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Determinants of Income Inequality Among Members of Farmers Cooperative Societies in Anambra State, Nigeria

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Abstract

This study examined the determinants of income inequality among members of Farmers Cooperative Societies in Anambra State, Nigeria. The specific objectives are to examine the influence of farming technique, farm size, input supply, credit obtained on the income of members of Farmers Cooperatives in Anambra State using a descriptive statistics like frequency, percentages, mean, standard deviation and regression technique of the ordinary least square on a sample of 290 respondents. Findings revealed that farming technique, farm size, input supply and credit obtained have significant influence on the income of members of Farmers Cooperative Societies in Anambra State. The study concludes that all the four coefficients (farming technique, farm size, input supply and credit obtained) are significant determinants of income inequality among members of Farmers Cooperative Societies in Anambra State, Nigeria. The variables also have direct and positive relationship with income inequality among members of Farmers Cooperative Societies in Anambra State. Based on the findings of the study, the following recommendations are made: The government should enlighten the members of Farmers Cooperative Societies in Anambra State on new and improve farming technique to enable them improve their productivity and income. The government should assist members of Farmers Cooperative in Anambra State with access to adequate farm land particularly in the government farm settlements. This will enable them increase their farm size, productivity and consequently income. The societies' leadership and government agency supplying input should make input supply to be adequate and timely. The agricultural cooperative subsector should be adequately financed to help improve the farmers' income and also reduce income inequality.

Keywords: Income Inequality, Farmers Cooperative Societies, farming technique, farm size, input supply and credit obtained .

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1. Introduction

Income inequality describes an unevenness in the allocation of material possessions across the society. Income inequality shows how unevenly income is distributed throughout a population. It has therefore become a global worry among developed and emerging economies and also development agencies because, it is found to be important in discussing the levels of growth, poverty, crime, social unrest and the attainment of various strategic global development goals. [1] A lot of factors have contributed to income inequality depending on the economy measured. In advanced economies, the gap between the rich and poor is at its highest level in decades. Inequality trends have been more mixed in emerging markets and developing countries (EMDCs), with some countries experiencing declining inequality, but there are still pervasive inequities in access to education, health care, and finance. Not surprisingly then, the extent of inequality, its drivers, and what to do about it have become some of the most debated issues by policymakers and researchers alike. [2]

In most agrarian economies in Sub-Saharan Africa and Nigeria in particular, the level of income inequality continues to widen even when it is reported to be closing up in some emerging economies like the Latin America that had once witnessed a more persistent and pervasive rise in income inequality. Today, many resource poor rural farmers now wallow in poverty. [3] Yet, agriculture has been described as the main stay of most emerging economies and most of the people engaged in the profession are the rural poor who at the same time account for 80 percent of African poverty. [4]

The government and donor agencies have made concerted efforts at closing income disparity gap by initiating a number of poverty reduction programmes which arguably have not yielded the required result. Anigbogu, Onwuteaka, Anyanwu and Okoli [5] note that doubts have been raised regarding the effectiveness of the programmes in achieving their overarching goals of poverty reductions and promoting household welfare, as the country experiences soaring and wide-spread poverty incidence. A close inspection of these programmes reveals priority misplacement. Therefore, the cooperative, more precisely the agricultural cooperative has been publicized as a veritable instrument for helping the rural resource poor farmers to come out of poverty and improve their livelihood and income. This could be possible if there are available and adequate access to various factors of production that can enhance the productivity and income of the farmer. [6] Perceptibly, a more technically efficient farmer that has a large farm size and who also have adequate access to farm credit with the required farm input will

invariably do better than one that is not efficient. Regrettably, it remained uncertain if farmers in Nigeria and Anambra State in particular have adequate access to the needed farming technique, farm size, input supply and access to adequate credit for agricultural production. There had been cases where the government claimed to have made these factors of production available through budgeting in the agricultural sector yet not much have been achieved (Anigbogu, Onwuteaka, Anyanwu & Okoli, 2014). Farmers Cooperative as posited by Ibe [7] is a more reliable and visible organizational form for mobilizing the resources of desperate resource poor farmers to enjoy the benefit of economy of scale. It is therefore imperative to investigate this organizational form to ascertain its efficacy in improving the income of rural farmers.

