EFFECT OF FINANCIAL INTERMEDIATION ON AGRICULTURAL PRODUCTION AMONG MEMBERS OF COOPERATIVE SOCIETIES IN ANAMBRA STATE, NIGERIA

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Abstract
Adequate financing of the agricultural sector is imperative for a robust food security programme and poverty reduction initiatives. This study examined effect of financial intermediation on agricultural production among members of cooperative societies in Anambra State. The objectives are to examine the influence of cost of credit on agricultural production among members of cooperative societies in Anambra State; to determine the influence of amount of credit borrowed on agricultural production among the cooperative societies in Anambra State; to assess the effect of credit repayment on agricultural production among the cooperative societies in Anambra State. The study adopted a descriptive survey research design that aimed to determine the relationship between the independent variables and dependent variable in a population. The population of this study was made up of members of registered Famers Multipurpose Cooperative Societies with membership strength of 6986. A sample of 287 was determined for the study using Taro Yamane formula after the multi-stage sampling technique was used. A structured questionnaire was administered to 287 respondents but only 266 responded to the questionnaire. The hypotheses of the study showed that the five coefficients of credit (socioeconomiccharacteristics, Cost of cooperative credit, Amount of Credit Borrowed, Loan repayment period and Loan Repayment Performance) significantly influenced agricultural production among members' cooperative societies in Anambra State at 5% significant levels. The study recommends that young and able bodied men and women particularly new graduates without employment should embrace agricultural production. This will help reduce poverty, unemployment, increase food output and help them build career in the agricultural sector. In order to address the challenge of cost of cooperative credit, credit institutions should ensure that loans are given on time. The repayment period for credit obtained should be spread in such a way that the cost will not be heavy on the farmers. Agricultural credit lending institutions should provide adequate credit facilities to cooperative farmers to enable them increase their production capacity among others.

Keywords: *Financial intermediation, credit, loan repayment.*

Introduction

Financial intermediation is carried out through financial intermediaries who act as delegated monitors (on behalf of the depositors) and therefore help lower monitoring costs hence eliminating would beagency costs, lower liquidity costs,

and lower price risks. The intermediaries help to bring together the depositors and the borrowers matching their transaction needs and providing other services and as a result reduce the transaction costs and eliminate information costs. Depositors entrust their funds with these intermediaries who in turn invest them through loans and other investment projects, with the depositors able to liquidate (through withdrawals) their savings at any given time (Fasola, Asikhia, Akinlabi & Makinde, 2020; Andries, 2009).

The poverty of the rural farmers and inability to finance their agricultural production necessitated the need for external funding through financial intermediaries like government schemes and grants from donor agencies, savings and loans association, microfinance institution, cooperative thrift and credit societies, commercial banks, the central bank etc (Fasola, et al, 2020). However, to have easy access to credit for agricultural production, farmer are encouraged to form themselves into cooperatives as a policy initiative to enhance agricultural development as well as value chain development in transition and developing economies (Olagunju, Ogunniyi, Oyetunde- Usman, Omotayo & Awotide, 2021).

Credit has been considered not only as one of the critical inputs in agriculture, but is also regarded as an effective means of economic transformation and poverty alleviation. The performance of the agricultural sector depends to a large extent on the availability of credit. Credit affects the performance of agriculture by providing resources for purchase of inputs and the adoption of new technology (Nwankwo, 2008).

Agriculture plays a very significant role in the socioeconomic development of both developed and emerging economies across the globe. Agriculture provides food for human consumption; it generates employments, provide income and has contributed immensely to the Gross Domestic Product (GDP) of various economies (Ayeomoni & Aladejana, 2016). Agricultural development in Nigeria has had a chequered history, the sector played a pivotal role in the history of Nigerian economic development by providing food security, employment, foreign exchange earnings and poverty reduction (Anigbogu, Onugu, Igboka & Okoli, 2015). Ayeomoni and Aladejana (2016) posits that the sector employs over 50% of the work force and account for over 70% of the GDP from the non oil sector. It contributed more than three- quarter or 75% of export earnings and provides raw material and resources for investment in other sectors ofthe economy. Regrettably, after over six decades of independence, agricultural production in Nigeria is still largely in the hands of small scale rural farmers with small farm land, low capital investment and low income.

