UNIZIK Journal of Agricultural Economics and Extension (UJAEE) Vol. 2 No. 1 (2025): 35-41
A Journal of the Department of Agricultural Economics and Extension, Nnamdi Azikiwe University, Nigeria
ISSN: 3043-6540 (Print) and 3043-6559 (Electronic) / Available at: https://journals.unizik.edu.ng/ujaee

Effect of Credit Acquisition and Repayment on the Productivity of Smallholder Crop Farmers in Ardo-Kola LGA, Taraba State, Nigeria

Akintunde, M.O.[1]*, Daniel, N.G.[3], Zubairu, A.I.[1], Igbankwe, A.T.[1] and David, F.A.[1]

[1]*Faculty of Agriculture, Department of Agricultural Economics and Extension, Taraba State University, Jalingo, Taraba.*
[2]*National Directorate of Employment, Yobe State*
[3]*Federal University Wukari, Taraba State*

DOI: *https://www.doi.org/10.5281/zenodo.18011945*

KEYWORDS:
Acquisition, Credit, Production, Repayment

***CORRESPONDING AUTHOR:**
monisolaakintunde0@gmail.com

ABSTRACT

This study examined the effect of credit acquisition and repayment on the productivity of smallholder crop farmers in Ardo-Kola Local Government Area, Taraba State. The specific objectives were to assess farmers' accessibility to credit facilities, determine the extent of credit utilization, evaluate the effect of credit acquisition on crop productivity, and identify the challenges associated with credit repayment in the area. A combination of simple random sampling and snowball techniques was used to select respondents. Data were analyzed using descriptive statistics such as frequencies and percentages. Findings revealed that most of the respondents (71.3%) were male and within the economically active age bracket, while 57.4% possessed at least a Senior Secondary School Certificate. Credit accessibility was generally low, as farmers reported frequent denial of loan applications and stringent acquisition requirements by financial institutions. The study also showed that 59.6% of the respondents were unable to fully utilize the credit obtained due to procedural complexities and delays. Furthermore, credit acquisition did not lead to substantial improvement in crop productivity, indicating a weak linkage between loan access and farm output among the respondents. High interest rates, short repayment periods, and limited grace periods were identified as major challenges affecting credit repayment performance. The study concludes that inadequate access to credit and unfavorable repayment conditions significantly constrain the productivity of smallholder crop farmers in Ardo-Kola. Strengthened agricultural credit policies, reduced interest rates, and simplified loan procedures are recommended to enhance farmers' financial inclusion and productivity outcomes.

INTRODUCTION

The Nigerian agricultural sector has long been a key driver of the country's economic growth. Covering approximately 70.8 million hectares of arable land, it produces major export crops such as rice, maize, yam, cassava, beans, guinea corn, palm kernel, and millet. In the first quarter of 2021, agriculture contributed about 22.4% to Nigeria's overall GDP growth (Karmer, 2022). Agriculture is vital for Nigeria's economic development, providing employment opportunities for many youths and young adults, including both educated and uneducated individuals (Oluwafemi et al., 2024). The sector heavily depends on financial resources and credit, which are often limited. It is predominantly operated by small-scale farmers and semi-educated practitioners, mostly women and youth in specific regions. Without sufficient financial support, farming tends to remain at a subsistence level, restricting agricultural activities to basic survival rather than profitable enterprises. Nonetheless, successful economies recognize that agriculture

is crucial, not only for food security but also as a source of raw materials for manufacturing (Johnny *et al.,* 2021). According to Zeller and Sharma (2020) found that access to credit can help farmers overcome liquidity constraints and adopt modern farming techniques, thereby increasing productivity.

Despite importance of agriculture to Nigeria's economy, many smallholder farmers encounter persistent obstacles that limit their productivity and output. Access to adequate credit is a critical challenge, as it provides the necessary funds for purchasing inputs such as seeds, fertilizers, pesticides, and equipment. However, the process of obtaining credit and meeting repayment obligations remains complex and can adversely affect agricultural productivity (D'souza, 2020; Azubugwu & Osuafor, 2019). Smallholder farmers often lack sufficient capital, and access to credit can be transformative in expanding their farming activities. This study aims to analyze effects of credit acquisition and repayment on agricultural production in Ardo-Kola, Taraba State, Nigeria. The specific objectives are to describe socioeconomic characteristics of the farmers; assess the accessibility of credit facilities amongst smallholder farmers in the study area; assess the utilization of credit facilities amongst smallholder farmers in the study area; identify the effect of credit acquisition on the productivity of agricultural activities in the study area; and identify the challenges of credit repayment on the financial institutions and agricultural productivity of farmers in the study area.

