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PEASANT FARMERS ATTITUDE AND KNOWLEDGE TOWARDS ACCESSING AGRICULTURAL LOANS IN GAGARAWA TOWN, JIGAWA STATE

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Abstract

The purpose of this study was to design and analyze the determinants of credit access by peasant farmers in Gagarawa town of Jigawa state. Specifically, the study aimed to uncover the factors influencing peasant farmers' access to agricultural credit. A convenient sampling technique using survey questionnaires was employed to collect primary data from 370 respondents, and were analyzed using descriptive statistics and Logit regression model. Result obtained from Logit regression analysis explained predictor variables such as education, experience, annual income size, attitude and knowledge were the key determinants of credit access in the study. The study recommends peasant farmers to be encouraged to attain higher education, have positive attitude towards formal financial institutions from which they can access credits. Commercial banks need to be establish in the area to discourage informal lending that charges exorbitant rate of interest. That will not only improve agricultural production, but will also increase financial inclusion and thereby improve peasant farmers' livelihood and reduce poverty.

Keywords: Credit access, peasant farmers, agriculture, financial institutions, Gagarawa

Introduction:

Nigeria with a projected total population of 216 million people, is the most populated country in Africa and the 7th populous in the world (NPC, 2013). About half of the people live in rural areas and agricultural sector is the key economic sector and major source of employment in the country, contributing about 23% to GDP and a

70% share of the labor force (Olu, Adama, & Umejiaku, 2023). Commercial banks play a significant role in providing agricultural loans to peasant farmers in Nigeria. They offer credit facilities specifically tailored for agricultural purposes, such as the Anchor Borrowers' Program initiated by the Central Bank of Nigeria

(CBN) (Umeh & Adejo, 2019). Access Bank, Guaranty Trust Bank, and Zenith Bank etcetera have also established loan programs specifically tailored to meet the financial needs of small-scale businesses (William & Olabiyi, 2024). Additionally, World Bank and the African Development Bank (ADB) also provide loans to support agricultural development in Nigeria (Ijie & Iyoriobhe, 2020). The Nigerian government on the other hand, implements schemes like the Agricultural Credit Guarantee Scheme Fund (ACGSF) and the Growth Enhancement Support Scheme (GESS) to facilitate farmers' access to loans and subsidized inputs (Adetiloye, 2012; Tiri, Ojoko, & Aruwayo, 2014). The Central Bank of Nigeria (CBN) through its Micro, Small, and Medium Enterprises Development Fund, also provides loans to small-scale businesses at subsidized interest rate (Okon & Zephaniah, 2022). Furthermore, some philanthropic individuals and organizations support agriculture by providing loans and grants to farmers. Examples of such individuals include Aliko Dangote, Tony Elumelu, and Femi Otedola, who have established foundations to support entrepreneurial development in Nigeria (Forbes, 2021).

Despite these interventions in the agricultural sector, peasant farmers in the rural areas still suffers major challenges in accessing loans and services (Bee, 2007; Kong, Turvey, Xu, & Liu, 2014). Enhancing Financial Innovations and Access (EFInA) in Nigeria opined that 24 percent of adult population in the country has access to informal financial institutions, 23 percent to formal financial services, while majority, 53 percent are excluded financially (Ajah, Igiri, & Ekpenyong, 2017; Ayegba & Ikani, 2013; EFLnA, 2008).

In Nigeria, like in most developing countries, the agricultural production process is controlled by peasant farmers. These farmers operate within the limits of their small income which restrain their capacity to employ most recommended inputs and technologies in their farms (Ohen & Ajah, 2015; Okereke, 2012). This reduces their capability in the agricultural production for both domestic and international market. Limited knowledge and negative attitude towards formal financial institutions hinders their ability to access agricultural loans and services. In other words, peasant farmers lacked knowledge about available loan options, eligibility criteria, and application processes which restricts their ability to seek financial assistance. Additionally, their negative attitudes towards formal financial institutions further exacerbate the problem. Consequently, they were unable to invest in modern farming techniques, purchase essential inputs, and improve their productivity. This research seeks to address these issues by understanding the knowledge and attitude of peasant farmers towards accessing agricultural loans and services from formal financial institutions.

Literature Review

Khalid (2003) examined access to formal and informal credit by peasant farmers using descriptive statistics and logistic regression analysis. Findings of the study indicated that 26% of the respondents have received credits from money lenders (informal institutions). Age, income level, gender, education, and the degree of awareness on credit availability were the factors that influenced credit access by peasant farmers. Moreover, t-test result indicates that there is a significant difference between farmers who access credit and those that did not access credit in relation to their income level and value of productive assets owned by them.