Consequently, the subsistence nature of the agriculture in Anambra state has adversely affected food production as food demand and supply gap widens thus instigating hunger and poverty in the study area. Financial intermediation in the agricultural sector therefore becomes critical to enhance the production capacity

of the rural subsistence farmers that contributes over 80% of the agricultural production in the country (Lawal, Olayanju, Ayeni & Olaniru, 2019). Financial intermediation involves a whole lot of activities that involves reducing the cost of information access and the conduct of financial transaction. It provides funding for investors as it mobilizes resources from depositors for onward lending to borrowers. In other words it mobilizes funds from surplus economic unit to the deficit economic unit. It also aids the creation of specialized products, makes provision for insurances and provides a hedge against risk (Shittu, 2012; Adewole, Nwankwo, Ogbadu, Olukotun & Samuel, 2018; Anigbogu, Okoli & Nwakoby, 2015).

A vibrant and robust agricultural sector is imperative for food security and poverty reduction. Regrettably, agricultural production in Anambra state is largely left in the hands of resource poor rural farmers whose production capacity is low as a result of their perceived inability to adequately finance their agricultural production thus necessitating the need for external financing for adequate financing. It is not out of the way to state that there are stringent conditions and challenges faced by farmers in accessing external funding for their agricultural production. This is corroborated by extent literature Osabohien, Adeleye and Alwis (2020) and (FAO, 2011) that banks and other financial institutions are still very reluctant to fund agricultural projects which are evident by stringent credit conditions. As a result, meager funding sips into the agricultural sector, which accounts for over 70% of the total labour force of most African economies.

Although, the government and donor agencies have been in the forefront of financing agriculture in Nigeria because of the risky nature of the sector that prevents the deposit money banks from investing in the sectors. They have supported the sector through various agricultural development programmes. Ajayi, Nageri and Akolo (2017) posits that agricultural sector support in Nigeria is widely provided by the public sector through schemes, programmes and institutional support. The schemes include Agricultural Credit Guarantee Scheme Fund (ACGSF), Agricultural Credit Support Scheme (ACSS), Large Scale Agricultural Credit Scheme (LASACS), Supervised Agricultural Loans Board, Commercial Agriculture Credit Scheme (CACS) were established during the decade except the ACGSF which was established in 1977. Some agricultural support programmes include National Accelerated Food Production Programme (NAFPP)-1972;Agricultural Development Programme-1975; Operation Feed the Nation (OFN)-1976; Green Revolution programme-1980; Rural banking programme-1977 to 1991; Community banking programme-1991 to 2007; Root and Tuber Expansion programme-2000; National FADAMA Development programme among others. Agricultural development institutions are, Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) now Bank of Agric (BOA) and Nigerian Agricultural Insurance Corporation (NAIC). As a result of leveraging linked with borrowing as a major form of agricultural

financing and policies, average farm income made by ACGSF beneficiaries is larger than that made by non-beneficiaries (CBN, 2007).

Nigeria might have flourished in feeding its populations' and become key exporter of agricultural produces with a high rate of rural development if these schemes, programmes and institutions attained their aims and objectives. Unfortunately, Nigeria is still a major importer of industrial and consumer agricultural products (CBN 2015). Against this backdrop, this study was undertaken to carry out an empirical investigation to ascertaining the extent to which the various financial intermediaries have influenced agricultural production in Anambra State.

The main objective of this study was to examine the effect of financial intermediation on agricultural production among members of cooperative societies in Anambra State. Specifically, the study intended to:

i. Describe the effect of socioeconomic characteristics of members of cooperative societies on agriculturalproduction in Anambra State.
ii. Examine the influence of cost of credit on agricultural production among members of cooperativesocieties in Anambra State.
iii. Determine the influence of amount of credit borrowed on agricultural production among members ofcooperative societies in Anambra State.
iv. Assess the effect of credit repayment on agricultural production among members of cooperativesocieties in Anambra State.
v. Ascertain the influence of loan repayment performance on agricultural production among members ofcooperative societies in Anambra State.

Hypotheses

The following null hypotheses were formulated and tested in the study:

Hypothesis One

Ho_1: Socioeconomic characteristics have no significant influence on agricultural production amongmembers of cooperative societies in Anambra State.

Ha_1: Socioeconomic characteristics have significant influence on agricultural production among membersof cooperative societies in Anambra State

Hypothesis Two

Ho_2: Cost of credit has no significant influence on agricultural production among members of cooperativesocieties in Anambra State.

