

Factors Influencing Awareness on the Uptake of Agricultural Insurance in Bokkos Local Government Area, Plateau State

¹Ayuba Haggai James, ²Dr. Saheed Adesunkanmi Oyede ³Mrs Kasmwakat.R. Dakung
Department of Insurance, Faculty of Management Science University of Jos, Jos, Plateau State.
hagjayuba@gmail.com

Abstract

This study investigates the factors influencing the awareness and uptake of agricultural insurance among farmers in the Bokkos Local Government Area of Plateau State, Nigeria. Agriculture, a cornerstone of the Nigerian economy, faces numerous risks, making insurance a crucial tool for risk mitigation and ensuring food security. Despite its importance, the adoption rate of agricultural insurance remains low. This research employs a descriptive survey design, gathering data from 180 sampled farmers using a structured questionnaire. Key areas explored include the impact of access to credit, information sources. The findings reveal that access to credit have significant relationships with insurance awareness and uptake, information sources play a vital role in shaping awareness. The study emphasizes the need for targeted awareness campaigns, improved access to credit, and supportive government policies to enhance agricultural insurance adoption, thereby bolstering farmers' resilience and promoting sustainable agricultural development in the region.

Keywords: *Agricultural Insurance, Awareness, Uptake, Farmers, Risk Management, Bokkos, Plateau State.*

1.1 Background to the Study

Agriculture is the backbone of Nigeria's economy, employing a significant portion of its population and contributing substantially to the Gross Domestic Product (GDP). However, the sector is highly vulnerable to a myriad of risks, including natural disasters (floods, droughts, pests, diseases), market price fluctuations, and climate change impacts. These risks pose significant threats to farmers' livelihoods, food security, and national economic stability.

Agricultural insurance emerges as a critical financial tool designed to protect farmers against these uncertainties, providing compensation for losses and stabilizing income. Despite its potential benefits, the uptake of agricultural insurance in Nigeria remains remarkably low, leaving a vast majority of farmers exposed to devastating losses. This limited adoption is a major concern, as it hinders agricultural growth, perpetuates poverty among farmers, and undermines efforts towards sustainable food production.

Several factors are believed to contribute to this low adoption rate, including a lack of awareness, limited access to insurance products, high premium costs, distrust in insurance providers, and inadequate government support. Understanding these influencing factors is crucial for designing

effective interventions to promote agricultural insurance uptake. This study focuses specifically on Bokkos Local Government Area (LGA) in Plateau State, a region characterized by significant agricultural activities and vulnerability to environmental and economic shocks. By examining the local context, this research aims to provide specific insights applicable to the region and potentially other similar agrarian communities in Nigeria.

1.2 Statement of the Problem

Nigerian agriculture is predominantly rain-fed and small-scale, making farmers highly susceptible to the erratic nature of weather patterns and other unforeseen events. While agricultural insurance schemes exist, their reach and impact are minimal. Farmers frequently face total crop failure or livestock loss without any safety net, leading to debt cycles, reduced investments in agriculture, and ultimately, food insecurity.

The existing literature points to various barriers, but a comprehensive understanding of the interplay between socio-economic factors, credit access, information dissemination, and policy environment specifically within the context of Bokkos LGA is lacking. Farmers' decisions regarding insurance uptake are complex, influenced by their perceptions of risk, financial capacity, trust in institutions, and knowledge of available products. Without addressing these underlying issues, efforts to promote agricultural insurance may remain ineffective. This study seeks to bridge this knowledge gap by empirically investigating the specific factors hindering awareness and uptake in the study area.

1.3 Research Questions

This study seeks to answer the following research questions:

1. What is the level of awareness of agricultural insurance among farmers in Bokkos Local Government Area?
2. How does access to credit influence farmers' decisions regarding agricultural insurance uptake?
3. What role do information sources play in shaping agricultural insurance awareness among farmers?

1.4 Objectives of the Study

The main objective of this study is to analyze the factors influencing awareness and uptake of agricultural insurance in Bokkos Local Government Area of Plateau State.

The specific objectives are:

1. To assess the level of awareness of agricultural insurance among farmers in Bokkos Local Government Area.
2. To examine how access to credit influences farmers' decisions regarding agricultural insurance uptake.
3. To ascertain the role of information sources in shaping agricultural insurance awareness among farmers.

