

ROLE OF AGRICULTURAL CO-OPERATIVES ON POVERTY REDUCTION AMONG RURAL FARMERS IN ENUGU STATE, NIGERIA

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Abstract: The study examined the role of agricultural co-operatives on poverty reduction among rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria. Specifically, it determined the impact of agricultural co-operatives on job creation for member rural farmers and evaluated the effect of agricultural co-operatives on increased income for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria among others. It adopted descriptive survey research design with a population of 1476 members of selected registered co-operative societies and a sample of 305, determined through the Cochran statistical formula. Data were collected through a structured questionnaire and analyzed using frequency tables, simple percentages, mean and standard deviation through a 5-point Likert scale. Hypotheses were tested using one sample t-test statistical tool at 0.05 level of significance, through (SPSS version 23). The study revealed that agricultural co-operatives had significant and positive impact on job creation for member rural farmers [$\chi^2(16, N = 256) = 27.3387, p < 0.05$] and significant and positive effect on increased income for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria among others. It therefore conclude that agricultural co-operatives have made significant contributions to job creation, income improvement, access to credit facilities, and provision of agricultural inputs for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria. Recommendations were made, among others, that there is a need to develop and implement comprehensive training programs for members of agricultural co-operatives to enhance their agricultural skills, management abilities, and understanding of modern farming practices.

Keywords: Agricultural, Cooperatives, Poverty, Reduction, Farmers

1.1 Introduction

The rural areas are often neglected by the Nigerian government, even the financial institutions, in terms of investment. This is why co-operatives are mostly functional in the rural areas of the country. Co-operatives are self-help organizations formed by the rural people themselves to meet their common economic, social, and cultural needs. Co-operative is one major tool used to reduce poverty levels in rural areas because they always start from the grassroots of the people themselves. In the words of Birchall (2013), co-operatives have played and continue to play an important role worldwide in the case of poverty reduction, facilitating the construction of homes, the provision of employment creation availability, agricultural loans, through the supply of credit for on farm productivity, provision of farm inputs like fertilizers, seedlings, education and training among others.

In Nigeria, co-operative societies perform a plethora of functions by engaging in the production, processing, marketing, distribution and financing of agricultural products. Attah, *et al.* (2018), opine that agricultural co-operative societies cover a plethora of human activities undertaken by farmers in Benue state. The fact that small holder rural farmers in Benue State live in conditions of abject poverty and malnutrition notwithstanding; Ibitoye (2012) observed that small scale farmers can help themselves by organizing for them co-operative societies to address their common benefits and also enhance their farming yields. Although, co-operative societies have performed laudable roles in enhancing the social and economic standard of living of farmers in Nigeria, there are some important factors which have affected their performance significantly over the years. As credited to Borgens (2011), these challenges involve inadequacy of trained personnel, illiteracy of co-operative members and their inability to cope with global best techniques and practices. Baarda (2014) also observed that in developing countries like Nigeria, co-operative societies have not given adequate attention to empowering their members educationally. This implies that most rural farmers in Nigeria are not educated and this affects them adversely when taking farming decisions.

Girel *et al.* cited in Gomina (2015), assert that there have been some agricultural development programmes put forward by the Nigeria government to include Agricultural Development Programme (1975), Operation Feed the Nation (1986), National Directorate for Employment (1987), National Fadama Development Programme (1992), Family Support Programme (1996), National Poverty Eradication Programme (2001), Special Programme on Food Security (2001), National Fadama II Programme (2004), National Special Food Security Programme (2004), National Fadama III Programme (2009), and Sure-P Programme (2013). In spite of these concerted efforts, poverty level has continued to be very high and creates worry (NBS, 2010). It is based on the inability of the above mentioned programmes to impact positively on the lives of the masses that an alternative in the form of co-operative society has become imperative to mobilize the limited resources of crop farmers to alleviate their suffering.

The study therefore centered on the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria.

1.2 Statement of the Problem

The importance of agriculture to developing and developed economies cannot be overemphasized. It contributes tremendously to countries' Gross Domestic Product (GDP) by creating employment and serving as a means for food security, among others. Agricultural production is mainly dependent on the efforts of farmers in the rural areas. The fact remains that when there is significant investment in agriculture by the Nigerian government, the issue of poverty among rural farmers can easily be addressed. Poverty is a major socioeconomic problem facing many developing countries, including Nigeria. In Enugu State, its prevalence has continued among the citizens, especially among farmers in the rural areas. This is not unconnected to the unavailability of jobs, low-income

generation, lack of access to credit facilities, and lack of government presence, among others. To address poverty related issues bedeviling rural farmers in the South East, it is believed that existing co-operative societies such as agricultural co-operatives can instrumentally help in the area of income generation for their members, facilitating access to loans on members' behalf, providing improved seedlings and other farm inputs like fertilizers, insecticides, herbicides towards improved agricultural production and extension services such as education, training and information for members among others. It is against this backdrop that it became pertinent to examine the role of agricultural co-operatives in poverty reduction among rural farmers in Enugu State, Nigeria, from 2001-2021.

1.3 Objectives of the Study

The main objective of the study was to examine the role of agricultural co-operatives in poverty reduction among rural farmers in Enugu State, Nigeria. The specific objectives are to:

- i. Determine the impact of agricultural co-operatives on job creation for member rural farmers in Enugu State, Nigeria.
- ii. Evaluate the effect of agricultural co-operatives on increased income for member rural farmers in Enugu State, Nigeria.

1.4 Research Questions

- i. What is the impact of agricultural co-operatives on increased income for member rural farmers in Enugu State, Nigeria?
- ii. What is the effect of agricultural co-operatives on the provision of improved income for member rural farmers in Enugu State, Nigeria?

