

## The Impact of Agricultural Credit Guarantee Scheme Fund (ACGSF) on Rice Production in Kura LGA, Kano State-Nigeria

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### Abstract

*Agricultural financing plays a vital role in enhancing farm productivity, allowing farmers to allocate funds for necessary inputs like fertilizers, better seeds, chemicals, and machinery. Nevertheless, many smallholder farmers face considerable obstacles in obtaining formal credit because of issues like illiteracy, brief repayment timelines, and strict lending requirements. This research investigates how the Agricultural Credit Guarantee Scheme Fund (ACGSF) influences rice production in Kura Local Government Area, Nigeria. By employing both descriptive and inferential statistical methods, particularly Ordinary Least Squares (OLS) regression, the study reveals that ACGSF positively impacts rice output significantly. Key factors such as farm size, fertilizer use, labor input, and seed quality exhibit strong statistical significance in influencing rice production post-ACGSF intervention. However, credit accessibility remains a challenge, as many farmers struggle with bureaucratic loan application processes, collateral requirements, and financial literacy barriers. The study highlights that while ACGSF has contributed to increased agricultural output; its full potential is hindered by systemic constraints. To enhance the effectiveness of the scheme, policy measures such as financial literacy programs, flexible repayment structures, and improved risk mitigation strategies (e.g., crop insurance) should be implemented. Strengthening farmer-lender relationships and expanding institutional credit access will further ensure the sustainability of agricultural financing and overall sectoral growth.*

**Keywords:** Agricultural Credit, ACGSF, Rice Production, Farm Productivity, and Credit Constraints.

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### Introduction

At independence in 1960, Nigeria's economy was primarily agrarian, with agriculture accounting for 63.8% of GDP. However, over time, the sector's output share has decreased. In 1970, agriculture's share of the GDP was 41.2%; by 1980, that percentage had fallen to 20.6%. It had dropped to 27% in 2000, despite having increased to 37% in 1990. Agriculture's GDP contribution decreased to 23.8% in 2010, 20.2% in 2014, and 21.42% in 2018, according to further data based on the rebased GDP (Central Bank of Nigeria, 2019). Oil's discovery was the main factor that caused agricultural output to drop. The nation has transitioned from producing enough food on its

own to importing food. Nigeria imported food and live animals for N1.8 billion in 1981, but by 2018, that amount had skyrocketed to N1.4 trillion (Central Bank of Nigeria, 2019).

Rural loan accessibility has the potential to enhance income distribution within a country (Bahinipatim, 2020). Micro-credit has significantly broadened financial opportunities for millions of smallholder farmers who were previously trapped in exploitative lending systems dominated by informal money lenders (Kiros & Meshesha, 2022). With access to financial support, smallholder farmers can invest in improved seeds, fertilizers, modern equipment, and other essential inputs to enhance crop yields (Masood & Keshav, 2021). As noted by Assogba et al. (2017), farmers can also allocate funds towards purchasing storage facilities, agricultural supplies, farm machinery, advanced technologies, or irrigation systems. Access to finance enhances not only agricultural output and income but also positively impacts social welfare, especially in sectors like health and education (Abubakar, 2019; Alfa et al., 2022). Nonetheless, the growth of micro-credit has also amplified the influence of exploitative financial capitalism in rural areas (Alierio & Yusuf, 2017).

The microcredit model is often incompatible with peasant agriculture due to its long production cycles, seasonal uncertainties, environmental dependence, and high volatility. This system usually functions by providing loans directly to individuals at their homes, requiring fixed weekly repayments, and charging higher interest rates compared to conventional banks, which accounts for increased transaction costs and smaller loan amounts. Additionally, it enforces strict repayment policies and aggressively seeks to expand its borrower base. For many low-income households engaged in small-scale enterprises, credit remains a crucial yet missing component in their efforts to sustain a livelihood. While agricultural production heavily depends on financial resources, farmers face significant barriers to accessing credit due to bureaucratic hurdles, complex application procedures, and restrictive policies set by formal lending institutions (Adeyongo et al., 2022). Expanding access to micro-credit is one potential strategy for alleviating poverty and fostering rural economic growth.

