UNIZIK Journal of Agricultural Economics and Extension (UJAEE) Vol. 1 No. 1 (2024): 65-73
A Journal of the Department of Agricultural Economics and Extension, Nnamdi Azikiwe University, Nigeria
Available at: https://journals.unizik.edu.ng/ujaee

Evaluation of Agricultural Credit Utilization Among Rice Farmers in ADP Zone I of Taraba State, Nigeria

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KEYWORDS:
Credit, Evaluation, Utilization, and Rice farmers

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ABSTRACT

The study evaluates the utilization of agricultural credit among rice farmers in ADP Zone 1 of Taraba State, Nigeria. The specific objectives of the study were to describe the socio-economic characteristics of rice farmers, identify the purpose of credit utilization among the rice farmers, and to identify the constraints experienced by respondents in rice production and credit acquisition and utilization in the study area. Multi-stage and random sampling techniques were employed in selecting respondents and the study area. The primary data used for the study were collected from 84 randomly selected rice farmers through the use of structured questionnaire. Data were analyzed using descriptive statistics such as percentages, frequency and mean. The result of the findings revealed that majority (83.75%) of the respondents were male, the mean age of the respondents were 45 years old, 75% were married, most (70%) had acquired one form of formal education and another, 50% of them had household size of 1-5 people. 53.8% of the respondents belongs to cooperative organization,50% were small scale rice farmers who produces on 1-5ha, 93.8% do not have access to extension services in the study area. The study further indicate that 43.8% of the respondents strongly agreed that they use credit to improve their crop productivity, majority (65.0%) identified that high interest rate is the severe constraint in accessing credit facility in the study area. The study recommended that Government and Non-governmental organization should go into the establishment of community and agricultural banks in the rural areas with simple procedures to securing loans facilities; and also help in reducing the high interest rates of lending institutions. Adequate Extension personnel be recruited, trained and be posted to the rural communities by the State government for dissemination of innovations, supervision and recouping of government agricultural loans.

INTRODUCTION

The agricultural sector relies heavily on money and credit, which are often insufficient. This sector is mainly operated by small-scale and semi-educated farmers, predominantly women and youth in certain areas. Without adequate financial resources, farming remains at a subsistence level, limiting agriculture in developing nations to basic survival activities rather than a profitable business. However, successful economies recognize the importance of agriculture, as it is vital for food production and provides raw materials for manufacturing (Johnny, Odinwa & Ekeogu, 2021). Agriculture is crucial for both economic and technological advancement in developed countries, receiving strong support from both the government and citizens. This support includes effective policies, regulations, financial incentives, conducive environments, and proper implementation to ensure continuous food production and sustainability (Odinwa *et al.*, 2016).

About three-quarter of the world's poor live in rural areas that are majorly involved in agricultural activities (World Bank, 2014). Furthermore, the agricultural products from these rural areas account for majority of the agricultural products in terms of crops and animal produce consumed in the cities across the world. To be able to continue with the production of agricultural products to match up with the world's increasing population, which is put at an annual growth rate of 1.7% (World Bank, 2016), it is inherent that these smallholder farmers move from the traditional method of farming to a more developed and improved technological way of farming (Ellinger & Penson, 2014). Credit is any form of deferred payment (Finlay, 2021). Agricultural credit or lending can be defined as giving out of cash and kind) to farmers for the purpose of farming (Duy, 2015). There are two types of credit- Consumption and Production credit. Consumption credit is granted for the purpose of acquiring consumable goods and services whiles Production credit is advanced for acquisition of factors of production. This could be in the form of cash credit, inventory or input credit. Shah *et al*. (2018) observed that credit plays a crucial role in economic development in general and agricultural development. So, credit appears as a solution to the weakness of rural savings by allowing producers to cover the expenses related to production (Shah *et al*., 2018).

Provision of credit encourages farmers to use modern technologies and procure inputs for farm use, thereby increasing their level of productivity and incomes. Credit can be used to invest in a household's future prosperity by purchasing assets such as plant machinery and inputs such as fertilizer and bullock ploughs. Helps improve the standard of living of the poor through increasing food production, raising incomes and therefore permitting increased saving. Access to credit also enables farmers acquire lands, inputs, both skilled and unskilled labor and also access good markets for their produce which would ultimately result in an improved standard of living (Shah *et al*. 2018).

The rice industry in Nigeria is one of the most important in the agricultural sectors and it is one of the food crops which have assumed greater significance as a major staple food that is widely consumed in Nigeria (Uhuegbulem *et al*. 2020). Rice is cultivated approximately on 3,700,000 ha of land in Nigeria and this covers 10.6% of the 35,000,000 ha of land under cultivation out of a total arable land area of 70,000,000 ha Monitoring African Food and Agricultural Policies (MAFAP).

