigeria. Data was gathered through a well structured questionnaire administered to one hundred (100) respondents using multi-stage sampling methods. Using both descriptive and inferential statistics. The results showed that majority (81%) of farmers dominated by males involving in agricultural pursuits, with a certain level of formal education. Farmers were in the prime working age range, with mean household size of 4 persons. The results also showed that eight (8) out of ten (10) variables regressed exhibited significant influence on cooperative members' access to credit. The analysis of constraints revealed that low savings by members was the primary barrier ranked first while poorly leadership style and managerial functions was ranked the least 8th. The study recommended that farmers ought to consider establishing more cooperative societies and make use of credit facilities effectively and efficiently. Government should persist in subsidizing agricultural inputs. Government must strive to create a conducive environment to stimulate farming activities among farmers. Challenges facing the farmers should properly addressed.

Keywords: Arable crops, Farmers, Cooperative societies, Loans, Incomes

JEL Classification: Q10, G21, O18, Q14, D31

Introduction

Currently in Nigeria, a large percentage of farmers, especially the rural farmers, are poor and the level of poverty has been exacerbated by the decline in agricultural output as well as income inequality. Small-scale farmers have reliably and dependably funded from their projects with their own funds and retained profits from household businesses, (Emerole and Ndu, 2019). Such farmers have complained of denied access to loans from commercial banks on account of their inability to provide the necessary collaterals demanded by the banks (Mbubaegbu and Apata, 2021). Most of the farmers operate without modern production inputs. Their marketing system is unorganized with each farmer acting individually to procure farm inputs and to sell farm produce. Capital is the most important input in agricultural production and its availability has remain a major problem to small scale farmers who account for the bulk of agricultural produce of

the nation. In Nigeria, credit has long been identified as a major input in the development of the agricultural sector, (Balogun, 2018). Credit is considered the catalyst that activates other factors of production and make under used capacities functional for increased production, (Ikpefan, 2019). It is a major factor necessary for technological transfer in traditional agriculture. Asogwa (2019) observed that high level of cost inefficiency is highly attributable to the low profitability that results from inadequate organization of farmers into collective farmers' institutions that can provide opportunities for risk sharing and improved bargaining power.

The smallholder farmers are constrained by many problems, including those of poor access to modern inputs and credits, poor infrastructure, inadequate access to markets, land and environmental degradation including climate change, inadequate and unused research and extension services and so on (Manyong et al., 2023). Nigerian government since her second republic years, has responded to palliating this hurdle to these small-scale farmers by instituting development

bank- Nigerian Agricultural and Cooperative Bank (NACB) in 1972, which extended loans to both small and large scale farmers; agricultural lending risks reduction schemes- Agricultural Credit Guarantee Scheme Fund (ACGSF) in 1978 by which the Central Bank of Nigeria (CBN) guaranteed loans extended by Commercial banks up to 75 per cent in case of any default in borrowers repayments; proximity enhancing scheme- rural banking system of 1977 by which commercial banks were required to establish some given number of rural branches; liberal economic policies such as setting up of Peoples' Bank (PB) of 1989 to cater for poor borrowers, Community Banks (CB) of 1990's; merger and reform policies-merging Peoples' bank with NACB and the risk assets of the Family Economic Advancement Programme (FEAP) to form Nigerian Agricultural Cooperatives and Rural Development Bank (NACRDB) in 2000; licensing and renaming of CB to Microfinance Institutions (MFIs) in 2005 which currently has been renamed Bank of Agriculture (BOA). In spite of these efforts, analysts have reported poor repayment of borrowed and invested funds by farmers under different loan schemes, (Njoku and Nzenwa, 2020). Among reasons advanced for the poor repayments of borrowed funds are loan diversions, poverty, social expenses (on ceremonies, social clubs, religious obligations, extended family and using of loans to fund family consumption expenditures (Oke, 2017) funds borrowed from outside sources by farmers include those formal and informal credit facilities outside the farmer's personal savings invested in farm activities.

An overview of Nigerian agricultural sector during 1960's revealed that agricultural sector was the most important to the economy. In fact, the generation of this period can still remember those days when the pyramid of groundnut was the pride to the northern region and cocoa production areas of the west also boosted the foreign earning from cocoa exports. Agricultural credit is seen as an undertaking by individual farmers or farm operators to borrow capital from intermediaries for farm operations (Odoh and Sonaiya, 2019). According to Ibitoye et al. (2019), credit involves all advances released for farmers' use, to satisfy farm needs at the appropriate time with a view to refunding it later. Thus, credit can be in the form of cash or kind, obtained either from formal, semi-formal or informal sources. A productive resource such as agricultural credit is very vital for efficient and sustainable production activities especially in developing countries (Nweke, 2021). Cooperative societies as part of the rural finance provider is a cost-effective model for providing financial services to those segments of the population that have little or no access to other formal financial services (Sharma et al., 2015). Poverty alleviating policies including credit administration were subsequently administered through cooperative societies. However, the emerging market liberalization of the time brought an end to the monopoly status already enjoyed by