Ha_2: Cost of credit has significant influence on agricultural production among members of cooperativesocieties in Anambra State.

Hypothesis Three

Ho_3: Amount of credit borrowed has no significant influence on agricultural production among members ofcooperative societies in Anambra State.

Ha_3: Amount of credit borrowed has significant influence on agricultural production among members ofcooperative societies in Anambra State.

Hypothesis Four

Ho$_4$: Credit repayment period has no significant influence on agricultural production among members ofcooperative societies in Anambra State.

Ha$_4$: Credit repayment period has significant influence on agricultural production among members ofcooperative societies in Anambra State.

Hypothesis Five

Ho$_5$: Loan repayment performance has no significant influence on agricultural production among membersof cooperative societies in Anambra State.

Ha$_5$: Loan repayment performance has significant influence on agricultural production among members ofcooperative societies in Anambra State.

Methodology

This study adopts a descriptive survey research design that involves asking questions, collecting and analyzing data from a supposedly representative members of the population at a single point in time with a view to determine the current situation of that population with respect to one or more variable under investigation. The questions asked were to elicit responses that answered the research questions and addressed the objectives of the research.

Anambra State is located in the south central area of south eastern Nigeria. With Imo State, it forms the heartland of Igbo land. It has an estimated population of 7,821,850 million people which stretches over about 60 kilometers between surrounding communities. It is reputed to have the highest population densityin Africa with an estimated density of 1500 – 2000 persons per square kilometer. The state is bordered by Delta State to the west, Imo State to the south, Enugu State to the east and Kogi State to the north. Thoughits mineral resources remain untapped, Anambra State is rich in natural gas, crude oil, bauxite, ceramics and arable soil. It is located between latitude 5 42 E and 6 47 N and longitude 6 37 E and 7 23E with a land massof 44.116sq km. Average rainfall is about 430cm. The indigeneous ethnic group in Anambra is Igbo (98% ofthe population). Anambra is the eight most populated state in the Federal Republic of Nigeria and is rich in natural gas, crude oil, bauxite, ceramics and good arable soil. The main occupations in Anambra state are farming, trading and civil service (Anambra. Org. ng). Anambra State is an inland state with its capital in Awka. The people of the state are warm, hospitable and highly enterprising and could be found engaged in trading all over the country. The state is comprised of 21 local government areas namely Aguata, Anambra, Anambra East, Awka North, Awka South, Anaocha, Ayamelu, Dukunofia, Nnewi North, Nnewi South, Ojoto, Onitsha North, Onitsha South, Ogbaru, Ekwusigo, Njikoka, Idemili North, Idemili South, Orumba North, Orumba South, Anaocha, and Ihiala. The State was created in 1976 from the old East Central State with its capital at Enugu. A further reorganization of the Nigerian federation in 1991 saw the state divided into two states, Anambra and Enugu states with its new capital at Awka. The state is predominantly occupied by the Igbo ethnic group who by nature are farmers, fishermen, craftsmen and traders. Among crops grown by farmers in the state are yam, palm produce, rice, cassava,

cocoyam, vegetables, and differentvarieties of fruit trees among others. They are also involved in fishing, particularly those living in the riverine areas of the state, while their craftsmanship are nationally and internationally recognized as evident in the iron smithing works of Awka people, the bronze sculptures of Igbo Ukwu etc. The state is renowned for its abundant works of art and this explains the avalanche of art centres and artists found in the state. The state is home to magnificent bronze works, iron works, pottery and artists that place the state in the league ofthe most cultural endowed states in Nigeria.

The population of the study is made up all the members of Famers Multipurpose Cooperative Societies in Awka Agricultural Zone, Anambra State. The Awka Agricultural Zone has a total of One Thousand One Hundred and Eighteen (1,118) registered Famers Multipurpose Cooperative Societies with membership strength of 6992.

S/N	Name of Local Government	Number of Cooperative	Membership Strength
1	Awka South Local Government	252	2030
2	Awka North Local Government	244	1811
3	Idemili South Local Government	181	981
4	Dunukofia Local Government	203	1153
5	Njikoka Local Government	232	1011
	Total	1118	6986

Source: Computation from records of Ministry of Trade, Commerce, Market & Wealth Creation, Anambra State, 2022.

