



EFFECTS OF COMMUNITY FINANCING INSTITUTIONS ON CASSAVA FARMERS INCOME IN OYO STATE, NIGERIA

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ABSTRACT

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The study examined the effect of community financing institutions on cassava farmers' income in Oyo State. The objectives were to examine the socio-economic characteristics of the respondents in the study area, identify governmental & non-governmental community financing institutions in the study area, and examine the effect of the financial institution programme on respondents' income and to identify the factors affecting the accessibility of credit facilities among small holder farmers in Oyo State. A Multi-stage sampling technique was used for this study. In the first stage, a purposive sampling was used to select Lagelu, Akinyele and Ido Local Government Areas in Ibadan. Random sampling was used to select three communities from each of the three Local Government Areas and from each community, 10 respondents were selected randomly to give a total of 90 respondents of cassava farmers and processors. The analysis of the socio-economic characteristics revealed that majority of respondents that were involved in the cassava production and processing activities in the study area were males, the ages ranged between 17- about 65years and majority (38.9%) were between the ages 49-56years with the mean age of 49 years. Most (96.7%) were married with a high household size of between 6-10 numbers. The level of education of respondents revealed that majority (43.3%) had one form of education or the other which could enhance performance in production and processing activities. The primary occupation of respondents reveals that all of them were farmers, some are artisans and their monthly allowance ranged between less than ₦20,000.00 and ₦75,000.00 as most of them earn less than ₦30,000.00. Chi square showed that there is a significant association between rural financing institution and cassava farmers' income ($\chi^2=0.014$, $p=6$). Also 57.8% of the respondents affirmed that the benefits received from the financial institution has a high effects on their standard of living which is affirmed by 43.3% of the respondents who agreed that their monthly income has increased as a result of the accessibility to fund. From the result, 53.3% of the respondents claimed that the high interest rate charged by the institution was the major challenge and 47.8% of the respondents affirmed that the Interest rate should be affordable as this will enhance accessibility of credits.

Contribution/Originality: This original study focused on the effects of community financing institution on cassava farmers' income. It revealed the significant relationship between rural financing and cassava farmers' income and also the major constraint of high interest rate facing the farmers in the study area.

1. INTRODUCTION

Agriculture is a major source of livelihood throughout the world, especially for the majority of poor people living in rural areas in developing countries. A key challenge for the majority of these farmers is access to finance. Lack of access to finance is a key impediment to farmers in improving the efficiency of their productions and adopting better technologies in the development of cassava production. Agricultural developments in Nigeria were established during the third National Development Plan (1975-1980) to enhance agriculture and food production. These are World Bank assisted projects consisting of an input delivery and credit supply system.

Agricultural finance refers to financial services ranging from short, medium and long term loans, to leasing, to crop and livestock insurance, covering the entire agricultural production, input supply and distribution, wholesaling, processing and marketing. Rural and agricultural financial services are provided by formal and informal financial institutions as well as through financial arrangements within the agricultural value chain.

However the role of financial institution in agricultural development involves ways and means by which a farmer obtains the entire necessary fund required in order to carry out agricultural production. And it also deals with the supply of demand for funds in agricultural sector of the economy. Where a farmer has a sufficient capital of his own to carry out farm production he can then obtain credit from the best available sources.

Agricultural finance plays significant role in the development of the agricultural sector because adequate finance is required by farmers to establish economic size farms or large scale farms, and to expand existing farms. Adequate finance also brings significant changes in the structure of agriculture. This is because finance enables the acquisition of machinery and farm equipment to substitute labour use and the purchase of other farm inputs and the promotion of agricultural production processes. The use of finance in farming leads to rapid increase in farm land value which necessitates the farmers to look outward for fund. Agricultural finance from co-operative societies is very important in communities where credit institutions such as commercial banks are lacking; farmers who belong to a cooperative society can often get inputs against liens over produce for sale through the societies. Therefore, agricultural finance in development has been made mandatory in Nigeria through government directives on rural banking and the lending of a certain percentage of the banks loanable fund or deposit to agricultural sector of the economy [1].

