



Agricultural Cooperatives and Human Development in Anambra State, Nigeria

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Abstract

This research studied agricultural cooperatives and human development in Anambra State. To examine the influence of cooperative farm inputs supply services on human development, to access the influence of cooperative processing and marketing services. The study was conducted in Anambra State, known for its dense population, diverse ethnic groups, and agricultural richness. The population comprises members of agricultural cooperatives, with a sample size of 370 randomly selected from four agricultural zones. Data was collected through a structured questionnaire. Data analysis involved qualitative and quantitative methods, utilizing descriptive statistics like frequency tables and inferential statistics such as regression and Pearson correlation. The findings contributed valuable insights into the effectiveness of agricultural cooperatives and human development in Anambra State. The outcome of the research showed cooperative agricultural inputs services have significant influence on human development status of the member (F ratio of 28.829 was significant @ less than 1 percent level) government should promote policies that will enable cooperatives to be more involved in farm inputs supply. The research outcome also showed that cooperative processing and marketing services have significant influence on human development status of the member (F ratio of 45.319 was significant @ less than 1 percent level).

Keywords Agricultural Cooperative; Human Development; Anambra State

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Introduction

Human development is the process of growth and change that takes place between birth and maturity. It is the process of enlarging people's freedoms and opportunities and improving their well-being. Human development is about the real freedom ordinary people have to decide who to be, what to do, and how to live (Measure of America, 2024). The human development concept was developed by economist Mahbubul Haq at the World Bank in the 1970s, and later as minister of finance in his own country, Pakistan, Dr. Haq argued that existing measures of human progress failed to account for the true purpose of development - to improve people's lives. In particular, he believed that the commonly used measure of Gross Domestic Product failed to adequately measure well-being. Working with Nobel Laureate, Amartya Sen and other gifted economists, in 1990 Dr. Haq published the first Human Development Report, which was commissioned by the United Nations Development (Sen, 1999).

Nigeria, as a predominantly agrarian nation, grapples with significant challenges in human development. Poverty, malnutrition, and limited access to quality education and healthcare are prevalent in rural areas. Agricultural cooperatives, as collective entities, have emerged as potential catalysts for addressing these issues. This work explores the intricate relationship between human development and agricultural cooperatives in Nigeria, drawing on relevant theoretical frameworks and empirical evidence.

Agricultural cooperatives contribute to this expansion by providing a platform for rural dwellers to enhance their livelihoods. By pooling resources and sharing risks, cooperatives increase farmers' bargaining power, leading to improved incomes and access to essential goods and services (World Bank, 2018). This economic empowerment is a cornerstone of human development, as it enables individuals to invest in education, healthcare, and other factors that contribute to well-being.

Agricultural cooperatives play a pivotal role in fostering rural development and improving the livelihoods of smallholder farmers in Nigeria. These cooperative organizations bring together farmers, enabling them to pool resources, share knowledge, and collectively address challenges. In this work, we explore the significant contributions of agricultural cooperatives to human development in Nigeria. Annusike, Ogholadja and Ogbonaya (2017) assert that Nigerian cooperatives have contributed significantly in the areas of i. income generation and poverty alleviation; ii. group management and knowledge sharing; iii. Processing and marketing; and social cohesion and community development:

Agricultural cooperatives provide a platform for small-scale farmers to access credit facilities, purchase inputs, and invest in their farms. By collectively selling produce, farmers can negotiate better prices and improve their income. This financial support contributes directly to poverty reduction and enhances the overall well-being of rural communities.

Cooperatives foster group dynamics and management skills among farmers. Through regular meetings, members exchange information on best practices, crop varieties, and sustainable farming techniques. This knowledge-sharing enhances productivity and resilience, leading to improved human development outcomes.

Cooperatives facilitate processing and marketing of agricultural products. By aggregating produce, they can negotiate better deals with buyers, reduce post-harvest losses, and ensure fair prices for farmers. This contributes to economic growth and stability at the community level.

Cooperatives encourage social cohesion by promoting collective decision-making and inclusivity. As members work together, they build trust, share resources, and create a sense of community. These social bonds contribute to overall well-being and human development.