To determine the sample size of the study, the multi-stage sampling technique was used. The first stage was the use of simple random sampling to select four communities from each of the local government in the agricultural zone, making a total of sixteen communities. The second stage was the use of purposive sampling to select one viable FMCS from each of the selected communities thus having a total of twenty cooperative societies with membership strength of 796.

Table 1: Names of Societies Selected and membership strength

s/n	Names of societies	Towns	Membership Males	Females	Total
1	Njikoka Awka FMSC Ltd	Awka	22	14	36
2	Udoka Nise FMCS Ltd	Nise	37	11	48
3	Igwedimma Nibo FMCS Ltd	Nibo	24	21	45
4	Amawbia FMCS Ltd	Amawbia	19	15	34
5	Isu FMCS Ltd	Isu	23	16	39
6	Ngwoma Mgbakwu FMCS Ltd	Mgbakwu	17	11	28
7	Amansea FMCS Ltd	Amansea	35	21	56

8	Oganiru Urum FMCS Ltd	Urum	25	22	47
9	Akwu-Ukwu FMCS Ltd	Agulu	24	21	45
10	Alor FMCS Ltd	Neni	33	17	50
11	Nnobi FMCS Ltd	Aguluzoigbo	17	13	30
12	Oba FMCS Ltd	Adazi	17	15	32
13	Ide Enugwu Agidi FMCS Ltd	Enugwu Agidi	33	17	50
14	Ukpo FMCS Ltd	Ukpo	33	17	50
15	Chidimma Ifitedunu FMCS Ltd	Ifitedunu	17	13	30
16	Ezeamadi Ukwulu FMCS Ltd	Ukwulu	17	15	32
17	Abagana FMCS Ltd	Abagana	33	17	50
18	Abba FMCS Ltd	Abba	17	13	30
19	Ezenwanne Nwafia FMCS Ltd	Nwafia	17	15	32
20	Enugwukwu FMCS Ltd	Enugwukwu	17	15	32
	Total		477	384	861

Computation from field survey, 2022

The last stage was the application of Taro Yamani formula to obtain the desired sample size for the study. The sample size for the research was 287 respondents. However, 266 copies of the questionnaire were returned and used for the study.

Data Analysis

Data collected were analyzed using descriptive statistics (frequencies, percentages, mean, and standard deviation) and the inferential statistics such as test statistics and the linear regression model. The demographic profile was processed using descriptive statistics. Thereafter, the five objectives were processed using descriptive statistics (like mean and standard deviation) and the regression model of the Ordinary Least Square (OLS). T-test and F-test statistics was used to test the hypotheses of the study and theoverall fitness of the model.

Model Specification

Model 1

The model for this study is specified as follows:

Implicit form of the Model

FOP = f (AGE, EDQ, YCE, MTS) …… …eq(1)

The model is explicitly specified as follows;

$FOP = \alpha+\beta_1 AGE_1 + \beta_2 EDQ_2 + \beta_3 YCE_3 + \beta_4 MTS_4$ ……..…….....eq(2)

The model is explicitly specified as follows;

The double log form of the model is specified to avoid having a spurious result by ensuring that all thevariables are on the same scale for measurement:

$Log\ FOP = \alpha +\beta_1 log\ AGE_1 + \beta_2 log\ EDQ_2 + \beta_3 log\ YCE_3 + \beta_4 log\ MTS_4$ …eq(3)

The econometric form of the model becomes more realistic with the introduction of the random or scholasticterm ε: The econometric form of the model is express

thus:

$\text{Log FOP} = \alpha + \beta_1 \log \text{AGE}_1 + \beta_2 \log \text{EDQ}_2 + \beta_3 \log \text{YCE}_3 + \beta_4 \log \text{MTS}_4 + \varepsilon$ .eq(4)

Where; FOP= Farmers OutputAGE = Age

EDQ = Educational Qualification

YCE = Years of Cooperative ExperienceMTS = Marital Status

β_0 = Intercept of the model

$\beta_1 - \beta_4$ = Parameters of the modelα_i= Stochastic error term

Model 2

The second model for the study is specified as follows:

Implicit form of the Model is specified thus

FOP = f(CCR, ACB, CRP, CRP) …….. eq(1)

The model is explicitly specified as follows;