While the majority of Africa's population lives in rural areas and depends on agricultural production, the supply of financial services to the sector is inadequate. Reasons for the lack of access to finance in rural areas and in the agricultural value chains are numerous. They can be found in the slow and uneven entry of formal financial institutions into rural areas, which leads to rural clients often remaining beyond the reach of financial outlets, to the reluctance of financial institutions to provide financial services to agricultural and rural activities, whose risk profile is frequently not fully understood and which are often informal in nature.

Factors such as poor infrastructure and widely dispersed populations in rural areas raise transaction and information costs, thus further hindering the spread of financial services. In addition, title and property rights can be difficult to verify in rural areas, posing problems in the use of collateral. Subsidized lending programs for rural recipients have also contributed to obstructing the development of a sustainable rural banking sector in Africa.

Farmers and agricultural companies typically face seasonal income and long maturation periods and are exposed to considerable risks. Seasonality requires specifically tailored financial services and conditions, such as longer repayment and grace periods, less frequent repayments, or leasing products. Agricultural risks to be considered include price fluctuations for inputs and products or crop failure due to pests and diseases, temperature or variable rainfall. Despite these difficulties, formal rural and agricultural finance has been making advances in the continent, and such this study seeks to answer questions as to the effects of financial institutions on cassava farmers income despite the various problems and uncertainties characterizing agricultural sector, such questions as;

- I. What are the socio economic characteristics of the cassava farmers?

- II. What are the types of governmental and non-governmental financing institutions present in the study area?
- III. What are the effects of community financial institutions on the farmer's income?
- IV. What are the factors affecting the accessibility of credit among small holder farmers in the study area?

Specifically, the objectives of the study are to;

(a) ascertain the socio-economic characteristics of the respondents in the study area (b) identify governmental & non-governmental community financing institutions in the study area (c) examine the effect of the financial institution programme on respondents' income (d) identify the factors affecting the accessibility of credit facilities among small holder farmers in the study area.

The hypothesis of the study in null form is as follows;

Ho: there is no significant relationship between the community financing institutions and the cassava farmers' income.

2. RESEARCH METHODOLOGY

The study was carried out in Ibadan, Oyo state. It is situated within the tropics in the south western part of Nigeria. It is a metropolitan city with an extensive geographical area of 1,190sqm (metropolis) and 2,600sqm (urban). It is 120km east of the border with Republic of Benin, 128km inland north Lagos and 530km south-west of Abuja. Other cities nearby includes; Lalupon, Apomu, Ikire, Fiditi, Olupona. It is located between longitudes 3°54'21'' and latitude 7°22'39'' and it is situated at elevation 181 meters (593ft) above sea level. It came into existence in 1829. The state has a population of 3,565,108, making it the biggest city in Oyo and the third most populous city in Nigeria, after Lagos and Kano. Oyo State has a tropical wet and dry climate which characterize the wet and dry season respectively. This wet season with relatively high humidity lasts from April to October while the dry season lasts from November to March. Its yearly average high and low temperature is about 31°C and 22°C respectively with substantial agriculture land mass and climate conducive for the production of diverse range an tree crops, fruits, vegetables, fishery, forestry and livestock product.

The State is predominantly a Yoruba society with a large percentage of its labour force engaged in agriculture. Crops grown in Ibadan include cassava and maize produced annually, fruits like mangos, pineapple and citrus species and vegetables especially tomatoes and chilies. The state capital is a major transit point linking the coast to major cities in the north. It is abundant in clay, kaolin and aquamarine also serves as a trade center for cassava, cocoa, cotton, timber, rubber and palm oil. It has several industries for processing agriculture products like tobacco, cereals, leather and timbers. Agriculture is the dominant occupation of the people of Oyo State providing income and employment opportunities for over 70% of its population. It contributes well over 75% of the state's Gross Domestic Product.

Multi-stage sampling procedure was used as sampling technique for this study.

Stage 1; a purposive sampling was used to select samples in Lagelu, Akinyele and Ido Local Government Areas within Ibadan metropolis. The choice of these Local Government Areas in the study area was as a result of the dominance of cassava farmers in the area for better representative of the sample.

Stage 2; Random sampling was used to select three communities from each of the three Local Government Areas in the study area. From these communities 10 respondents were selected randomly to have a total of 90 respondents of cassava value chain processors who were interviewed through well-structured questionnaire. Primary data were collected using a well-structured questionnaire that was administered to the cassava farmers who are into value chain production.