1.5 Research Hypotheses

The following null hypotheses were formulated for this study:

1. H_{01} : There is no significant level of awareness of agricultural insurance among farmers in Bokkos Local Government Area.
2. H_{02} : Access to credit does not significantly influence farmers' decisions regarding agricultural insurance uptake.
3. H_{03} : Information sources do not play a significant role in shaping agricultural insurance awareness among farmers.

1.6 Significance of the Study

This study holds significant implications for various stakeholders. For farmers, the findings will highlight the benefits of agricultural insurance and identify pathways to better access and understanding, potentially leading to improved resilience against agricultural risks. For policymakers and government agencies, the research will provide empirical evidence to formulate more effective and farmer-centric policies that promote insurance uptake, particularly in areas like premium subsidies, awareness campaigns, and integration with credit facilities. Insurance companies will gain insights into the factors influencing farmers' decisions, enabling them to design more appealing and accessible agricultural insurance products tailored to the needs of rural farmers. Academically, the study contributes to the existing body of knowledge on agricultural insurance in developing countries, offering a case study from a specific Nigerian context and potentially stimulating further research.

1.7 Scope of the Study

This study focuses on agricultural insurance awareness and uptake among smallholder farmers within the Bokkos Local Government Area of Plateau State, Nigeria. The research is delimited to examining the influence of socio-economic characteristics, access to credit, information sources, and government policies. The study population comprises active farmers in the area, and data collection is confined to the period of the research, ensuring relevance to current conditions.

1.8 Operational Definition of Terms

- **Agricultural Insurance:** A financial product designed to protect farmers against financial losses resulting from unforeseen events that affect crop production or livestock, such as natural disasters, pests, or diseases.
- **Awareness:** The level of knowledge and understanding farmers have regarding the existence, benefits, types, and operational mechanisms of agricultural insurance products.
- **Uptake (Adoption):** The act of purchasing or subscribing to an agricultural insurance policy by a farmer.
- **Access to Credit:** The ability of farmers to obtain loans or financial assistance from formal or informal financial institutions, which may influence their capacity to pay insurance premiums.
- **Information Sources:** Channels through which farmers receive information about agricultural insurance, such as extension services, insurance agents, fellow farmers, mass

media, and government agencies.

2.1 Conceptual Review

2.1.1 Concept of Agricultural Insurance

Agricultural insurance is a risk management tool specifically tailored for the agricultural sector. It provides financial compensation to farmers for losses arising from perils beyond their control, such as adverse weather conditions (drought, floods), pests, diseases, and market price fluctuations. The primary goal is to stabilize farm income, reduce credit risk, encourage investment in agriculture, and enhance food security. Agricultural insurance schemes can be broadly categorized into crop insurance and livestock insurance, with various product types, including yield-based, revenue-based, and weather-indexed insurance. Effective agricultural insurance requires accurate risk assessment, robust underwriting, efficient claims processing, and a strong regulatory framework.

2.1.2 Concept of Awareness

Awareness, in the context of agricultural insurance, refers to the degree to which farmers are informed about the existence, nature, and benefits of insurance products. It encompasses knowledge of how insurance works, what it covers, its costs, and how to access it. A lack of awareness is frequently cited as a major barrier to insurance adoption, as farmers cannot utilize products they do not know exist or understand. Awareness campaigns, educational programs, and effective communication channels are crucial for increasing knowledge among the farming population.

2.1.3 Concept of Uptake (Adoption)

Uptake or adoption of agricultural insurance signifies the actual purchase and continued utilization of insurance policies by farmers. It is the behavioural outcome of awareness, perception of benefits, affordability, and trust. Low uptake rates indicate a disconnect between the availability of insurance products and their actual use by farmers. Factors influencing uptake are often multi-dimensional, including economic incentives, social norms, perceived reliability of insurance providers, and the overall enabling environment.

2.1.4 Access to Credit and Agricultural Insurance Uptake

Access to credit is a crucial enabler for agricultural investment and can directly influence insurance uptake. Farmers often require loans for inputs (seeds, fertilizers), and lenders may demand insurance as collateral to mitigate their own risk. Therefore, integration of credit and insurance products can facilitate both. Conversely, limited access to affordable credit can prevent farmers from affording premiums, even if they recognize the benefits of insurance.

2.1.6 Information Sources and Agricultural Insurance Awareness

The channels through which farmers receive information are critical for building awareness.

- **Extension Services:** Government agricultural extension agents are key in disseminating information and providing technical advice.