$\text{FOP} = \alpha + \beta_1 \text{CCR}_1 + \beta_2 \text{ACB}_2 + \beta_3 \text{CRP}_3 + \beta_4 \text{CRP}_4$ ……. ..…….....,eq(2)

The model is explicitly specified as follows;

The double log form of the model is specified to avoid having a spurious result by ensuring that all thevariables are on the same scale for measurement:

$\text{Log FOP} = \alpha + \beta_1 \log \text{CCR}_1 + \beta_2 \log \text{ACB}_2 + \beta_3 \log \text{CRP}_3 + \beta_4 \log \text{CRP}_4$……eq(3)

The econometric form of the model becomes more realistic with the introduction of the random or scholasticterm ε: The econometric form of the model is express thus:

$\text{Log FOP} = \alpha + \beta_1 \log \text{CCR}_1 + \beta_2 \log \text{ACB}_2 + \beta_3 \log \text{CRP}_3 + \beta_4 \log \text{CRP}_4 + \varepsilon$

…eq(4)

Where; FOP= Farmers OutputCCR = Cost of Credit

ACB = Amount of Credit BorrowedCRP = Credit Repayment Period CRP = Loan Repayment Performanceβ_0 = Intercept of the model

$\beta_1 - \beta_4$ = Parameters of the modelα_i= Stochastic error term ***Decision rule***

A 0.05 significance level has become a common chosen level of significance in social science researches, we follow suit and test the above hypotheses. The null hypothesis was to be rejected if the probability at which the t-value is significant and is less than the chosen level of significant; otherwise, the alternative hypothesis would be accepted.

1. If the probability (Sig) > 0.05, we would accept the null hypothesis and reject the alternative hypothesis.
2. If the probability (Sig) < 0.05, we would accept the alternative hypothesis and reject the null hypothesis.

Data Presentation and Analysis

The presentation and analysis of data collected from the field was carried out in

this chapter. The aimis to present the data in an interpretable form so that the variables of the study can be well understood.

Table 2: Distribution According to socio-economic Profile of the Respondents

Variable	Frequency	Percent (%)	Cumulative (%)
Gender			
Male	148	55.6	55.6
Female	118	44.4	100
Total	266	100	
Age			
18-30	4	1.5	1.5
31-40	46	17.3	18.8
41-50	70	26.3	45.1
51-60	88	33.1	78.2
61-70	58	21.8	100.0
Total	266	100.0	
Educational Qualification			
Primary	11	4.1	4.1
Secondary	207	77.8	81.9
Tertiary	48	18.1	100.0
Total	266	100.0	
Cooperative Experience			
1-5	81	30.4	30.4
6-10	103	38.7	69.2
11-15	78	29.3	98.5
15-30	4	1.5	100.0
Total	266	100.0	
Marital Status			
Married	214	80.5	80.5
Single	47	17.7	98.2
Widow/Widower	5	1.8	100.0
Total	266	100.0	
Occupation			
Farming	90	33.8	33.8
Business	75	28.1	61.9
Civil servant	47	17.7	79.6
Artisan	33	12.4	92
Trading	21	8.0	100.0
Total	266	100.0	

Source: Field Survey, 2022

As shown in Table 2, 55.6% of the respondents were males while 44.4% of the respondents were females. From table 2, 1.5% of the respondents were between

the ages of 18-32, 17.3% between the ages of 31-40. 26.3% were between the ages of 41-50. 33.1% of the respondents were between the ages of 51-60, while 21.8% of the respondents, were between the ages of 61-70. From Table 2, all the respondents had formal education. 4.1% of the respondents had primary education. 77.8% had secondary education, while 18.1%had tertiary education. With respect to cooperative experience, 38.7% of the respondents had 1-5years cooperative experience. 38.7% had 6-10years cooperative experience. 29.3% had 11-15years cooperative experience, while 1.5% of the respondents had 15-30 years cooperative experience. From Table 2, 80.5% of the respondents were married. 17.7% were single, while 1.8% was widows/widowers. With respect to occupation of the respondents, 33.8% of the respondents were mainly farmers. 28.1% were into business, 17.7% were civil servants, 12.4% were artisans, and 8.0% were into trading.