To address the disparity between national demand and supply for rice, imports from other countries have been utilized to enhance local production. Between 1981 and 2016, rice imports increased from 600,000 tonnes to more than 1 million tonnes, with Nigeria becoming the largest rice importer globally in 2011, importing around 3.4 million tonnes (Chandio et al., 2020; Alam et al., 2020). One of the most effective ways to reduce reliance on imports and meet domestic demand is to enhance local production through productivity-boosting technologies, such as the adoption of improved rice varieties (Egboduku et al., 2021; Lai-Solarin et al., 2021). Enhancing domestic rice production through advanced farming technologies has remained a key priority in both scientific research and policy initiatives in Nigeria. Notably, Nigeria holds the title of the largest rice (paddy) producer in Africa, achieving an average yearly production of 8 million metric tons. In 2019, Nigeria was identified as the 14th largest rice producer worldwide, with China at the forefront of global production. During that same year, Africa's total rice production reached 14.6 million metric tons, where Nigeria contributed roughly 55% and Egypt provided about 30% (Samuel, 2020; Anas et al., 2022).

Agricultural financing is critical to agricultural development and, more broadly, economic prosperity in Nigeria. Unfortunately, Nigeria's agricultural growth is hampered by a lack of information and access to suitable finance facilities for the majority of small-scale farmers. Efforts by succeeding administrations to address the issue have been mostly fruitless. The country's commercial banks view agriculture lending as a high-risk industry. Agriculture in Nigeria has suffered from a lack of funding and carelessness. Other linked issues were Nigerian farmers' failure to get and secure appropriate loans or cash; harsh or rigorous credit terms imposed by commercial banks; and unsatisfactory collateral security provided by financial institutions and commercial banks. By 2011 agriculture contributed 40% of GDP, but receives only 1% of total commercial bank loans. This is much lower than in other developing nations, such as Kenya and Brazil, where rates are reported to be 6% and 18%, respectively (CBN, 2011).

The Nigerian Federal Government established the Agricultural Credit Guarantee Scheme Fund (ACGSF) in 1977, with operations commencing in April 1978, to promote and maintain agricultural lending by formal financial institutions (Eyo, Nwaogu & Agenson, 2020). Under this initiative, the Central Bank of Nigeria (CBN) serves as a guarantor, ensuring that 75% of loans provided to farmers by banks are covered in case of default (Sulaimon, 2021). This indicates that the government's Agricultural Credit Guarantee Scheme Fund (ACGSF) is designed to facilitate access to financial resources and services for farmers, particularly smallholder farmers, to enhance productivity and output in Nigeria. However, despite these initiatives, practical challenges persist, as many government credit policies have not effectively boosted the agricultural sector or created significant employment opportunities. A major barrier is the requirement for acceptable collateral, which many farmers, especially those in rural areas without property rights, are unable to provide, making it difficult for them to secure credit.

The agricultural sector continues to suffer from under-capitalization, with most farmers unable to obtain the necessary equity capital for expanding their operations and modernizing their enterprises. Additionally, financial institutions remain hesitant to lend to the sector due to perceived risks (Olomola & Yaro, 2015). This research intends to offer important perspectives for the government, aiding in the evaluation of the Agricultural Credit Guarantee Scheme Fund (ACGSF) and its impact on agricultural production while providing a more thorough comprehension of the scheme's functioning. This study is expected to make a significant contribution to existing empirical research, serving as a valuable resource for future scholars and researchers interested in exploring similar variables. It can be used as a reference for literature review and as a guide for identifying research gaps that need to be addressed to expand the body of knowledge. In this context, the main aim of this paper is to evaluate how the Agricultural Credit Guarantee Scheme Fund (ACGSF) influences agricultural productivity, particularly in relation to rice farming within rural households in Kura Local Government Area. Furthermore, the research seeks to offer guidance to rural development stakeholders on effective strategies to tackle the barriers to accessing formal credit. The specific objectives are:

- i. To describe the socioeconomic features of rice farmers in Kura Local Government,

- ii. To examine the impact of Agricultural Credit Guarantee Scheme Fund (ACGSF) beneficiaries on rice production.
- iii. To identify the constraints faced by rice farmers in accessing of Agricultural Credit Guarantee Scheme Fund (ACGSF) on rice production in Kura Local Government.

## **LITERATURE REVIEW**

### **2.1 Conceptual Literature**

#### **2.1.1 Concept of Credit**

Agricultural credit refers to financial resources provided to a willing borrower specifically for agricultural purposes, with the expectation that the borrower will repay after use, demonstrating commitment to the agreed terms, utilization, and repayment, whether monitored or not (Admasu, 2010). It includes all forms of loans and advances extended to borrowers to support agricultural activities, as well as the processing and distribution of agricultural products (Manganh, 2010).

