International Journal of Agriculture, Environment and Bioresearch

Vol. 10, No. 02; 2025

ISSN: 2456-8643

INFLUENCE OF SOCIOECONOMIC CHARACTERISTICS ON CREDIT REPAYMENT OF MEMBERS OF AGRICULTURAL COOPERATIVE SOCIETIES IN NASARAWA STATE, NIGERIA

Onugu, C.U.[1], Obasanya, S.O.[2] and Umeh, O. J.[3]
[1]Department of Agricultural Economics and Extension, Nnamdi Azikiwe University,
Awka, Anambra State, Nigeria.
challibee4u@yahoo.com
[2]Department of Cooperative and Rural Development, Osun State University,
Osogbo, Nigeria
sheriffobasanya@gmail.com.
[3]Department of Agricultural Economics and Extension, Nnamdi Azikiwe University,
Awka, Anambra State, Nigeria.
onyebuchiumehj@gmail.com
Corresponding Author: sheriffobasanya@gmail.com

https://doi.org/10.35410/IJAEB.2025.5973

ABSTRACT

This study examined the influence of socioeconomic characteristics on credit repayment among agricultural cooperative members in Nasarawa State, Nigeria. Data were collected from 214 members using structured questionnaires and analysed using descriptive statistics and multiple regression model. The results revealed that gender, education, farming experience, and farm size significantly affect repayment capacity. Specifically, male borrowers were more likely to repay their loans (coefficient = 3.627, p = 0.0332), while education positively influenced repayment behaviour (p = 0.0922). Farming experience was the most significant predictor (coefficient = 22.102, p = 0.0026), and larger farms demonstrated better repayment performance (coefficient = 7.346, p = 0.0798) than smaller ones. The study concludes that gender, education, farming experience and farm size play crucial roles in loan repayment and recommends that cooperatives tailor loan products and support services to accommodate these characteristics.

Keywords: Nigerian agriculture, smallholder farmers, agricultural cooperatives, loan repayment determinants, Nasarawa State.

1. INTRODUCTION

In agriculture, access to credit plays a pivotal role in fostering growth and development, enabling farmers to invest in essential inputs, expand their operations, and adopt modern farming techniques (Amanullah et al., 2022; Sabasi et al., 2021). Despite its importance, credit repayment remains a significant challenge for many farmers, particularly in rural areas in Nigeria (Datti et al., 2021; Nwagu, 2021). The sustainability of credit programs, however, relies heavily on borrowers' ability to meet repayment obligations (Msomi & Olarewaju, 2022). In Nigeria, many credit schemes have faced high default rates including loans or credit facilities from cooperatives, microfinance institutions and even traditional savings and credit schemes (Babalola et al., 2023; Joseph et al., 2021; Oladejo, 2013; Onugu, Ademola, & Obasanya, 2024).

In spite of the potentials of cooperatives in Nigeria, cooperative contributions to smallholder farmers have been minimal. A study conducted by Anderson, Marita, Musiime, and Thiam (2017) revealed that only 4% of smallholder farmers had used cooperatives. The study also

Vol. 10, No. 02; 2025

ISSN: 2456-8643

revealed that cooperatives are less trusted by smallholder farmers with less than 11% having full trust in cooperatives to handle their finances. High loan default has been reported to prevent appreciable loan advancement (in terms of frequency and size) in Nigeria (Oluwasanya et al., 2020; Agada et al., 2018; Ojiako et al., 2014). This has negatively affected trust in cooperatives and willingness of entrepreneurs (including smallholder farmers) to use cooperatives as alternative financial source (Enwa et al., 2024; Nwachukwu, 2024).

In Nasarawa State, agricultural cooperatives face significant challenges due to seasonal income cycles, which create cash flow gaps and delayed loan repayments. The seasonal gap in income is compounded by market fluctuations that destabilize crop prices and farmer incomes. Additionally, low financial literacy among members—many with limited formal education—hinders effective loan management and financial planning, while small loan sizes for majority of borrowers restrict farmers' ability to invest in scaling operations, perpetuating cycles of marginal productivity and financial vulnerability (Kiran & Mayya, 2024; Onugu, Obasanya, & Nwosu, 2024).

Individual and household characteristics, such as age, education, and farming experience, as well as structural factors, like farm size and labour availability among others have been found to influence credit repayment among cooperatives in Nigeria (Kehinde & Kehinde, 2020; Njoku, 2017; Rotimi et al., 2024). Notwithstanding, the degree to which these factors affect repayment behaviour is not well understood, leading to gaps in policy design and financial intervention strategies. Identifying these relationships is, therefore, crucial for addressing the underlying causes of credit defaults and ensuring the continued availability of financial resources to support agricultural development.

To this end, this study examined how different socioeconomic characteristics shape credit repayment behaviour among farmers. This study uniquely addresses credit repayment challenges in Nasarawa State, a region where more than 85% of the people engage in one form of agricultural activities or the other (Tukura, 2020) yet faces chronic loan default rates exceeding 40% (Nasarawa State Agricultural Development Programme, 2023). By analysing the effect of certain socio-economic characteristics of the farmers, the research seeks to uncover patterns that can inform more effective and targeted financial policies. Additionally, understanding the non-significant factors offers insights into the complexities of rural economies, ultimately contributing to improved credit access and repayment outcomes for sustainable agricultural growth.