2.Statement of the Problem

The rising income asymmetry and soaring poverty level in recent time have necessitated the diversion of livelihood activity into the agricultural sector in Anambra State. The state play host to four agricultural zones located mainly in the rural areas and is dominated by resource poor rural farmers. These farmers arguably, have very limited farm lands with low capital investment and limited returns, which invariably make them, revolve in a vicious circle of poverty. Yet, government in Anambra State like in every other states of the federation make annual budgetary allocation to the agricultural sector which is expected to improve the income of farmers and lift them out of poverty. [8] Regrettably, there is a serious perceived inevitable consequence of food demand and supply gap which is evident in the present hike in the prices of food stuff in the market. The low agricultural output of the farmers in the state which has made the State not to have attained food sufficiency could be traced to the farmers limited farm size, input supply, farming technique and credit obtained which invariably affects the efficiency and income of the farmers. [9]

In most developed agrarian economy, farming technique has contributed immensely to agricultural production and income of the farmers. Regrettably, modern agriculture emphasizes crop specialization, also known as monoculture was lacking among farmers in the study area as most of the farmers practice mixed farming. Other aspect include genetic engineering and monitoring technology, pesticide resistance and pest control, quality seeds, mechanized farm tools, water depletion and soil salinization techniques. Application of these techniques enhances agricultural production and farming technique. Arguably, a farmer with larger farm size is expected to have increased production and income but that could be affected if the technique of production is still crude compared to a farmer with modern farming technique. It is however uncertain if the farmers have improved their farming techniques and productivity thus warranting an empirical investigation to find out.

Input supply and credit obtained by a farmer no doubt enhances the farmers production, but incidentally, the State is still far from being food sufficient and the farmers still regarded as resource poor thus arousing a research curiosity of this magnitude that warrants an empirical investigation to ascertain the extent to which farming technique, farm size, input supply and credit obtained have influenced the farmers income. A number of studies have been carried out in this study area with very robust and insightful findings, however, there is a scarcity of such research in the study area which if investigated could help in making policies that will address the teething problem of income asymmetry among members of Farmers Cooperative in Anambra State, Nigeria

3. Objectives of the Study

The main objective of this study is to ascertain the determinants of income inequality among members of Farmers Cooperative in Anambra State, Nigeria. The specific objectives are to:

i. Examine the influence of farming technique on the income of members of farmers cooperatives in anambra state.

Ii. Ascertain the effect of farm size on the income of members of farmers cooperatives in anambra state.

Iii.Determine the effect of input supply on the income of members of farmers cooperatives in anambra state.

Iv.Identify the effect of credit obtained on the income of members of farmers cooperatives in Anambra State.

4. Research Hypotheses

The following null hypotheses will be tested at 0.05 level of significance

Ho1:Farming technique has no significant influence on the income of members of Farmers Cooperative in Anambra State

Ho2:Farm size has no significant influence on the income of members of Farmers Cooperative in Anambra State

Ho3:Input supply has no significant influence on the income of members of Farmers Cooperative in Anambra State

Ho4:Credit obtained has no significant influence on the income of members of Farmers Cooperative in Anambra State

5. Methodology

The methodology used in this study is broken down under the following subheadings: research design, area of study, population of the study, sample size determination, sampling procedure, sources of data, data collection instrument, validity of the research instrument, reliability of the research instrument, and method of data analysis.

6. Research Design

Descriptive research will be 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 [10] 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).

7. Area of Study

This study will be 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. [11] The name; AnambraStateis 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. [12]

The indigenous ethnic groups in AnambraState 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 and ceramic and also has an almost 100 percent arable soil. In the year 2006, foundation laying ceremony for the first Nigerian private refinery Orient Petroleum Refinery (OPR) was made 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. The State also have a good number of registered cooperative societies that are both agricultural and non agricultural (Anambra State Statistical Bulletin, 2020).