Lagunju (2007) described agricultural credit as a subfield of agricultural economics that focuses on the provision and management of banking services and financial resources for individual farm enterprises. According to Akram, Hussaun, Sail, and Hussain (2008), credit is crucial for the agricultural sector to function effectively and contribute to the nation's economic and social development. Furthermore, agricultural credit examines the economic and financial interactions between agriculture and the broader macroeconomic, including the impact of national economic policy changes on agricultural performance and the financial stability of farming households (Nyika, 2010).

#### **2.1.2 Concept of Agricultural Production**

Fulginiti and Perrin (1998) characterize agricultural production as the amount of output produced from a certain level of inputs in an economy's agricultural sector. Specifically, it is defined as “the ratio of the value of total farm outputs to the value of total inputs utilized in farm production” (Olayide & Heady, 1992, as cited in Iwala, 2013). The evaluation of agricultural production is usually conducted by contrasting the final output, stated in appropriate units, with a related measure of inputs. According to Singh and Dhillon (2000), as referenced in Kumar and Manimannan (2014), agricultural production should be evaluated based on “yield per unit.” Nonetheless, this perspective has faced critiques from academics for focusing solely on land as the main production factor while ignoring other crucial elements. Consequently, different viewpoints propose that agricultural production should take into account various factors, such as labor, farming expertise, fertilizers, water access and management, as well as diverse biological components.

### **2.2 Empirical Review**

Zakaree et al. (2022) investigated the influence of the Agricultural Credit Guarantee Scheme Fund (ACGSF) on the production of crops and livestock in Nigeria, utilizing secondary data spanning from 1987 to 2020. The research implemented the Auto-regressive Distributed Lag (ARDL) model to explore the correlation between ACGSF credit, average annual rainfall, and the rural population (independent variables) with crop output (dependent variable). Furthermore, the analysis examined

the impact of ACGSF credit on cattle, poultry, and sheep farming within the livestock sector. The findings indicated that ACGSF positively and significantly affected both crop and livestock production in Nigeria. The research highlighted that ACGSF credit aimed at cattle rearing led to a 29% enhancement in livestock output. The ARDL analysis indicated that both crop and livestock sectors tend to return to equilibrium over time following short-term fluctuations. The study recommended continuing the scheme and ensuring sustained credit support for farmers to boost production and food supply. This research is particularly relevant as it examines the agricultural credit scheme and applies the ARDL regression model. However, while the previous study analyzed data from 1987 to 2020, the current research extends the period to 2021 to reflect evolving economic trends.

Iroegbu, Okidim, and Ekine (2021) investigated the impact of bank loans on artisan fishing in Rivers State, focusing on the Bank of Agriculture as a case study. They used a purposive random sampling technique to choose 60 loan recipients and 40 individuals who did not receive loans. The research employed both descriptive and inferential statistics for the analysis of the data. The results indicated a significant increase in the income of fishers who received loans from the Bank of Agriculture, as the funds were used to acquire fishing inputs such as gear and to finance fishing operations, ultimately leading to higher output. This study is relevant as it explores bank loans as a credit source for the fisheries sector, a key component of Nigerian agriculture. However, a major limitation is that it did not assess the policy's impact on livestock and crop production.

In contrast to the previous study that utilized primary data, the present research makes use of time series secondary data. Nakazi and Nathan (2020) examined how commercial bank credit affects agricultural growth in Uganda by using quarterly data sourced from the Bank of Uganda and the Uganda Bureau of Statistics. The study spanned from the third quarter of 2008 to the fourth quarter of 2018 and employed the Auto-regressive Distributed Lag (ARDL) model to investigate both the short- and long-term relationships between agricultural GDP (the dependent variable) and commercial bank credit (the independent variable). The results revealed that, over the long term, credit positively influenced agricultural production, whereas in the short term, it produced an immediate effect. The research suggested that to boost productivity, there should be an increase in commercial bank lending to the agricultural sector. This study is significant because it highlights commercial bank loans as an essential form of credit for farmers to improve agricultural output. Nevertheless, the research mainly centers on the Agricultural Credit Guarantee Scheme Fund (ACGSF), which is a targeted initiative by the Federal Government via the Central Bank of Nigeria (CBN) designed to enhance agricultural production in the nation.