MATERIALS AND METHODS

Study Area

Ardo Kola is a Local Government Area in Taraba State, Nigeria. Its headquarters are located in the town of Sunkani. The LGA covers a land area of 2,262 km² and had a population of 86,921 during the 2006 national census. Based on recent demographic projections, the population has grown to an estimated 150,400 in 2025. Ardo Kola is one of the sixteen Local Government Areas in Taraba State, and the people are predominantly farmers. Major crops cultivated include yam, maize, cassava, rice, and millet. The area is also enriched by the River Benue, which serves as a vital source of water supporting various agricultural activities.

Sampling Procedure and Sample Size

The study employed a multistage sampling technique to select the respondents. In the first stage, simple random sampling was used to select five wards from Ardo-Kola LGA. In the second stage, a snowball non-probability sampling technique was applied to specifically identify smallholder crop farmers who had accessed agricultural credit facilities within the selected wards. Through this approach, a total of 95 smallholder crop farmers who had obtained agricultural credit were successfully identified and included in the study.

Method of Data Collection

Data were collected from respondents through questionnaire which was administered to the identified farmers.

Analytical technique

Data collected via questionnaire were analyzed using descriptive statistics such as frequencies and percentages.

RESULTS AND DISCUSSIONS

Results

Socio-economic Characteristics of Respondents

The Socio-economic distribution is presented in Table1. The result revealed that most (71.3%) of the respondents were males significantly outnumber females (28.7%), indicating a gender imbalance among

respondents. This in line with finding of Ukwuaba *et al.* (2020) who reported that majority of the respondents were male. More so, 55.3% of the farmers were married. This indicates that married individuals are more using credit facility for farming than any other category. This agrees with Danji *et al.* (2024) who reported that 75% of his sample size who benefited from agricultural credit scheme were married. Also, the age distribution reveals that most (57.4%) of the respondents fall within the 31–50 years. This suggests that the respondents are predominantly middle-aged, and they still strong for agricultural production. This is consistent with finding of Vihi *et al.* (2024) who reported that majority (51.0%) of the respondents were between the age ranges of 41-50 years, Furthermore, the result revealed that all the respondents possessed one form of education or the other, indicating that the basic knowledge of education helped them to manage their resources. This in harmony with Samson et al. (2018) who found that some form of formal education is usually necessary for farmers to be able to communicate effectively with the bank officers

Table 1: Socio-economic Characteristics of respondents

Sex	**Frequency (N=94)**	**Percentage (%)**
Male	67	71.3
Female	27	28.7
Total	94	100
Marital Status		
Single	52	55.3
Married	34	36.2
Divorced	8	8.5
Total	94	100
Age		
10-30	34	36.2
31-50	54	57.4
51-above	6	6.4
Total	94	100
Qualification		
SSCE	49	52.1
NCE/OND	33	35.1
B.Sc/B.Ed/HND	10	10.6
M.ED/PhD	2	2.1
Total	94	100

Source: *Field survey, 2024*

Accessibility of Credit Facilities

Table 2 presents an analysis of the accessibility of credit facilities amongst respondents. The majority (72.3%) have applied for credit facilities from financial institutions, demonstrating significant engagement with credit systems. However, majority (67.0%) reported challenges, highlighting accessibility issues. A considerable proportion (55.5%) of the respondents have been denied credit due to lack of collateral, indicating that collateral requirements pose a major barrier. Most (48.9%) of the respondents stated that credit facility provided were not sufficient for their farming activities. This shows a lack of clarity or mixed experiences with credit adequacy. A majority (75.5%) recognized the importance of credit facilities for the success of their farming businesses, reinforcing the critical role of financial support in agricultural productivity. This aligns with study of Adesina and Zinnah, (1993) who showed that credit accessibility significantly impacts agricultural productivity and rural development.

