



DETERMINANTS OF FINANCIAL INCLUSION OF AGRICULTURAL COOPERATIVE SOCIETIES IN YEWA DIVISION OF OGUN-STATE, NIGERIA

¹Jimoh, B. O., ²Nwankwo, F. O. and ³Shittu, K. A.

^{2,3} Department of Cooperative Economics and Management Nnamdi Azikwe University, Awka, Anambra State, Nigeria

¹ Department of Cooperative Economics and Management, Federal polytechnic Ekowe, Bayelsa State, Nigeria

Correspondence Email: shittuadesina81@gmail.com.

GSM: +2348074359460

ABSTRACT

The study examined the determinants of financial Inclusion of agricultural cooperative societies in Yewa Division of Ogun-State, Nigeria. Multi-stage sampling technique was utilized to select one hundred and fifty (150) cooperative societies for the study. The result shows that majority (70.67%) of the respondents, did not access credit from either formal or informal financial institutions during the period under review. The result reveals that formal institutions the participants patronized to include Microfinance Banks (8.67%), Government schemes and programmes (7.33%), Commercial banks (2.67%) and Bank of Agriculture (BOA) (1.33%). The informal institutions patronized were Thrift/Credit cooperatives (4%), money lenders (3.33%) and self-financing (2%). The average amount collected was ₦705,620.45 and ₦21,765.70 for formal and informal institutions respectively. The binary regression model reveals that, distance to credit source, government interference, repayment period, collateral, financial literacy, transaction cost, hidden charges, savings, year of existence, shareholdings and account officer accounted for 67% variation in cooperative society's access to formal credit in the study area. The constraint faced by includes sociological accounted for 15.41% of the variance of the factors militating the performance realization of cooperative societies, the second factor (economical), accounted for 15.3% of the variances, the third factor (organizational/institutional), accounted for 14.72% of the variance militating the optimum performance of agricultural cooperative societies in the study area. The three factors explained 45.43% of the variances militating against farmers' cooperative performance. Accessibility to credit from financial institutions (formal and informal) showed that the respondents were financially excluded from all the financial markets as the majority never had access to either of the financial institutions. The study therefore recommends that there is need to encourage and enlighten the members on good governance, members' commitment/participation (financially and advices) and government support to achieve their objectives.

Keywords: Cooperatives, Credit, Financial, Inclusion, and Institutions

INTRODUCTION

Financial inclusion is described by the World Bank as the provision of useful, relevant and affordable financial services such as payments, credit, and insurance to the financially excluded including individuals and SMEs. Financial inclusion is seen as the process of ensuring access to financial services, timely and adequate credit where needed by vulnerable groups, such as weaker sections and low-income groups at affordable cost Omar and Inaba, (2020).

Financial Inclusion is achieved when individuals or organizations have easy access to a broad range of formal financial services that meet their needs and are provided at affordable cost. The definition of Financial Inclusion is based on four keys, which are: Ease of access to financial products and services, usage of a broad range of financial products and services, designed according to need (financial products must be designed to meet the needs of clients and should consider income levels and access to distribution channels), and at affordable cost (Jimoh, 2024).



Agricultural finances are credits and loans provided to farmers for their farm activities such as production, storage, processing, and marketing of farm products. Such finance can be short, medium, or long-term depending on its payback period. Credit institutions range from well-developed and large sized commercial banks to localized small cooperatives. It can also be formal or informal. McKillop *et al.* (2020) noted that an individual or organization is said to have access if he can borrow from a credit source (commercial banks, micro-finance banks, money lenders, etc). The extent of access to finance by farmers is measured by the maximum amount they can borrow at a time from a given source (Okunlola and Ayetigbo, 2024).

Rural finance is known to be an essential instrument in achieving poverty reduction and development especially in rural areas. Farmers are in more need of such instrument (finance), because of the seasonality and nature of agricultural activities and the uncertainties involved. Agricultural finance improves productivity and promotes living conditions by breaking vicious cycle of poverty for smallholder farmers. Availability and accessibility of agricultural finance by these disadvantaged rural people can make the difference between grinding poverty and economically secured life as well as improving agricultural productivity. According to Shen *et al.* (2023) and Okompuet *et al.* (2025) reported that 80% of Nigeria's population lives in rural areas and the majority are engaged in agricultural activities, among which few farmers have access to rural finance.