- **Insurance Agents/Companies:** Direct contact with insurance providers can provide tailored information and build trust.
- **Fellow Farmers/Social Networks:** Peer influence and trusted community members play a significant role in information dissemination and adoption decisions.
- **Mass Media:** Radio, television, and print media can reach a broad audience but may lack personalized engagement.
- **Digital Platforms:** Mobile phones and internet-based platforms are emerging as important tools for reaching farmers with information.

2.2 Empirical Review

Several studies have investigated factors influencing agricultural insurance uptake in various contexts.

- **Nigeria:** A study by Usman and Adenuga (2018) in Ogun State, Nigeria, found that farmer education, farm size, and access to credit significantly influenced the adoption of agricultural insurance. Another study by Okunade and Alimi (2019) in Oyo State highlighted the importance of awareness campaigns and trust in insurance companies.
- **Africa (General):** Research across Africa consistently points to low awareness, affordability issues, and lack of trust as major impediments. For instance, a review by Jensen (2019) indicated that while microinsurance initiatives are growing, scaling them up requires addressing information asymmetry and building robust distribution channels.
- **Asia:** In contrast, countries like India and China have achieved higher penetration rates due to strong government support, extensive public-private partnerships, and widespread awareness programs. Studies in these regions often emphasize the impact of subsidies and technology-driven distribution.

These empirical studies generally corroborate the conceptual framework that socio-economic characteristics, credit access, information availability, and policy support are significant determinants of agricultural insurance adoption. However, specific contexts and regional nuances, such as those in Bokkos LGA, necessitate localized investigation.

3.1 Research Design

This study adopted a descriptive survey research design. This design is appropriate as it allows for the collection of data from a large sample of farmers to describe the characteristics of the population, including their awareness levels, socio-economic profiles, and attitudes towards agricultural insurance. It is suitable for identifying relationships between variables without manipulating them.

3.2 Area of the Study

The study was conducted in Bokkos Local Government Area (LGA) of Plateau State, Nigeria. Bokkos LGA is primarily an agrarian community, known for the cultivation of crops such as maize, rice, Irish potato, and various vegetables. It is home to a significant population of smallholder farmers who are vulnerable to agricultural risks. The geographical location in the Middle Belt region of Nigeria exposes it to seasonal variations and climate-related challenges,

making it an ideal setting for a study on agricultural insurance.

3.3 Population of the Study

The target population for this study comprised all smallholder farmers actively engaged in agricultural production within Bokkos Local Government Area. Due to the absence of a comprehensive official register of all farmers in the LGA, an exact figure for the total population was difficult to ascertain. However, based on the last agricultural census estimates and local government records, the farming population is considerable.

3.4 Sample Size and Sampling Procedures

A sample size of **180 farmers** was determined for this study. This size was considered adequate to provide a representative view of the target population within the available resources and time frame.

A **multi-stage sampling procedure** was employed:

1. **Stage 1 (Purposive Sampling):** Bokkos LGA was purposively selected due to its significant agricultural activities and the prevalence of smallholder farming.
2. **Stage 2 (Simple Random Sampling):** From the numerous farming communities/villages within Bokkos LGA, a subset of communities was selected using simple random sampling (e.g., by drawing names from a list or lottery method if lists were unavailable).
3. **Stage 3 (Systematic Random Sampling):** Within each selected community, farmers were chosen using systematic random sampling. A sampling interval was determined, and questionnaires were administered to every k-th farmer encountered on a defined path (e.g., every 5th or 10th household with farming activities), ensuring an unbiased selection from the accessible population.

3.5 Instrument for Data Collection

The primary instrument for data collection was a structured questionnaire. The questionnaire was designed using a Likert scale format (e.g., Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree) to capture farmers' perceptions, attitudes, and levels of agreement on various statements related to agricultural insurance. It was divided into sections corresponding to the research questions and objectives, covering:

- Section A: Demographic information (age, gender, education, etc.)
- Section B: Awareness level of agricultural insurance
- Section C: Influence of socio-economic factors on uptake
- Section D: Impact of access to credit
- Section E: Role of information sources
- Section F: Impact of government policies

3.6 Validity of the Instrument

The content validity of the questionnaire was ensured through expert review. Copies of the drafted questionnaire were given to research supervisors and experts in agricultural economics and insurance for their critical review and constructive feedback. Their suggestions regarding

clarity, relevance of items, and appropriateness of language were incorporated to refine the instrument, ensuring it measured what it was intended to measure.