1.1 Objectives of the Study

The main objective of this study is to assess the socio-economic characteristics influencing credit repayment in cooperative societies in the study area. The specific objectives are to:

1. assess the loan repayment behaviour of the cooperative farmers
2. assess the Influence of Socioeconomic Characteristics on Credit Repayment

1.2 Research Questions

Vol. 10, No. 02; 2025

ISSN: 2456-8643

1. What are the key patterns in loan repayment behaviour among cooperative farmers in the study area?
2. How do socioeconomic characteristics such as age, education level, and income influence credit repayment among cooperative farmers?

2. LITERATURE REVIEW

2.1 Conceptual review

The academic literature offers a variety of conceptualizations regarding the key elements influencing credit repayment behaviour among members of agricultural cooperatives, especially in the context of socioeconomic characteristics, social capital within groups, and institutional support systems. Each of these key concepts is explored in depth across several fields of study, including economics, sociology, and developmental studies.

Socioeconomic Characteristics

Socioeconomic characteristics such as age, gender, education, and income play pivotal roles in shaping financial behaviours. Age impacts financial decisions with theories suggesting that younger individuals are more likely to take financial risks due to a longer time horizon in line with the lifespan theory, while older individuals might demonstrate more conservative financial behaviours as they approach retirement (Depping et al., 2021; Mitsopoulou, 2019). Gender differences in credit access and repayment behaviour are significant, with some studies indicating that women, despite facing higher barriers to access credit, often have better repayment discipline (Aliya, 2019; Jaim, 2021). Contrary to global trends where women exhibit better repayment discipline, male dominance in Nasarawa's agricultural decision-making—owing to patriarchal land ownership norms (Abdullahi et al., 2022)—grants men preferential access to credit and extension services, likely explaining their superior repayment rates.

Education is frequently linked to enhanced financial literacy (Lajuni et al., 2022), which is crucial for making informed financial. Higher educational attainment is generally associated with better management of finances and loan repayment obligations(McNaughtan et al., 2020). Lastly, income stability from various sources, including non-farm activities, directly affects the ability of borrowers to fulfill their credit obligations (Lin et al., 2019).

2.1.1 Credit Repayment Behaviour

Credit repayment behaviour, which refers to how borrowers manage their debt obligations (Bjorkegren & Grissen, 2019), is influenced by their capacity and willingness to repay (Kao et al., 2021). Capacity to repay is closely linked to one's financial stability and available resources (But & Netudyhata, 2020; Sherraden & Ansong, 2016), while willingness involves personal and cultural attitudes towards debt. Some scholars emphasize the psychological and ethical dimensions of repayment, suggesting that personal values and norms can significantly influence repayment behavior (Roos et al., 2021). This dual aspect of capacity and willingness integrates the financial capabilities of an individual with their moral and ethical inclinations towards meeting debt obligations.

2.1.2 Group Dynamics (Social Capital)

The concept of social capital within groups, particularly in cooperative societies, is vital for understanding credit repayment behaviour. Social capital encompasses the networks, trust, and norms that enable members to work together for mutual economic benefit (Berger, 2024)). In microfinance and cooperative settings, social capital is often operationalized through

Vol. 10, No. 02; 2025

ISSN: 2456-8643

mechanisms like social collateral and peer monitoring. Social collateral functions on the basis of group guarantees, where each member's repayment behavior affects others, fostering a system of mutual accountability (Siriringoringo & Anugrahini, 2023; Subchi et al., 2024). Peer monitoring, facilitated by close social ties within the group, helps ensure that all members adhere to their financial obligations, thereby reducing the risk of default (Cameron et al., 2021).

2.1.3 Institutional Support

Institutional support refers to the frameworks and systems established to facilitate social, economic, and organizational development, ensuring effective governance, resource allocation, and adaptation to changing conditions (Zagornaya et al., 2023). In the context of loan repayment, therefore, institutional support can be referred to as the structures and policies put in place by financial institutions, governmental bodies, and non-governmental organizations to support credit access and repayment. This includes not only the provision of financial services but also the regulatory frameworks that protect both the borrower and the lender. Effective institutional support often includes financial education programs aimed at enhancing borrower understanding of financial products and effective debt management strategies (Hashinaga, 2023). Moreover, credit policies and regulations are crucial for creating an enabling environment that supports fair lending and borrowing practices (Kumar et al., 2022).

The foregoing concepts reflect the complex interplay between individual capabilities, social mechanisms, and institutional frameworks in influencing credit repayment behaviours in cooperative societies. Notwithstanding, the study focuses on the socio-economic characteristics of borrowers in the cooperative institution but the foregoing insights are crucial for policymakers, scholars, and practitioners engaged in enhancing financial inclusion and economic development in rural areas.

2.2 Theoretical Framework

The theoretical framework for this study is the human capital theory. Human Capital Theory provides a fitting framework to understand the effect of socio-economic characteristics on credit repayment behaviour among agricultural cooperative members in Nasarawa State. Human Capital Theory, developed by scholars like Gary Becker and Theodore Schultz(Schultz, 1970), focuses on how investments in education, skills, experience, and other personal attributes enhance individuals' economic productivity (Grugulis, 2024). These characteristics, which represent accumulated human capital, shape members' financial decisions, including their ability to repay loans. In this study, factors such as education, farming experience, income, and farm size reflect the human capital that influences credit repayment behaviour.