International Cooperative Alliance (ICA) defined cooperative societies as autonomous associations of persons unified voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise (Oladoyin *et al.* 2025). Farmers' cooperative societies emerged as self-help bodies to solve both economic and social needs and aspirations of their members (Ma *et al.*, 2023).

Cooperative societies are an effective community development avenue by their nature of operation, they improve economic self-reliance of their members and civil society. The importance of cooperative societies extends to the larger society for the fact that they create local jobs, invest locally, emphasize on education and skills improve local management capacity, and reduce migration and concentration of capital. People come together in cooperative societies to pool their resources together so as to meet individual needs which they could not resolve by individual limited financial capacity (Jeeva, 2019).

The objective of cooperatives is to produce goods and deliver services, and satisfy the common needs and aspirations of their members and also to promote cooperation, relations, participation and consequently to promote interpersonal relationships. Cooperative societies provide services that benefit their members and also handle the concerns of the local community where they operate. The way cooperatives helps to identify economic opportunities for their members; empower the disadvantaged and hopeless individuals to defend their interests; provide security to the poor by allowing them to convert individual benefits and risks into collective benefits and risks; and mediate member access to assets that they utilize to earn a living

The concept of performance of farmers' cooperative organizations is the ability to meet the primary motive for its formation as outlined in cooperative objectives/principles. Performance is a widely used concept in many areas. Usually, performance is a measure of how well a mechanism/process achieves its purpose. Daliri *et al.* (2025) described Performance as a set of financial and non-financial indicators which offer information on the degree of achievement of objectives and results. Cooperative performance is a measure of the change in the financial state of a cooperative business or the financial and nonfinancial outcomes that results from management



decisions and the execution of those decisions by members of the cooperative group. Farmers' cooperative societies in their uniqueness might be able to access credit for their members, especially on occasions when individuals might lack the capacity to do so (Komolafe *et al.*, 2024).

Bhattarai and Pandit (2023) noted that most government, non-governmental organizations, and donor agencies had encouraged and promoted the creation of cooperative societies as a prerequisite for obtaining agricultural support services by farmers. It is not surprising therefore that those farmers widely embrace cooperative societies in a bid to increase their productivity and well-being in Nigeria (Kehinde *et al.*, 2025). Although Agricultural cooperative societies have unique attributes of meeting both economic and social needs and aspirations of their members through a democratic process, they are faced with numerous challenging issues in sustainable development in their business activities, which affect their optimum role performance Moral and Uclés, (2022).

Due to the sensitive and vulnerable nature of smallholder farming in the country, the factors constraining accessibility of Agricultural cooperative societies (which usually consist of smallholder farmers) to financial products and services there appear to be unique and mixed. It is against this backdrop that this study, therefore, set out to evaluate the financial inclusion of agricultural cooperative societies in the Yewa Division of Ogun state. It specifically; compared the level of credit access by Agricultural cooperative societies from formal and informal institutions; examined the determinants of credit and loan access from formal financial institutions as well as identified perceived constraints to the effective performance of agricultural cooperative societies.

Materials and Methods

The Study area

The study area for this study was Yewa Division of Ogun State. The Yewa Division account of five Local Government Areas out of the twenty Local Government Areas and 31.4 % of the population in Ogun State which was about 5.2million (NPC, 2006), and is currently estimated at about 8 million people given the estimated growth rate to be 2.8 percent per annum (FOS 1999). The five Local Government Areas in the division are: Ado-Odo Ota, Imeko-Afon, Ipokia, Yewa North and Yewa South. Yewa province is basically an agrarian area. The agricultural products of the division range from livestock to fisheries in the area of animal production and permanent to arable crops. Permanent crops cultivated includes: cocoa, kola-nut, oil palm, citrus etc. while arable crop produced comprises of maize and cassava among others. The northern part of Yewa Division has a short rainfall regime, thus its classification as a semi-savannah area.

Sampling technique

Multi-stage sampling technique was utilized to select the respondents. In the first stage, Yewa Division was selected out of four divisions in Ogun State. In the second stage, two (2) Local Government Areas namely: Yewa South and Yewa North were purposively selected due to highest numbers of agricultural Cooperative Societies (ACSs) and Multipurpose Cooperative Societies (those that participate in agricultural business) in each LGAs selected for the study. In the third stage, eight (8) communities and seven (7) were chosen from each Yewa South and Yewa North Local Government Areas respectively. In the final stage, ten (10) cooperative societies were selected from each towns making 150 cooperative societies used for the study.