The data were analyzed using descriptive and inferential statistical analysis. The descriptive analysis such as frequency distribution, percentages, standard deviation and mean were used to analyze the objectives. Inferential statistics involved the use of Karl Pearson Product Moment Correlation as explained below:

Karl Pearson Product Moment Correlation

This was used to determine the strength of relationship between variables when measured at a particular interval level. It can be interpreted as in the case of the spearman rho. Pearson product moment correlation does not take into consideration whether a variable has been classified as dependent or independent variable. It treats all variables equally. For decision making, we check the critical values of r on the table using degree of freedom (n-2). R-values indicate relationship but not causality. So there may be a relationship between the variables but it does not mean one is the cause of another. This is because we are dealing with a bi-variate relationship and there could be other variables/factors in the environment that are not captured by our research.

$$Y = \frac{n\sum xy - \sum x \sum y}{\sqrt{\{n\sum x^2 - (\sum x)^2\} \{n\sum y^2 - (\sum y)^2\}}}$$

Where x is independent variable

Y is dependent variable

Y is the Karl Pearson correlation coefficient

n is the number of variable

3. RESULTS AND DISCUSSION

3.1. Respondents' Socio Economic Characteristics

The characteristics of farmers interviewed in this study as contained in table 1 include sex, age, marital status, educational level, religion, farm size, level of total annual income, farming experience, household size, and primary occupation. According to sex, 60% of the farmers are males and 40% are females. This may be because production and processing activities are seen to be very rigorous than actual production and better suited to men.

Based on marital status 96.7% of the farmers are married, compared to 2.2% that are single, 1.1% widowed. This implies that a larger proportion of the respondents are married which can lead to a well co-ordinated farm work activity. This also could contribute significantly to the labour force which will improve productivity and income. The married respondents will be in better position to enjoy social inclusion, occupational responsibilities, mutual and working interactions that would facilitate the production and processing of cassava in the study area. The mean age is 49 years, 1.1% are below 27 years, 5.6% are between 28 – 37 years, 31.1% are between 38- 47 years and 15.6% are between 58- 67 years. This implies that the majority of the farmers are in their active age. From the survey, 51.1% of the respondents were Muslims, 42.2% of the respondents were Christian, while 6% were traditionalists. This implies that majority of the respondents are Islam. This is likely to be true, as Oyo State is predominated by people who are of the Islamic faith. The educational level of famers varies with about 32.2% having completed primary school education, while 43.3% have completed secondary education, 13.3 % completed tertiary education, 7.8% had non-formal education, while 3.3% had no formal education. This implies that majority of the respondents have basic secondary education. From the survey, 97.8% of the respondents are involved in farming as their primary occupation while 2.2% were artisans. This indicates that majority of the respondents are primarily farmers. From the survey, 52.2% of the respondents have a household size of 6-10, 34.4 % has a household size of 1-5, while 13.3% have a household size which is above 10. The mean score for the household size is 6. This implies that majority of the respondents have a household size of 6-10 which is an advantage in cassava production and processing through family labor. Also. 37% of the respondents have a farming experience of between 17-24years of farming experience, 30% are between 9-16years, and 17.8% are between 25-32years, 7.8% fall below 8years, while 6.7% are between 33-40years. The mean value of year of experience of the farmers is 19years. This implies that majority of the respondents are experienced farmers.

Table-1. Distribution of Socio-economic Characteristics of Respondents

Age(years)	Frequency	Percent (%)	Mean
< 27	1	1.1	
28-37	5	5.6	
38-47	28	31.1	
48-57	42	46.7	
58-67	14	15.6	
Total	90	100	49
Gender			
Male	54	60	
Female	36	40	
Total	90	100	
Marital status			
Widowed	1	1.1	
Married	87	96.7	
Single	2	2.2	
Total	90	100	
Religion			
Christian	38	42.2	
Islam	46	51.1	
Traditional	6	6.7	
Total	90	100	
Level of education			
Primary education	29	32.2	
Secondary education	39	43.3	
Tertiary education	12	13.3	
Non formal education	7	7.8	
No formal education	3	3.3	
Total	90	100	
Primary occupation			
Farming	88	97.8	
Artisan	2	2.2	
Total	90	100	
Household size			
1-5	31	34.4	
6-10	47	52.2	
Above 10	12	13.3	
Total	90	100	6
Farming Experience(years)			
1-8	7	7.8	
9-16	27	30	
17-24	34	37.8	
25-32	16	17.8	
33-40	6	6.7	
Total	90	100	19
Annual income(₦)			
< 200000	13	14.4	
200001-400000	33	36.7	
400001-600000	16	17.7	
600001-800000	20	22.2	
800001-1000000	7	7.8	
> 1000000	1	1.1	
Total	90	100	491685.40