8. Population of the Study

The population is made up of members of Farmers Cooperative 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 a purposive random sampling technique. The preference for the two zone was because of their high povarty incidence and income disparity (Anambra State Statistical Bulletin, 2020). The two zones have about 1247 active Farmers Cooperative Societies with membership strength 4977.

Sample Size and Sampling Procedure

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:

$$n = \frac{1963}{1+1963\ (0.05)^2}$$

$$= \frac{1963}{1+3977\ (0.0025)}$$

$$= \frac{1963}{5.9075}$$

$$= 332.3$$

$$= 332$$

9. Method of Data Analysis

Data collected was analyzed using descriptive statistics (frequencies, percentages, mean, and standard deviation) and the inferential statistics such as t-test statistics and the linear regression model. The demographic profiles will be processed using descriptive statistics. Objectives one to four will be processed using descriptive statistics (mean and standard deviation). The hypotheses of the study were 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 was 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 and dependent variable. The use of Ordinary Least Square (OLS), is informed by the fact that under normality assumption for αi, the Ordinary Least Square (OLS) estimator is normally distributed and is said to be best, unbiased linear estimator. [13]

Model Specification

The models for this study is specified as follows:

Implit Model

IMFC = f(FAT, FAS, INS, CRD) .....eq(1)

The model is explicitly specified as follows;

$IMFC = \alpha+\beta_1 FAT\ 1 + \beta_2 FAS\ 2 + \beta_3 INS_3 + \beta_4 CRD_4$ .....,.....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 the variables are on the same scale for measurement:

$Log\ IMFC = \alpha + \beta_1 logFAT_1 + \beta_2 logFAS_2 + \beta_3 logINS_3 + \beta_4 logCRD_4$ ....eq(3)

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

$Log\ IMFC = \alpha + \beta_1 logFAT_1 + \beta_2 logFAS_2 + \beta_3 logINS_3 + \beta_4 logCRD_4$ .....eq(4)

Where; IMFC = Income of Members of Farmers Cooperative
FAT = Farming Technique
FAS = Farm Size
INS = Input Supply
CRD = Credit Obtained
β_0 = Intercept of the model
$\beta_1 - \beta_4$ = Parameters of the model
α_i= Stochastic error term

PRESENTATION AND ANALYSIS OF DATA
Demographic Profile of the Respondents
Table 1: Distribution of Respondents According to Gender

Variable	Frequency	Percent (%)	Cumulative (%)
Male	258	89.0	89.0
Female	32	11.0	100
Total	290	100	

Source: Field Survey, 2021

Table 1 shows that 89.0% respondents are males while 11.0% of the respondents are females.

Table 2: Distribution

Variable	Frequency	Percent (%)	Cumulative (%)
18-30	14	4.8	4.8
31-40	46	15.9	20.7
41-50	84	29.0	49.7
51-60	88	30.3	80.0
Above 60	58	20.0	100.0
Total	290	100.0	

Source: Field Survey, 2021

As shown in table 2, 4.8% of the respondents are between the ages of 18-30. 15.9% of the respondents, are between the ages of 31-40. One hundred and fifty-two respondents, representing 29.0% of the respondents, are between the ages of 41-50. Eighty-eight respondents, account for 30.3% of the respondents, between the ages of 51-60, while 20.0% of the respondents, are between the ages of 61-70.

Table 3: Distribution of Respondents According to Educational

Variable	Frequency	Percent (%)	Cumulative (%)
Primary	11	3.8	3.8
Secondary	157	54.1	57.9
Tertiary	122	42.1	100.0
Total	290	100.0	

Source: Field Survey, 2021

From table 3, all the respondents had formal education. 3.8% of the respondents had primary education. 54.1% had secondary education while 42.1% had tertiary education.