Islam (2020) investigates the impact of agricultural credit on productivity in Bangladesh, utilizing annual time series data from 2000 to 2019, obtained from Bangladesh Bank, the Ministry of Finance, and the Bangladesh Bureau of Statistics. The research employs the Auto-regressive Distributed Lag (ARDL) model to assess both short-term and long-term relationships between agricultural credit and productivity, alongside additional control variables. The analysis over a prolonged period shows that agricultural credit, government spending on agriculture, and inflation all positively influence the sector, with government spending proving to be statistically significant



at the 5% level. The coefficient associated with government investment in agriculture is 0.133097, indicating that a 1% rise in government expenditure results in a 0.13% increase in agricultural GDP. The research concludes that there is a positive correlation between agricultural credit and productivity over the long term.

Nakazi and Nathan (2020) investigate the impact of commercial bank lending on agricultural growth in Uganda, utilizing quarterly data gathered from the Bank of Uganda and the Uganda Bureau of Statistics. The analysis covers the period from the third quarter of 2008 to the fourth quarter of 2018. By employing the Auto-regressive Distributed Lag (ARDL) model, the study examines both the short-term and long-term relationships between agricultural GDP (the dependent variable) and commercial bank credit (the independent variable). The findings indicate that commercial bank credit positively influences agricultural output in the long term. Additionally, in the short term, credit has an immediate effect on agricultural productivity, highlighting the significance of financial access in promoting agricultural growth.

Reuben, Nyam, and Rukwe (2020) explored the impact of the Agricultural Credit Guarantee Scheme Fund (ACGSF) on agricultural production in Nigeria by using both descriptive and inferential statistical methods. Their results indicated that the distribution of funds to the agricultural sector varied significantly among its various sub-sectors. During the years 1998 to 1999, there was only a slight increase in credit allocated to the crop sub-sector, whereas credit distribution to the livestock sub-sector showed consistent growth over the entire study duration. The regression analysis revealed a multiple coefficient of determination ( $R^2$ ) of 0.8523, with ACGSF coefficients for the crop, livestock, and fishery sub-sectors measured at 0.1607, 0.2320, and 0.2110, respectively; all of these were positively correlated and statistically significant at the 1% and 5% levels. The research determined that ACGSF significantly improved agricultural production in Nigeria and suggested that the government should expand and improve access to agricultural financing. This work is pertinent to the current study as it examines the connection between agricultural credit programs and productivity in agriculture. Nonetheless, whereas the present study utilizes the ARDL regression method for model estimation, the previously reviewed study used an alternative statistical approach.

## **METHODOLOGY**

### **3.1 The Study Area**

Kura Local Government Area (LGA) is located between the coordinates of 11°46'17"N latitude and 8°25'49"E longitude, encompassing roughly 206 square kilometers of land. Based on the 2006 population census, Kura LGA had an estimated population of 144,601 individuals. With a yearly growth rate of 3.3%, the population was expected to reach 206,634 by 2021. The region is largely agrarian, with more than 80% of the workforce engaged in farming and related activities to support their livelihoods, and nearly 74% of farmers primarily growing rice. The area receives an average yearly rainfall of 134.4 mm, with daily average maximum and minimum temperatures of 35°C and 19°C, respectively. Prominent crops cultivated in this region consist of rice, millet, maize,

sorghum, tomatoes, onions, cucumbers, cabbage, and watermelon, among others (Nigerian Agricultural Extension and Research Liaison Service, 2012).

### 3.2 Research Design and Data Collection Methods

This research employs a quantitative methodology, using an Ordinary Least Squares (OLS) regression model to assess how agricultural credit impacts farm productivity and financial outcomes. The study combines both descriptive and inferential statistical techniques. Furthermore, inferential statistical methods, specifically OLS regression analysis, will be utilized to investigate the link between agricultural credit and farm productivity, while considering additional influencing variables.

The research is mainly based on primary data obtained from a field survey of chosen smallholder rice farmers. A carefully crafted questionnaire, administered by trained enumerators, was employed to collect pertinent information. This questionnaire aimed to gather insights into the socioeconomic profiles of smallholder rice farmers, the effects of beneficiaries of the Agricultural Credit Guarantee Scheme Fund (ACGSF) on rice production, and the obstacles they encounter in obtaining and using agricultural credit.