Human Capital Theory aligns well with the socio-economic characteristics examined in this study. For example, cooperative members with higher levels of education are likely to have better financial literacy, allowing them to manage their loans more effectively. Similarly, those with more farming experience have acquired specialized skills that enhance their income-generating abilities, which directly impacts their capacity to repay loans. Income and farm size are also indicative of financial resources, with larger farms or higher income reflecting higher human capital, thereby improving members' repayment potential.

Vol. 10, No. 02; 2025

ISSN: 2456-8643

2.3 Empirical review

The factors influencing credit repayment behaviour among cooperative society members have been widely studied, with various socioeconomic and group dynamics playing significant roles. A range of studies has highlighted both individual and collective influences on repayment behaviour, illustrating the complexity of credit systems within rural settings.

Qinlan and Izumida (2013) identify group dynamics, particularly higher degrees of acquaintanceship within groups, as a key factor influencing credit repayment behavior in rural China. Their findings emphasize that social connections among group members, along with income from migration and employment in government agencies, significantly affect an individual's likelihood of repaying loans. The social cohesiveness within groups and formal employment positions offers a safety net that enhances credit repayment. This study demonstrates the importance of interpersonal relationships and formal employment as enablers of successful credit repayment.

Similarly, the study by Absanto and Aikaruwa (2013) reveals that specific socioeconomic characteristics such as age, sex, savings, deposits, group guarantees, asset collateral, and the presence of guarantors play crucial roles in influencing credit repayment behaviour. The presence of guarantors and collateral in cooperative societies offers a form of financial assurance, thereby enhancing the likelihood of repayment. This reinforces the view that socioeconomic characteristics are pivotal in shaping credit behaviours, particularly in cooperative settings where group dynamics and individual financial standing intersect.

Building on this, Ojiako et al. (2014) highlight additional socioeconomic characteristics such as education level, farming experience, household size, and non-farm income as determinants of credit repayment behaviour. Their study finds that younger farmers and those with higher non-farm income are more likely to repay their loans successfully. This suggests that diversified income streams, particularly those not reliant on agriculture, improve the financial resilience of farmers, thus contributing to better repayment outcomes. These findings suggest that fostering economic diversity within rural households can strengthen credit systems.

In another study, Umamaheswari and Periasamy (2022) underscore the role of family-related socioeconomic factors such as family size, percentage of earning adults, and family consumption expenditure. These factors, along with the repayment capacity and the total amount of credit borrowed, directly influence repayment behaviour. A larger family size and a higher percentage of earning adults increase household stability, which can positively impact repayment capacity. Conversely, higher consumption expenditures may strain a family's ability to meet loan obligations. These findings highlight the dual impact of household structure and consumption patterns on credit behaviour.

Lastly, Gehrig et al. (2021) explore the role of social dynamics beyond socioeconomic factors, specifically focusing on prior interactions and partner choice within groups. Their study finds that prior interactions and the freedom to choose partners positively influence credit repayment behaviour, while kinship ties negatively affect repayment efficacy. These results suggest that while close social ties can foster trust, excessive reliance on familial relationships may hinder repayment behaviour due to social obligations that conflict with financial responsibility.

In summary, credit repayment behaviour among cooperative society members is shaped by a variety of factors, including socioeconomic characteristics, group dynamics, and social

Vol. 10, No. 02; 2025

ISSN: 2456-8643

relationships. The influence of group acquaintanceship, income diversification, guarantors, and prior social interactions illustrates the complexity of credit systems in rural contexts, while social and family dynamics also play a critical role in determining repayment success.

3. METHODOLOGY

3.1 Research Design

This study adopted a descriptive survey research design to investigate the factors influencing credit repayment among members of agricultural cooperative societies in Nasarawa State, Nigeria. The descriptive survey design was chosen for its ability to provide detailed insights into relationships between variables and to generalize the findings to a broader population. The research design involved the collection of relevant data through structured questionnaires, allowing for an in-depth analysis of the socioeconomic characteristics influencing credit repayment behaviour.

3.2 Area of Study

The research was conducted in Nasarawa State, located in Nigeria's north-central region. The state comprises 13 local government areas, including Keffi, Karu, Toto, Nasarawa, Lafia, Awe, Doma, Obi, Keana, Akwanga, Nasarawa Eggon, Wamba, and Kokona. It shares boundaries with the Federal Capital Territory to the west, Kaduna State to the north, Benue and Kogi States to the south, and Plateau and Taraba States to the east. Nasarawa State is predominantly rural, with agriculture being the primary source of livelihood for most residents. Key crops grown in the state include yam, maize, groundnut, millet, soybean, and beans.

3.3 Population of the Study

The population for this study consisted of members from 13 agricultural cooperative societies in Nasarawa State, with a total membership of 460 individuals (Nasarawa State Ministry of Agriculture, 2016). The cooperative societies serve as a crucial source of credit for smallholder farmers in the state, who rely on financial assistance to support various agricultural activities, including crop production, livestock farming, and agro-processing.

