

## Influence of Cooperatives on Sustainable Development Goal of No Poverty in Anambra State, Nigeria

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**Abstract:** This study examined the influence of cooperatives on sustainable development goal of No Poverty in Anambra State, Nigeria using descriptive statistics like frequencies, percentages, and the inferential statistics such as t-test statistics and the linear regression model on a sample of 277 respondents. Findings revealed that education of farmers, access to land, farm credit, farm inputs have significant influence on no poverty among cooperative farmers in Anambra State. Based on the findings of this study the following recommendations were made: The ministry in charge of cooperative should ensure that farming extension education is given to farmers on a continuing and consistent basis. This is because education of farmers has significant influence on no poverty among cooperative farmers in Anambra State. The government through the ministry of agriculture should come up farm settlement sites that will enable farmers have adequate access to land for profitable agricultural production. The government should provide adequate and affordable supervised agricultural credit scheme. This will ensure that agriculture is adequately funded. Adequate farm input should be made available and accessible to farmers for increased agricultural among cooperative farmers in Anambra State.

**Keywords:** Cooperatives, Sustainable Development Goal, No Poverty, Education of Farmers, Access to Land, Farm Credit, Farm Inputs.

### 1. INTRODUCTION

No Poverty remains one of the 17 principles of sustainable development. The need to fight poverty is imperative because poverty has become endemic and cancerous to the socioeconomic health of Anambra state and Nigeria by extension. The percentage of poor household in Anambra State less than 70 years stood at 67.7%. The percentage of poor household in Anambra State under 50 years stood at 29.9%. The percentage of poor household in Anambra State under 35 years stood at 12.9% even when the poverty headcount rate in Anambra State compared to other states in Nigeria as one of the states with the least poverty rate in 2019 which stood at 14.8%. Consequently, sustaining the development progress becomes a critical challenge not only for the state but for the nation at large because Nigeria has been adjudged as the poverty capital of the world National Bureau of Statistics [NBS, 2022].

Today, the Sustainable development has been described as a development that hinges on 17 principles. These principles rests on a tripod of economic, social and environmental protection which include: no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation and

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infrastructure, reduced inequality, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace and justice, strong institutions and partnerships to achieve the goal (Shi, Han, Yang & Gao, 2019). The sustainable development stresses the need for intergenerational equity, which is the development that meets the needs of the present, without compromising the ability of future generations to meet their own needs. Today, the concept has become a fundamental strategy to guide the world’s social and economic transformation (Shi, Han, Yang & Gao, 2019). The Sustainable development Goals [SDGs] have 17 interconnected goals which address the major development challenges faced by people around the world and Nigeria. Since the adoption of the Sustainable Development Goals [SDGs] in September 2015, Nigeria has continued to demonstrate its commitment to achieving the global goals through leadership and ownership of the implementation process. The Sustainable Development Goals are a global call to action to end poverty, protect the earth’s environment and climate, and ensure that people everywhere can enjoy peace and prosperity (United Nation, 2022).

Today, despite the concerted efforts of the government towards the SDGs programme implementation, the first two pillars or goals of no poverty and zero hunger of the SDGs, the two indicators are still prevalent in Nigeria. In fact the level of poverty and hunger ravaging the Nigeria populace is alarming. Available statistics show that between 2015 and 2019, Nigeria’s population growth outstripped real GDP growth thus lowering the living standard and leaving over 100 million Nigerians in poverty. Most of the people that strife for survival engages in small scale farm and non-farm household enterprises, which do not translate their hard work to an exit from poverty (World Bank, 2022). The government and its global partners have launched a number of programmes that are geared towards fighting poverty. Some of the global partners that work with the government include the United Nations Development Programme [UNDP], Food and Agriculture Organization [FAO], International Labour Organization [ILO], International Fund for Agricultural Development [IFAD] among others (United Nations Nigeria, 2022). However, the International Fund for Agricultural Developments [IFAD] support to the Nigerian Government’s poverty reduction programme in rural areas targets large numbers of smallholder farmers and is essentially people-centred. IFAD supports programmes and projects that work with communities, with smallholder farmers on the platform of cooperatives as the key players (United Nations Nigeria, 2022). The Fund also promotes commodity-based interventions that provide technical and financial support along several value chains, such as livestock products, rice and other cereals, roots and tubers, vegetables and agroforestry products [IFAD, 2015].