Farm size		
Less than 2 hectares	83	92.2
2-5hectares	7	7.8
Above 5 hectares	0	0.0
Total	90	100

Source: Field survey, 2017

The result on table 1 is a clear indication that majority of the cassava farmers have been in farming for very long time, hence they would be vast in the knowledge of farming practices. With regards to annual income, 36% of the respondents earn between ₦200,001-₦400,000, 22.2% earn between ₦600,001-₦800,000, 18.9% earn between ₦400,001-₦600,000, 14.4% earn less than ₦200,000, 7.8% earn between ₦800,001-₦100,000, while 1.1% earn above ₦100,000. The mean income is ₦491,685.40. This implies that majority of the respondents have a low total annual income. It was also revealed that 92.2% of the respondents have less than a hectare of land, 7.8% has between 2-5hectares of land. This implies that majority of the farmers are small farm holders.

3.2. Governmental and Non-Governmental Community Financing Institutions

From the survey, 61.1% of the respondents claimed that the financial institutions in the community are not owned by the government while 38.9% claimed the financial institution are owned by the government. This implies that most of the financial institutions are not governmentally owned. Also 46.7% of the respondents claimed that some of the institutions available in the communities are savings and loan societies, 25.6% claimed that some of the institutions are micro finance banks, 11.1% claimed that some are credits union, 8.9%t claimed that some other financial institutions are owned by other financial institution present in the community, 7.8% claimed some are commercial banks while 4.4% claimed that some are agricultural banks (table 2). This implies that majority of the financial institutions present are owned by the savings and loan society (cooperative societies), and the respondents are members and also benefit from.

Table-2. Distribution of the presence of financial institution and owners

Government Owned	Frequency	Percent (%)	Rank
Yes	35	38.9	
No	55	61.1	
Total	90	100	
Name of institution			
Savings & loan society	42	46.7	1 st
Micro finance banks	23	25.6	2 nd
Credit union	10	11.1	3 rd
Commercial banks	7	7.8	4 th
Others	4	4.4	5 th
Agricultural bank	4	4.4	6 th
Total	90	100	

Source: Field survey, 2017

3.3. Effects of Financial Institution on Respondent's Income

From table 3, increase in the standard of living of the respondents was greatly affected by the financial institution and thus was ranked 1st with 4.39 point. 57.8% of the respondents claimed the benefits received from the financial institution has a high effects on their standard of living which is affirmed by 43.3% of the respondents who agreed that their monthly income has increased as a result of the accessibility to fund, 22.2% affirmed that it has a moderate effect on their standard of living, 7.8% affirmed that it has a low effect on their standard of living while 6.7% affirmed that it has no effect on their standard of living.

From table 3, 38.9% stated that access to financial institution has moderately increased the money spend on farm production activities while 32.2% agreed that the effect is high. Increase expenses on personal clothing was

regarded as the least in the effect that the financial institutions has on the respondents which ranked 9th, 33.3% of the respondents agreed that the financial institution has a high effect on their personal clothing, 31.1% agreed that it has a moderate effect The Grand mean of 4.04 the respondents' perceptions attest that the financial institution has a high effect on the respondents. This implies that the respondents perceived the presence of the financial institutions as a factor enhancing their livelihood and income.