3.4 Sampling Technique and Sample Size Determination

The sample size was determined using Taro Yamane's formula for finite populations. With a total population of 460 cooperative members and a 5% margin of error, the sample size was calculated as follows. A 5% margin of error was selected to align with prior studies on agricultural credit in Nigeria (e.g., Kehinde & Kehinde, 2020; Rotimi et al., 2024), balancing precision and feasibility in rural data collection.

$$n = \frac{N}{1+N(e^2)}$$

$$n = \frac{460}{1+460(0.0025)} = 214$$

Vol. 10, No. 02; 2025

ISSN: 2456-8643

Thus, a total of 214 respondents were selected for the study. A multi-stage sampling technique was employed, where Nasarawa State was first purposively chosen due to its reliance on agriculture and cooperative societies for credit access. In the next stage, cooperative societies were randomly selected from the different local government areas, followed by a random selection of individual members from each cooperative.

3.5 Sources of Data

Primary data was collected for this study using a structured questionnaire designed to capture both quantitative and qualitative information. The questionnaire covered socioeconomic variables such as age, gender, marital status, education level, farming experience, farm size, household size, and the amount of credit accessed. In addition, it sought to assess the respondents' credit repayment behaviour.

3.6 Validity and Reliability of the Research Instrument

The questionnaire was subjected to face and content validity, where experts in the field reviewed the instrument to ensure that it accurately measured the research objectives, questions, and hypotheses. A pilot test was conducted to pre-test the questionnaire, and necessary adjustments were made based on feedback from the respondents to ensure the clarity and relevance of the questions. For reliability, the test-retest method was applied to ensure consistency in responses over time. The instrument's internal consistency was confirmed with a reliability coefficient of 73.4%. This aligns with social science benchmarks where Cronbach's $\alpha > 0.7$ indicates acceptable internal consistency (Tavakol & Dennick, 2011).

3.7 Data Analysis

The collected data were analyzed using both descriptive and inferential statistical methods. Descriptive statistics, including frequencies, percentages, and means, were employed to summarize the socioeconomic characteristics of the respondents and their credit repayment rates. Inferential analysis, specifically multiple regression, was conducted to examine the relationship between socioeconomic characteristics and credit repayment behaviour, identifying the key determinants that influence repayment performance.

The regression model was specified as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \epsilon$$

Where:

Y = Credit repayment rate (dependent variable)

β_0 = Intercept (constant term)

X_1 = Age of the borrower

X_2 = Sex (male = 1, otherwise = 0)

X_3 = Marital status (Married = 1, otherwise = 0)

Vol. 10, No. 02; 2025

ISSN: 2456-8643

X_4 = Household size (number of individuals in the household)

X_5 = Level of education (years of formal education)

X_6 = Farming experience (in years)

X_7 = Farm size (in hectares)

X_8 = Source of labor (hired = 1, 0 = otherwise)

X_8 = Membership in farmers' organizations (member = 1, non-member = 0)

ϵ = Error term

The coefficients $\beta_1, \beta_2, \beta_3,..., \beta_9$ represent the estimated effects of each variable $X_1, X_2, X_3,..., X_9$ on the credit repayment rate.

4. RESULTS

4.1 Socio-economic characteristics

Table 1 presents the results of the analysis of the borrowers' socio-economic characteristics. As evident in the table, age distribution of the cooperative members, predominantly in the middle-aged bracket of 41-50 years, suggests a conservative financial behaviour pattern, which is typical as individuals becomes older. According to Depping et al. (2021), older individuals often exhibit more conservative behaviours in financial decision-making, driven by a reduced appetite for risk to secure stable futures. This cautious approach is likely beneficial for consistent loan repayment, suggesting that interventions might focus on financial products and education tailored to this age group's specific risk profiles and financial management needs.

The low proportion of members with tertiary education (15.4%) poses significant challenges, particularly in terms of financial literacy, which is essential for effective loan management. McNaughtan et al. (2020) emphasize that higher educational levels correlate strongly with enhanced financial management capabilities.

Household size, averaging 3.5 persons, suggests a dual dynamic of available labour and financial dependency. While larger households may provide necessary labour for agricultural productivity, they can also indicate greater financial burden, which may complicate loan repayment schedules. Umamaheswari and Periasamy (2022) discuss how larger family sizes can influence repayment capacities, depending on the balance of earning members versus dependents. Programs that address these family dynamics through support services or financial planning could aid in stabilizing income and enhancing repayment behaviour.

Lastly, the predominance of small to medium-sized farms highlights the challenges and advantages associated with scale. While smaller farms might struggle with achieving economies of scale, their integration into cooperative structures can mitigate some financial risks through shared resources and collective bargaining power. This cooperative advantage could be harnessed further to provide members with better access to credit and financial management tools, fostering an environment where credit is both accessible and repayable.