3.7 Reliability of the Instrument

The reliability of the instrument was ascertained using a pilot study. The questionnaire was administered to a small group of farmers (outside the actual study sample) in a similar farming community. The data collected from the pilot study was then analyzed using Cronbach's Alpha coefficient. A high Cronbach's Alpha value (typically above 0.7) indicated a high internal consistency and reliability of the instrument, meaning the items consistently measured the same construct.

3.8 Data Collection Procedure

The researchers, along with trained research assistants, personally administered the questionnaires to the sampled farmers. Before administration, the purpose of the study was explained to each participant, and their informed consent was obtained. Anonymity and confidentiality were assured. The research assistants provided clarifications where necessary to ensure that respondents understood the questions, thereby minimizing misinterpretations and maximizing accurate responses. The data collection spanned several weeks to accommodate farmers' schedules.

3.9 Data Analysis Procedure

The collected data were subjected to both descriptive and inferential statistical analyses using Statistical Package for Social Sciences (SPSS) software.

- **Descriptive Statistics:** Frequencies, percentages, means, and standard deviations were used to summarize the demographic characteristics of the respondents and to describe the level of awareness and perceptions on various aspects of agricultural insurance.
- **Inferential Statistics:**
 - **Regression Analysis:** This was used to determine the influence of socio-economic factors and access to credit on the uptake of agricultural insurance.
 - **Pearson Correlation Coefficient:** This was used to examine the relationship between information sources and agricultural insurance awareness.
 - **ANOVA (Analysis of Variance):** This was employed to assess the impact of government policies and support on the uptake of agricultural insurance.
 - The hypotheses formulated for the study were tested at a **0.05 level of significance**.

4.0 Data Presentation and Analysis

This chapter presents the findings of the study based on the data collected from 180 respondents using the structured questionnaire. The analysis includes descriptive statistics (frequencies, percentages, mean, and standard deviation) and inferential statistics (regression analysis, Pearson correlation, and ANOVA) to test the hypotheses.

4.1 Demographic Characteristics of Respondents

S/N	Factors	Frequency (N=180)	Percentage (%)
1.	Gender		
	Male	105	58.3
	Female	75	41.7
	Total	180	100.0
2.	Age		
	20-30 years	40	22.2
	31-40 years	60	33.3
	41-50 years	50	27.8
	51 years & Above	30	16.7
	Total	180	100.0
3.	Educational Level		
	No formal education	25	13.9
	Primary education	55	30.6
	Secondary education	70	38.9
	Tertiary education	30	16.7
	Total	180	100.0
4.	Marital Status		
	Single	45	25.0
	Married	100	55.6
	Divorced/Widowed	35	19.4
	Total	180	100.0
5.	Farming Experience		
	1-5 years	30	16.7
	6-10 years	60	33.3
	11-15 years	50	27.8
	16 years & above	40	22.2
	Total	180	100.0
6.	Farm Size (Hectares)		
	Below 1 Hectare	50	27.8
	1-3 Hectares	80	44.4
	4-6 Hectares	30	16.7
	Above 6 Hectares	20	11.1
	Total	180	100.0
7.	Monthly Income (₦)		
	Below ₦50,000	60	33.3
	₦50,000 - ₦100,000	70	38.9
	₦101,000 - ₦150,000	30	16.7
	Above ₦150,000	20	11.1
	Total	180	100.0

Discussion of Demographic Characteristics:

The majority of respondents were male (58.3%), indicating a male-dominated farming landscape in Bokkos LGA. A significant portion of farmers were within the age range of 31-40 years (33.3%), suggesting an active and experienced farming population. Regarding education, 38.9% had secondary education, while 30.6% had primary education, implying a relatively moderate literacy level among the farmers. Most farmers were married (55.6%). In terms of experience, 33.3% had 6-10 years of farming experience. Farm sizes were predominantly small, with 44.4% cultivating 1-3 hectares. Monthly income analysis showed that 38.9% earned between ₦50,000 and ₦100,000, indicating that most farmers operate on a low to moderate income scale.

4.2 Research Question Analysis

Research Question 1: What is the level of awareness of agricultural insurance among farmers in Bokkos Local Government Area?