Table 4: Distribution of Respondents According to Years of Business Experience

Variable	Frequency	Percent (%)	Cumulative (%)
1-5	43	14.8	14.8
6-10	58	20.0	34.8
11-15	78	26.9	61.7
15-30	111	38.3	100.0
Total	290	100.0	

Source: Field Survey, 2021

With respect to business experience, table 4 reveals that 14.8% of the respondents had 1-5years business experience. 20.0% of the respondents had 6-10years business experience. 26.9% of the respondents had 11-15years business experience, while Four respondents representing 38.3% of the respondents had 15-30years business experience.

Table 5: Distribution of Respondents According to Marital Status

Variable	Frequency	Percent (%)	Cumulative (%)
Married	237	81.7	81.7
Single	42	14.5	96.2
Widow/Widower	11	3.8	100.0
Total	290	100.0	

Source: Field Survey, 2021

From table 5, 81.7% of the respondents are married. 14.5% of the respondents are single, while 3.8% of the respondents are widow/widower.

Table 6: Distribution of Respondents According to Income of Farmers

Variable	Frequency	Percent (%)	Cumulative (%)
N1000 - N 20,000	43	14.8	14.8
N20100 - N 40,000	58	20.0	34.8
N40,100 - N 60,000	78	26.9	61.7
N60,100 - N 80,000	70	24.1	85.8
N80,100 and above	41	14.2	100
Total	290	100.0	

Source: Field Survey, 2021

With respect to the income of farmers. 14.8% of the respondents earn between N1000 - N 20,000. 20% of the respondents earn between N20100 - N 40,000. 26.9% of the respondents earn between N40,100 - N 60,000. 24.1% of the respondents earn between N60,100 - N 80,000 while 14.2% of the respondents earn between N80,100 and above.

Descriptive Statistics Result

Table 7: Influence of farming technique on the income of members of Farmers Cooperatives in Anambra State.

Variables	Mean	Std Dev	Remark
The use of high quality seeds during a given year has influenced your productions	4.32	0.027	Accepted
Better monitoring technology has influenced your income	4.11	0.036	Accepted
Green Methods of pest control has influenced your income	4.01	0.041	Accepted
The use of farm tools and equipment has influenced your income	4.22	0.041	Accepted
The use of organic fertilizers has influenced your income	4.03	0.001	Accepted
Performing intercropping / polyculture has influenced your income	4.02	0.015	Accepted
Grand Mean	4.12	0.020	Accepted

Source: Field Survey, 2021

With respect to the influence of farming technique on the income of members of Farmers Cooperatives in Anambra State, respondents accepted that the use of high quality seeds during a given year has influenced their productions. They accepted that better monitoring technology has influenced their income. They accepted that green methods of pest control have influenced their income. They accepted that the use of farm tools and equipment has influenced their income. That also accepted that the use of organic fertilizers has influenced their income and also performing intercropping / polyculture has influenced their income with a grand mean of 4.12 and 0.020.

Table 8: Effect of farm size on the income of members of Farmers Cooperatives in Anambra State

Variable	Frequency	Percent (%)	Cumulative (%)
1-5 plots	178	61.4	61.4
6-10 plots	43	14.8	14.8
11-15 plots	30	10.3	86.5
15-30 plots	27	9.3	95.8
Above 30plots	12	4.2	100
Total	290	100.0	

Source: Field Survey, 2021

With respect to effect of farm size on the income of members of Farmers Cooperatives in Anambra State, 61.4% of the respondents farm on between 1-5plots of land. 14.8% of the respondents farm on between 6-10plots of land. 10.3% of the respondents farm on11-15plots of land. 9.3% of the respondents farm on between 15-30plots of land. 4.2% of the respondents farm on above 30plots of land.

Table 9: Effect of input supply on the income of members of Farmers Cooperatives in Anambra State.