Table 2: Accessibility of Agricultural Credit Facilities among Smallholder Crop Farmers

Statement	YES	NO	Not Sure	Percentage
Have you ever applied for a credit facility from a financial institution	68(72.3)	23 (24.5)	3 (3.2)	100%
Do you find it easy to access credit facilities for your farming needs?	31(33.0)	63 (67.0)	0 (0.0)	100%
Have you been denied a credit facility due to a lack of collateral	52(55.3)	37 (39.4)	5 (5.3)	100%
Are the credit facilities provided by financial institutions sufficient for your farming activities	21(22.3)	46(48.9)	27(28.7)	100%
Do you feel that credit facilities are crucial for the success of your farming business?	71(75.5)	21(22.3)	2(2.1)	100%

Source: *Field survey, 2024*

Utilization of Credit Facilities

The utilization of credit facilities is presented in Table 3. The results revealed that a majority (59.6%) of respondents have not utilized credit facilities adequately, indicating that significant barriers impede full use of credit, which negatively affects agricultural production. Furthermore, 75.6% of respondents reported difficulty navigating the application procedures, suggesting that procedural complexity discourages potential applicants. In addition, 64.8% of respondents disagreed that financial services were readily accessible in their areas, highlighting a scarcity of accessible financial support. Likewise, 61.7% of respondents indicated that high interest rates make it difficult to utilize credit facilities effectively, while 73.4% reported that the criteria for selecting eligible beneficiaries were perceived as unfair, reflecting systemic barriers that exclude many potential beneficiaries. These findings are consistent with recent studies, which note that stringent loan conditions, high interest rates, and limited financial outreach significantly constrain the ability of smallholder farmers to utilize formal credit systems (Oluwafemi & Adegboye, 2020; Chibuzor *et al.,* 2021; Ibrahim *et al.*, 2022).

Table 3: Utilization of Credit Facilities

Statement	Yes	No	Not Sure	Percentage
Have you ever successfully utilized a credit facility from a bank or financial institution?	33(35.1)	56(59.6)	5(5.3)	100%
Do you find the application process for credit facilities straightforward and easy to navigate?	18(19.1)	71(75.6)	5(5.3)	100%
Are there enough financial institutions in your area that provide credit facilities to smallholder farmers?	31(32.9)	61(64.8)	2(2.1)	100%
Have you faced difficulties in utilizing credit facilities due to high interest rates?	58(61.7)	35(37.2)	1(1.1)	100%
Do you believe that the eligibility criteria for credit facilities are fair and accessible to most people in your community?	25(26.5)	69(73.4)	0(0.0)	100%

Source: Field survey, 2024

Effect of Credit Acquisition on Agricultural Productivity

Table 4 highlights the impact of credit acquisition on agricultural productivity. The majority (65.9%) of respondents reported that credit acquisition had no significant influence on their farming practices. Similarly, 72.3% revealed that although access to credit enabled them to purchase better farming equipment or inputs, this did not translate into substantial improvements in productivity. Regarding yields, 76.6% of respondents indicated that credit facilities had not enhanced their crop production or livestock productivity, suggesting that available credit may not be effectively tailored to meet farmers' specific needs. In terms of farm expansion, 64.9% stated that credit had not influenced their decision to grow operations, and 56.4% felt that credit did not make their farms more competitive. Additionally, 46.8% reported no measurable improvement in overall productivity. Collectively, the data suggest that credit acquisition has had limited success in enhancing agricultural productivity and income generation for most farmers. These findings align with recent studies indicating that poorly targeted credit, inadequate loan amounts, and high interest rates often reduce the effectiveness of formal credit in improving smallholder agricultural productivity (Adebayo & Adeyemi, 2020; Nwosu *et al.,* 2021; Yusuf & Bala, 2022).