Vol. 10, No. 02; 2025

ISSN: 2456-8643

Table 1: Socioeconomic Characteristics of Agricultural Cooperative Members in Nasarawa State

Socioeconomic Variables	Frequency (n=214)	Percentage (%)	Mean
Sex			
Male	136	63.6	
Female	78	36.4	
Age			
20-30 years	37	17.3	
31-40 years	60	28.0	
41-50 years	100	46.7	38.4
51-60 years	11	5.1	
61 years & above	6	2.8	
Marital Status			
Married	141	65.9	
Single	60	28.0	
Divorced	9	4.2	
Widowed	4	1.9	
Household Size			
1-2 persons	79	36.9	
3-4 persons	73	34.1	3.5
5-6 persons	40	18.7	
7 persons & above	22	10.3	
Level of Education			
Non-formal	64	29.9	
Primary	64	29.9	
Secondary	53	24.8	

Vol. 10, No. 02; 2025

ISSN: 2456-8643

Tertiary	33	15.4	
Years of Farming Experience			8.88
2-6 years	109	50.9	
7-11 years	66	30.8	
12-16 years	20	9.3	
17 years & above	19	8.9	
Farm Size			
1-3 hectares	91	42.5	
4-6 hectares	70	32.7	5.0
7-9 hectares	44	20.6	
Above 9 hectares	9	4.2	

Source: Field Survey, 2024

4.2 Credit obtained and Repayment Rate

Table 2 presents the distribution of the borrowing cooperatives by credit amount obtained and the repayment. As evident in the table, the majority (74.8%) of cooperative members received loans within the ₦100,000 to ₦500,000 range indicating that the farmers obtained credit on a small scale. A study by Lin et al. (2019) found that smaller loan sizes are common among smallholder farmers in rural areas due to the limited scope of their agricultural activities and the lower risks lenders are willing to take. The mean loan amount of ₦1,708,500.17, however, suggests that while most loans are small, a few larger loans skew the average, indicating some variability in the size and perhaps the nature of farming operations within the cooperative.

The repayment results reveal that a significant portion of members struggles with their financial obligations, with 50% of them repaying less than 20% of their loans. This substantial repayment challenge could be reflective of the seasonal nature of agriculture, where income is not consistent throughout the year. Bjorkegren and Grissen (2019) discuss how fluctuating agricultural yields and market prices can severely impact farmers' ability to meet scheduled loan repayments. The seasonal variance in income makes it difficult for farmers to maintain steady repayment progress.

The difficulties in repaying larger loan portions, where only 8.9% of the members repaid between 41%-60% of their loans, may be attributed to factors like market volatility and inadequate financial planning or literacy. The literature, including Kao, Lin, and Yu (2021), highlights how economic unpredictability and a lack of robust financial strategies can exacerbate repayment challenges. Moreover, the small percentage of members who managed to fully repay their loans points to broader systemic issues within the agricultural credit system, possibly including the terms of the loans and the financial support structures available to the farmers.

Vol. 10, No. 02; 2025

ISSN: 2456-8643

This pattern of repayment underscores the critical need for more effective credit management strategies and stronger institutional support systems. As suggested by Hashinaga (2023), providing financial education and planning tools can help farmers better manage their loans. Furthermore, adapting loan terms to fit the agricultural cycle and offering more substantial institutional support during off-peak seasons could improve repayment rates.

Table 2: Credit Obtained by Members and Repayment Rate

Amount of Credit Obtained	**Frequency (n=214)**	**Percentage (%)**	**Mean**
₦100,000 - ₦500,000	160	74.8	₦1,708,500.17
₦501,000 - ₦700,000	35	16.4	
₦701,000 - ₦1,000,000	8	3.7	
₦1,000,001 - ₦3,000,000	9	4.2	
₦3,000,001 - ₦5,000,000	2	0.9	
Above ₦5,000,000	0	0	
Repayment Rate			
<20%	107	50.0	
21%-40%	72	33.6	
41%-60%	19	8.9	
61%-80%	10	4.7	
81%-100%	6	2.8	

4.3 Effect of Socio-economic characteristics on loan repayment

The multiple regression analysis outlined in Table 3 provides insightful revelations on how socioeconomic variables impact credit repayment behaviour among agricultural cooperative members. The adjusted R^2 (0.677) indicates that 67.7% of variance in repayment behaviour is explained by the model, accounting for sample size and predictor count. This robust explanatory power underscores the relevance of socioeconomic factors in credit systems.

The results demonstrate a significant correlation between gender and loan repayment capabilities, where male members are more likely to meet their loan obligations. In Nasarawa, cultural norms restrict women's land ownership to 12% (National Bureau of Statistics, 2023), limiting their collateral options and bargaining power. This systemic disparity likely underpins men's superior access to loans and repayment capabilities. This finding aligns with research by Aliya (2019), which noted differences in credit access and repayment discipline between genders, often attributing better repayment discipline to women, contrary to the results of this

Vol. 10, No. 02; 2025

ISSN: 2456-8643

study. However, this discrepancy can be explained by potentially better access to resources and decision-making power for men within agricultural communities, as discussed in broader gender and development literature (Jaim, 2021).

The positive and significant impact of education on credit at 10% level, emphasizes the role of educational attainment in enhancing financial literacy, a finding supported by Lajuni, Wellfren, and Samsu (2022). Their studies corroborate that higher education equips individuals with the necessary skills to effectively manage their finances and negotiate complex loan terms, thereby improving their repayment capacities.

Farming experience emerges as a strong predictor of repayment capacity, a result that echoes findings by Kehinde and Kehinde (2020), who found that longer farming experience correlates with better financial stability and risk management in agricultural operations. Experienced farmers are likely more adept at navigating the cyclical nature of agricultural incomes and expenditures, thus positioning them better for meeting repayment schedules.

Similarly, the positive correlation between farm size and repayment ability suggests that larger operations, which typically have greater production and potentially higher revenues, are better positioned to manage loan repayments. This relationship is highlighted in studies by Sabasi et al. (2021), which note that larger farms often achieve economies of scale that contribute to financial solvency and stability, essential for fulfilling credit obligations.