The cooperative more precisely the agricultural cooperative has been touted as a veritable tool and platform for accessing virtually all the commodity-based interventions that provide technical and financial support along several value chains. The cooperative contributes to Sustainable Development Goals [SDGs] agenda through social integration, education of farmers, access to land, access to farm credit, access to farm inputs, access to markets among others. Consequently, promoting these SDGs agenda in the areas of no poverty on the platform of cooperative is imperative because of the inherent potentials of cooperative in transforming Nigeria agricultural sector (Anigbogu, Agbasi & Okoli, 2015). Through the contributions of agricultural cooperatives the nation’s agricultural sector has in the past been an important provider of resources for investments in other sectors of the economy and also served as a source of food to growing population. Apart from being a source of food to the people, it has provided employment, incomes and has also been a source of industrial raw materials, and export products for foreign exchange earnings (Anigbogu, Agbasi & Okoli, 2015).

A quick survey at the aim of initiating the various Sustainable Development Goals [SDGs] agenda shows that the programmes are expected to reduce poverty by improving the household income of the citizenry

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particularly farmers, but against this expectation poverty has remained cancerous and an endemic epidemic (Okoli & Umebali, 2022). Doubts have been raised regarding the effectiveness of these programmes in achieving their overarching goal of poverty alleviation and promoting household welfare, as the country experiences soaring and wide-spread poverty incidence throwing Over 80% Nigerians of the populace into extreme poverty and hunger. A close inspection of these programmes reveals priority misplacement (Anigbogu, Onwuteaka, Anyanwu & Okoli, 2014; IFAD, 2015). This assertion is evidenced in the level of poverty ravaging the country today. Over 80% Nigerians live on less than US\$1.25 a day. Poverty is especially severe in rural areas, where up to 80 per cent of the population lives below the poverty line, and social services and infrastructure are limited [IFAD, 2015]. The problems of youth unemployment and underemployment are more accentuated in rural areas, where agriculture remains the primary source of livelihoods. Although Nigeria’s GDP growth is three times higher than its population growth, it is not able to create sufficient employment opportunities for the 4.5 million young people entering the labour market annually (International Fund for Agricultural Development [IFAD, 2015]. Therefore, assessing the Influence of Cooperatives on Sustainable Development Goals of No Poverty is of empirical importance.

**Statement of the Problem**

Eradicating *poverty* is an acts of justice that will unlock huge human potential. Consequently, the critical is what can be done to help end *poverty* ? It all starts with a small action of assisting and equipping farmers to become more productive by educating them on the current and recent farming technology. Helping them have access to farm land, farm credit and farm inputs. Education of farmers, farmers’ access to land, access to farm credit and access to farm inputs has remained a topical issue as farmers access to these critical inputs in agricultural production have continued to affect farmers effort in fighting poverty in Nigeria and Anambra State in particular. Consequently farmers’ inadequate access to these critical inputs has informed their decisions of joining cooperative to improve their access and supply of these critical inputs and supplies through group dynamics. Today, poverty has remained cancerous in Anambra State and Nigeria by extension thus suggesting the need to improve food production and consequently reduce poverty and hunger.

The problem of this study centres on the SDG agenda of no poverty which this study intends to address on the platform of cooperative because of the inherent potentials of cooperative in transforming Nigeria agricultural sector. Through the contributions of agricultural cooperatives the nation’s agricultural sector has in the past been an important provider of resources for investments in other sectors of the economy and also served as a source of food to growing population (Anigbogu & Uzodu, 2018). Despite the contributions of cooperative to employment generation and food production in order to reduce poverty by contributing to the developing the agricultural sector, the country is today still battling with poverty. It has been reported by World Bank that the number of poor persons in Nigeria will rise to 95.1 million in 2022. Between 2018 and 2022 the number of people in Nigeria living in extreme poverty was 89.0 million during this periods Nigeria was said to have overtaken India with 73 million people living in extreme poverty thus making Nigeria to have maintained the infamous position as the poverty capital of the world (World Bank, 2022).