Presently, Nigerian banks give an average of 2 percent of their total loan portfolio to the agricultural sector despite the fact that the sector employs over 50 percent of the total labour force and contributes about 42 percent of the gross domestic product of the country (Akinbode, 2020). According to Adebayo and Adeola (2018), the smaller community-based banks otherwise called "Microfinance Banks" are however closer to the grassroots. They are usually owned by groups of individuals and development/trade associations in the community. These banks are expected to be of more importance to rural and less educated farmers. Awotide *et al.* (2015), Linh *et al.* (2019), and Okoruwa *et al.* (2020) suggest that rural and smallholder farmers in developing countries, such as Nigeria, struggle with limited capital and poor access to financing. This lack of adequate credit has exacerbated the problem of low production efficiency among these farmers. Insufficient credit supply significantly hampers the effectiveness of other production factors, negatively impacting farmers' output and efficiency. Even when farmers do gain access to credit, production efficiency remains low, particularly when there is a significant disparity between the amount of credit requested and the amount actually received (Ukwuaba *et al.*, 2021).Given the advantages of credit or financing in agriculture and other sectors, it is crucial to study and assess how farmers utilize agricultural credit.

Many research works have been carried out on access to agricultural credit (Muhammad *et al*., 2013; Johnny *et al.*, 2021); some tried to compare the effort of interest rate on access (Ali *et al.*, 2017); some focused on access by specific farmers (Bashir *et al.*, 2010); some worked on credit utilization (Isitor *et al.*, 2014; Danso-Abbeam *et al.*, 2016; Bulus *et al.*, 2021), etc. These and numerous other studies demonstrate the crucial role of credit in agriculture. However, there has been little to no research focused specifically on crop farmers, particularly in Agricultural Zone I of Taraba State, Nigeria, where farming is the primary occupation. Thus, this study was designed

to analyze the socio-economic characteristics of rice farmers, identify the purpose of credit utilization among the rice farmers, and to identify the constraints experienced by respondents in rice production and credit acquisition and utilization in the study.

METHODOLOGY

The study was conducted in Taraba state, Nigeria. It is situated in the North Eastern part of Nigeria. Taraba state occupies 54,473 square kilometers with a population of 2,300,736 people (NPC, 2006). The national population commission has projected an annual population growth rate of 3.5% which brought the population figure to two hundred and eleven million, four hundred thousand seven hundred and eight peoples, (211,400,708) as at 2021. The state has boundary with Bauchi state to the North, Gombe State to the North East, Adamawa state to the east, plateau state to the North West, Nasarawa and Benue to the west and the Republic of Cameroun to the South east (Taraba Agricultural Development Project, 2014).

Taraba state has a tropical climate marked by the dry and rainy seasons. The rainy season starts in April and ends in October, while the dry season starts in November and ends in March. The mean annual rainfall ranges from 800mm in the North to 1800mm in the southern part. The mean minimum daily temperature recorded is14.8^{o}C and the mean maximum daily temperature recorded is 34.4^{o}C (TADP, 2014).

The vegetation of Taraba State is the Guinea Savannah type with the state being a predominantly agrarian and some of the major crops produced are Cassava, Yam, Maize, Rice, Soybeans, Oil palm, Mangoes, Citrus, Banana, dry season production of Maize, Rice Sugarcane, and vegetables. Other economic activities carried out in the state include Livestock rearing, fishing Trading and Tailoring. The ethnic groups include: Jukuns, Mambilas, Mumuyes, Kutebs, Ichen, Wurkun, Chamba, Fulani, Jenjo and the Tiv among others (Taraba dairy, 2014). ADP Zone I comprises of the following are Lau, Karim-Lamido, Yorro Zing, Ardo-Kola Jalingo.

Primary data were used in the study. The primary data were collected with the help of a structured questionnaire. Multi-stage sampling procedures were employed in the selection of the study area and respondents for the study. In the first stage, three LGAs (Zing, Karim-lamido & Jalingo) were randomly selected. In the second stage, two wards were purposively selected from each of the three (3) LGAs. Since the three (3) LGAs are relatively similar in the distribution of the identified farmers, stage three (3) 14 farmers were randomly selected from each of the two words selected. A total of 84 farmers form the sample size for the study. The data that was collected for this study were analyzed using descriptive statistical instrument such as percentages, frequency and mean for all three objectives.