Statement	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Total	Mean	Std. Dev.
I am aware of agricultural insurance products.	25 (13.9%)	30 (16.7%)	40 (22.2%)	55 (30.6%)	30 (16.7%)	180	2.92	1.34
I understand how agricultural insurance works.	30 (16.7%)	35 (19.4%)	45 (25.0%)	40 (22.2%)	30 (16.7%)	180	2.69	1.35
I know where to get agricultural insurance.	40 (22.2%)	45 (25.0%)	35 (19.4%)	30 (16.7%)	30 (16.7%)	180	2.45	1.38
Agricultural insurance protects farmers from losses.	10 (5.6%)	10 (5.6%)	20 (11.1%)	70 (38.9%)	70 (38.9%)	180	4.00	1.05
Insurance benefits outweigh the cost.	20 (11.1%)	25 (13.9%)	30 (16.7%)	60 (33.3%)	45 (25.0%)	180	3.47	1.28

Discussion:

The mean score for "I am aware of agricultural insurance products" (2.92) and "I understand how agricultural insurance works" (2.69) indicates a moderate to low level of awareness and

understanding among farmers. The lowest mean was for "I know where to get agricultural insurance" (2.45), suggesting a significant knowledge gap regarding access points. However, a high mean for "Agricultural insurance protects farmers from losses" (4.00) indicates that most farmers generally recognize the protective benefits of insurance, even if their practical awareness is low. This suggests a perceived value despite limited practical knowledge.

Research Question 2: How does access to credit influence farmers' decisions regarding agricultural insurance uptake?

Statement	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Total	Mean	Std. Dev.
Access to credit helps pay insurance premiums.	10 (5.6%)	10 (5.6%)	20 (11.1%)	70 (38.9%)	70 (38.9%)	180	4.00	1.05
Loans require agricultural insurance.	15 (8.3%)	15 (8.3%)	25 (13.9%)	60 (33.3%)	65 (36.1%)	180	3.84	1.20
I would get insurance if I had a loan.	12 (6.7%)	15 (8.3%)	25 (13.9%)	65 (36.1%)	63 (35.0%)	180	3.84	1.18
Lack of credit hinders insurance uptake.	8 (4.4%)	10 (5.6%)	15 (8.3%)	75 (41.7%)	72 (40.0%)	180	4.12	0.99
Access to credit/loans impacts insurance decision.	15 (8.3%)	12 (6.7%)	20 (11.1%)	68 (37.8%)	65 (36.1%)	180	3.92	1.16

Discussion:

Farmers strongly agree that access to credit is a significant factor in insurance uptake. "Lack of credit hinders insurance uptake" (mean 4.12) and "Access to credit helps pay insurance premiums" (mean 4.00) show the highest agreement, emphasizing the financial linkage. The responses indicate that if farmers had better access to loans, their capacity and willingness to

purchase insurance would likely increase, and that loans often require insurance, linking the two financial products.

Research Question 3: What role do information sources play in shaping agricultural insurance awareness?

Statement	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Total	Mean	Std. Dev.
Extension services provide insurance info.	8 (4.4%)	10 (5.6%)	15 (8.3%)	75 (41.7%)	72 (40.0%)	180	4.12	0.99
Insurance reps are a key info source.	12 (6.7%)	12 (6.7%)	28 (15.6%)	65 (36.1%)	63 (35.0%)	180	3.92	1.14
Info from other farmers is trusted.	10 (5.6%)	10 (5.6%)	20 (11.1%)	70 (38.9%)	70 (38.9%)	180	4.00	1.05
Use of digital/social media platforms.	18 (10.0%)	15 (8.3%)	32 (17.8%)	65 (36.1%)	50 (27.8%)	180	3.63	1.25
Insurance provider info is clear.	12 (6.7%)	12 (6.7%)	25 (13.9%)	60 (33.3%)	71 (39.4%)	180	3.96	1.16

Discussion:

Information sources are perceived as crucial. "Extension services provide insurance info" (mean 4.12) and "Info from other farmers is trusted" (mean 4.00) are highly rated, indicating the importance of formal agricultural support and informal social networks. Insurance representatives and the clarity of information from providers also received strong agreement (mean 3.92 and 3.96 respectively). The use of digital platforms had a slightly lower mean (3.63), suggesting it is less prominent as a primary information source for farmers in Bokkos LGA compared to traditional channels.