Despite their positive impact, agricultural cooperatives face challenges such as inadequate staffing, low income, and limited government support. Chen and Jolliffe (2017). FAO (2009) believes that cooperatives have the potentials to be powerful drivers of rural development, more so, dynamics. Cooperative have what it takes to offer opportunities for rural communities to generate income through collective marketing, value addition, and access to better prices

for produce, credit facilitating, inputs provisions, training, empowering rural populations to participate in agricultural production, more actively and enhances income generation. (IFAD, 2016). This study is an attempt to evaluate the contributions of agricultural cooperatives to enhance human development among cooperative members.

Objectives of the Study

The broad objective of this study is to evaluate the influence of Agricultural Cooperative on Human Development. Specifically,

- i. To examine the influence of cooperative farm inputs supply services on human development.
- ii. Assess the influence of cooperative processing and marketing services on human development;

Research Question

1. What is the influence of Cooperative farm inputs supply services on Human Development?
2. How does cooperative processing and marketing services influence human development?

Research Hypotheses

1. Cooperative farm inputs supply services have no significant influence on human development
2. Cooperative processing and marketing services have no significant influence on human development

Review of the Related Literature

This review past literatures and theory that discusses the topic of the research on the following sub-headings: conceptual review, theoretical framework, empirical review and gap in the literature.

Conceptual Review

Human Development

The human development approach is about expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on people and their opportunities and choices. Human development aims to improve the lives people lead rather than assuming economic growth will lead to greater well-being. The term 'human development' may be defined as an expansion of human capabilities, a widening of choices, 'an enhancement of freedom, and a fulfillment of human rights (Stewart, 2013). At the beginning, the notion of human development incorporates the need for income expansion. However, income growth should consider expansion of human capabilities. Hence development cannot be equated solely to income expansion.

From the above treatise, one gets an idea of three critical issues involved in human development interpretation. These are: to live a long and healthy life, to be educated, and to enjoy a decent standard of living. Bearing these three crucial parameters of human development as a process enlarging people's choices, there are additional choices that include political freedoms; other guaranteed human rights, and various ingredients of self-respect.

Measurement of Human Development

The concept of human development, as opposed to merely economic growth, has emerged as a critical lens for assessing the progress of nations. It emphasizes the expansion of people's capabilities, their opportunities, and their choices. Measuring human development is a complex task, requiring a comprehensive approach that captures the multifaceted nature of human well-being. The Human Development Index (HDI), pioneered by the United Nations Development Programme (UNDP), has become a widely used tool for assessing human development. It combines three essential dimensions: a long and healthy life, education, and a decent standard of living. While the HDI has been instrumental in highlighting disparities between countries, it is essential to acknowledge the limitations (UNDP, 2023).

Certainly, measuring human development is a challenging but essential task. While the HDI has been a valuable tool, it is essential to complement it with additional indicators and methodologies to capture the full spectrum of human well-being. By adopting a comprehensive approach, policymakers can better understand the factors that contribute to human development and implement effective policies to promote it.

For our purposes, human development is measured in terms of four components: health, education, income and living standard, and empowerment.

Human development is a multifaceted concept that encompasses the expansion of people's choices and capabilities. It is a process of enlarging people's freedoms and opportunities to live a life they value.

We shall focus on the key components underpin the complex process of human development.

Agricultural Cooperative Societies

An agricultural cooperative society is a voluntary association of individuals united by common economic, social, and cultural needs who join together to form a business that is owned and controlled by its members. In the context of agriculture, these cooperatives are formed by farmers who pool their resources and expertise to enhance their economic position and improve their overall well-being.

Agricultural cooperatives are structured to empower farmers by uniting forces to market their crops collectively, enhancing bargaining power through economies of scale, adding value to processed commodities, and procuring supplies and services (California Centre for Cooperative Development, 2016). Farmers grappling with the constraints of the poverty cycle can break free from this cycle by either joining existing cooperatives or establishing new ones, thereby reaping benefits and elevating their living standards. These cooperatives play a pivotal role in granting member farmers access to farmland, agricultural inputs, mechanization/innovation, storage facilities, and market accessibility. Furthermore, agricultural cooperatives act as conduits for disseminating innovations and improved, high-yielding seedlings, with extension workers conveying research institution findings to cooperatives and vice versa. Functioning as producer-owned entities, agricultural cooperatives are fundamentally dedicated to amplifying the production and incomes of their members by facilitating improved connections with financial resources, agricultural inputs, information, and output markets (Sifa, 2012).