### 3.3 Sampling Procedure

For this survey, the sample frame, this includes a total number of 600 registered rice farmers who benefited from the ACGSF, was obtained from LAPO Microfinance Bank in March 2023 and used to determine the sample size. The sample size was calculated using Yamane's (1967) formula, as adapted from Obianefo et al. (2020), and is presented as follows:

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

Where:

n = Sample size

N = Population size (600)

e = Margin of error (5% or 0.05)

By applying the formula:

$$n = \frac{500}{1+500(0.05^2)} \quad n = \frac{500}{1+500(0.0025)} \quad n = \frac{500}{1+1.25} \quad n = \frac{500}{2.25} \approx 150$$

### Model on the impacts of the ACGSF intervention:

$$\text{Output}_i = \beta_0 + \text{CRDT} + \text{FTLZ} + \text{CHEM} + \text{LABR} + \text{SEED} + \text{FRMS} + \text{TRACT} + \varepsilon_i \dots \dots \dots (1)$$

Where:

Output = Rice Output after ACGSF (Bags)

CRDT = Credit Amount (N)

FTLZ = Cost of Fertilizer (N)

CHEM = Cost of Seed (N)

LABR = Cost of Chemicals (N)  
SEED = Cost of Labour (N)  
FRMS = Farm Size (Acre)  
TRACT = Cost of Tractor (N)  
 $\beta_0$  = Intercept  
 $\beta_1 - \beta_7$  = Regression Co-efficient  
 $\varepsilon_i$  = Error Term

## DISCUSSION AND ANALYSIS

### 4.1 Socioeconomic Characteristics of the Respondents

**Table 1: Socio-economic characteristics of the farmers**

Variables	Frequency	Percentage
<b>Gender</b>		
Male	100	66.7
Female	50	33.3
<b>Total</b>	<b>150</b>	<b>100.0</b>
<b>Age</b>		
21-30	78	52.1
31-40	49	32.8
41-50	17	11.4
51-Above	6	4.2
<b>Total</b>	<b>150</b>	<b>100</b>
<b>Marital Status</b>		
Single	25	16.7
Married	115	76.7
Divorced	10	6.7
<b>Total</b>	<b>150</b>	<b>100.0</b>
<b>Education Level</b>		
Primary	24	16.0
Secondary	31	20.7
Tertiary	17	11.3
Informal	78	52.0
<b>Total</b>	<b>150</b>	<b>100.0</b>
<b>Farm Size (Acres)</b>		
$\leq 1$	78	52.0
1 - 2	31	20.7



2 - 3	24	16.0
3 - Above	17	11.3
<b>Total</b>	<b>150</b>	<b>100</b>

**Farming Experience  
(Years)**

1-10	128	85.4
11-20	21	14.1
21-30	1	0.7
<b>Total</b>	<b>150</b>	<b>100</b>

**Source of Credit**

Commercial Bank	22	14.7
Anchor Borrowers	93	62.0
ACGSF	35	23.3
<b>Total</b>	<b>150</b>	<b>100.0</b>

Source: 2023 Survey Data

The social and economic traits of farmers reveal that a significant portion are men, accounting for 66.7%. suggesting that farming is predominantly male-driven, possibly due to cultural and economic factors influencing land ownership and agricultural decision-making. Most farmers (52.1%) fall within the 21-30 age range, with a significant portion (30.7%) aged 31-40, highlighting a youthful farming population that, if well-supported, can enhance agricultural productivity. Additionally, 76.7% of farmers are married, which may contribute to a stable household labor force for farming activities.

Education levels among farmers are relatively low, with 52.0% having only informal education, while the remaining have primary (16.0%), secondary (16.0%), and tertiary (16.0%) education. This suggests a need for extension services and financial literacy programs to equip farmers with knowledge of modern agricultural practices and credit management. Farm sizes are predominantly small, with 52.0% cultivating one acre or less, indicating that most farmers operate on a subsistence scale. The limited landholding underscores the importance of policies aimed at improving land access, optimizing productivity, and ensuring efficient use of available resources.