This alarming number of poor people represents people suffering from hunger and malnutrition which were orchestrated by the increasing gap between the demand and supply of food due to the inability of farmers to finance their agricultural production. About 90 per cent of Nigeria’s food is produced by small-scale farmers who cultivate small plots of land and depend on rainfall rather than irrigation systems (Anigbogu & Uzodu, 2018; IFAD, 2015). Today however, farmers have been encouraged to join cooperative as a strategy to fight poverty and close the food deficit gap. This is important to harness the

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cooperative potentials in promoting social integration and providing platform for the education of farmers, farmers access to land, access to farm credit, access to farm inputs, access to markets among others. A number of studies (Giagnocavo, *et al.*, 2018; Imaz & Eizagirre, 2020; Anigbogu, *et al.*, 2015; Anigbogu & Uzundu, 2018) have been carried out in this study area yet; poverty still soar thus warranting an empirical investigation on the influence of cooperatives on sustainable development goal of no poverty in Anambra State, Nigeria. This study is crucial because of the inevitable consequence of persistent soaring poverty that may engulf the nation.

**Objectives of the Study**

The broad objective of the study is to assess the influence of cooperatives on sustainable development goal of no poverty in Anambra State, Nigeria: The Specific objectives are to:

1. Determine the extent to which education of farmers has influenced no poverty among cooperative farmers in Anambra State
2. Examine the extent to which access to land has influenced no poverty among cooperative farmers in Anambra State.
3. Evaluate the extent to which access to farm credit has influenced no poverty among cooperative farmers in Anambra State
4. Ascertain the extent to which access to farm inputs has influenced no poverty among cooperative farmers in Anambra State.

**Research Questions**

The following research question is expected to guide the present research effort:

1. To what extent has education of farmers has influenced no poverty among cooperative farmers in Anambra State?
2. To what extent has access to land has influenced no poverty among cooperative farmers in Anambra State?
3. To what extent has access to farm credit has influenced no poverty among cooperative farmers in Anambra State?
4. To what extent has access to farm inputs has influenced no poverty among cooperative farmers in Anambra State?

**Hypotheses of the Study**

The following null hypotheses are tested at 5% levels of significance

**Ho<sub>1</sub>:** Education of farmers has no significant influence on no poverty among cooperative farmers in Anambra State

**Ho<sub>2</sub>:** Access to land has no significant influence on no poverty among cooperative farmers in Anambra State.

**Ho<sub>3</sub>:** Access to farm credit has no significant influence on no poverty among cooperative farmers in Anambra State

**Ho<sub>4</sub>:** Access to farm inputs has no significant influence on no poverty among cooperative farmers in Anambra State.

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## 2. METHODOLOGY

### *Research Design*

Descriptive research was used in this study. The aim of using descriptive research design is to enable the eliciting of information from the supposed sample of the study by way of 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. Micheal, Oparaku and Oparaku (2012) posit that descriptive survey research design can be quantitative or qualitative, but this study is quantitative in nature. In a quantitative survey research design, the researcher's aim is to determine the relationship between the independent variables and dependent variable in a population. Quantitative research design is either descriptive (variables usually measured once) or experimental (variables measured before and after a treatment).

### *Area of Study*

This study was carried out in Anambra State. Anambra State is a state in south-eastern Nigeria. The area of study is the geographical area or boundaries where the study is carried out (Uzoagulu, 1998). The name Anambra State is an anglicized version of the original 'OmaMbala', the native name of the Anambra River which is a tributary of the famous River Niger. The Capital and the Seat of Government is Awka. Onitsha and Nnewi are the biggest commercial and industrial cities. The state's theme is "Light of the Nation". The boundaries are formed by Delta State to the west, Imo State and Rivers State to the south, Enugu State to the east and Kogi State to the north (Anambra State Statistical Bulletin, 2020).

The indigenous ethnic groups in Anambra State are the Igbos (98% of population) and a small population of Igala (2% of the population) who live mainly in the north-western part of the State. Anambra State is the eighth most populated state in the Federal Republic of Nigeria and the second most densely populated state in Nigeria after Lagos State. The stretch of more than 45 km between Oba and Amorka contains a cluster of numerous thickly populated villages and small towns giving the area an estimated average density of 1,500–2,000 persons per square kilometre (Anambra State Statistical Bulletin, 2020).