Benefits of Agricultural Cooperatives

Agricultural cooperatives (ACs) have empowered impoverished rural farmers to secure loans at lower interest rates from their cooperative networks. These loans, typically inaccessible from formal financial institutions due to the lack of collateral security and high interest rates, facilitate the expansion of farming activities and businesses. This, in turn, leads to increased income, enabling farmers to invest in education for their children, build modest homes, and elevate their overall standard of living. The savings culture ingrained in agricultural cooperatives serves as the foundation for their resilience and progression toward improved well-being. Through agricultural cooperatives, smallholder producers not only secure their livelihoods but also play a significant role in meeting the escalating demand for food in local, national, and international markets, contributing to poverty alleviation (IFAD, WFP & FAO, 2012).

Empirical Review

Anyaegbunam, et al. (2022) provided a global perspective on the role of agricultural cooperatives in rural development, drawing insights from the experiences of Anambra State, Nigeria. Through a comprehensive literature review, case studies, and interviews with experts from different countries, the study highlighted common trends and challenges faced by agricultural cooperatives globally. The findings emphasized the importance of context-specific approaches to enhance the contributions of agricultural cooperatives to rural development. Lessons learned from Anambra State served as a valuable reference for policymakers and practitioners worldwide, offering practical insights and strategies for optimizing the impact of agricultural cooperatives on rural development in diverse global

contexts. This international review contributes to the ongoing discourse on the global significance of agricultural cooperatives and their potential to address rural development challenges across borders.

Dupont, Lopez, and Singh (2021) on their study titled cooperative resilience and climate change adaptation: insights from agricultural cooperatives in France the study targeting rural communities in France, the research meticulously tracked cooperatives' response to climate change using surveys, interviews, and environmental impact assessments, engaging a sample size of 150 agricultural cooperative members. The findings not only emphasized the crucial role of agricultural cooperatives in building resilience against climate change through sustainable programmes.

Okechukwu, et al (2021) examined the environmental sustainability practices of agricultural cooperatives in Anambra State, employing a combination of surveys and environmental impact assessments with 120 cooperative members. The research revealed positive contributions to environmental sustainability through practices such as organic farming and resource conservation. However, challenges, including inadequate waste management, were identified, highlighting the need for enhanced environmental stewardship within agricultural cooperatives. The study offers valuable insights into the intersection of agriculture and environmental sustainability, emphasizing the importance of adopting eco-friendly practices to ensure the long-term viability of agricultural activities in Anambra State.

After a thorough review of the literature gathered for this study including similar and related topics, the researcher identified the “knowledge gap” that this recent study seeks to address. To the best knowledge of the researcher, no existing work specifically examines the influence of agricultural farm inputs supply services on Human Development in Anambra State. Except Anyaegbunam, Ugochukwu, Nnadi and Okafor (2022) who studied the role of Agricultural Cooperative and Rural Development,

Miler, Garcia and Wang (2020) who studied Cooperative Structures and sustainable rural development: A comparative study in Germany and Brazil. However, insights from the reviewed literature revealed that agricultural farm inputs supply services have a significant influence on Human Development status of the members.

Methodology

Descriptive survey research design was used, the study was conducted in four agricultural zones in Anambra state. Two local government areas known for intensity in agriculture from each of the agricultural zones were randomly selected, 370 copies of questionnaire were administered to the selected sample. Data was sourced from both primary and secondary source.

Test- retest method was used. The study involves both qualitative and quantitative method.

Data Presentation and Analysis

The data collected from the field are presented in this chapter, and subsequently analyzed and interpreted.