Several socioeconomic factors—namely age, marital status, household size, and membership in farmers' organizations—do not significantly predict credit repayment behaviour, indicating that direct economic capacity and financial literacy are more critical determinants. While older age might be expected to enhance financial acumen, its effect appears muted compared to factors like education and farming experience, as individual resource access seems to outweigh mere demographic advantages (Björkegren & Grissen, 2019).

Similarly, despite assumptions that marital stability or larger household size might provide a financial safety net, these variables do not independently improve repayment outcomes, suggesting that actual financial management skills and asset ownership play a more decisive role (Nguyen et al., 2021). Moreover, even though participation in farmers' organizations could offer enhanced information sharing and collective support, its influence on repayment performance remains statistically insignificant, reinforcing the view that personal economic strategies are paramount.

Vol. 10, No. 02; 2025

ISSN: 2456-8643

Table 3: Multiple Regression Results on the Influence of Socioeconomic Characteristics on Credit Repayment

Socioeconomic Variables	Coefficients	Standard Error	t-value	p-value
Age	9.630	5.515	1.746	0.0823
Sex	3.627	1.692	2.144	0.0332**
Marital Status	0.343	0.900	0.381	0.7036
Household Size	0.511	1.099	0.465	0.6424
Level of Education	6.781	4.008	1.692	0.0922*
Farming Years	22.102	7.235	3.055	0.0026***
Farm Size	7.346	4.171	1.761	0.0798*
Source of Labour	0.470	1.054	0.446	0.6561
Membership of Farmers' Org.	1.045	1.574	0.664	0.5075
R Squared	0.691			
Adjusted R^2	0.677			
F-value	14.96***			

Source: Field Survey, 2024. *, ** and *** significant at 10%, 5% and 1% levels respectively.

5. CONCLUSION

This study examined the influence of socioeconomic characteristics on credit repayment among agricultural cooperative members in Nasarawa State, Nigeria. Based on the study findings, it is concluded that gender, education, farming experience, and farm size significantly impact repayment capacities. Specifically, male borrowers were found to more likely to fulfill their repayment obligations (contrary to a priori expectations from the literature), potentially due to better access to resources. Furthermore, a higher level of education correlates with improved financial literacy, enhancing borrowers' ability to manage loans effectively. Farming experience is identified as the strongest predictor of repayment success, indicating that seasoned farmers manage agricultural and financial risks more proficiently. Similarly, larger farms tend to have higher repayment success perhaps due to greater revenue generation

6. RECOMMENDATIONS

1. Launch mobile financial literacy workshops in partnership with local NGOs like Nasarawa Farmers' Alliance, focusing on budgeting for seasonal income fluctuations.
2. Develop gender-inclusive loan products requiring joint spousal ownership of collateral to mitigate patriarchal barriers.
3. Integrate farming experience metrics into credit assessments, offering graduated loan sizes aligned with farmers' operational scale.

Vol. 10, No. 02; 2025

ISSN: 2456-8643

REFERENCES

Absanto, G., & Aikaruwa, D. (2013). Credit rationing and loan repayment performance: The case study of Victoria savings and credit cooperative society. *Global Advanced Research Journal of Management and Business Studies*, *2*(6), 328–341.

Agada, S. G., Iheanacho, A. C., & Ogbanje, E. C. (2018). Causes and Measures for Controlling Loan Default among Agricultural Cooperatives in Bune State, Nigeria. *International Journal of Environment, Agriculture and Biotechnology*, *3*(5), 264449. https://doi.org/10.22161/IJEAB/3.5.12

Aliya, K. (2019). *Microcredit and Women's Empowerment in Kyenjojo District of Uganda* [MA]. International Institute of Social Studies.

Amanullah, Jing, W., Channa, S. A., & Magsi, H. (2022). Farm level impacts of credit constraints on agricultural investment and Income. *Pakistan Journal of Agricultural Sciences*, *56*(02), 511–521. https://doi.org/10.21162/PAKJAS/19.7872

Babalola, F. I., Mhlongo, N. Z., Obinyeluaku, M. I., Oladayo, G. O., & Daraojimba, C. (2023). Microfinance and Economic Empowerment in Nigeria: A Critical Review of Impact and Sustainability. *Finance & Accounting Research Journal*, *5*(12), 381–404. https://doi.org/10.51594/farj.v5i12.640

Berger, J. (2024). Social capital is associated with cooperation and indirect norm enforcement in the field: Behavioural evidence from Switzerland. *European Sociological Review*, *40*(3), 511–522. https://doi.org/10.1093/esr/jcad039

Bjorkegren, D., & Grissen, D. (2019). *Behavior Revealed in Mobile Phone Usage Predicts Credit Repayment*. World Bank, Washington, DC. https://doi.org/10.1596/1813-9450-9074

But, T. V., & Netudyhata, K. L. (2020). Analysis of the Financial Sustainability of Enterprises in Modern Conditions. *Efektyvna Ekonomika*, *3*, 1–8. https://doi.org/10.32702/2307-2105-2020.3.156

Cameron, A., Oak, M., & Shan, Y. (2021). Peer monitoring and Islamic microfinance. *Journal of Economic Behavior & Organization*, *184*, 337–358. https://doi.org/10.1016/j.jebo.2021.02.001