Anambra is rich in natural gas, crude oil, bauxite, ceramic and has an almost 100 percent arable soil. In the year 2006, foundation laying ceremony for the first Nigerian private refinery Orient Petroleum Refinery (OPR) cited at Aguleri area. The Orient Petroleum Resource Ltd, (OPRL) owners of OPR, was licensed in June 2002, by the Federal Government to construct a private refinery with a capacity of 55,000 barrels per day. Furthermore, Anambra State is a state that has many other resources in terms of agro-based activities like fishery and farming, as well as land cultivated for pasturing and animal husbandry. Currently, Anambra State has the lowest poverty rate in Nigeria that stood at 14.8% in 2019 (NBS, 2020). The State also has a good number of registered cooperative societies that are both agricultural and non agricultural (Anambra State Statistical Bulletin, 2020).

### *Population of the Study*

The population was made up of members of Cooperative Farmers in Anambra State. The state has four agricultural zones which include: Awka, Anambra, Aguata, and Onitsha. Two zones namely; Aguata and Anambra were selected from the four agricultural zones using judgmental sampling technique because of their agricultural and food production potentials. The preference for the two zones was because of their high poverty incidence and income disparity (Anambra Statistical Bulletin, 2019). The two zones have about 1247 active Agricultural Cooperative Societies with membership strength of 4048. The preference for the two zones was because of their high poverty incidence and income disparity (Anambra Statistical Bulletin, 2019).

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**Sample Size determination and Sampling Procedure**

To determine the sample size sixteen cooperative societies were selected from the two agricultural zones for the study. The cooperative societies are shown in the table 3.1 below

**Table 1: The table below shows the societies selected.**

Names of societies	Towns	Membership Size	Sample size
UgochekeUmunzeFmcs Ltd	Umunze	92	28
UdokaUmunzeFmcs Ltd	Umunze	62	19
UmuneboOgbunkaFmcs Ltd	Ogbunka	88	27
OsodiemeOgbunkaFmcs Ltd	Ogbunka	46	14
EzinnaUfumaFmcs Ltd	Ufuma	42	13
IkeamaUfumaFmcs Ltd	Ufuma	68	21
Izunwanne (AWA) Fmcs Ltd	AWA	82	25
Ugochinyere (AWA) Fmcs Ltd	AWA	50	15
UmuofungoUnueriFmcs Ltd	Umueri	46	14
IfunanyaUnueri (Fug) Mcs Ltd	Umueri	64	19
OluchukwuAguleriFMcs Ltd	Aguleri	52	16
Oganiru Farmers AguleriFMcs Ltd	Aguleri	68	21
OmambalaAnamFMcs Ltd	Anam	80	24
Oroma-EtitiAnam (Fca) Mcs Ltd	Anam	42	13
EziwanneNzam (Fug) Mcs Ltd	Nzam	40	12
IgwebuikieNzam (Fug) Mcs Ltd	Nzam	44	13
Total		1034	293

Source: Authors Computation

The sample size for the study was obtained using Taro Yamane formula. The formula is stated thus:

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

- Where: n = sample size  
 N = population  
 e = Margin of error (5% or 0.05)  
 I = Constant

Substituting in the above formula:

$$n = \frac{1034}{1 + 1034 (0.05)^2}$$

$$= \frac{1034}{1 + 1034 (0.0025)}$$

$$= 1034$$

$$3.6$$

$$= 290.3$$

$$= 290$$

For the purpose of allocation of sample stratum, the researcher adopted R. Kumaison's formula. Below is the R. Kumaisons formula for sample size distribution:

$$n_h = \frac{nN_h}{N}$$

Where  $n$  = Total sample size

$N_h$  = The number of items in each stratum in the population

$N$  = Population size

$N_h$  = The number of units allocated to each stratum

$n$  = 290

### Sources of Data

The researchers explored mainly the primary source of data for the study. The primary data was obtained from members of selected agricultural Cooperative Societies through the use of a structured questionnaire that was administered to them.