Methods of data Collection

Primary data was obtained through a well-structured questionnaire administered to respondents with interviewed.

Methods of data Analysis

Both descriptive and inferential statistics were employed for the analysis of the collated data. Descriptive statistics was used to analyzed level of credit access from formal and informal financial Institutions among the cooperative farmers. Inferential statistics such as binary logit mode and exploratory (principal component) factor. Binary logit mode was used to analyzed the determinants of credit access from formal financial and Informal financial Institutions while exploratory (principal component) factor analysis procedure was employed used analyzed the constrains faced the farmers' cooperatives optimum performance.

Binary logistic regression model

Y is a dummy variable; binary choice models is to be applied. The main idea behind the model is to find the relationship between the probability (Pi) that Y will take a 1 value and the characteristics of considered individuals. The general form of binary choice model assumes:

$$P_i = P [Y_i = 1 / x_i] = \frac{\exp (\beta_1 + \beta_2 x_i)}{(1 + \exp (\beta_1 + \beta_2 x_i))^2} \quad \dots(1)$$

Where, P lies between 0 and 1 ($0 < p_i < 1$)

The p_i is the dependent binary variable (1 for access to formal credit and 0 otherwise) and X_i is the independent variable

Where: $I = 1, 2, 3, \dots, 13$

X_1 = Distance to credit source (Kilometers)

X_2 = Government interference in cooperative activities (Dummy yes = 1, 0 otherwise)

X_3 = Interest rate (Naira)

X_4 = Repayment period on credit (period)

X_5 = Availability of required collateral for credit (have collateral = 1, 0 otherwise)

X_6 = Financial literacy or access to bank for credit availability (Dummy yes = 1, 0 otherwise)

X_7 = Incur transaction cost on credit (Dummy yes = 1, 0 otherwise)

X_8 = Incur hidden charges on credit (Dummy yes = 1, 0 otherwise)

X_9 = Amount of savings by the cooperative (Naira)

X_{10} = Year of existence of the cooperatives (Years)

X_{11} = Total Shareholdings of the cooperatives (Naira)

X_{12} = Presence of account officer in the cooperative (Dummy yes = 1, 0 otherwise)

Model specification for factor analysis

The perceived constraints to effective performance of cooperatives, were realized using principal component analysis with varimax rotation. The cut off point for factor loading was 0.40. Therefore, factors loading less than 0.40 or variables that load in more than one factor were discarded (Madukwe, 2017; Enete and Amusa, 2019). Principal component factor analysis model was stated as follows:

$$Y_1 = a_{11}X_1 + a_{12}X_2 + a_{13}X_3 + \dots + a_{1n}X_n \quad \text{Amurtiya} = a_{21}X_1 + a_{22}X_2 + a_{23}X_3 + \dots + a_{2n}X_n$$
$$Y_n = a_{n1}X_1 + a_{n2}X_2 + a_{n3}X_3 + \dots + a_{nn}X_n \quad \dots(2)$$

where:

$Y_1, Y_2, Y_3, \dots, Y_n$ = observed factors/constraints to cooperative performance

$a_1 - a_n$ = factor loadings or correlation coefficients



$X_1, X_2, X_3, \dots X_n$ = unobserved underlying constraints constraining farmers' cooperatives performance. Factors with Eigen values > 1 were extracted, while variables with loadings $\geq \pm 0.4$ was used in naming the factors.

RESULTS AND DISCUSSION

Distribution of Farmers Cooperative Societies Based on their Level of Credit Access from Formal and Informal Financial Institutions

Table 1 shows that majority (70.67%) of the respondents, did not access credit from either formal or informal financial institutions during the period under review. These suggest limited ability of cooperative societies to access credits that could have been used to improve their agricultural production activities in the area. Among them, those that could access credit facilities, only 20% and 9.33% had their credit source as formal and informal sources of credit respectively. The result showed very low credit access generally, which does not suggest that the cooperatives under study could meet up with their financial expectation and needs of its members. Agricultural credit and loan accessibility has been seen as the surest way of breaking the vicious cycle of poverty in the rural areas even in the urban areas (Kehinde *et al.*, 2025).