Table-3. Effects of financial institution on respondents' income

Effects	No effect		Low effect		In difference		Moderate effect		High effect		Total	Mean	Rank
	F	%	F	%	F	%	F	%	F	%			
Increase in Standard of living	6	6.7	7	7.8	0	0	12	13.3	52	57.8	77	4.39	1 st
Increase in monthly income	6	6.7	9	10	1	1.1	22	24.4	39	43.3	77	4.17	2 nd
Purchase of household equipment	5	5.6	9	10	1	1.1	28	31.1	34	37.8	77	4.14	3 rd
Increased in money for farm production	5	5.6	7	7.8	1	1.1	35	38.9	29	32.2	77	4.11	4 th
Payment for house rent	7	7.8	13	14.4	2	2.2	24	26.7	31	34.4	77	4.01	5 th
Money for household's health care	5	5.6	16	17.8	3	3.3	23	25.6	30	33.3	77	4.01	5 th
Increase in provision for food	9	10	16	17.8	3	3.3	14	15.6	35	38.9	77	3.98	6 th
Money for house maintenance	8	8.9	10	11.1	5	5.6	21	23.3	33	36.7	77	3.98	6 th
Increase in fund for children's school	8	8.9	9	10	5	5.6	32	35.6	30	33.3	77	3.98	6 th
Provision for children's clothing	7	7.8	11	12.2	5	5.6	33	36.7	31	34.4	77	3.93	7 th
Increase in money for personal clothing	9	10	16	17.8	2	2.2	20	22.2	30	33.3	77	3.88	9 th
Grand mean												4.04	

Source: Field survey, 2017

3.4. Challenges Faced by the Respondents

From the survey as shown in table 4, 53.3% affirm that the financial institutions give loan at high interest rates, 23.3% complained of the government policies, 20.0% affirmed that there is no collateral security to access loans, 14.4% of the respondents affirmed that there were no financial institution in their community, 3.3% affirmed that they have no encounter with the financial institutions, 8.9% affirmed that they lack linkages to credits, 8.9% affirmed that there are no guarantors and surety to stand in for them, 5.6% affirmed that there is problem of land tenure system in their community, 2.2% affirmed that they have no membership certification with the financial institutions, 1.1% complained of delay in issuing of loans by the financial institutions, 1.1% affirmed that expected amounts are not usually given to them. This implies that majority of the respondents affirmed that most financial institutions give out loans at high interest rate. This is the major problem of the respondents that prevents the respondents from gaining access to financial benefits.

Table-4. Distribution according to challenges faced by the respondents

Challenges	Frequency	Percent (%)
High interest rate	48	53.3
Government policies	21	23.3
No collateral security to access loan	18	20.0
Financial institution is not available	13	14.4
Absence of guarantor and surety	8	8.9
Lack of linkages to credit	8	8.9
Problem of land tenure system	5	5.6
No encounter with them	3	3.3
Non membership with financial institution	2	2.2
Not giving out expected amount	1	1.1
Delay in issuing of loan	1	1.1

Source: Field Survey, 2017

3.5. Hypothesis

H₀, there is no significant relationship between community financing institutions and cassava farmers' income.

The result of the test statistics in table 5 shows that there is a significant relationship between rural financing institution and cassava farmers' income. The chi-square value of 6.07 is significant at 0.05 level of significance since the p-value of 0.014 is lesser than 0.05.

Therefore the null hypothesis is rejected. This means that there is a significant relationship between the rural financing institutions and the cassava farmers' income. The implication of this is that the respondents' income is affected by the presence or the absence of the financial institutions. This could only be because processors cannot increase supply beyond the output they can produce. Even if financial institutions were to be present in the community, they cannot sell or supply beyond what they get from their production which can lead to increase in financial income of the farmers [2].

On policy implication, these major determining factors could be more locally enhanced through a proper formulation of policy which involves low interest rate by the government, this will facilitate a proper access to credit by the farmers which will promote the livelihood of the respondents.

Table-5. Chi-Square Analysis

Variables	Chi square value	Assymp. Sig (2-sided)	Remark
Rural financing institution * farmers income	6.07	0.014	Significant

Source: Field survey, 2017

4. CONCLUSION

The study has critically examined the effects of the various community financing institutions in the study area. It reveals that there are financial institutions in the community but majority of the people were not able to gain access and benefit from those financial institutions as a results of the high interest rates and unfavorable policies by the financial institutions. The study shows that easy access to credit is the major factor which could enhance respondents' livelihood activities. More so, the high interest rate was the major constraints that hindered livelihood activities of the respondents in the study area. It was recommended that government should establish more financial institutions targeting the farmers in rural areas with the mandate to make credit available to farmers at low interest rate especially the cassava farmers.

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