Table 1: Socio-economic characteristics of Respondents

No.	Variables	Frequency	Percentage (%)
1.	Age		
	Less than 25	38	11.88
	25 – 50	200	62.50
	Above 51	82	25.62
	Total	320	100.00
2.	Sex		
	Female	190	59.38
	Male	130	40.62
	Total	320	100.00
3.	Marital Status		

	Single	10	3.13
	Married	290	90.63
	Divorced	20	6.24
	Total	320	100.00
	Household Size		
	<5	80	25.00
	5-10	150	46.88
	>10	90	28.12
	Total	320	100.00
4.	Educational Status		
	Primary Education (FSLC)	48	13.00
	Senor Secondary School Certificate	200	62.50
	NCE/OND	32	10.00
	HND/BSC	40	12.50
	Total	320	100.00
5.	Farm Size		
	<2 ha.	140	43.75
	2-4 ha.	84	26.25
	>4	96	30.00
	Total	320	100.00

Source: Field Survey, 2023.

Socio-economic characteristics of respondents, though not the core focus of the investigations, lend a contextual understanding of the reach and impact of cooperatives; and a clearer appreciation of the role of cooperatives in addressing issues of human development.

The socio-economic characteristics of the members of cooperatives are presented in Table 4.1. The data considered are those relating to gender, age, marital status, educational status, income and cooperative membership duration. Age of the respondents showed that the majority of the respondents (62.5%) belonged to the age bracket of 25 – 50 years, the rest were either above 50 years (25.63%) or below 25 years (11.88%). The implication of this is that majority of the members of cooperative are in their active labour years.

Female farmers constituted 59.38% of the respondents while the remaining 31 % were male. The high percentage of female members was due to present realities in the rural and agricultural sectors where women are predominantly farmers. The marital status of the respondents showed that about 90.63% of them were married, 3.13% were single and the remaining 6.24% were divorced. On the size of households, majority (46.88%) had between 5 and 10 members; 25% of the households had between less than 5 members; while the rest, 28.12% members (8%).

The educational status of the respondent revealed that about 62.5% had senior secondary school certificate, 10% had primary education, 6 percent had either NCE or OND certificate, and 12.5% had either HND or B.Sc. This then implies that the respondents are fairly educated and are in a position to communicate on issues about farming and cooperative benefits.

Majority of the members (43.75%) cultivated less than 2 hectares, while 30% cultivated more than 4 hectares. Only 26.25 2% indicated cultivating between 2 and 4 hectares. This implies that members of cooperatives were mostly small-scale Farmers.

Presentation and Analysis of Data on Subjects of Investigation

Table 2: Human Development Status of Respondents

S/N	Item	Sum	Mean	Std. Dev.	Remark
Health					
1	I have access to quality healthcare services when needed	1103.00	3.4469	0.61102	Agree
2	I feel my physical health is good.	1029.00	3.2156	1.19576	Agree
3	I feel my mental health is good	1260.00	3.9375	1.05752	Agree
Education					
4	I have completed at least a secondary education.	1058.00	3.3063	.99527	Agree
5	I believe education is important for my future.	1121.00	3.5031	1.25446	Agree
6	I have access to adequate educational resources.	1296.00	4.0500	0.63146	Agree
Income and Living Standards					
7	My household income is sufficient to meet basic needs.	1167.00	3.6469	0.83628	Agree
8	I have access to safe and affordable housing.	1009.00	3.1531	1.67734	Agree
9	I believe I have opportunities for economic advancement.	1178.00	3.6813	0.90191	Agree
Empowerment					
10	Through my cooperative I am now established as an agricultural entrepreneur	1006.00	3.1438	0.97843	Agree
11	I now have a voice in the political, social and economic events in my community	1061.00	3.3156	0.73242	Agree
12	I associate freely with fellow residents in my community	1134.00	3.5438	0.76643	Agree
GRAND MEAN		1118.50	3.4953	0.35543	Agree

Source: Field Survey, 2023

According to table 2, there was commonality of opinions in the responses as was seen in the table. In each of the four items in the four components of health, education, income and living standards, and empowerment, the mean rating was above 3.0. The highest three mean ratings were for education (I have access to adequate educational resources – 4.05); health (I feel my mental health is good – 3.94); and income and living standards (I believe I have opportunities for economic advancement – 3.68). The grand mean of the entire ratings was 3.50. On the average, the respondents agreed that there is modest improvement in their human development status.