RESULTS AND DISCUSSIONS

Socioeconomic Characteristics of the Respondents

Table 1 show the distribution of respondents based on socio-economic characteristics. The result on age distribution reveals that about 5.0% of the respondents were between 21 – 30 years and 35.0% were between the age brackets of 31 – 40 years, 23.8% were 41 – 50 years while 31.3% 51 - 60 years of age with mean age of 45. This result implies that greater proportion (35.0%) of rice farmers in the study area are young and have adequately energy for farm labor. This is in line with the study of Ahmed *et al.* (2023) and Madugu (2017) who similarly reported a mean age of 45 years among rice farmers. The result further indicates that majority (83.8%) of the respondents were male farmers while 16.3% were female. This unarguably showed that rice farming is predominantly carried out by male farmers. This result is similar to Adenegan (2016); Agunlloye *et al.* (2017) and Danjuma *et al.* (2017) who reported that male farmers formed the majority of smallholder rice farmers in their respective study areas.

The result on marital status revealed that 15% of the respondents were single, 75% forming the majority were married farmers, 6.25% farmers were separated and 3.75% of the farmers were divorced. This by implication showed that smallholder rice farmers in the study area were mostly married individuals who have families to cater for and also sees farming as livelihood. In line with this, Olaolu *et al.*, (2013) and Osondu *et al.* (2015) reported that rice farming is dominated by married farmers.

The result on educational status revealed that 31.3% had acquired no form of formal education, 17.5% had acquired primary education, and 38.8% had attained secondary education while 12.5% had acquired tertiary education. This clearly implies that majority of the respondents had attained some level of education and thus could access and use credit if provided. This is similar to Uhuegbulem *et al.* (2020) who all reported that rice farmers in Abakaliki Local Government Area of Ebonyi State, Nigeria have attained post-secondary education.

The result revealed that 50.0% were from a household of 1-5 individuals, 46.3% were from a household of 6 – 10 individuals, and 3.8% were from a household of more than 11 people. With a mean household size of 5 and, this result is a clear indication that majority of the respondents are from a larger households and larger households supplies the farmer with more available labour for farm activities (Hassan, 2017). This result is similar to the findings of Oni *et al.* (2024) who reported in their finding that majority of the rice farmers' fall within 31-50 years of age bracket with household size of 5-8 persons.

The distribution of respondents based on farm size (ha). The result indicated that 25.6% had a farm size of <1 ha, 41.1% had a farm size of 2 – 5 ha while 33.3% had a farm size of more than 6ha. This implies that majority of rice farmers in the study area were small holder rice farmers. According to Bashir *et al.* (2018), smallholder rice farmers cultivate 0.10 – 5.99 hectares. This is similar to result of Simtowe *et al.* (2019) who reported that rice farmers in the study area were mostly smallholder farmers.

The distribution of respondents based on their years of faming experience. The result revealed that 51.0% had 1-5 years of farming experience, 43.8% had 6-10 years of farming experience while 41.3% had 11 – 15 years of farming experiences. With a mean of 9 years of farming experience among rice farmers, this is a clear indication that most of the rice farmers have gained some fair level of farming experience and could have the ability to rightly use credit to boost their rice productivity. This result is similar to the findings of Luka *et al.* (2024) who stated in their finding that majority (55%) had farming experience of 6-10 years.

Farmers that belong to a cooperative society are likely to adopt innovation easily than those not in any cooperative society. Majority (53.8%) of the respondents belongs to cooperative organization while 46.3% do not belong to cooperative. This study showed that few of the rice farmers do not belong to cooperative and as such could miss out frequently from obtaining credit. This is similar to the findings of Reuben (2020) who reported that majority of credit users belong to cooperative society in their respective destinations.

The result revealed that 6.3% had access to extension service in the last production season while majority, 93.8% had no access to extension services in the past farming season. This is a clear indication that extension services are insufficient and farmers could only access limited information on credit availability and their sources. This is similar to reports of Rasheed (2014), who found that extension services are scarce to the farmers. The result revealed that 45.0% acquired their land by inheritance, 25.0% acquired their lands by purchasing, while 30.0% hired their land. This finding showed that some rice farmers use credit to hire farmland, and could be posed that credit can be used in purchasing or hiring farm lands for rice production in the study area. this is similar to the result of Abay *et al.* (2021) who reported that small holder farmers in Nigeria uses credit to acquire or hire farmlands unlike others who have inherited a piece from their family.