Datti, M. I., Said, R., Ismail, N. W., & Abd. Rahman, A. (2021). Assessment of major requirements for accessing credit among paddy farmers in Jigawa state, Nigeria. *Food Research*, *5*(2), 74–79. https://doi.org/10.26656/fr.2017.5(2).339

Depping, M. K., Best, R., & Freund, A. M. (2021). From gains to losses: Age-related differences in decisions under risk in a non-monetary gambling task. *British Journal of Developmental Psychology*, *39*(2), 312–329. https://doi.org/10.1111/bjdp.12362

Enwa, S., Gbigbi, T. M., Oyita, G. E., & Ikenga, V. U. (2024). Assessing the efficacy of cooperative societies in agricultural credit delivery: A comprehensive review in Nigeria. *Magna Scientia Advanced Research and Reviews*. https://doi.org/10.30574/msarr.2024.10.1.0001

Gehrig, S., Mesoudi, A., & Lamba, S. (2021). Banking on cooperation: An evolutionary analysis of microfinance loan repayment behaviour. *Evolutionary Human Sciences*, *3*, 1–23. https://doi.org/10.1017/ehs.2020.64

Grugulis, I. (2024). Human capital theory. In K. Hutchings, S. Michailova, & A. Wilkinson (Eds.), *A Guide to Key Theories for Human Resource Management Research* (pp. 93–99). Edward Elgar Publishing. https://doi.org/10.4337/9781035308767.ch10

Hashinaga, M. (2023). Financial education and financial behavior. In J. Xiao & S. Kumar (Eds.), *A Research Agenda for Consumer Financial Behavior* (pp. 33–46). Edward Elgar Publishing. https://doi.org/10.4337/9781803922652.00011

Jaim, J. (2021). Bank loans access for women business-owners in Bangladesh: Obstacles and dependence on husbands. *Journal of Small Business Management*, *59*(sup1), S16–S41. https://doi.org/10.1080/00472778.2020.1727233

Joseph, T., Obikaonu, P., Ariolu, C., Nwolisa, C., & Aderohunmu, A. (2021). SMEs Intervention Programmes in Nigeria: Evaluating Challenges Facing Implementation. *Applied Journal of Economics, Management and Social Sciences*, *2*(1), 16–25. https://doi.org/10.53790/ajmss.v2i1.10

Kao, L.-J., Lin, F., & Yu, C. Y. (2021). Bayesian Behavior Scoring Model. *Journal of Data Science*, *11*(3), 433–450. https://doi.org/10.6339/JDS.2013.11(3).1145

Kehinde, A. D., & Kehinde, M. A. (2020). The impact of credit access and cooperative membership on food security of rural households in south-western Nigeria. *Journal of Agribusiness and Rural Development*, *57*(3), 255–268. https://doi.org/10.17306/J.JARD.2020.01337

Kiran, K., & Mayya, S. (2024). Analyzing Determinants of Loan Repayment Performance at Grameen Koota: A Comprehensive Study in Bangalore District. *International Journal for Multidisciplinary Research*, *6*(4), 1–12. https://doi.org/10.36948/ijfmr.2024.v06i04.24400

Kumar, I. E., Hines, K. E., & Dickerson, J. P. (2022). Equalizing Credit Opportunity in Algorithms: Aligning Algorithmic Fairness Research with U.S. Fair Lending Regulation. *Proceedings of the 2022 AAAI/ACM Conference on AI, Ethics, and Society*, 357–368. https://doi.org/10.1145/3514094.3534154

Lajuni, N., Wellfren, A. C., & Samsu, S. H. (2022). Financial Literacy/Knowledge Through Financial Education: A Bibliometric Analysis. *Labuan Bulletin of International Business and Finance (LBIBF)*, *20*(2), 66–80. https://doi.org/10.51200/lbibf.v20i2.3570

Lin, L., Wang, W., Gan, C., & Nguyen, Q. T. T. (2019). Credit Constraints on Farm Household Welfare in Rural China: Evidence from Fujian Province. *Sustainability*, *11*(11), 1–19. https://doi.org/10.3390/su11113221

McNaughtan, J. L., Brower, M. T., & Overton, B. (2020). Student Choice and Social Mobility through Institutional Policy: An Examination of Loan Repayment Assistance Programs. *International Journal of Education Policy and Leadership*, *15*(16), 1–19. https://doi.org/10.22230/ijepl.2019v15n16a925

Mitsopoulou, E. (2019). *The young male hypothesis of risk-taking behavior* [PhD Thesis]. University of Southampton.

Msomi, T., & Olarewaju, O. (2022). Nexus of Loan Re-payment Plans, Interest on Loans and the Sustainability of Small and Medium Enterprises in South Africa. *African Journal of Inter/Multidisciplinary Studies*, *4*(1), 205–216. https://doi.org/10.51415/ajims.v4i1.976

Nguyen, A. D. M., Onnis, L., & Rossi, R. (2021). The macroeconomic effects of income and consumption tax changes. *American Economic Journal: Economic Policy*, 13(2), 439–466.