the cooperatives (Wanyama et al., 2018). Therefore, the present study was undertaken to examine the assessment of credit and investment cooperative society (CICS) among arable farmers in Ifo Local Government Area of Ogun-state, Nigeria. The specific objectives were to: describe the socio-economic characteristics of selected arable crop farmers, examine the factors that determine farmers' access to cooperative loan and identify the constraints facing arable crops farmers in accessing cooperative loan in the study area. (Nnadozie et al., 2025)

Data Sources and Methodology

The study was carried out in Ifo local government area of Ogun State, Southwestern Nigeria. Its headquarters are in the town of Ifo at 6°49'00" N3°12'00"E. It has an area of 521km² (201 sq mi) and a population of 698,837 (NPC, 2006). Ifo local government area is one of twenty local government areas in Ogun-State. The local government area lies in the rain forest zone of Nigeria. The temperature ranges from 27° to 32° and relatively humidity average of 80 per cent to 90 per cent. The State comprises of four (4) division namely Egba, Yewa, Remo and Ijebu divisions. Ifo consist of Yoruba people and inhabit the southern area of Ogun North Senatorial District, Ogun State. Ifo is a home to branches of many established Nigerian banks. It is a town of fast growing part-market of the Ogun State metropolis, owing in part to increasing influxes of people from Ifo's towns and villages who are attracted by the town's proximity to Lagos State. The people are predominantly farmers but in recent times people have also engaged in business. Ifo people engaged in rearing of livestock such as poultry birds, goat, sheep etc and cultivation of land for planting of crop like cassava, yam, cocoyam and among others. The study employed both primary and secondary sources of data. Primary source involved the use of well-structured questionnaire to obtain relevant information from respondents (arable crop farmers) in the study area. The secondary data was obtained from journals, articles, textbooks and other related publications. Descriptive statistics and Inferential statistics were absorbed to analyze collected data. Descriptive statistics such as frequency table, mean and percentage and inferential statistics such as logit were used to analyse collected data. The primary data collected from the respondents pertained to the year 2024.

Concepts Used

Logit Regression model: This model assumed that we were being faced with two options; the dependent variable is the access to credit of the arable crop farmers (1 = if the arable crop farmer is a credit beneficiary, 0 = non-beneficiary) as follows;

Logit model is represented as:

$$Y_i = L_n(P_i/1-P_i) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \epsilon_i \dots \dots (1)$$

Where:

Y = Access to credit of arable crop farmers (1 = if the arable crop farmer is a credit beneficiary, 0 = non-beneficiary)

P_i = Probability of arable crop farmer's decision to access credit

$1 - P_i$ = Probability of not having access to credit

β_0 = Intercept

β_i (1,2,3.....10) = Regression coefficients.

X_i (1,2,3.....10) = Independent variables; and

U_i = error term

The independent variables specified as factors influencing farmers decision to access credit for arable crop production and are defined as follows;

X_1 = Gender (Dummy; 1 = male, 0 = female)

X_2 = Age (Years)

X_3 = Household size (No. of person)

X_4 = Education attainment (Years)

X_5 = Farming Experience (Years)

X_6 = Marital status

X_7 = Loan duration (Years)

X_8 = Loan interest (%)

X_9 = Farm Income (₦)

X_{10} = Cooperative membership (Dummy: 1 = yes, 0 = no)

U = Error term.

Results and Discussion

Socio-economic Profile of Surveyed Arable Crop Farmers

The study's findings revealed a significant gender disparity among the arable crop farmers, with males constituting 81 per cent of the respondents, while females accounted for only 19 per cent. This showed that males continue to play a dominant role in arable crop activities. Furthermore, the age distribution of the respondents showed that a substantial 74 per cent were below 50 years old, with an average age of 46 years. This indicated that the majority of crop farmers are in their prime working years, possessing the energy, vitality, and potential for high productivity. This aligns with the assertion made by Shittu and Osunmakinde (2025) that individuals within the age bracket of 20-50 are economically active and are likely to exhibit a strong drive towards productivity. The study also unveiled that a substantial 75 per cent of the respondents were married, with only 20 per cent being single and 5 per cent divorced. This suggested that most of the respondents are family-oriented individuals with dependents, implying that their livelihoods and farming activities likely support not only themselves,

but also their family members. This observation resonates with the findings of Epeju and Opara (2019), who noted that between 94 to 99.5 per cent of the farmers surveyed were married. The marital status of the respondents could potentially impact their access to resources, productivity levels, and overall profitability. Furthermore, the study highlighted that majority of the respondents 81 per cent had moderate-sized households, comprising between 3-6 individuals and 19 per cent above six people per households' size, with a mean household size of four persons, indicating a relatively modest family structure which is conducive for balancing production and consumption, thereby providing a favourable environment for a profitable farming venture.