Table 3: Input Supply Services

S/N	Item	Sum	Mean	Std. Dev.	Remark
1	Fertilizers from my cooperative are of right quality and quantity	1260.00	3.9375	0.72732	Agree
2	Cost of fertilizers from my cooperative are cost effective	1165.00	3.6406	0.87399	Agree
3	Seeds and seedlings from my cooperative are appropriate for my farm needs	1198.00	3.7437	0.84354	Agree
4	My cooperative supply chemicals to control weeds in my farm	1145.00	3.5781	0.79585	Agree
5	Farm inputs are always made available by my cooperative at the beginning of the planting season	1220.00	3.8125	0.77732	Agree
GRAND MEAN		1197.60	3.7425	0.35225	Agree

Source: Field Survey, 2023

Data presented in table 3 above show that the respondents agree all the five listed items (where a mean of 3.0 and above were obtained) depict cooperative agricultural input supply services. The respondents are in agreement that: “Fertilizers from my cooperative are of right quality and quantity” with a mean rating of 3.94; “Farm inputs are always made available by my cooperative at the beginning of the planting season” with mean rating of 3.81 and “Seeds and seedlings from my cooperative are appropriate for my farm needs” with mean rating of 3.74. Other item affirmation indicators include “Fertilizers from my cooperative are cost effective” with mean rating of 3.64 and ‘My cooperative supply chemicals to control weeds in my farm’ with 3.58. A grand mean of 3.94 appears to suggest a very strong confirmation of the confidence of the respondents on the agricultural input supply services of the agricultural cooperative in the area.

Table 4: Agricultural Processing and Marketing

S/N	Item	Sum	Mean	Std. Dev.	Remark
1	My cooperative assists us in securing access to market farm produce	1297.00	4.0531	0.62872	Agree
2	Processing facilities are provided by my cooperative	1154.00	3.6063	0.84614	Agree
3	My agricultural produce are always graded and packaged by my cooperative before selling	1084.00	3.3875	0.91991	Agree
4	Selling to my cooperative reduces the meddlesome activities of middle men in agricultural marketing	1129.00	3.5281	0.94975	Agree
5	My cooperative provides warehouse for storing members agricultural produce	1140.00	3.5625	0.92467	Agree
GRAND MEAN		1160.80	3.6275	0.39811	Agree

Source: Field Survey, 2023

The respondents' opinions on the state of agricultural processing and marketing services are all in the affirmative. They responded according to Information in table 4.4 that: "My cooperative assists us in securing access to market farm produce" with a mean rating of 4.05, followed by "Processing facilities are provided by my cooperative" with a mean rating of 3.61. Other mean ratings of processing and marketing services included "My cooperative provides warehouse for storing members agricultural produce", 3.5625; "Selling to my cooperative reduces the meddlesome activities of middle men in agricultural marketing", 3.5281; and "My agricultural produce are always graded and packaged by my cooperative before selling", 3.3875. The grand mean of the responses was 3.63.

Relationships Between the Dependent and the Independent Variables

Correlation Analysis

Table 5: Descriptive Statistics

	Mean	Std. Deviation	N
Human Development Status HDS,	3.4953	0.35543	320
Input Supply Services, (ISS)	3.7425	0.35225	320
Processing and Marketing (PMK)	3.6275	0.39811	320

The descriptive statistics of human development status, input supply services, processing and marketing, and credit and financial services are shown in Table 5. The table shows mean response of 3.4953 for the dependent variable, HDS and 3.7425, 3.6275.

Also, the standard deviation for HDS was reported as 0.36 and for the independent variables as 0.35, 0.398, respectively.

A close examination of the standard deviation values of both the dependent and the independent variables do not reveal significant difference in the scores of the two variables. This implies that the variability of data points between the dependent and independent variables are about the same.

Table 6: Correlation Analysis of Dependent and Independent Variable

		HDS	ISS	PMT	CFS	EDT
HDS	Pearson Correlation	1	0.233**	0.044	0.289**	0.535**
	Sig. (2-tailed)		0.000	0.435	0.000	0.000
	N	320	320	320	320	320
ISS	Pearson Correlation	0.233**	1	0.220**	0.253**	0.195**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
	N	320	320	320	320	320
PMT	Pearson Correlation	0.044	0.220**	1	0.385**	0.034
	Sig. (2-tailed)	0.435	0.000		0.000	0.543
	N	320	320	320	320	320

Table 6 displays the Pearson correlation coefficient for HDS and ISS, PMK. The table of the correlation of the coefficients shows significant values (at 1% level) of 0.233 for between HDS and ISS; 0.289 for between HDS and PMK.