Variables	Mean	Std Dev	Remark
Fertilizers and chemicals inputs has influenced your income	4.54	0.042	Accepted
Seeds and planting materials inputs has influenced your income	4.54	0.042	Accepted
Machinery and equipment has influenced your income	3.33	0.129	Accepted
cleaning agents and additives used in food production has influenced your income	4.45	0.065	Accepted
Permitted plant protection products has influenced your income	4.02	0.076	Accepted
Products permitted for use in organic farming has influenced your income	4.22	0.077	Accepted
Grand Mean	4.18	0.710	Accepted

Source: Field Survey, 2021

From Table 9, it is observed that all the variables construct that examined the effect of input supply on the income of members of Farmers Cooperatives in Anambra State met the theoretical mean threshold of 3.0. Thus, the descriptive statistics suggests that input supply has enhanced the income of members of Farmers Cooperatives in Anambra State with a grand mean of 4.18 and standard deviation of 0.710.

Table 10: Effect of credit obtained on the income of members of Farmers Cooperatives in Anambra State.

Variables	Mean	Std Dev	Remark
The nature of farm credit in terms of short-term credit (crop loan) has influenced your income	4.40	0.067	Accepted
The nature of farm credit in terms of medium-term credit and long-term credit has influenced your income	4.37	0.062	Accepted
The nature of farm credit in terms of credit history has influenced your income	4.32	0.052	Accepted
The nature of farm credit in terms of capacity to repay has influenced your income	4.26	0.038	Accepted
The nature of farm credit in terms of the loan's conditions has influenced your income	4.34	0.038	Accepted
The nature of farm credit in terms of associated collateral has influenced your income	4.36	0.023	Accepted
Grand Mean	4.34	0.047	Accepted

Source: Field Survey, 2021

As shown in Table 10, shows the effect of credit obtained on the income of members of Farmers Cooperatives in Anambra State. From the results, all the variables meet the theoretical mean threshold of 3.0 which is the established mean cut-off thus, the descriptive statistics suggests that credit obtained has influenced the income of members of Farmers Cooperatives in Anambra State. with a grand mean of 4.34 and standard deviation of 0.047.

Regression Analysis Result

Table 11: Regression Result on determinants of income inequality among members of Farmers Cooperative in Anambra State, Nigeria.

Model	B	Std. error	T	Sig.
Constant(C)	0.075	0.041	1.829	0.140
Farming Technique	0.399	0.065	6.098	0.001
Farm Size	0.276	0.009	3.055	0.002
Input Supply	0.410	0.052	7.925	0.003
Credit Obtained	0.426	0.053	8.046	0.000
R	0.879			
R2	0.843			
Adj. R2	0.810			
F-statistic	201.110			0.000

Source: Field Survey, 2021

Dependent Variable: Income of Members of Farmers Cooperative

The table above shows 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 determinants of income inequality among members of Farmers Cooperative in Anambra State, Nigeria, 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. As showed in the table 11, it is observed that the regression line has a positive intercept as presented by the constant (c) = 0.075. This means that if all the variables are held constant or fixed (zero), the income inequality among members of Farmers Cooperative in Anambra State, Nigeria increases by 7.5%. The result also conforms to the a priori expectation. This states that the intercept could be positive or negative, so it conforms to the theoretical expectation.

Farming Technique has an inverse relationship with income inequality among members of Farmers Cooperative in Anambra State, Nigeria. This implies that farming technique and income inequality among members of Farmers Cooperative in Anambra State increase in the same direction. In other words, 1% increase in farming technique will bring about 39.9% a increase in income inequality among members of Farmers Cooperative in Anambra State.

Farm Size has a direct and positive relationship with income inequality among members of Farmers Cooperative in Anambra State, Nigeria. In other words, 1% increase in farm size will bring about 27.6% increase in income inequality among members of Farmers Cooperative in Anambra State.

Input Supply has a direct and positive relationship with income inequality among members of Farmers Cooperative 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 input supply will bring about 41.0% increases in income inequality among members of Farmers Cooperative in Anambra State.