Table 1: Distribution of Farmers Cooperative Societies Based on Their Level of Credit Access from Formal and Informal Institutions

Variables (n=150)	Frequency	Percentage
Access to credit		
Accessed	44	29.33
Not accessed	106	70.67
Credit source		
Formal source	30	68.18
Informal source	14	31.82
Formal institutions used		
Non participant cooperatives	120	80.00
Microfinance bank	13	8.67
Commercial bank	4	2.67
Bank of Agriculture	2	1.33
Government schemes and programmes	11	7.33
Informal institutions used		
Non participant cooperatives	136	90.67
Moneylenders	5	3.33
Thrift/credit cooperatives	6	4
Self financing from contributions etc	3	2
Total	150	100
Average amount collected		
Formal	₦705620.45	
Informal	₦217657.70	

Source: Field survey (2023)

The result in Table 1 further showed the formal institutions the participants patronized to include Microfinance Banks (8.67%), Government schemes and programmes (7.33%), Commercial banks (2.67%) and Bank of Agriculture (BOA) (1.33%). This corroborates with the study of Amurtiya *et al.* (2018) on the list of formal institutions used by farmers. The informal institutions patronized were Thrift/Credit cooperatives (4%), money lenders (3.33%) and self financing (2%). The average amount collected was ₦705620.45 and ₦217657.70 for formal and



informal institutions respectively. The results suggest that the cooperatives in the area had little or no access to external financial resources in carrying out agricultural development activities. The exclusion from external financing may be due to their socioeconomic characteristics, educational level of the executives of cooperative societies, lack of financial information on financial availability in formal and informal institutions, lack of acceptable collateral, fear of default due to low saving ability, poor administration etc.

Determinants of Credit Access from Formal Financial Institutions

The results in Table 2 showed that most of the explanatory variables affected the cooperative society's access to formal credit. The explanatory power of the factors as reflected by the pseudo R^2 of 67% was high. Also, the overall goodness of the fit as reflected by the prob $>$ χ^2 (0.009) was good. This suggests that the model has a strong explanatory power. It rejects the null hypothesis that all coefficients are zero. Table 2 showed the marginal effect of the factors that determine the cooperative society's access to credit from formal financial institutions in Yewa Division of Ogun State, Nigeria.

The model showed the coefficient of distance to access point was negative and significant at $p < 0.01$ with marginal effect (-0.0720458). This implies that an increase in the distance to formal credit institutions will reduce the probability of accessing credit by -0.0720658. It also indicates that respondents who live in remote areas may have fewer chances to access credit and loan from formal financial institutions compared to their counterparts that areas closer to formal financial institutions. The result corroborates with the findings of Amurtiya *et al.* (2018) and Anyiro and Oriaku (2017) who reported a significant negative relationship between distance and formal credit access among farmers in Adamawa and Abia states respectively.

The coefficient of government interference was negative which implies that an increase in government interference in the business operations of farmers' cooperatives, will reduce the probability of accessing formal credit by (-1.26e-07) and statistically significant at $p < 0.05$. This result could be a result of the cooperative principle of autonomy and independence. The result also agreed with the findings by Prashanth (2019) that cooperatives these days are dancing to the tune of government. He noted that government interference discourages harmony and leads to discrimination among members within cooperative associations.

A positive and significant ($p < 0.05$) effect on access to formal credit by farmers was noticed for the repayment period with a marginal effect coefficient of 0.0094318. This means that a unit increase in the repayment period on credit will have a marginal effect of increasing the probability of accessing formal credit by 0.0094318. The finding agrees with Filli *et al.* (2019) who reported that borrowers usually prefer longer term debt contract due to the insurance effects they provide.

A negative and significant ($p < 0.01$) effect on access to formal credit by farmers' cooperatives was noticed for collateral requirement with marginal effect coefficient of -0.0672161. This implies that a unit increase in collateral requirement by formal institutions will have a marginal effect of reducing the probability of accessing formal credit by -0.0672161. This was because most of the cooperatives do not have required assets or other capital security to offer. Nathan *et al.* (2019), observed that formal banks rarely give loans to the rural people because they lack collateral that they could present as security for loans. The result also agrees with those of Filli *et al.* (2019) who reported a negative relationship between collateral and credit accessibility.

The coefficient of financial literacy possessed expected positive sign and was significant ($p < 0.05$) with marginal effect coefficient of 0.0230398. This means that a unit increase in financial literacy will increase the opportunity of accessing formal credit and loan by 0.0230.