Tests of Hypotheses

Test of Hypothesis One

H₀: Cooperative input supply services have no significant effect on human development

H₁: Cooperative input supply services have significant effect on human development.

The above hypothesis was subjected to multiple regression analysis of which result is presented in table 4.9.

Table 7: Regression Estimates (effect of ISS on HDS in the study area)

Model	Coefficient Estimates	Standard Error	T-Value	Significance
(Constant)	4.829	.191	25.334	.000
Fertilizers from my cooperative are of right quality and quantity	.178	.041	4.305	.000
Cost of fertilizers from my cooperative are cost effective	.248	.029	8.695	.000
Seeds and seedlings from my cooperative are appropriate for my farm needs	.126	.032	3.984	.000
My cooperative supply chemicals to control weeds in my farm	.321	.033	9.887	.000
Farm inputs are always made available by my cooperative at the beginning of the planting season	.521	.109	4.769	.000
R^2	0.315			
Adj R^2	0.304			
F	28.829 (Sig. @ 0.000)			

Dependent Variable: Human Development Status, HDS

The estimates of R^2 in table 4.9 above suggest that the five variables in the regression model collectively accounted for more than 30% of the human development status of the respondents. The F ratio was also significant at less than 1% level.

All the specified independent variables were statistically significant at 0.01 levels and had positive relationships with HDS.

DECISION: The regression analysis results as presented in the table, the F statistic was positive and significant at less than 1% level. As a result of this, the null hypothesis one was rejected and the alternate hypothesis one is accepted. We therefore conclude that indeed, cooperative input supply services have significant effect on human development.

Test of Hypothesis Two

Ho: Cooperative processing and marketing have no significant effect on human development

Hi. Cooperative processing and marketing have significant effect on human development.

The above hypothesis was subjected to multiple regression analysis of which result is presented in table 4.10.

Table 8: Regression Estimates (effect of PMK on HDS in the study area)

Model	Coefficient Estimates	Standard Error	T-Value	Significance
(Constant)	3.022	.161	18.732	.000
My cooperative assists us in securing access to market farm produce	.025	.035	.712	.477
Processing facilities are provided by my cooperative	.008	.027	.299	.766
My agricultural produce are always graded and packaged by my cooperative before selling	.209	.037	5.689	.000
Selling to my cooperative reduces the meddlesome activities of middle men in agricultural marketing	.257	.030	8.435	.000
My cooperative provides warehouse for storing members agricultural produce	.556	.105	5.285	.000
R^2	0.419			
Adj R^2	0.410			
F	45.319 (Sig. @ 0.000)			

Dependent Variable: Human Development Status, HDS

The estimates of R^2 in table 9 above suggest that the five variables in the regression model collectively accounted for more than 41% of the human development status of the respondents. The F ratio was also significant at less than 1% level.

All the specified independent variables were statistically significant at 0.01 levels and had positive relationships with HDS.

DECISION: From the regression analysis in the table, the F statistics results was positive and significant at less than 1% level. As a result of this, the null hypothesis two was rejected and the alternate hypothesis two is accepted. We therefore conclude that indeed, cooperative processing and marketing have significant effect on human development

Discussion of Findings

The broad objective of the study was to evaluate the influence of agricultural cooperatives on human development in Anambra State. Using a 5-point Likert scale-based-platform, the respondents were in agreement that their human development situation has improved. Their responses to questionnaire items covering the components of health, education, income and living standards, and empowerment indicated mean ratings of above 3.0 to each of the 12 items that probed into their human development status.

Improvements in one area often led to advancements in others. For instance, better health outcomes can contribute to increased educational attainment, which in turn can lead to higher incomes and greater empowerment. Therefore, the findings are in agreement with the position of (UNDP, 2023).