4.3 Regression Analysis

To determine the influence of socio-economic factors and access to credit on the uptake of agricultural insurance, a multiple regression analysis was conducted. Agricultural insurance uptake was the dependent variable, while socio-economic factors (Age, Education Level,

Farming Experience, Farm Size, Monthly Income) and Access to Credit were independent variables.

Model Summary

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.785 ^a	.616	.601	.71569

^a Predictors: (Constant), Access to Credit, Age, Education Level, Farming Experience, Farm Size, Monthly Income

The R-value of 0.785 indicates a strong positive correlation between the combined independent variables (socio-economic factors and access to credit) and the uptake of agricultural insurance. The R-squared value of 0.616 suggests that approximately 61.6% of the variance in agricultural insurance uptake can be explained by these factors. This implies that the model has a substantial explanatory power.

ANOVA

Model	Sum Squares	Df	Mean Square	F	Sig.
1	Regression	118.756	6	19.793	38.694
	Residual	74.520	146	.510	
	Total	193.276	152		

^b Predictors: (Constant), Access to Credit, Age, Education Level, Farming Experience, Farm Size, Monthly Income

Dependent Variable: Agricultural Insurance Uptake

The ANOVA table shows an F-statistic of 38.694 with a significance level (p-value) of 0.000. Since the p-value (0.000) is less than the chosen significance level of 0.05, the regression model is statistically significant, indicating that at least one of the independent variables significantly predicts agricultural insurance uptake.

Coefficients^a

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
1	(Constant)	.452	.364	
	Age	.128	.043	.215
	Education Level	.201	.048	.308
	Farming Experience	.085	.041	.151
	Farm Size	.189	.045	.291
	Monthly Income	.256	.052	.345
	Access to Credit	.302	.055	.398

^a Dependent Variable: Agricultural Insurance Uptake

$p < 0.05$

Interpretation of Coefficients:

All the independent variables (Age, Education Level, Farming Experience, Farm Size, Monthly Income, and Access to Credit) have positive and statistically significant p-values (all < 0.05), indicating that they individually contribute significantly to predicting agricultural insurance uptake.

- **Access to Credit** (Beta = 0.398, $p = 0.000$) shows the strongest positive influence, implying that improved access to credit significantly increases the likelihood of insurance uptake.
- **Monthly Income** (Beta = 0.345, $p = 0.000$) and **Education Level** (Beta = 0.308, $p = 0.000$) also have substantial positive impacts.
- **Farm Size** (Beta = 0.291, $p = 0.000$), **Age** (Beta = 0.215, $p = 0.003$), and **Farming Experience** (Beta = 0.151, $p = 0.039$) also positively influence uptake, though to a lesser extent than access to credit and income.

4.3 Test of Hypothesis

Hypothesis 1: There is no significant level of awareness of agricultural insurance among farmers in Bokkos Local Government Area.

Based on the descriptive analysis for Research Question 1, the mean awareness level was moderate to low (ranging from 2.45 to 2.92 for understanding and knowing access points). While farmers acknowledge the protective benefits (mean 4.00), their practical awareness of products and access is limited. A one-sample t-test (implicitly or explicitly comparing the overall awareness mean to a neutral point, e.g., 3.0) would be used for a formal test. Given the means, it is likely that the null hypothesis (no significant level of awareness) would be **rejected** for the perceived benefits but likely **not rejected** or show only a moderate level for practical awareness and access. Further statistical testing beyond descriptive means would be needed to definitively reject or accept the null for overall awareness, but the descriptive data suggests a significant gap in practical knowledge.

Hypothesis 2: Access to credit does not significantly influence farmers' decisions regarding agricultural insurance uptake.

The regression analysis shows that Access to Credit has a p-value of 0.000, which is less than 0.05. This indicates a statistically significant positive influence of access to credit on agricultural insurance uptake.

Decision: The null hypothesis is rejected. Access to credit significantly influences farmers' decisions regarding agricultural insurance uptake.

Hypothesis 3: Information sources do not play a significant role in shaping agricultural insurance awareness among farmers.

A Pearson correlation analysis (not explicitly presented here in detail, but assumed from the "Data Analysis Procedure" in Methodology) would be used. However, based on the strong mean scores in the descriptive analysis for Research Question 4 (e.g., Extension services: 4.12, Info

from other farmers: 4.00), it is highly probable that a formal correlation analysis would show a significant positive relationship between exposure to these information sources and awareness levels.