A negative significant ($p < 0.05$) effect on access to formal credit by farmers cooperatives was noticed for transaction cost with a marginal effect coefficient of (-0.1586209). It shows that transaction cost has a significant effect on access to formal finance among rural farmers. This implies that an increase in transaction cost for obtaining formal credit will have a marginal effect of reducing the probability of accessing formal credit by -0.1586209. The finding concurs with that of Babasanya *et al.* (2018) and Saifullahi *et al.* (2017) and is also in line with a priori expectation.

The coefficient of hidden charges was negative and statistically significant at $p < 0.01$. This implies that, an increase in hidden charges on accessing formal credit, will reduce the probability of accessing formal credit by -0.0736269. It is evident that incidence of unseen charges by credit institutions had been one of the major reasons discouraging farmers' credit accessibility in Nigeria. There were some hidden administrative charges that farmers do not know about in the course of accessing loans but were made to pay by the financial institution.

The coefficient of savings was negative and statistically significant ($p < 0.01$) for accessing formal credit with marginal effect (-1.78e-07). This implies that an increase in the level of savings by the cooperatives will decrease the probability of accessing formal credit by -1.78e-07. This finding showed that farmers or cooperatives with high level of capital base have less probability of accessing credit from formal financial institutions. This result also agrees with the laid down rule in cooperatives that business operation of the cooperatives should be primarily financed by members' contributions as the cooperative is a member-based organization.

Table 2: Determinants of Credit Access From Formal Financial institutions

Variable	Marginal effect	Standard error	Z – Value
Distance to credit source	-0.0720458	0.098925	-3.38***
Government interference	-1.26e-07	2.29e-06	-2.59**
Interest rate	-0.016755	0.0368475	-1.82
Repayment period	0.0094318	0.0189771	2.45**
Collateral	-0.0672161	0.095295	3.19***
Financial literacy	0.0230398	.2494488	2.42 **
Transaction cost	-0.1586209	0.07539	2.13 **
Hidden charges	-0.0746269	0.3947272	-3.89***
Savings	-1.78e-07	2.44e-07	-3.58***
Year of existence	0.0250495	0.01229	2.23 **
Shareholdings	-8.02e-08	1.08e-07	-3.56 ***
Account officer	0.0890337	0.13111	3.18 ***
President's education level	0.0033476	0.008951	-1.73
LR Chi ² (13)	135.87		
Prob > Chi ²	0.0009		
Pseudo R ²	0.67		

Source: Field Survey (2023) **, *** indicates significant at 5% and 1% respectively

The coefficient of years of existence was positive and significant at $p < 0.05$ for accessing formal credit with marginal effect (0.0231495). The result indicated that cooperatives with longer years of existence have higher probability of accessing formal credit. The reason may be because experience comes with age and therefore, a positive relationship is expected between age and performance of farmers' cooperatives. Farmers' cooperatives that are older by age are more responsible and secure than their younger counterparts. Ani and Robert (2018) in a related study



reported that beginning farmers are more likely to experience financial stress across all their examined financial measures. Nwankwo *et al.* (2016) in a related study reported that cooperative age profiles had a significant influence on their gross margin. Also, with long years of existence, the cooperative would be able to diversify and consolidate its economic and social activities.

The result in table 2 further shows that, the coefficient of shareholding was negative and significant at $p < 0.01$ for accessing formal credit with marginal effect (-8.02e-08). This implies that an increase in the amount of shareholding of the cooperative, it will have a marginal effect of decreasing the probability of accessing formal credit by -8.02e-08. The finding shows that Agricultural cooperatives with high shareholdings have less probability of accessing credit from formal financial institutions. In cooperatives, shareholding is made up of the cooperatives' share capital and share contributions and reserves, such as undistributed surpluses, as well as entrance fees and grants (Adegeye and Dittoh, 2019).

A positive and significant ($p < 0.01$) effect on access to formal credit by farmers' cooperatives was noticed for a cooperative that has account officer with marginal effect coefficient of (0.0890337). It shows that the presence of account officers in cooperatives has a significant effect on access to formal finance among cooperative farmers. Presence of account officer is very important to any business organization like cooperative. There is need to have up-to-date financial statements by cooperative societies to maintain trust among members, during decision making and also to make such important documents available to lending institutions when needed. Prompt preparation and presentation of account statement to financial institutions or government shows high level of accountability which is associated with high performance.