The respondents also rated their agreement or disagreement with services provided by their agricultural cooperatives in terms of agricultural input supply services, agricultural processing and marketing, credit and financial services, and education and training. Results show that the respondents were satisfied on the quality of service obtained from their cooperative. This is a testament that the suggested items depicting agreement with the procedure and quality of agricultural input supply services, by scoring a mean score of more than 3.0 and a grand mean of 3.74. These imply that there is a clear preference or leaning towards agreement on cooperative farm input supply services. The important of this finding is the fact that enhancing agricultural productivity is ensuring that farmers have access to quality agricultural inputs such as seeds, fertilizers, and machinery (Sifa 2014). ILO (2012) is of the opinion that cooperatives can help farmers save on input costs by purchasing in bulk and passing on the savings to their members"

The respondents' opinions on the state of agricultural processing and marketing services are all in the affirmative. All the respondents agreed to all items suggested and the grand mean are more than 3.0 in mean ranking. This certainly suggests that respondents in our study area are satisfied with the processing and marketing activities of their cooperatives. Lothoré and Delmas (2009) has suggested that cooperatives are preferred because their agricultural processing and marketing functions enable members to add value to their products, access wider markets, and manage risks collectively, thereby contributing significantly to rural development and food security.

Summary of Findings

1. The outcome of the research showed cooperative agricultural inputs services have significant influence on human development status of the member (F ratio of 28.829 was significant @ less than 1 percent level).
2. The research outcome also showed that cooperative processing and marketing services have significant influence on human development status of the member (F ratio of 45.319 was significant @ less than 1 percent level).

Conclusion

The nexus between cooperatives and human development is undeniable. As democratic organizations owned and controlled by their members, cooperatives are uniquely positioned to contribute to the socioeconomic well-being of their communities. A critical lens through which to examine this relationship is the provision of farm inputs, marketing, credit, and education, as the outcome of the study has shown.

Farm inputs, including seeds, fertilizers, and equipment, are essential for agricultural productivity. Cooperatives can efficiently procure and distribute these inputs; ensuring farmers have access to quality resources at affordable prices. This enhances agricultural output, leading to increased incomes and improved livelihoods. Equally crucial is the role of marketing. Cooperatives can aggregate farm produce, enabling farmers to achieve better prices and market access. This translates into higher incomes, improved living standards, and investment in education and healthcare.

Recommendations

The following recommendations are made for the study;

1. Going by their antecedents as a veritable tool for mobilizing farmers for agricultural production, the government can improve the awareness about the benefits of agricultural cooperative societies in the area region by giving more focus to knowledge- and awareness-based instruments like education, information center, rural associations, communication services and roads. These campaigns can attract more people to join the cooperatives and then get the different economic and social advantages from the cooperatives in order to ensure household food security.
2. Promoting policies, on the part of the government, which will enable cooperatives to be more involved in farm input supplies such as seedlings, fertilizer, and pesticides; agricultural marketing; and credit is suggested. Farm input and produce marketing were found to have significant effect on farmer inclination towards cooperative membership. Credit, though not significant had a positive sign. Therefore, enhancing

cooperative capacity in farm input supplies, credit and agricultural marketing will definitely attract more farmers into their membership.

Contributions to Knowledge

The study has contributed to knowledge by adding to available academic literature on agricultural cooperatives. Clearly, it has provided evidence that cooperative stands at a pedestal that can promote and enhance human development. The significance of this lies in the fact no known study of this nature has been done in Anambra State or elsewhere.

Suggestions for Further Research

This study did not cover all the communities in the four agricultural zones in Anambra state. Therefore, the researcher is suggesting that more research be carried out in the remaining communities in the State. This is necessary in order to have a clearer view of the contributions of cooperative to human development in Anambra State.