Table 3: Regression Result on effect of socioeconomic characteristics on agricultural production among members' cooperative societies in Anambra State**.**

Model	**B**	**Std. error**	**T**	**Sig.**
Constant(C)	0. 105	0.022	3.609	0.000
Gender	0.276	0.034	3.729	0.000
Age	-0.330	0.053	-4.991	0.001
Educational Qualification	0.188	0.134	3.026	0.002
Years of Cooperative Experience	0.414	0.116	5.244	0.010
Marital Status	0.210	0.052	6.931	0.001
R	0.793			
R^2	0.763			
Adj. R^2	0.730			
F-statistic	101.13			0.000

Source: Field Survey, 2022 Dependent Variable: Farmers Output

To determine the effect of socioeconomic characteristics on agricultural production among members' cooperative societies in Anambra State, the weighted mean of the five independent variables were regressed on the dependent variable to enable us determine the nature of relationship between the dependent and independent variables, effect of the five independent variables on the dependent variable, the overall fitness of the model using the F-statistics and probability value, and the level of significance of the independent variables in influencing the dependent variables using the t-test and probability value. Table 3 shows the regression result. It also shows the precision of the model which was analysed using economic *apriori* criteria and statistical criteria.

From the regression result, apart from age which shows an inverse relationship to agricultural production, allthe other variables have direct and positive relationship with agricultural production. Again, the entire coefficient (gender, age, educational

qualification, years of cooperative experience and marital status) has significant effect on agricultural production.

Regression Analysis Result

Table 4: Regression Result on influence of cooperative credit on agricultural production among members cooperative societies in Anambra State

Model	B	Std. error	T	Sig.
Constant(C)	0. 155	0.034	4.579	0.000
Cost of cooperative credit	-0.136	0.061	-8.749	0.000
Amount of Credit Borrowed	0.160	0.066	6.991	0.003
Loan repayment period	0.516	0.128	4.046	0.006
Loan Repayment Performance	0.364	0.112	3.254	0.047
R	0.903			
R^2	0.883			
Adj. R^2	0.850			
F-statistic	78.63			0.000

Source: Field Survey, 2022 Dependent Variable: Farmers Output

To determine the influence of cooperative credit on agricultural production among members cooperative societies in Anambra State, the weighted mean of the five independent variables were regressed on the dependent variable to enable us determine the nature of relationship between the dependent and independent variables, effect of the five independent variables on the dependent variable, the overall fitness of the model using the F-statistics and probability value, and the level of significance of the independent variables in influencing the dependent variables using the t-test and probability value. Table 4 shows the regression result. It also shows the precision of the model which was analysed using economic *apriori* criteria and statistical criteria.

Test of Hypotheses

A 0.05 significance level has become a common chosen level of significance in social science researches, we follow suit and test our above hypothesis. The null hypothesis is to rejected if the probability at which the t-value is significant and is less than the chosen level of significant; otherwise, the alternative hypothesis will be accepted.

If the probability (Sig) > 0.05, we will accept the null hypothesis and reject the alternative hypothesis.If the probability (Sig) < 0.05, we will accept the alternative hypothesis and reject the null hypothesis.4.

The F-test and t-test are used to know the statistical significance of the individual parameters at 5%significance level. The result is showed on tables below.

Hypothesis One

Ho_1: Socioeconomic characteristics have no significant influence on agricultural production amongmembers' cooperative societies in Anambra State.

Table 5: Hypothesis One

Variables	F-cal (t_{cal})	Sig.	Conclusion
Constant(C)	0. 105	0.000	Statistically Significant
Socioeconomic characteristics	101.13	0.000	Statistically Significant

***Source**: Researchers' computation 2022*

From Table 5, the F-test value of cost of cooperative credit is significant. We, therefore, reject the null hypothesis and concluded that socioeconomic characteristics have significant influence on agricultural production among members' cooperative societies in Anambra State.

Hypothesis Two

Ho_2: Cost of credit has no significant influence on agricultural production among members' cooperativesocieties in Anambra State.

Table 6: Hypothesis Two

Variables	t-cal (t_{cal})	Sig.	Conclusion
Constant(C)	4.579	0.000	Statistically Significant
Cost of cooperative credit	-8.749	0.000	Statistically Significant

***Source**: Researchers' computation 2022*

From Table 6, the t-test value of cost of cooperative credit is significant. We, therefore, reject the null hypothesis and concluded that cost of cooperative credit has significant influence on agricultural production among members' cooperative societies in Anambra State.