Mohamed and Temu (2008) studied factors that determine the relationship between peasant farmers' access to formal credit and adoption of agricultural technology in Zanzibar. Data collected was analyzed using STATA 10.0 and SPSS 13.0. Findings of the study revealed that extension workers contacts intensity, size of household, accesses to credit number, and the value of productive assets were found to determine significantly the adoption of agricultural technologies among peasant farmers. Ibekwe and Ukoha (2011) investigated the determinants of loan acquisition from formal financial institutions by small-scale farmers in South East Nigeria. The study revealed that, farmers' secured loan is determined by socioeconomic variables such as age, the level of education, farming experience and farm size. The study also indicated that, gender and household size variables are not significant, implying that they are not very important determinants of loan acquisition by farmers in the study area. Also, from the result of the analysis, marital status is negatively related to the amount of loan acquired by farmers.

In another independent study, Adebite and Adeleye (2011) studied the determinants of farmers' access to micro credit in Oyo state-Nigeria. Descriptive statistics, z-score and Tobit regression analysis were employed in the analysis. Findings suggest that marital status, land ownership, farming experience, existence of credit institutions were significantly related to access to credit. However, age was negatively correlated to access to credit.

Ololade and Olagunju (2013) analyzed the factors determining access to credit facilities among peasant farmers in Oyo, Nigeria. Employing Logit regression analysis, the study found that factors affecting access to agricultural credit by peasant farmers were high interest rates, gender, marital status and guarantor. The study added that being single (not married) reduces the chances of having access to agricultural credit by almost 83.3 percent. In addition, the study discovered that female gender reduces the chances to access to credit by a 71.3 percent. Peasant farmers' access to agricultural credit is affected by the availability of a guarantor. Oruonye and Musa (2012) in their study, examined the difficulties faced by peasant farmers' access to agricultural loan in Ganol Local Government Area of Taraba state - Nigeria. Findings shows that 65.7% of the peasant farmers have difficulties in accessing agricultural credit at the commencement of the farming season. High interest rate which is 20%, and getting approval by the government 37.1%. was employed in another study.

Obisesan (2013) also in their study applied logistic regression analysis to determine the factors that influence peasant farmers' credit accessibility. Age, marital status, education, gender, cultivated land area, size of household, marital status, occupation, off-farm activities, farmers' group membership, farming experience in years and yield of crop. Among the eleven (11) variables studied, only seven (7) variables positively and significantly determined peasant farmer's agricultural credit accessibility. Age, gender, main occupation, peasant farmers' off-farm activities, farmers' group membership, years of farming experience and crop yield were discovered to correlate with access to credit.

In another study, Ghosh and Hasan (2013) studied attitude of the farmers towards sustainable agriculture. The study was conducted among ninety (90) respondent of Tejrol and Rajapur of Sadar Upazila of Jessore district. It was found that majority of the respondents (51.1%) had low knowledge and medium attitude (65.6%) towards sustainable agricultural practices. In addition,

farmers' level of education, farm size, cosmopolitaness, annual income, knowledge and extension contact had significant and positive relationship with the farmers' attitude towards sustainable agriculture. The study indicated that the higher the socio-economic status of a farmer and the greater the access to information, the greater the perceived importance of sustainable agricultural practices.

Kabir (2015) investigated the level of knowledge and attitude of peasant farmers with regards to the usage of ICT in Mymensingh Sadar Upazila. Qualitative interview method and statistical tools were employed to analyze the collected data. The results showed that some peasant farmers (37.8%) consider information related to input service and availability is most appropriate information. It was also discovered that half of the farmers (50.0%) had medium level of knowledge on ICTs. Furthermore, farmers had highly favorable attitude (58.9%) towards ICT. In addition, age, level of education, farmers' perception on information need, farming experience, and farmers' knowledge were found to be the potential factors of enhancing their attitude towards ICTs. Moreover, lack of electricity was the major constraints faced by the farmers associated with ICTs application. In another different study, Ratanapob, Saengtienchai, and Rukkamsuk (2024) E-study was carried out in 89 dairy farms using a quantitative survey. The study analyzed data using descriptive statistics. The study variables such as knowledge and attitude were analyzed using multivariate linear regression. E-mean scores for knowledge, attitude, and practice (experience) were scored at 62%, 86%, and 78%. Respondents' higher education, attendance of workshop and training associated with antibiotic use, and being supervised by trained personnel of the Veterinary Teaching Hospital were found to be associated with a higher knowledge. Dairy farmers with lower practice score received a higher score of attitude. Acquiring antibiotic knowledge from other farmers was associated with a lower practice score. A positive association was found between knowledge and attitude scores and practice and attitude score.