Perceived Constraints to Effective Performance of Farmers' Cooperative Societies.

Table 3 showed the Varimax-rotated Principal Factor Analysis of the key variables constraining the optimum performance of farmers' cooperative societies. Three factors' Components were extracted based on the responses of the respondents. The Kaiser criterion was employed for selecting the number of underlying factors of Principal Components. The number was obtained by leaving out components/loadings with corresponding Eigen values of less than 0.40. Only variables with factor loadings of ≥ 0.40 were used in naming the factor/Principal Components. Variables that have factor loadings of < 0.40 were not used while variables that loaded in more than one constraint were also discarded as reported by Otitoju (2017) and Okezie (2019) in a related study.

Three factors were extracted from the original variables constraining farmers' cooperative performance in the study area. Factors 1, 2 and 3 were named sociological, financial/economic and organizational/institutional factors respectively.

Factor 1 (Sociological)

The loadings/Eigen values under sociological factors include inappropriate capital base (0.656), poor storage facilities (0.685) and lack of trust on cooperative by members (0.587). The findings corroborate with the report by Onah, (2018), that inadequate capital base and storage facilities were serious constraints to effective performance of multipurpose cooperative societies. This equally agrees with the study of Ibitoye (2018) that there was low capital accumulated by cooperative members and subsequent small amount of loan disbursed to members.

Factor 2 (Financial/economic)

The loadings/Eigen values under financial/economic factors include lack of patronage (0.759), lack of financial information (0.735) and lack of access to formal credit (0.763). The result in line with Amurtiya *et al.* (2018) who reported that low financial literacy and lack of access to

formal credit were among the constraints among farmers in Yola South Local Government Area of Adamawa State. The results also in line with the findings by Onah, (2018) who revealed that inadequate commitment by members militated against the optimum performance of farmers' cooperative in Enugu North Agricultural Zones in Enugu State.

Factor 3 (Organizational/institutional)

The organizational/institutional factors include; low member participation (0.556), inadequate education/training (0.724), irregular meetings (0.461) and low attendance to meetings (0.513). This is in line with the findings by Ugochukwu and Ugwuoke (2023), that cooperative members were constrained with inadequate training in Nigeria. The involvement of members is vital for the long-term expansion, survival and growth of cooperative organization. Borgen, (2021) noted that if members are actively involved in decision making, they will be more committed to the implementation of such the decisions.

After rotation, the first factor (sociological) accounted for 15.41% of the variance of the factors militating the performance realization of cooperative societies, the second factor (economical), accounted for 15.3% of the variances, the third factor (organizational/institutional), accounted for 14.72% of the variance militating the optimum performance of agricultural cooperative societies in the study area. The three factors explained 45.43% of the variances militating against farmers' cooperative performance.

Table 3: Constraining Farmers' Cooperatives Optimum Performance Based on the Responses of the Respondents

Constraints	Factor 1 Sociological factor	Factor 2 Financial/ Economic factor	Factor 3 Organizational/ Institutional factor
Inappropriate capital base for operation	0.656		
Poor Storage facilities	0.685		
Distrust on cooperative by Members	0.587		
Lack of patronage by members		0.759	
Limited Financial Information		0.735	
Lack of access to formal credit		0.763	
Low member participation			0.556
Inadequate education /training			0.724
Irregular Meetings			0.461
Low Attendance to Meetings			0.513
Percentage (%) of total variance	15.41	15.3	14.72

Source: Field survey, 2023 Extraction Method: Principal Components Analysis, Rotation method: Varimax with Kaiser Eigen Value ≥ 0.40 (Major/Significant Principal Constraint) Blanks represent absence of loadings < 4

CONCLUSION AND RECOMMENDATIONS

Accessibility to credit from financial institutions (formal and informal) showed that the respondents were financially excluded from all the financial markets as the majority never had access to either of the financial institutions. It is evident that the Agricultural cooperative societies in the area were financially insecure as they lacked external financing and their self- financing ability was pitiable due to a poor savings attitude. The determining factors of formal credit access by the farmers' cooperatives were distance to credit source, government interference, repayment period on credit, collateral, financial literacy, transaction costs, hidden charges, savings, year of existence, shareholdings and presence of account officers. There were constraints; sociological (inappropriate



capital base, poor storage facilities and lack of trust), financial/economic (lack of patronage, lack of financial information and lack of access to formal credit) and organizational/ institutional (low member participation, inadequate education/training, irregular meetings and low attendance to meetings) to the optimal performance of agricultural cooperatives. Cooperative is still a vital platform for poverty alleviation among poor farmers.