Farming experience is largely within the early years, as 85.4% of farmers have 1-10 years of experience, while only 14.0% have 11-20 years, and 0.7% have over 20 years. This suggests that many farmers may still be in the learning phase, reinforcing the need for training programs to enhance skills and productivity. In terms of credit sources, ACGSF (42.0%) and Anchor borrowers (43.3%) are the primary sources of agricultural financing, while only 14.7% of farmers access credit from commercial banks. This indicates possible barriers to bank financing, for instance, strict collateral demands, elevated interest rates, and a lack of financial understanding among farmers.

Overall, the findings highlight the need for interventions that enhance access to credit, promote financial education, and introduce policies to support smallholder farmers in expanding land ownership, improving productivity, and adopting modern agricultural techniques. Addressing these socio-economic constraints will be essential for driving sustainable agricultural growth and improving farmers' livelihoods.

#### 4.2 Impact of Agricultural Credit Guarantee Scheme Fund (ACGSF) on Rice Production.

The second objective of this research is to assess how ACGSF affects the amount of rice produced in the area under investigation. An OLS multiple regression model was employed to evaluate the influence of various factors on the quantity of rice harvested following the ACGSF intervention in Kura Local Government of Kano State.

**Table: 4.2. Impact of ACGSF Intervention on rice production**

Variables	Coefficients	Std. Err.	T Value	P- Value
Constant	3227.272	1883.66	1.71	0.088
CRDT	0.766736	.4073	1.88*	0.061
FTLZ	0.1594565	.0202	7.88***	0.000
CHEM	0.3452315	.0976	3.23**	0.001
LABR	0.3762507	.0471	7.97***	0.000
SEED	0.4751671	.1874	2.54*	0.012
FRMS	0.6532843	.0465	14.02***	0.000
Obs.	150			
R <sup>2</sup>	0.7084			
Adj R <sup>2</sup>	0.7017			
Prob > F	0.0000			
F-value	105.66			

Note: Robust standard errors in parentheses\*\*\* p<0.001, \*\* p<0.005, \* p<0.1

Source: **Author's estimation using STATA 14.**

The regression analysis used to investigate the influence of the Agricultural Credit Guarantee Scheme Fund (ACGSF) intervention on rice output yielded numerous noteworthy results. The model explains approximately 70.84% ( $R^2 = 0.7084$ ) of the variation in rice production, indicating a strong explanatory power of the selected independent variables. The adjusted  $R^2$  value (0.7017) confirms the model's robustness, and the overall model significance is reinforced by the F-statistic (105.66) with a p-value of 0.0000, suggesting that the independent variables collectively have a substantial effect on rice production.

The regression results show that fertilizer usage (FTLZ), chemical application (CHEM), labor input (LABR), seed quality (SEED), and farm size (FRMS) are all statistically significant at conventional significance levels. Farm size (FRMS) had the greatest influence on rice output, with a coefficient of 0.6533 and a highly significant p-value of 0.000. This implies that increasing farm

size results in a significant increase in rice yield, highlighting the importance of land availability and optimal land use in increasing productivity.

Similarly, fertilizer usage (FTLZ) and labor input (LABR) demonstrate strong positive effects on rice production, with coefficients of 0.1595 and 0.3763, respectively. Their corresponding p-values of 0.000 indicate a highly significant contribution. This implies that increased fertilizer application enhances soil fertility and crop yields, while labor availability ensures efficient farm operations. Furthermore, the usage of chemicals (CHEM), with a coefficient of 0.3452 and a p-value of 0.001, is critical in pest and weed management, resulting in increased crop health and productivity.

Seed quality (SEED) is also a key determinant of rice production, with a coefficient of 0.4752 and a p-value of 0.012, signifying that access to high-yielding or improved seed varieties positively influences output. This underscores the need for policies that support the distribution of high-quality seeds to farmers.

Conversely, credit access (CRDT) has a positive but marginally significant effect on rice production, with a coefficient of 0.7667 and a p-value of 0.061. While this suggests that credit access can contribute to increased production, its statistical insignificance at conventional levels implies that other factors, such as loan utilization efficiency, repayment conditions, and access barriers, might influence its effectiveness.

#### 4.3 Constraints of the Respondents in Accessing the ACGSF

Constraints of the respondents in accessing the ACGSF were determined in this study and results were presented in Table 4.6.