Abdullahi (2019) studied how well-informed farmers are about the agricultural credits that Cooperative banks in Coimbatore city offer. The study comprises of a randomly selected 500 Coffee farmers from Arumeru (119), Hai (135), Moshi Rural (139), and Rombo (107) in Northern Tanzania who had experience of using pesticides over the years. A questionnaire with 61 questions was employed which contained structured and unstructured questions about farmers' demography, land tenureship and land use, knowledge, attitude. Findings have indicated that coffee farmers have managed to produce with minimum guidance and supervision from the agricultural extension service. However, farmers has shown creativity and motivation in dealing with the pest problem, but were constrained by the lack of appropriate knowledge and shortage of inputs.

Methodology:

Description of the study area:

This study was undertaken in Gagarawa town - a town located on Longitude: 9° 31' 43.72 and Latitude: 12° 24' 30.53"N in Gagarawa Local Government Area of Jigawa State-Nigeria. The predominant ethnic group in the area is the Hausa-Fulani, who make up a significant portion of the 11,450 population. However, there are also residents from other ethnic groups such as the Kanuri, Yoruba, Igbo, and others, indicating the town's diverse makeup. In terms of agricultural activities, the people of Gagarawa

town are millet, guinea corn, beans, sesame and ground-nut farmers (Pew Research Center, 2017).

Population of the study:

The town has a diverse demographic profile, with a population of 11,450 according to NPC (2006) population census.

Sampling procedure

Convenient sampling techniques was adopted for the study. Therefore, the sample size was determined using Krejcie and Morgan (1970) table for determining sample size. Based on Krejcie and Morgan (1970), a representative of 11,450 peasant farmers were taken as the sample of the study which is 370.

Data collection procedure/method:

Data for the study were obtained using survey questionnaire. The questionnaires were administered to peasant farmers in the study area. The researcher distributed 370 questionnaires in which 257 were returned. This gives a total response rate of 69.5%, and out of these response, 51 questionnaires were found not completed by the peasant farmers which presented 206 useable questionnaires. This accounted for 55.68% response rate. Sekaran (2003), has opined that a response rate of 30% is considered appropriate for any statistical analysis. The following table (Table 1) described a response rate for this study.

Table 1:

Data collection procedure/method

Response	Frequency/Rate
Distributed questionnaires	370
Returned questionnaires	257
Returned and useable questionnaires	206
Response rate (approximate)	55.68%

Method of data analysis:

Descriptive statistics and logistic regression analysis were employed to achieve the two objectives of the study. Logistic regression model is used to determine peasant farmers' attitude and knowledge in accessing credit from financial institutions. The choice of logistic regression in this study arises because the influence of predictor variables on dependent variable were needed. Logistic regression model is much related to linear regression, however, it is more consistent to a model where the dependent variable is dichotomous. It can rightly be argued that Y_i is the dichotomous variable (random variable) which takes on the value 1 or 0, where 1 denotes occurrence and 0 denotes its non-occurrence of the event in question. If $x_1 - x_n$ are factors to be related to the outcome of the event, then logistic regression model stipulates that $Y=1$, given that the value of x_1, \dots, x_n is as follows:

$$P(Y)=1/[1+ \exp - (\alpha - \sum\beta_i x_i)] \dots\dots\dots (1)$$

Divide both sides by logarithm we have;

$$\text{Logit } P(Y) = \alpha + \sum\beta_i x_i \dots\dots\dots (2)$$

Where $Y_i = 1 =$ success (access to credit), $Y_i = 0 =$ failure (no access to credit)

β = logistic coefficient for independent variables

α = constant

$x_1 - x_n$ = independent variables

The independent variables in our study for determining access to credit were: x_1 = gender (1 = Male, 0 = Female); x_2 = Age (in years); x_3 = marital status (1= Married, Single = 0); x_4 = household size (in number); x_5 = education; x_6 = farmer's group (1= Yes, No = 0); x_7 = experience (in years); and x_8 = Household income (in naira). These independent variables were adopted from prior studies with minor changes (Ajah et al., 2017; Obisesan, 2013; Ololade & Olagunju, 2013).