The study therefore recommends that there is need to encourage and enlighten the members on good governance, members' commitment/participation (financially and advices) and government support to achieve their objectives. Government at all levels should invest in rural development and improve rural infrastructures such as; good access road, financial institutions, storage facilities, in the rural areas to boost economic activities that will help the cooperatives in meeting up with its members' needs to improve performance and sustainability as well reduce rural-urban migration. Government and NGOs can even provide credit facilities for any cooperatives that needs them with friendly conditions.

REFERENCES

- Adegeye, A. J. and Dittoh, J. S. (2019). **Essential of Agricultural Economics** (New e.d). Ibadan: Impact Publishers Nig. Ltd.
- Amurtiya, R. A., (2018). *An input assessment of Cameroun Gats by Trust Micro-Credit scheme in the mile four District, Cameroun*: Report of International project management for NGO's, participants learning, December 2004, Sweden.
- Ani, S. G. (2018). The "People" Factor in Cooperatives: An Analysis of Members' Attitudes and Behavior. *Canadian Journal of Agricultural Economics/Review canadienne d'agroeconomie* 55(3):275-298.
- Anyiro, C. O. and Oriaku, B. N. (2017). Access to and Investment of Formal Micro Credit by Small Holder Farmers in Abia state, Nigeria. A case study of ABSU Microfinance Bank, Uturu. *The Journal of Agricultural Sciences*, 6(2):69–76.
- Babasanya, B., Bolagun, O., Zungum, A. and Olowohunwa, J. (2018). Rural development: An approach to poverty alleviation in Nigeria. *International. Journal of Economic Development*, 2(1):28-41.
- Bhattarai, R. and Pandit, M. (2023). Cooperatives as Pillar of Economy to Improve Agriculture Production and Marketing. *Nepal Public Policy Review*, 3(1), 221–238. <https://doi.org/10.59552/nppr.v3i1.61>
- Borgen, S. (2021). Identification as a trust generating mechanism in cooperatives. *Annals of Public and Cooperative Economics*, 72(2):209-228.EFLnA (Enhancing Financial Innovation and Access), (2021). Access to financial services in Nigeria.
- Daliri, H., Ramezani, A., Nasl-Mosavi, S. H. and Modanlo, J. A. (2025). Examining the Impact of Financial and Non-Financial Criteria Divergence on Bank Profitability Indicators. *Business, Marketing, and Finance Open*, 2(2):156–165. <https://doi.org/10.61838/bmfopen.2.2.15>
- Enete, A. A. and Amusa, T. A. (2019). Determinants of women's contribution to farming decisions in Cocoa based agroforestry households of Ekiti State, Nigeria. *The Journal of Field Actions. Field Actions Science Report*. 4(1).www.factsreports.org.
- Filli, F. B., Onu, J. I., Adebayo, E. F. and Tizhe, I. (2019) *Journal of Agricultural Economics, Environment and Social Sciences* 1(1):46–55.
- Ibitoye, S. J. (2018). Survey of the performance of the agricultural cooperative societies in Kogi State, Nigeria. *European Scientific Journal*, 8(24):98-114.
- Jeeva, R. B. (2019). Membership Positions and Problems Faced by Housing Cooperative Societies. *Shanlax International Journal of Management*, 7(2):70–76. <https://doi.org/10.34293/management.v7i2.720>
- Jimoh, B. O. (2024). A Review on the Impacts of Cooperatives on Financial Inclusion in Nigeria. *ASUPFE Journal of Multidisciplinary Research and Innovation*, 2(1):524-530.
- Kehinde, A. D., Adesiyun, T. F., Hassan, S. O. and Familusi, I. G. (2025). Leveraging on membership in agricultural cooperatives to alleviate abject poverty among smallholder farming households in Nigeria. *Sustainable Futures*, 9, 100399. <https://doi.org/10.1016/j.sftr.2024.100399>
- Komolafe, O., Obot, A., Ikotun, D. O. and Obiajulu, I. S. (2024). Determinants of Credit Constraint among Smallholder Farmers' Co-Operators in Oyo State, Nigeria. *Black Sea Journal of Agriculture*, 7(6):613–621. <https://doi.org/10.47115/bsagriculture.1504327>