Credit Obtained has a direct and positive relationship with income inequality among members of Farmers Cooperative in Anambra State, Nigeria. In other words, 1% increase in Credit Obtained will bring about 426% increase in income inequality among members of Farmers Cooperative 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 showed on table 12 below.

Table 12: Summary of t-statistic

Variables	t-cal (tcal)	Sig.	Conclusion
Constant(C)	1.829	0.140	Statistically Insignificant
Farming Technique	5.098	0.001	Statistically Significant
Farm Size	4.055	0.002	Statistically Significant
Input Supply	4.925	0.003	Statistically Significant
Credit Obtained	6.046	0.000	Statistically Significant
F-statistic	221.210	0.000	Statistically Significant

Source: Researchers computation

We begin by bringing our working hypothesis to focus in considering the individual hypothesis. From table 12, the t-test result is interpreted below:

Hypothesis One

Ho1:Farming technique has no significant influence on the income of members of Farmers Cooperative in Anambra State.

Ha1:Farming technique has significant influence on the income of members of Farmers Cooperative in Anambra State.

From table 12, the t-test value of farming technique is significant. We, therefore, reject the null hypothesis and conclude that farming technique has significant influence on the income of members of Farmers Cooperative in Anambra State.

Hypothesis Two

Ho2:Farm size has no significant influence the income of members of Farmers Cooperative in Anambra State.

Ha2:Farm size has significant influence the income of members of Farmers Cooperative in Anambra State.

From table 12, the t-test value of farm size is significant at 0.002 level of significant. We, therefore, reject the null hypothesis and accept the alternate by concluding that farm size has significant influence the income of members of Farmers Cooperative in Anambra State.

Hypothesis Three

Ho3:Input supply has no significant influence the income of members of Farmers Cooperative in Anambra State.

Ha3:Input supply has significant influence the income of members of Farmers Cooperative in Anambra State.

From table 12, the t-test value of input supply, is significant at 0.003 level of significant. We, therefore, reject the null hypothesis and accept the alternate by concluding that input supply has significant influence the income of members of Farmers Cooperative in Anambra State.

Hypothesis Four

Ho4:Credit obtained has no significant influence on the income of members of Farmers Cooperative in Anambra State.

Ha4:Credit obtained has significant influence on the income of members of Farmers Cooperative in Anambra State.

From table 12, the t-test value of brand development is significant. We, therefore, reject the null hypothesis and conclude that credit obtained has significant influence on the income of members of Farmers Cooperative in Anambra State.

10. Summary of Findings

1.Farming technique has significant influence on the income of members of Farmers Cooperative in Anambra State.

2.Farm size has significant influence the income of members of Farmers Cooperative in Anambra State

3.Input supply has significant influence the income of members of Farmers Cooperative in Anambra State.

4.Credit obtained has significant influence on the income of members of Farmers Cooperative in Anambra State.

Conclusion

In the final analysis, this study has examined the determinants of income inequality among members of Farmers Cooperative in Anambra State, Nigeria. Specifically, the study ascertained the effect of farming technique, farm size, input supply and credit obtained on the income of members of Farmers Cooperative in Anambra State. The study concludes that all the four coefficients (farming technique, farm size, input supply and credit obtained) are significant determinant of income inequality among members of Farmers Cooperative in Anambra State, Nigeria. all the four coefficients (farming technique, farm size, input supply and credit obtained) also have direct and positive relationship with income inequality among members of Farmers Cooperative in Anambra State.

11. Recommendations

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

i.The government should enlighten the members of Farmers Cooperative in Anambra State on new and improve farming technique to enable them improve their productivity and income.

ii.The government assist members of Farmers Cooperative in Anambra State with access to adequate farm land particularly in the government farm settlements. This will enable them increase their farm size, productivity and consequently income.

iii.The societies' leadership and government agency supplying input should make input supply to be adequate and timely.

iv.The agricultural cooperative subsector should be adequately financed to help improve the farmers' income and also reduce income inequality

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