Result of findings and discussion:

Demographic profile of the peasant farmers

This study included 206 respondents most of them were males. Table 2 shows the tabular distribution of the participants by gender, 89.9% of the respondents were male, while 9.1% were female. This indicated that men are highly involved in peasant

farming production in the study area. The tabular representation of respondents by age shows that more than half of the respondents (58.8%) were between the age group of 51-60 years. The education level of the respondents presented in the table showed that only one third of the respondents (30.5%) had completed their Primary School Education. This means that most of the participants did not attend a formal education. Most of the respondents (54.1%) had farming experience ranging from 10-15 years. Result from the descriptive analysis showed that more than half of the respondent (65%) had an annual income ranging from N400,000 – N800,000. This signifies the extent to which peasant farmers in the study area need financial credit/ assistance by commercial banks and the government. Only 6% indicated an annual income of N1,600,001 and above.

Table 2:

Demographic profile of the peasant farmers

Demographics	Description	Frequency	Percentage
<i>Gender</i>	Male	183	89.1
	Female	22.45	10.9
<i>Age</i>	30-39	50.68	24.6
	40-49	29.66	14.4
	50-59	121.13	58.8
	60 and above	4.53	2.2
	Total	206	100
<i>Marital Status</i>	Married	113.3	55.0
	Single	92.7	45.0
	Total	206	100
<i>Education</i>	Non formal	33.37	16.2
	Primary	62.83	30.5
	Secondary	46.76	22.7
	NCE/Diploma	63.04	30.6
	Total	206	100
<i>Annual Income of (N)</i>	400,001 – 800,000	133.9	65.0
	800,001 – 1,200,000	37.7	18.3
	1,200,001- 1,600,000	17.92	8.7
	1,600,001- 2,200,000	12.36	6.0
	2,200,001 and above	4.12	2.0
	Total	206	100
<i>Farming experience</i>	1 - 5 years	5.36	2.6
	6 - 10 years	35.84	17.4
	11 - 15 years	103	50
	15 and above years	61.8	30
Total	206	100	

Factors influencing peasant farmers access to credit:

Logistic regression analysis was performed to ascertain the impact of factors that determine peasant farmers' access to credit facility. The model contained eight independent variables (age, gender, marital status, education, farming experience, size of peasant farmers' income, peasant

farmers' attitude towards financial institutions and their knowledge of credit availability), that predicted the dependent variable (access to credit) The full model containing all the predictor variables was statistically significant, $\chi^2 (8, N= 206) = 86.06, p < .001$, indicating that the model was able to explain respondents who have positive or negative attitude towards financial institutions and respondents who have prior knowledge of credit availability or lacked the awareness of the existence of credit availability. Generally, the model explained between 37.3% (Cox and Snell R square) and 56.1% (Nagelkerke R squared) variance in access to credit, and correctly classified 85.2% cases.

Table 4:

Logit regression predicting peasant farmers' access to credit

	B	S.E.	Wald	df	P	Odds Ratio	95.0% Odd	C.I. for Ratio
							Lower	Upper
Gender	-.12	.40	.13	1	.74	.91	.49	1.76
Age	-.02	.02	.20	1	.67	.98	.99	1.03
Marital Status	-.46	.18	7.38	1	.02	.67	.47	.89
Education	.73	.35	4.46	1	.04	2.07	1.09	4.97
Income size	1.98	.33	38.32	1	.01	8.20	3.87	12.76
Farming experience	1.67	.42	45.0	1	.05	2.01	1.09	2.99
Attitude	1.57	.33	37.0	1	.03	1.01	1.14	2.16
Knowledge	1.74	.24	51.0	1	.05	2.01	1.09	1.09
Constant	1.98	1.65	1.91		.19	8.04		

As shown in the table 4 above, only five of the independent variables make up a statistically significant contribution to the model. Peasant farmers' education, size of annual income, farming experience, attitude, and knowledge of credit availability. The strongest variable factor predicting access to credit was size of annual income given at an odd ratio of 8.20. This shows that respondents' access to credit is over 8 times than those that have small income size, controlling for all the other variable factors in the model. The odd ratio of .67 for marital status was less than 1 signifying that respondent marital status (single or married) does not have any significant effect on credit access by peasant farmers, controlling for other variables in the model.

Conclusion and recommendations:

This study concluded that predictor variables such as education, experience, income size, attitude and knowledge were the key determinants of credit access in this study. Peasant farmers should be encouraged to attain higher education, have positive attitude towards formal financial institutions from which they can access credits.

Commercial banks need to be establish in the area to discourage informal lending that charges exorbitant rate of interest. That will not only improve agricultural production, but will also increase financial inclusion and thereby improve peasant farmers' livelihood and reduce poverty.

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