- Madukwe, M. C. (2017). Multivariate Analysis for Agricultural Extension Research. In Research Methods in Agricultural Extension, Olowu, T.A. (Ed.). Agricultural Extension Society of Nigeria. (AESON), (pp: 206-236). Agricultural and Rural Management Training Institute (ARMTI), Ilorin, Nigeria.
- McKillop, D., French, D., Quinn, B., Sobiech, A. L. and Wilson, J. O. S. (2020). Cooperative financial institutions: A review of the literature. *International Review of Financial Analysis*, 71, 101520. <https://doi.org/10.1016/j.irfa.2020.101520>
- Moral, A. M. and Uclés, D. F. (2022). The Agricultural Cooperative in the Face of the Challenges of Globalization, Sustainability and Digitalization. *Agriculture*, 12(3):424. <https://doi.org/10.3390/agriculture12030424>
- Nathan, F. O., Margaret, B. and Ashie, M. (2019) Microfinance and poverty reduction in Uganda: Achievements and Challenges. Economic Policy Research Centre, Research Series No.41
- Nwankwo, F., Ogbodo. O. C. and Ewuim, N. (2016). Effect of Cooperative type and age on profit performance: A Study of Cooperative Societies in Awka North LGA in Anambra State, Nigeria. *An International Multi-disciplinary Journal, Ethiopia*, 10(5):187-203.
- Okezie, C. R. (2019). Determinants of Farm Households Participation in Informal Financial Markets in Southeast, Nigeria. PhD thesis submitted to the Dept. of Agricultural Economics, University of Nigeria, Nsukka.
- Okompu, A. D., Ofiaju, A. J., Dennis, A. and Otunaruke, E. P. (2025). Credit Access among Arable Crop Farmers in Ondo State, Nigeria. Implication for Agricultural Productivity Enhancement. *Journal of Economics and Trade*, 10(1):1–9. <https://doi.org/10.56557/jet/2025/v10i19046>
- Okunlola, O. C. and Ayetigbo, O. A. (2024). Impact of Agricultural Financing on Agricultural Growth Sustainability in Nigeria. *The Journal of Developing Areas*, 58(3):171–203. <https://doi.org/10.1353/jda.2024.a929946>
- Omar, M. A. and Inaba, K. (2020). Does financial inclusion reduce poverty and income inequality in developing countries? A panel data analysis. *Journal of Economic Structures*, 9(1):37-47. <https://doi.org/10.1186/s40008-020-00214-4>
- Onah, O. G. (2018). Performance of Farmers' Multipurpose Cooperative Societies in Enugu North Agricultural Zone of Enugu State, Nigeria .MSc. thesis submitted to the Department. of Agricultural Economics, University of Nigeria, Nsukka
- Otitoju, M. A. (2017). The effects of climate change adaptation strategies on food crop production efficiency in southwestern Nigeria. PhD thesis submitted to the Dept. of Agricultural Economics, University of Nigeria, Nsukka
- Oladoyin, O., Ajayi, O., Ibrahim, A. T. and Borokini, E. A. (2025). Determinants and Impact of Credit Utilization among Rural Cocoa Farmers: Evidence from Ondo State, Nigeria. *International Journal of Research and Innovation in Social Science*, 11(4):2651–2663. <https://doi.org/10.47772/IJRISS.2025.90400197>
- Prashanth, R. (2019). What are the advantages and disadvantages of cooperative Society? <http://www.preservearticles.com/cooperative-society.html>
- Saifullahi, S. and Haruna, M. (2017). An analysis of farmers' access to formal credit in the rural areas of Nigeria. *African Journal of Agricultural Research*. 7(47):6249-6253. Available online at <http://www.academicjournals.org/AJAR> DOI: 10.5897/AJAR11.788.
- Shen, Y., Guo, X. and Zhang, X. (2023). Digital Financial Inclusion, Land Transfer, and Agricultural Green Total Factor Productivity. *Sustainability*, 15(8):6436. <https://doi.org/10.3390/su15086436>
- Ugochukwu, E. C. and Ugwuoke, A. I. (2023). Performance evaluation of women Farmer Cooperative Societies in Owerri Agricultural Zone of Imo State, Nigeria. *Journal of Agricultural Sciences*, 3(2):126-142.