### Description of the Research Instrument

The researcher developed questionnaire which was used to collect data for the study. The questionnaire was titled influence of cooperative on sustainable development goal of no poverty in Anambra State, Nigeria. The questionnaire has two sections. Section A and Section B. Section A sought information on socio-economic background of respondents. Section B was made up of items relating to the influence of cooperative on sustainable development goal of no poverty s in Anambra State, Nigeria. The questionnaire was designed using a five (5) point likert summative scale question of Very Great Extent(VGE) 5 points; Great Extent (GE) 4 points; Undecided (U) 3 points; Some Extent (SE) 2 points; and No Extent (NE) 1 point. Out of the 290 questionnaires distributed, only 277 were dully completed and returned for the study.

### Method of Data Analysis

Data collected were analyzed using descriptive statistics (frequencies and percentages) and the inferential statistics such as t-test statistics and the linear regression model. The demographic profile will be processed using descriptive statistics. The hypotheses of the study will be tested using the regression model of the Ordinary Least Square [OLS]. T-test and F-test statistics in the regression results will be used to test the significance overall fitness of the model. All the analyses will be done using SPSS version 23. Linear regression model of the Ordinary Least Square [OLS] approach was used to analyze the objectives in order to ascertain the influence and also determine the relationship between the independent variables

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and dependent variable. The use of Ordinary Least Square [OLS], is informed by the fact that under normality assumption for  $\alpha_i$ , the Ordinary Least Square [OLS] estimator is normally distributed and is said to be best, unbiased linear estimator (Gujarati & Porter, 2008).

**Model Specification**

The model for this study is specified as follows:

Implicit Model

$$POVR = f(EDF, ACL, ACF, AFI) \dots\dots\dots eq(1)$$

The model is explicitly specified as follows;

$$POVR = \alpha + \beta_1 EDF_1 + \beta_2 ACL_2 + \beta_3 ACF_3 + \beta_4 AFI_4 \dots\dots\dots eq(2)$$

Where; POVR = Poverty Reduction

EDF = Education of Farmers

ACL = Access to Land

ACF = Access to Farm Credit

AFI = Access to Farm Inputs

$\beta_0$  = Intercept of the model

$\beta_1 - \beta_4$  = Parameters of the model

$\alpha_i$  = Stochastic error term

**Decision Rule:**

Any mean score above the mean theoretical threshold of 3.0 was accepted while any mean score below the mean theoretical threshold of 3.0 was rejected.

**3. PRESENTATION OF EMPIRICAL RESULTS**

**Table 2: Demographic Profile of Respondents**

Gender	Frequency (n=277)	Percentage (%)	Cumulative (%)
Female	121	43.7	43.7
Male	156	56.3	<b>100.0</b>
<b>Total</b>	<b>277</b>	<b>100</b>	
<b>Age</b>			
≤20	-	-	-
21-30	5	1.8	1.8
31-40	11	3.9	5.7
41-50	62	22.4	28.1
51-60	165	59.6	87.7
Above 60	34	12.3	<b>100</b>
<b>Total</b>	<b>277</b>	<b>100</b>	
<b>Educational Qualification</b>			
Primary	11	4.0	4.0
Secondary	200	72.2	76.2

Tertiary	66	23.8	<b>100</b>
<b>Total</b>	<b>277</b>	<b>100</b>	
<b>Cooperative Experience</b>			
1-5	11	4.0	4.0
6-10	25	9.0	13
11-15	77	27.8	40.8
Above 15	164	59.2	<b>100</b>
<b>Total</b>	<b>277</b>	<b>100</b>	
<b>Marital Status</b>			
Married	103	37.2	37.2
Single	135	48.7	85.9
Widow/widower	17	6.1	92.0
Divorced	22	8.0	<b>100</b>
<b>Total</b>	<b>277</b>	<b>100</b>	
<b>Monthly Income</b>			
1000-20000	17	6.1	6.1
21000-40000	135	48.8	54.9
41000-60000	26	9.4	64.3
61000-80000	22	7.9	72.2
81000-100000	<b>77</b>	27.8	100.0
Total	<b>277</b>	100.0	

Source: Field survey, 2023

As evidenced in table 2, the female gender constitutes 43.7% of the responses to the questionnaire while the male gender constitutes 56.3%. With respect to age, majority 59.6% of the respondents fall within the age bracket of 51-60 years of age. 22.4% of the respondents are within the age bracket of 41-50years of age. 12.3% of the respondents are within the age bracket of 60years and above. 3.9% of the respondents are within the age bracket of 31-40years of age. 1.8% of the respondents are within the age bracket of 21-30years of age.