Njoku, M.-S. E. (2017). Analysis of factors affecting agribusiness cooperators' access to credit from formal sources in Abia State, Nigeria. *Agro-Science*, *15*(2), 23–28. https://doi.org/10.4314/as.v15i2.4

Nwachukwu, N. (2024). Loan Accessibility and Promotion of Entrepreneurial Capacity of Cooperative Societies in Federal College of Agriculture, Ebonyi State. *Deleted Journal*. https://doi.org/10.61955/zvlwfo

Nwagu, K. (2021). Impact of Digital Finance Technologies on Agricbusiness Development in Nigeria. *Revista Gestão Inovação e Tecnologias*, *11*(4), 1729–1750. https://doi.org/10.47059/revistageintec.v11i4.2232

Ojiako, I. A., Idowu, A., & Ogbukwa, C. (2014). Determinants of loan repayment behaviour of smallholder cooperative farmers in Yewa North Local Government area of Ogun State, Nigeria: An application of Tobit model. *Journal of Economics and Sustainable Development*, *5*(16), 144–153.

Oladejo, M. O. (2013). Stakeholders perception of cooperative societies as a micro-credit delivery channel in the Nigerian financial sector reform era. *International Review of Management and Business Research*, *2*(2), 457.

Oluwasanya, O. P., Ogunmuyiwa, M. S., Aladegoroye, O. R., Akerele, E. O., & Olabisi, M. I. (2020). *Loan Default among Cooperative Women Entrepreneur in Ifo Local Government Area of Ogun State, Nigeria*. *6*(2), 229–237. http://www.ijhumas.com/ojs/index.php/kiujoss/article/download/866/787

Onugu, C. U., Ademola, A. O., & Obasanya, S. O. (2024). Demographic Factors influencing Default in Rotating Savings and Credit Association in Yewa North Local Government Area of Ogun State, Nigeria. *UNIZIK Journal of Agricultural Economics and Extension*, *1*(1), 222–236.

Onugu, C., Obasanya, S., & Nwosu, C. (2024). Organizational Factors of Agricultural Cooperative Societies and their Influence on Credit Repayment of Members in Nasarawa State, Nigeria. *UNIZIK Journal of Agricultural Economics and Extension*, *1*(2), 432–443.

Qinlan, Z., & Izumida, Y. (2013). Determinants of repayment performance of group lending in China: Evidence from rural credit cooperatives' program in Guizhou province. *China Agricultural Economic Review*, *5*(3), 328–341. https://doi.org/10.1108/CAER-08-2012-0083

Roos, M. W. M., Reale, J., & Banning, F. (2021). *The Effects of Incentives, Social Norms, and Employees' Values on Work Performance?* RWI. https://doi.org/10.4419/96973063

Rotimi, F., Olubiyo, S., Agbonlahor, M., & Adeogun, S. (2024). Determinants of loan repayment among agricultural beneficiaries of public funded credit scheme in Ekiti State, Nigeria. *Journal of Contemporary African Studies*, *42*(1), 88–103. https://doi.org/10.1080/02589001.2024.2320763

Sabasi, D., Shumway, C. R., & Kompaniyets, L. (2021). Analysis of Credit Access, U.S. Agricultural Productivity, and Residual Returns to Resources. *Journal of Agricultural and Applied Economics*, *53*(3), 389–415. https://doi.org/10.1017/aae.2021.17

Schultz, T. W. (1970). The reckoning of education as human capital. In *Education, income, and human capital* (pp. 297–306). NBER.

Sherraden, M. S., & Ansong, D. (2016). Financial Literacy to Financial Capability: Building Financial Stability and Security. In C. Aprea, E. Wuttke, K. Breuer, N. K. Koh, P. Davies, B. Greimel-Fuhrmann, & J. S. Lopus (Eds.), *International Handbook of Financial Literacy* (pp. 83–96). Springer Singapore. https://doi.org/10.1007/978-981-10-0360-8_7

Siriringoringo, R., & Anugrahini, T. (2023). Social Capital in Rizki Berkah Cooperative Business Group in Semper Timur Subdistrict, North Jakarta. *International Journal of Social Health*, *2*(6), 330–339. https://doi.org/10.58860/ijsh.v2i6.58

Subchi, I., Jahar, A. S., & Prasetyowati, R. A. (2024). Is Social Capital Determinant in Developing Islamic Microfinance Institutions? *ETIKONOMI*, *23*(1), 233–248. https://doi.org/10.15408/etk.v23i1.31769

Vol. 10, No. 02; 2025

ISSN: 2456-8643

Tukura, M. (2020). Agricultural initiative of Nasarawa state government. *Plateau News Online*. Accessed on 10the March, 2020, from https://plateaunewsonline.wordpress.com/2020/08/20/agricultural-initiative-of-nasarawa-state-government/

Umamaheswari, C., & Periasamy, P. (2022). Socio–Economic Factors Influencing Default in Repayment of Loans at Primary Agricultural Co-Operative Credit Societies in Pudukkottai District. *HuSS: International Journal of Research in Humanities and Social Sciences*, *9*(1), 37–42. https://doi.org/10.15613/hijrh/2022/v9i1/213620

Zagornaya, T. O., Treshchevsky, Y. I., & Dolbnya, N. V. (2023). Institutional support for the development of the Donbas: A retrospective analysis performed upon the inclusion of the region Into the Russian Federation. *Proceedings of Voronezh State University. Series: Economics and Management*, *4*, 46–59.