The findings showed a significant disparity in the level of experience among respondents, with only a small fraction 10 per cent having 1-5 years of experience in arable crop production, while a substantial majority 90 per cent boasted more than five years of experience, showing a high level of expertise and familiarity with the industry. This indicated that the arable crop farmers are highly seasoned, possessing a wealth of experience that could significantly contribute to the success of their farming operations. Data presented in Table 1 indicated that 20 per cent had no formal education, educational background of the respondents showed that 38 per cent had primary education, 37 per cent had secondary education, and five per cent had tertiary education. Notably, a significant majority 89 per cent of the farmers possessed formal education, indicating a relatively high level of educational attainment among the respondents. This showed that the respondents have ability to adopt innovation easily. This findings is consistent with Yusuf (2023) who asserted that individuals with higher educational attainment has capacity to grab new technology for easier and quick methods to increase their production.

The results showed that 15 per cent of the respondents joined cooperatives less than 5 years ago, 30 per cent had being a member between 6 and 10 years, 40 per cent of the farmers had joined cooperatives between 11 and 15 years ago, and 10 per cent of the respondents joined cooperatives between 16 and 20 years ago and, 5 per cent of the farmers had been a member over 21 years. This showed that majority 85 per cent of the arable crop farmers had being in cooperatives as members between six years and 21 years or more. In terms of income, 17 per cent of the respondents earned below ₦100,000 per month, 25 per cent earned between ₦100,000 and ₦200,000, 24 per cent generated between ₦200,001 and ₦300,000, 15 per cent earned ₦300,001- ₦500,000, and 19 per cent of the respondents earned more than ₦500,000 per month with an average income of ₦252,885 per month. This revealed that 66 per cent of the respondents realised less than ₦300,000 as monthly income of the farmers, which explained further that farmers' income is still low.

Table 1: Socio-economic characteristics of the respondents

Variable	Value	Frequency	Percentage	Cumulative frequency	Mean
Sex	Male	81	81.0	81.0	
	Female	19	19.0	100.0	
Age (years)	<30	15	15.0	15.0	
	31-40	32	32.0	47.0	
	41-50	27	27.0	74.0	
	51-60	19	16.0	90.0	
	Above 60	9.0	1.0	100.0	46 years
Marital status	Single	20	20.0	20.0	
	Married	75	75.0	95.0	
	Divorced	5	5.0	100.0	
Household size	<3	11	11.0	11.0	
	3-6	70	70.0	81.0	
	7-9	10	10.0	91.0	
	10 & above	9	9.0	100.0	4 persons
Farming experience (years)	<5	10	10.0	10.0	
	6-10	35	35.0	45.0	
	11-15	25	25.0	70.0	
	16-20	12	12.0	82.0	
	>20	18	18.0	100.0	
Educational level (years)	No formal education	20	20.0	20.0	
	Primary education	38	38.0	58.0	
	Secondary education	37	37.0	95.0	
	Tertiary	5	5.0	9.0	
Cooperative Membership	< 5	15	15.0	15.0	
	6-10	30	30.0	45.0	
	11-15	40	40.0	85.0	
	16-20	10	10.0	95.0	
	21& above	5	5.0	100.0	
Monthly income (₦)	< ₦100,000	17	17.0	17.0	
	₦100,001-₦200,000	25	25.0	42.0	
	₦200,001-₦300,000	24	24.0	66.0	
	₦300,001-₦500,000	15	15.0	81.0	
	> ₦ 500,000	19	19.0	100.0	₦252,885
Total		100	100		

Source: Field Survey, 2024

Note: Nigerian Naira = 0.066 Indian rupee

Factors Affecting Loan Accessibility Among Arable Crop Farmers

The analysis utilized logit regression to analyzed the findings. The regression parameters and diagnostic statistics were estimated utilizing Maximum Likelihood Estimation

(MLE) technique. Table 2, illustrated the determinants of cooperative loan accessibility among arable crop farmer. The results showed that eight (8) out of ten (10) included regressors exhibited significant influence on the cooperative members' access to credit while only two (2) variables were