As shown in Table 2, With respect to educational qualification, all the respondents had formal education. 72.2% of the respondents had secondary education. 23.8% of the respondents had tertiary education while 4.0% of the respondents had primary education. From Table 2, with respect to cooperative experience, majority 59.2% of the respondents had over 15years of cooperative experience. 27.8% of the respondents had between 11-15years of cooperative experience. 9.0% of the respondents had between 6-10years of cooperative experience. While 4.0% of the respondents had between 1-5years of cooperative experience. With respect to marital status of the respondents, about 37.2% of the respondents are married,

48.7% of the respondents are single, and 6.1% of the respondents are widow/widower, while 8.0% of the respondents are divorced. From table 4.1, 6.1% of the respondents had ₦1000- ₦ 20000 as monthly income. 48.8% of the respondents had ₦21000- ₦ 40000 as monthly income. 9.4% of the respondents had ₦41000- ₦ 60000 as monthly income. 7.9% of the respondents had ₦61000- ₦ 80000 as monthly income while 27.8% of the respondents had ₦81000- ₦ 100000 as monthly income.

**Regression Analysis Result**

**Table 3: Regression Result on influence of cooperative on sustainable development goal of no poverty in Anambra State.**

<b>Model</b>	<b>B</b>	<b>Std. error</b>	<b>T</b>	<b>Sig.</b>
Constant(C)	0.024	0.013	1.809	0.130
Education of sFarmers	0.270	0.066	4.098	0.001
Farm Size	0.334	0.047	7.055	0.002
Farm Credit	0.472	0.040	11.925	0.003
Farm Inputs	0.510	0.036	14.046	0.000
<b>R</b>	0.921			
<b>R<sup>2</sup></b>	0.873			
<b>Adj. R<sup>2</sup></b>	0.855			
<b>F-statistic</b>	212.434			0.000

*Source: Field survey, 2023*

**Dependent Variable: Income**

Table 3 above displays the regression result. It also shows the precision of the model which was analyzed using economic a priori criteria and statistical criteria. It also shows the overall fitness of the model using the F-statistics, probability value and the level of significance of the independent variables in influencing the dependent variables using the t-test and probability value. To ascertain the influence of cooperative on sustainable development goal of no poverty in Anambra State, the weighted mean of the four 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 four independent variables on the dependent variable.

Discussion using this criterion enables us to determine the nature of relationship between the dependent and independent variables. In this case, the sign and magnitude of each variable coefficient are evaluated against theoretical or economic a priori criteria/expectations. Table 3 shows that the regression line has a positive intercept as presented by the constant (c) = 0.024. This means that if all the variables are held constant or fixed (zero), the influence on cooperative on sustainable development goal of no poverty in Anambra State increases by 7.5%.

Education of Farmers has a positive relationship with no poverty among cooperative farmers in Anambra State. This implies that education of farmers and no poverty among cooperative farmers in Anambra State increase in the same direction. In other words, 1% increase in education of farmers will bring about 27.0% increases in no poverty among cooperative farmers in Anambra State.

Farm Size has a direct and positive relationship with no poverty among cooperative farmers in Anambra State. In other words, 1% increase in farm size will bring about 33.4% increases in no poverty among cooperative farmers in Anambra State.

Farm Credit has a direct and positive relationship with no poverty among cooperative farmers in Anambra State. As the input supply increases, it increases income inequality among members of Farmers Cooperative in Anambra State. In other words, 1% increase in farm credit will bring about 47.2% increases in no poverty among cooperative farmers in Anambra State.

Farm Inputs has a direct and positive relationship with no poverty among cooperative farmers in Anambra State. In other words, 1% increase in farm inputs will bring about 51.0% increase in no poverty among cooperative farmers in Anambra State.