Table 4: Effect of Credit Acquisition on Agricultural Productivity

Statement	YES	NO	NOT SURE	Percentage
How has the acquisition of credit influenced your farming practices?	31(32.9)	62(65.9)	1 (1.1)	100%
Has access to credit enabled you to purchase better farming equipment or inputs?	26(27.7)	68(72.3)	1(1.1)	100%
Do you believe credit facilities have improved your crop yield or livestock productivity?	21(22.3)	72(76.6)	1(1.1)	100%
Has the availability of credit influenced your decision to expand your farming operations	33(35.2)	61(64.9)	0 (0.0)	100%
Do you think that credit acquisition has made your farm more competitive in the market?	36(38.3)	53(56.4)	5(5.3)	100%
In your experience, has credit improved your overall financial stability?	31(33.0)	44(46.8)	20(21.3)	100%

Source: Field survey, 2024

Challenges of Credit Repayment on Financial Institutions

Table 5 examined the challenges of credit repayment among respondents. A majority (61.7%) reported no difficulties in repaying their loans, indicating that repayment issues, while significant, do not affect all borrowers equally. However, most respondents (71.3%) indicated that the interest rates on credit terms were excessively burdensome, highlighting how high interest rates exacerbate repayment challenges. Additionally, 66.0% of respondents reported being denied credit due to a lack of collateral, reflecting a critical barrier to financial access and limiting their ability to expand farming operations. In terms of farm sustainability, 55.3% of respondents stated that credit repayment had not adversely affected their agricultural activities. Fairness in repayment terms remains contested, as 58.5% believed that the terms were unfair. Long-term financial sustainability is also a concern, with 46.8% reporting that repayment challenges have impacted their household finances.

These findings are consistent with recent studies, which show that high interest rates, stringent collateral requirements, and poorly structured repayment schedules can constrain the effectiveness of credit and lead to financial stress among smallholder farmers (Adebayo & Adeyemi, 2020; Nwosu *et al., 2021*; Yusuf & Bala, 2022). The results underscore the need for well-structured, accessible, and flexible credit schemes that are tailored to the capacities and realities of smallholder crop farmers in rural Nigeria.

Table 5: Challenges of Credit Repayment on Financial Institutions

Statement	YES	NO	NOT SURE	Percentage
Have you faced challenges in repaying the credit you acquired?	36(39.1)	58 (61.7)	0(0.0)	100%
Do you feel that the interest rates on the credit facilities are manageable?	23(24.5)	67(71.3)	4(4.3)	100%
Have you been denied a credit facility due to a lack of collateral	62(66.0)	30(31.9)	2(2.1)	100%
Has credit repayment affected your ability to sustain your farming operations	32(34.0)	52(55.3)	10(10.6)	100%
Do you believe the repayment terms of the credit facilities are fair?	26((27.6)	55(58.5)	13(13.)	100%
Do you think that the challenges in credit repayment have affected your long-term financial sustainability	44(4.8)	49(52.1)	1(1.1)	100%

Source: *Field survey, 2024*

CONCLUSION

The study concludes that credit acquisition and repayment have a significant influence on the productivity of smallholder crop farmers in Ardo-Kola LGA, Taraba State, Nigeria. Although access to credit has the potential to enhance farming practices, improve input acquisition, and support farm expansion, several barriers limit its effectiveness. Farmers face challenges such as high interest rates, stringent collateral requirements, and limited outreach of financial institutions, which reduce the accessibility and utilization of credit facilities. Consequently, most smallholder crop farmers are unable to translate available credit into meaningful improvements in crop yields, farm efficiency, or acquisition of better farming equipment. These findings underscore the need for well-structured, accessible, and farmer-centered credit schemes to strengthen agricultural productivity and support sustainable farming in the study area.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are proposed to enhance the effectiveness of credit acquisition and repayment for smallholder crop farmers in Ardo-Kola LGA:

i. Financial institutions should design loan products tailored to the specific needs of smallholder crop farmers, with reduced collateral requirements and simplified application procedures. Expanding the presence of financial institutions in rural areas and establishing community-based lending platforms can improve accessibility. Policymakers should also encourage cooperative or group lending models to help farmers overcome individual collateral limitations.

ii. Credit products should be structured around farming seasons, with flexible repayment schedules that coincide with harvest periods. Interest subsidies or government-backed credit guarantees can reduce borrowing costs, motivating more farmers to invest in improved inputs and practices. Agricultural extension services should be strengthened to provide technical support for farmers utilizing credit, ensuring that funds are effectively translated into increased productivity.

iii. Financial institutions should introduce more flexible repayment schedules and offer lower interest rates where feasible. Loan restructuring options should be available for farmers facing financial difficulties. Strengthening farmers' associations and cooperative groups can foster peer accountability and support timely repayment while promoting financial literacy among smallholder crop farmers.