Table 2: Factors affecting loan accessibility among arable crop farmers

Variables	Maximum Probability Co-efficient	Standard Error	T-value	Marginal Effects
Constant	52.449	8.460	8.786***	-0.423
Age (X ₁)	5.508	0.676	3.174***	0.588
Sex (X ₂)	-1.662	-1.843	2.797***	0.850
Farming experience (X ₃)	0.206	2.277	5.582***	0.432
Education attainment (X ₄)	0.110	-0.657	1.590	0.255
Household size (X ₅)	0.615	2.006	2.541***	0.477
Marital status (X ₆)	-1.009	1.111	- 0.199	0.774
Amount of loan granted (X ₇)	1.122	0.413	2.137**	-0.747
Loan duration (X ₈)	0.140	1.107	5.153***	0.552
Loan interest (X ₉)	-1.208	2.332	-1.721*	0.677
Cooperative membership (years) (X ₁₀)	0.107	2.001	2.134**	0.577
Log likelihood value	51.319			
Sigma square	15.32			
Chi-Square	26.780			

Source: Field Survey, 2024, * Significant at 10% level, ** Significant at 5% level, ***Significant at 1% level

Table 3 : Constrains faced during loan accessibility to arable crop farmers

Constraints to loan accessibility to arable crop farmers	Frequency	Mean	Rank
Lack of government support	75	5.988	4 th
Over due loan	87	6.223	2 nd
Low savings by members	88	6.457	1 st
Delay in loan disbursement	67	5.321	5 th
Lack of sureties	34	3.912	7 th
Favoritism and nepotism	45	5.111	6 th
Inadequate capital	76	6.211	3 rd
Poor leadership style and managerial functions	42	4.991	8 th

Source: Field Survey, 2024

not statistically significant. The Chi-square value was 26.780, with a p-value of less than 0.01 and log likelihood function 51.31. Hence, sigma square 15.32 was statistically significant, thus indicating that the models displayed a good fit. The models also met the parallelism assumption that requires that parameters in the subsequent equations are the same. The link test also confirmed that the models were correctly specified. All the variables had significant co-efficient except marital and education attainment. The positive sign on a parameters indicated that higher values of the variables tend to increase the likelihood of credit accessibility and impact on arable crops farmers' business performance. Simultaneously, a negative value of t-values co-efficient implied that higher values of the variables would reduce the probability of credit accessibility and impact on arable crop farmers' enterprises. The findings also showed that eight out of ten variables regressed were positive while the rest two were negative. on loan interest should remain

constant to avoid adverse effects on loan repayment and accessibility.

Constraints faced during loan accessibility to arable crop farmers

The various constraints hindered the loan accessibility among arable crop farmers in the study area were outlined in Table 3. An analysis of these constraints revealed that low savings by members was the primary barrier ranked first among all the problems confronting arable crop farmers, followed by overdue loan positioned 2nd likely stemming from limited income generated by farmers with modest farm holding. inadequate capital, lack of government support, delayed in loan disbursement and, favouritism and nepotism were all ranked 3rd, 4th, 5th and 6th respectively. While lack of sureties or guarantors ranked second to the last seventh positioned among the constraints and poorly leadership style and managerial functions was ranked the least 8th. This

findings is consistent with the study conducted by Ezeano and Ohaemesi (2019).

Conclusions and Policy Implications

Demographic distribution of respondents revealed a significant gender imbalance, with the vast majority 81 per cent being male, while only a few of them 19 per cent were females. The majority 74 per cent of respondents were aged 50 or below, with a mean age of 46 years. Concerning marital status, the majority 75 per cent were married, while 20 per cent were single and five per cent of the respondents were divorced with an average household size of four individuals. The poultry farmers in the study demonstrated considerable expertise in arable crop production, boasting an average of 13 years of experience per farmer. Moreover, the farmers show cased a high level of education, with an average annual income of ₦252,885. The results showed that eight out of ten included regressors exhibited significant influence on the cooperative members' access to credit while only two variables were not statistically significant. The Chi-square value was 26.78, with a p-value of less than 0.01 and log likelihood function 51.31. Hence, sigma square 15.32 was statistically significant, thus indicating that the models displayed a good fit.

The analysis of the constraints revealed that low savings by members was the primary barrier ranked first among all the problems confronting arable crop farmers, followed by overdue loan positioned Second while lack of sureties or guarantors ranked seventh positioned among the constraints and poorly leadership style and managerial functions was ranked the least eighth. The study recommended that arable crop farmers ought to consider establishing cooperative societies, with a particular emphasis on encouraging more participation in crop farming activities. It is imperative for the government to persist in subsidizing agricultural inputs and loans, ensuring that the disbursing partners strictly adhere to the official interest rates and loan stipulations. Additionally, government must strive to create a conducive environment that will further stimulate farming activities among arable crop farmers. Farmers should also encourage themselves by making use of credit facilities effectively and efficiently through cooperative establishment or other self-help organization to increase farmer's income, profitability, standards of living, well being and enhance their arable crop production.

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