**Test of Hypotheses**

The t-test was used to know the statistical significance of the individual parameters at 5% significance level. The result is presented on table 4 below.

**Table 4: Summary of t-statistic**

Variables	t-cal ( $t_{cal}$ )	Sig.	Conclusion
Constant(C)	1.809	0.130	Statistically Insignificant
Farming Technique	4.098	0.001	Statistically Significant
Farm Size	7.055	0.002	Statistically Significant
Input Supply	11.925	0.003	Statistically Significant
Credit Obtained	14.046	0.000	Statistically Significant
F-statistic	212.434	0.000	Statistically Significant

*Source: Field survey, 2023*

From table 4, the t-test result is interpreted below:

Hypothesis One

**H<sub>01</sub>:** Education of farmers has no significant influence on no poverty among cooperative farmers in Anambra State.

**H<sub>a1</sub>:** Education of farmers has significant influence on no poverty among cooperative farmers in Anambra State.

Table 4, the t-test value of education of farmers is significant. We, therefore, reject the null hypothesis and conclude that education of farmers has significant influence on no poverty among cooperative farmers in Anambra State.

Hypothesis Two

**H<sub>02</sub>:** Access to land has no significant influence on no poverty among cooperative farmers in Anambra State.

**H<sub>a2</sub>:** Access to land has significant influence on no poverty among cooperative farmers in Anambra State.

Table 4, the t-test value of access to land is significant at 0.002 level of significant. We, therefore, reject the null hypothesis and accept the alternate by concluding that access to land has significant influence on no poverty among cooperative farmers in Anambra State.

Hypothesis Three

**H<sub>03</sub>:** Access to farm credit has no significant influence on no poverty among cooperative farmers in Anambra State.

**H<sub>a3</sub>:** Access to farm credit has significant influence on no poverty among cooperative farmers in Anambra State.

Table 4, the t-test value of farm credit is significant at 0.003 level of significant. We, therefore, reject the null hypothesis and accept the alternate by concluding that access to farm credit has significant influence on no poverty among cooperative farmers in Anambra State.

**Hypothesis Four**

**Ho<sub>4</sub>:** Access to farm inputs has no significant influence on no poverty among cooperative farmers in Anambra State.

**Ha<sub>4</sub>:** Access to farm inputs has significant influence on no poverty among cooperative farmers in Anambra State.

Table 4, the t-test value of farm inputs is significant. We, therefore, reject the null hypothesis and conclude that access to farm inputs has significant influence on no poverty among cooperative farmers in Anambra State.

**CONCLUSION AND RECOMMENDATION**

From the analysis in the previous chapter, the following findings were made:

- 1) Education of farmers has significant influence on no poverty among cooperative farmers in Anambra State. This is also supported by the descriptive statistics with a grand mean(x) of 3.31, *standard deviation of 0.900, t-value of 4.098 and F-statistics 212.434 that education of farmers has influenced no poverty among cooperative farmers in Anambra State..*
- 2) Access to land has significant influence on no poverty among cooperative farmers in Anambra State.
- 3) Access to farm credit has significant influence on no poverty among cooperative farmers in Anambra State. With a grand mean(x) of 3.78, *t-value of 11.925 and standard deviation of 0.682 the descriptive statistics also confirms that farm credit has influenced no poverty among cooperative farmers in Anambra State.*
- 4) Access to farm inputs has significant influence on no poverty among cooperative farmers in Anambra State. This is also validated by the descriptive statistics with a grand mean of 3.05, *standard deviation of 0.961 and with a t-value of 14.046 that farm inputs has influenced no poverty among cooperative farmers in Anambra State.*

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

1. The ministry in charge of cooperative should ensure that farming extension education is given to farmers on a continuing and consistent basis. This is because education of farmers has significant influence on no poverty among cooperative farmers in Anambra State.
2. The government through the ministry of agriculture should come up farm settlement sites that will enable farmers have adequate access to land for profitable agricultural production,
3. The government should provide adequate and affordable supervised agricultural credit scheme. This will ensure that agriculture is adequately funded.
4. Adequate farm input should be made available and accessible to farmers for increased agricultural among cooperative farmers in Anambra State.

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