REFERENCES

Adebayo, O., and Adeyemi, T. (2020). Effect of agricultural credit on smallholder farm productivity in Southwest Nigeria. Journal of Rural Economics, 16(2), 34–48.

Adesina, A. A., and Zinnah, M. M. (1993). Technology characteristics, farmers' perceptions, and adoption decisions: A Tobit model application in Sierra Leone. Agricultural Economics, 9(4), 297–311.

Adewale, A. T., Lawal, O. A., Aberu, F., and Toriola, A. K. (2022). Effect of credit to farmers and agricultural productivity in Nigeria. East Asian Journal of Multidisciplinary Research, 1(3), 377–388.

Azubugwu, N.M. & Osuafor, O.O. (2021). Effect of access to commercial agriculture credit scheme (CACS) on the agricultural output of beneficiaries and non-beneficiaries in Anambra State, Nigeria. *International Journal of Agriculture, Environment and Bioresearch, 4*(1), 171-180.

Chibuzor, E., Nwosu, J., and Okafor, P. (2021). Access and utilization of agricultural credit by smallholder farmers in Southeast Nigeria. *African Journal of Agricultural Finance, 12*(1), 23-35.

Danji, M. B., Zubairu, A. I., Hassan, C. K., and Garba, E. J. (2024). Evaluation of agricultural credit utilization among rice farmers in ADP Zone I of Taraba State, Nigeria. UNIZIK Journal of Agricultural Economics and Extension, 1(1), 65–73.

D'souza, R. (2020). Improving access to agricultural credit: New perspectives. Occasional Paper No. 230.

Ibrahim, H., Musa, A., and Bello, M. (2022). Barriers to credit access and agricultural productivity among rural farmers in Northern Nigeria. Nigerian Journal of Rural Development, 18(2), 77–91.

Johnny, B., Odinwa, A. B., and Ekeogu, C. O. (2021). Appraisal of the sources and uses of agricultural credits for increased food productivity by farmers in Delta State, Nigeria. Journal of Experimental Agricultural International, 43(12), 8–19.

Karmer, L. (2022). Agriculture in Nigeria: Statistics and facts.

Nwosu, P., Chukwu, G., and Okeke, J. (2021). Access to agricultural credit and its impact on farm productivity: Evidence from Southeast Nigeria. African Journal of Agricultural Finance, 14(1), 59–71.

Oluwafemi, A., and Adegboye, F. (2020). Determinants of credit utilization among smallholder farmers in Nigeria: Evidence from Ogun State. Journal of Agricultural Economics and Development, 9(3), 45–58.

Samson, A., and Obademi, O. (2018). The determinants and impact of access to agricultural credit on productivity by farmers in Nigeria: Evidence from Oyo State. Advances in Social Sciences Research Journal, 5(3), 252–265.

Ukwuaba, I. C., Owutuamor, Z. B., and Ogbu, C. C. (2020). Assessment of agricultural credit sources and accessibility in Nigeria. RAAE, 23(2), 03–11. https://doi.org/10.15414/raae.2020.23.02.03-11

Vihi, S. K., Tanko, P. K., Selzing, P. M., Jesse, B., and Ahmad, I. I. (2024). Analysis of poultry farmers' utilization of agricultural credit in Jos South Local Government Area of Plateau State, Nigeria. International Journal on Food, Agriculture and Natural Resources, 5(2), 54–62.

World Bank Group. (2014). The World Bank Group A to Z 2015. World Bank Publications.

Yusuf, M., and Bala, S. (2022). Challenges and impact of credit utilization on smallholder farmers in Northern Nigeria. Nigerian Journal of Agricultural Development, 19(1), 88–101.

Zeller, M., and Sharma, M. (2020). Many borrow, more save, and all insure: Implications for food and micro-finance policy. Food Policy, 25(2), 143–167.