**Table 3: Constraints of Access to Agricultural Credit**

Constraints	Mean Score	Rank
Lack of trust to pay back the credit	1.89	4 <sup>th</sup>
One is not approve amount he applied for	1.43	6 <sup>th</sup>
Risk of repaying the credit because of crop failure	1.97	3 <sup>rd</sup>
Rate of Interest	1.45	
Time in repaying the credit is short	2.47	2 <sup>nd</sup>
Difficulties before getting the credit	1.33	7 <sup>th</sup>
Problem of getting guarantors	1.75	5 <sup>th</sup>
Illiteracy	3.22	1 <sup>st</sup>

Source: 2023 Survey Data

Access to agricultural credit is crucial for farm productivity and farmers' livelihoods, yet several challenges hinder its accessibility. The most significant constraint is illiteracy (mean score: 3.22), limiting farmers' understanding of loan processes and financial management, highlighting the need for financial education. The short repayment period (mean score: 2.47) also poses difficulties, as agricultural cycles require longer durations before yielding returns, necessitating more flexible

loan terms. The risk of repayment due to crop failure (mean score: 1.97) discourages farmers from seeking credit, emphasizing the need for crop insurance and risk-sharing policies. Lack of trust in farmers' repayment ability (mean score: 1.89) leads to stricter lending requirements, which could be eased through credit guarantee programs. Challenges with obtaining guarantors (mean score: 1.75) further restrict access, suggesting the need for alternative credit models like group lending. Other barriers include partial loan approvals (mean score: 1.43) and bureaucratic application processes (mean score: 1.33), highlighting the need for administrative reforms to improve credit accessibility.

### **Discussion and Policy Implications**

Agricultural credit plays a crucial role in enhancing farm productivity, supporting input acquisition, and promoting rural development. The Agricultural Credit Guarantee Scheme Fund (ACGSF) intervention aims to improve farmers' access to financial resources, ensuring they can invest in critical farm inputs such as fertilizers, seeds, chemicals, and labor. However, despite its importance, several constraints hinder the accessibility and effectiveness of agricultural credit.

The findings from both analyses emphasize the need for policy interventions to improve the accessibility and impact of agricultural credit. Since key farm inputs such as land expansion, fertilizers, labor, chemicals, and quality seeds significantly enhance rice production, improving farmers' access to credit will be crucial in ensuring they can invest in these resources. However, existing barriers, including illiteracy, short repayment periods, and high risks of repayment failure, must be addressed to enhance credit utilization and effectiveness.

1. **Financial Literacy Programs:** Given that illiteracy is the leading constraint, targeted financial education initiatives should be implemented to train farmers on loan application processes, credit management, and repayment strategies.
2. **Flexible Loan Terms:** The short repayment period poses a major challenge, necessitating the introduction of loan structures that align with agricultural cycles, allowing farmers adequate time to generate income before repayment.
3. **Risk Mitigation Strategies:** Crop insurance schemes and credit guarantee programs should be introduced to reduce farmers' fear of repayment failure due to unpredictable production risks.
4. **Alternative Lending Models:** Financial institutions should explore innovative lending mechanisms, such as group-based lending, collateral-free loans, and cooperative financing, to make credit more accessible to smallholder farmers.
5. **Strengthening Farmer-Lender Relationships:** Addressing trust issues between farmers and financial institutions through transparent lending policies and improved access to credit facilities will enhance credit uptake and utilization.

### **Conclusion**

The ACGSF intervention has demonstrated a significant impact on rice production by improving access to essential farm inputs. However, for agricultural credit to be fully effective, existing constraints must be addressed. Implementing financial literacy programs, restructuring loan terms, mitigating credit risks, and adopting alternative lending models will enhance farmers' access to

financial resources, ultimately leading to improved productivity and sustainable agricultural growth. Strengthening these areas will not only boost individual farm outputs but also contribute to broader economic development in the agricultural sector.

### 5.3 Recommendations

To enhance agricultural credit accessibility and effectiveness, financial literacy programs should be implemented to educate farmers on loan management. Loan repayment structures should be made more flexible to align with agricultural cycles, while alternative lending models such as group-based financing and credit guarantees should be promoted. Expanding risk mitigation mechanisms, including crop insurance and government-backed credit guarantees, will help reduce repayment risks. Credit accessibility should be improved by streamlining loan approval processes and expanding financial services in rural areas. Strengthening farmer-lender relationships through transparent policies and rural banking initiatives will build trust and encourage credit uptake. Lastly, fostering government and private sector collaboration will enhance financial support for smallholder farmers, ensuring sustainable agricultural productivity and economic growth.

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