Table 1. Socio economic Characteristics of the Respondents

Variable	Frequency	Percentages (%)	Mean
Age			
21-30	4	5.0	
31-40	18	22.5	
41-50	29	36.25	
51-60	25	31.25	
61 and above		5.0	45
Sex			
Male	67	83.75	
Female	13	16.25	
Marital status			
Single	12	15	
Married	60	75	
Separated	5	6.25	
Divorced	3	3.75	
Educational level			
No formal education	24	30	
Primary	14	17.5	
Secondary	32	40	
Tertiary	10	12.5	
Household size			
1-5	40	50	
6-10	37	46.25	
11 and above	3	3.75	5
Farming experience			
1-5			
6-10			
11 and above			9
Cooperative society			
Yes	43	53.75	
No	37	46.25	
Access to extension service			
Yes	5	6.25	
No	75	93.75	
Method of land acquisition			
Inherited	36	45	
Purchased	20	25	
Hired	24	30	

Source: Field survey, 2021.

Distribution of Respondent Based on Purpose of Credit

Table 2 showed the distribution of respondents based on purpose of acquiring credit. The result indicated that 31% of the respondents agreed that they needs credit to provide farm inputs (seeds, fertilizers, pesticides/herbicides, as well as farm tools), 32% agreed that they uses credit for provision of farm labor, 40% strongly agreed that they uses credit to acquire farm security while 43.8% strongly agreed also that they uses credit to improve crop productivity. This is similar to the reports of Shah *et al*. (2018), Adebayo and Adeola (2018) and Balana *et al.* (2020) who opined that smallholder farmers use credit to acquire various farm inputs to boost their productivity level.

Table 2. Distribution of respondent based on purpose of credit

Purposes	SA	A	SD	D
Provision of farm inputs	4(5.0)	25(31.1)	19(23.8)	18(25.0)
Provision of labour	10(12.5)	32(38.8)	14(17.5)	24(31.3)
Farm security	40(50.0)	32(38.8)	4(5.0)	4(5.0)
Adoption of rice production technology	35(43.8)	33(41.3)	6(5.0)	6(5.0)

Source: Field survey, 2021.

Respondents' Constraints in Accessing Credit

Table 3 shows the constraints experienced in accessing credit. The result revealed that 65.0% identified that high interest rate is a severe major constraints in accessing credit, subsequently followed by lack of guarantor (55.0%), lack of collateral (38%), too young (56%) was observed a constraints and gender discriminations (53.8%) were the major constraints faced by credit users. The study further revealed that lack of insurance (56.25%); inadequate infrastructure (53.75%), and market risk (47.5%). This result showed the various constraints that limits respondent's access to credit facilities. This is similar to the result of Akinbode (2013) who reported that majority of farmers who were constrained stated that lack of acceptable collateral and high interest rate charged by banks and other lenders was a major constraint that hinders the respondents to acquire credit. Similarly, Uhuegbulem *et al.* (2020) also had a similar view that lack of collateral was the major factor constraining farmer's access to credit in the area.

Table 3 Distribution of Respondents Based on Constraints in Accessing Credit

Constraints	VS	S	NS
High interest rate	25(31.1)	52(65.0)	3(3.8)
Lack of guarantor	31(38.8)	44(55.0)	5(6.3)
Lack of collateral	44(55.0)	32(38.8)	4(5.0)
Gender (because I'm female)	43(53.8)	24(31.3)	10(12.5)
Age (too young)	10(12.5)	14(17.5)	56(70.0)
Lack of insurance	22(27.5)	45(56.25)	13(16.25)
Inadequate infrastructure	43(53.75)	26(32.5)	11(13.75)
Market risk	15(18.75)	38(47.5)	27(33.75)

Source: Field survey, 2021.

Multiple responses

CONCLUSION AND RECOMMENDATIONS

From the findings, farmers in Taraba State Agricultural Zone I are in their youthful age with majority having basic education required to take advantage of available economic interventions. As such, they were aware of the important sources of agricultural credits and have been accessing them for agricultural purposes, though, not as much as they needed them because of collateral problem in the area. But it is unfortunate that much proportion of the accessed credits are much times diverted to nonagricultural uses due to little or no monitoring of the uses of these credits by the credit providers.

Based on the findings, the study therefore recommended that Government and Non-governmental organization should go into the establishment of community and agricultural banks in the rural areas with simple procedures to securing loans facilities; and also help in reducing the high interest rates of lending institutions. Adequate Extension personnel be recruited, trained and be posted to the rural communities by the State government for dissemination of innovations, supervision and recouping of government agricultural loans. Also, the farmers should form cooperative organizations to help themselves in term of credit and inputs acquisition.

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