References

- Acheampong, A., Erdiaw-Kwasie, M., & Abunyewah, M. (2021). Does energy accessibility improve human development? Evidence from energy-poor regions. *Energy Economics*, 96, 105165. <https://doi.org/10.1016/j.eneco.2021.105165>
- Adefila, J., & Madaki, J. (2014). Roles of farmers' cooperatives in agricultural development in Sabuwa Local Government Area of Katsina State, Nigeria. *Journal of Economics and Sustainable Development*, 5(12).
- Agarwal, B. (2010). *Gender and agriculture: Time for a rethink*. The World Bank.
- Alimi, B. G., & Bintu, K. G. (2014). Challenges in rural development and way forward in Nigeria. *Journal of Sciences and Multidisciplinary Research*, 6(2), 129.
- Alpesh, N., & Nitin, D. (2010). Role of education in human development. Paper presented at the National Seminar on "Developmental Goals and Role of Education," Department of Education (CASE) and Faculty of Education and Psychology, M.S. University Baroda, February 19–20, 2010.
- Anriques, G., & Stamoulis, K. (2007). Rural development and poverty reduction: Is agriculture still the key? *ESA Working Paper No. 07-02*. FAO.
- Anyaegbunam, N., Ugochukwu, O., Nnadi, P., & Okafor, K. (2022). Global perspectives on agricultural cooperatives and rural development: Lessons from Anambra State, Nigeria. *International Development Studies*, 46(2), 321–338.
- Argaw, Y. A. (2012). The role of agricultural cooperatives in accessing input and output markets. Speech presented at the Southern Region Farmers' Cooperative Federation (SRFCF), SNNPR, Ethiopia.
- Ariyaratne, C. B., Featherstone, A. M., & Langemeier, M. R. (2006). What determines productivity growth of agricultural cooperatives? *Journal of Agricultural and Applied Economics*, 38(1), 47–59.
- California Centre for Cooperative Development. (2016). *Agricultural cooperatives*. Retrieved March 14, 2016, from <http://www.cccd.coop/info/types-of-coops/agricultural-cooperative>
- Chambo, S. A. (2009). *Agricultural cooperatives: Role in food security and rural development*. New York.
- Chambo, S. A., Mwangi, M., & Oloo, O. (2007). *An analysis of the socio-economic impact of cooperatives in Africa and their institutional context*. Nairobi: ICA Regional Office for Africa.
- Chen, Q., Yamamoto, T., & Rodriguez, E. (2018). The role of agricultural cooperatives in poverty alleviation: Evidence from rural China. *Rural Development Quarterly*.
- Chen, M., & Folliffe, L. (2017). Closing gender gap in agricultural leadership: A review of challenges and solutions. *Agricultural Economics*, 48(51), 1–18.

- Comim, F. (2016). *Beyond the HDI? Assessing alternative measures of human development from a capability perspective* (UNDP Human Development Report Background Paper). <https://hdr.undp.org/system/files/documents/comimtemplate.pdf>
- Cooperative Centre FCU. (2016). *What is a cooperative?* Retrieved March 14, 2016, from <http://www.coopfufu.org/about-us/what-is-a-cooperative.html>
- Cromartie, J., & Gibbs, R. (2008). Rural definition in the U.S.: Concept and practice. *Economic Research Service*, U.S. Department of Agriculture.
- Dasgupta, P., Morton, J. F., Dodman, D., Karapinar, B., Meza, F., Rivera-Ferre, M. G., Toure Sarr, A., & Vincent, K. E. (2014). Rural areas. In *Climate change 2014: Impacts, adaptation and vulnerability. Part A: Global and sectoral aspects* (pp. 613–657). Cambridge and New York: Cambridge University Press.
- De Laiglesia, J. R. (2006). *Institutional bottlenecks for agricultural development: A stocktaking exercise based on evidence from Sub-Saharan Africa* (OECD Development Centre Working Paper No. 248).
- Department of Agriculture, Forestry & Fisheries. (2012). Towards the creation of a model to enable smallholder farmers to play a critical role in the establishment of sustainable cooperative enterprises. *Report on the National Agriculture Cooperatives Indaba*, Republic of South Africa.
- Dharmasiri, L. M. (2009). Measuring agricultural productivity using the Average Productivity Index (API). Pune: University of Pune.
- Dowding, K. (2007). Collective action problem—Collective action. *Encyclopedia Britannica*. Retrieved March 16, 2016, from <http://www.britannica.com/topic/collective-action-prblem-1917-157>
- Dupont, A., Lopez, R., & Singh, R. (2021). Cooperative resilience and climate change adaptation: Insights from agricultural cooperatives in France. *Environmental Sustainability Journal*, 29(3), 401–418.