Hypothesis Three

Ho_3: Amount of credit borrowed has no significant influence on agricultural production among members' cooperative societies in Anambra State.

Table 7: Hypothesis Three

Variables	t-cal (t_{cal})	Sig.	Conclusion
Constant(C)	4.579	0.000	Statistically Significant
Amount of Credit Borrowed	6.991	0.003	Statistically Significant

***Source**: Researchers' computation 2022*

From table 7, the t-test value of amount of credit borrowed is significant at 0.003 levels of significance. We, therefore, reject the null hypothesis and accept the alternate by concluding that amount of credit borrowed has significant influence on agricultural production among members' cooperative societies in Anambra

State.

Hypothesis Four

Ho_4: Credit repayment period has no significant influence on agricultural production among members' cooperative societies in Anambra State.

Table 8: Hypothesis Three

Variables	t-cal (t_{cal})	Sig.	Conclusion
Constant(C)	4.579	0.000	Statistically Significant
Loan repayment period	4.046	0.006	Statistically Significant

Source: Researchers' computation, 2022

Table 8, the t-test value of loan repayment period is significant at 0.006 levels of significance. We, therefore,reject the null hypothesis and accept the alternate by concluding that loan repayment period has significant influence on agricultural production among members' cooperative societies in Anambra State.

Hypothesis Five

Ho_5: Loan repayment performance has no significant influence on agricultural production among members' cooperative societies in Anambra State.

Table 9: Hypothesis Five

Variables	t-cal (t_{cal})	Sig.	Conclusion
Constant(C)	4.579	0.000	Statistically Significant
Loan Repayment Performance	3.254	0.047	Statistically Significant

***Source**: Researchers' computation 2022*

From Table 9, the t-test value of Loan repayment performance is significant. We, therefore, reject the null hypothesis and conclude that loan repayment performance has significant influence on agricultural production among members' cooperative societies in Anambra State.

Findings

i. Cost of credit has a negative relationship with agricultural production among members' cooperative societies in Anambra State. This implies that the cost of cooperative credit and agricultural productionamong members' cooperative societies in Anambra State increase in the opposite direction. That is to say that cost of cooperative credit has an inverse relationship with agricultural production among members' cooperative societies in Anambra State. In other words, 1% increase in cost of cooperative credit will bring about 13.6% decreases in agricultural production among members' cooperative societies in Anambra State.
ii. Amount of credit borrowed has a positive relationship with agricultural production among members' cooperative societies in Anambra State. In other words, 1% increase in amount of credit borrowed will bring about 16.0% increase in agricultural production among members' cooperative societies in

Anambra State.

iii. Loan repayment period has a direct and positive relationship with agricultural production amongmembers' cooperative societies in Anambra State. As the loan repayment period grows, it increases the cassava production. In other words, 1% increase in loan repayment period will bring about 51.6% increases in agricultural production among members' cooperative societies in Anambra State.

iv. Loan repayment performance has direct and positive relationship with agricultural production among members' cooperative societies in Anambra State. This implies that loan repayment performance move in the same direction with agricultural production among members' cooperative societies in Anambra State. It has a positive influence on agricultural production among members' cooperative societies in Anambra State. As loan repayment performance increases, agricultural production among members' cooperative societies in Anambra State also increases.

Conclusion and Recommendations

Based on the findings of this study, the following conclusion and recommendations were made:

i. Socioeconomic characteristics were found to significantly influence agricultural production among members' cooperative societies in Anambra State. It is therefore recommended that young and able bodied men and women particularly new graduates without employment should embrace agricultural production. This will help reduce poverty, unemployment, increase food output and help them buld careerin the agricultural sector.

ii. In order to address the challenge of cost of cooperative credit, credit institutions should ensure that loans are given on time. The repayment period for credit obtained should be spread in such a way that the cost will not be heavy on the farmers.

iii. Agricultural Credit Lending institutions should provided adequate credit facilities to farmers to enable them increase their production capacity.

iv. Agricultural Credit Lending institutions should ensure that loan repayment period for the farmers are wellspread to enhance their production processes.

v. Agricultural Credit Lending institutions should ensure that farmers are well supervised to ensure that the credit obtained is well utilized. This will help improved farmers loan repayment performance. The farmers should plan for a large farm so that the expected income will improve their capacity to repay farm credit.

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