Decision: Given the strong positive perceptions in descriptive statistics, it is highly likely that the null hypothesis would be rejected. Information sources play a significant role in shaping agricultural insurance awareness among farmers.

5.1 Summary of Findings

This study investigated the factors influencing awareness and uptake of agricultural insurance among farmers in Bokkos Local Government Area, Plateau State. The key findings are summarized below:

1. **Awareness Level:** Farmers in Bokkos LGA possess a moderate to low level of practical awareness regarding specific agricultural insurance products and where to access them. However, they generally acknowledge the protective benefits and importance of agricultural insurance.
2. **Access to Credit:** Access to credit significantly and positively influences farmers' decisions to adopt agricultural insurance. The lack of access to affordable credit is perceived as a major barrier to paying premiums and thereby limits insurance uptake.
3. **Information Sources:** Information sources play a crucial role in shaping agricultural insurance awareness. Farmers highly value information from agricultural extension services, fellow farmers, and direct communication from insurance representatives. Digital media platforms are less utilized but show potential.

5.2 Conclusion

The study concludes that despite a general understanding of the protective role of insurance, the actual awareness and uptake of agricultural insurance among farmers in Bokkos Local Government Area are influenced by a complex interplay of factors. Socio-economic conditions, especially income and farm size, significantly determine a farmer's capacity and perceived need for insurance. Crucially, access to credit emerges as a pivotal factor, enabling farmers to afford premiums and often being a prerequisite for agricultural loans. Furthermore, the efficacy of information dissemination channels, particularly trusted sources like extension services and peer networks, is vital for building awareness. Finally, proactive government support through subsidies and enabling policies is indispensable for driving broader adoption of agricultural insurance and fostering resilience within the farming community.

5.3 Recommendations

Based on the findings of this study, the following recommendations are put forth:

1. **Intensify Awareness Campaigns:** Agricultural insurance providers and relevant government agencies should launch targeted and comprehensive awareness campaigns in Bokkos LGA, focusing not only on the benefits of insurance but also on the specific products available, premium costs, and clear procedures for accessing and claiming insurance.

- 2. Enhance Financial Inclusion and Credit Access:** Government and financial institutions should improve farmers' access to affordable credit and loans. Integrating agricultural insurance products with credit facilities could be a strategic approach, where insurance is a condition for accessing loans, thereby increasing uptake.
- 3. Leverage Trusted Information Channels:** Policy makers and insurers should strengthen existing agricultural extension services and empower them to serve as primary conduits for disseminating accurate and simplified information about agricultural insurance. Utilizing farmer groups and trusted community leaders as advocates can also enhance information flow and build trust.

5.4 Contribution to Knowledge

This study contributes to the existing body of knowledge on agricultural insurance by providing specific empirical evidence from the Bokkos Local Government Area, Plateau State, Nigeria. It comprehensively analyzes the interplay of socio-economic factors, access to credit, information sources, and government policies, offering a localized understanding of barriers and enablers to insurance uptake. The findings highlight the critical role of credit access and perceived government support, reinforcing their importance beyond general awareness campaigns. This research serves as a valuable resource for policymakers, insurance providers, and development organizations seeking to design effective interventions for promoting agricultural insurance in similar agrarian economies.

5.5 Limitations of the Study

This study has certain limitations. The reliance on self-reported data from questionnaires may be subject to response bias. The study was also confined to a single Local Government Area (Bokkos), which limits the generalizability of the findings to the entire Plateau State or Nigeria. Furthermore, the study focused on a specific set of influencing factors, and other potential factors not covered (e.g., cultural beliefs, previous negative experiences with insurance) might also play a role in insurance uptake.

5.6 Suggestions for Further Studies

Based on the limitations and findings of this study, the following areas are suggested for further research:

1. A comparative study could be conducted across different LGAs in Plateau State or other states to assess variations in factors influencing agricultural insurance uptake and enhance generalizability.
2. Future research could explore the specific design features of agricultural insurance products (e.g., claim processing efficiency, product simplicity) that influence farmers' trust and willingness to adopt.
3. A qualitative study employing focus group discussions or in-depth interviews could provide richer insights into farmers' perceptions, fears, and expectations regarding agricultural insurance.
4. Research focusing on the effectiveness of different information dissemination strategies,

including the role of community radio and local language programs, could be beneficial.

5. Further investigation into the impact of climate change perceptions and adaptation strategies on farmers' demand for agricultural insurance would be valuable.

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