1.5 Statement of Hypotheses

The following null hypotheses guided the study

- i. Agricultural co-operatives have no significant impact on job creation for member rural farmers in Enugu State, Nigeria.
- ii. Agricultural co-operatives have no significant effect on increased income for member rural farmers in Enugu State, Nigeria.

Review of Related Literature

2.1 Conceptual Review

Co-operatives

Many scholars have defined co-operatives in many different means and ways and from their definitions, the researcher have been able to extract his own definition of co-operative. In the view of Fred (2020), co-operative has been defined as the action that takes place when individuals pool their resources together which are often meager in an effort to obtain what is needed by all but cannot be obtained by the use of an individual's resources, talents, time, information or effort. Further explained, this habit has existed since the origin of humanity, that is, since the time that human beings started living together on the basis of family unit and / or in a community. Co-operation is customary and instinctive solidarity. The first co-operative act of man was when the first human family started gathering food even before agriculture was invented. From the University of Wisconsin-madison also UW for center for co-operatives, Co-operatives is defined as the values of self-help, self-responsibility, democracy, equality, equity, and solidarity. For Furtherance, Co-operative members believe in the ethical values of honesty, openness, social responsibility, and caring for others.

Co-operatives can also be defined as autonomous associations of people aspiring to achieve their objectives through a jointly owned and democratically controlled enterprise (European Parliament). With brief explanation, International organizations, such as the United Nations and the European Union (EU), value the role co-operatives play for society, the economy and (international) development. According to SNA, ICA, CIRIEC and current measurement practices of co-operatives, the definition of a co-operative appears to be based on three general premises, coherent with the previously identified criteria. The first is that a Co-operative is an organization with a legal identity that functions according to specific principles. The second is that a co-operative is a member-based organization, which implies the shared identity of members-users. The third is that a co-operative has specific objectives and functions related to its members-users' needs. From the definitions above, the researcher, has extracted a knowledge of co-operative in order to defined his own definition of co-operative as the agreement between two or more persons coming together to increase their individual needs with strict rules and condition to guide them the process in order to be successful in their objectives.

Role of Agricultural Co-operatives in Rural Development

Co-operatives help build sustainable communities in rural areas. The role of co-operatives in agricultural development is numerous. Cooperated growers enter a bigger market to sell their goods and buy input supplies at lower prices. More opportunities mean better economic development and the rural population's welfare.

Rural co-ops support various needs. There are rural co-operatives for education, healthcare, hardware, household and machinery supplies, etc. Compared to individual farmers, co-operative members are more economically protected and face lower risks. Cooperated farmers produce goods and render various services being owners and users at the same time. Besides, agricultural co-operatives can sell their products avoiding a middlemen fee, which increases farmers' profits.

Poverty Reduction

A concise and universally accepted definition of poverty is elusive largely because it affects many aspects of the human conditions, including physical, moral and psychological (Atkinson & Anthony, 2017). Different criteria have, therefore, been used to conceptualize poverty. Most analyses follow the conventional view of poverty as a result of insufficient income for securing basic goods and services. Others view poverty, in part, as a function of education, health, life expectancy and child mortality among others. Blackwood and Lynch (2017), identify the poor, using the criteria of the levels of consumption and expenditure. Further, Sen (2013), relates poverty to entitlements which are taken to be the various bundles of goods and services over which one has command, taking into cognizance the means by which such goods are acquired (for example, Money and Coupons among others) and the availability of the needed goods (Blackwood & Lynch, 2021). Yet, other experts see poverty in very broad terms, such as being unable to meet "basic needs" (physical; (food, health care, education, shelter etc. and non – physical; participation and identity among others) requirements for a meaningful life (World Bank, 1996).

Poverty may arise from changes in average income or changes in the distribution of income (Booth, M 2019). Let us for instance, assume a relationship between the poverty line (L) below which an individual is poor and the average incomes of the population (Y). The poverty index will decrease (increase) as L (Y) increases (decreases). Since higher average incomes are above the poverty line, other things being equal there will be less poverty (Camagarajah *et al.*, 2018). Among the "other things" that are equal is the distribution of income. Compare for instance, two countries with identical mean incomes (and poverty line), but with one having a wider area of distribution of incomes (that is, one with greater income inequality); poverty will generally be greater in the

country with higher inequality, since there will be relatively more people with incomes lower than the poverty line (L). Thus, the distribution of income has an important influence on poverty (Demery & Squire, 2016).

2.2 Theoretical Framework

The researchers considered the following theory;

The Collective Action Theory

The Collective Action theory was propounded by Mancur Olson in 1965. According to Uzonwane (2015), the theory states that “individuals under certain institutional arrangements and shared norms are capable of organizing and sustaining cooperation that advances the common interest of the group in which they belong.” This means that individuals can organize and govern themselves to attain benefits that may not be individualized but which benefit the entire group. The theory is applied widely to groups, organizations, agencies, as well as community action. Olson saw collective action as a voluntary action taken by a group to achieve perceived common needs of members, which helps in reducing the challenges of the group. According to Uzonwane (2015), such collective action has a lot of positive impact on society, for instance, by bridging the gap created by poverty inequalities and improving the livelihood of marginalized and vulnerable group such as the elderly and widowed.

Although the collective action theory is lauded, it has some weaknesses. The proponent in his model of the ‘rational’ individual suggests that where individuals believe that they can enjoy the benefits of cooperation without contributing to the costs, they will free-ride and leave the cooperation to others. This implies the corrupt nature of human beings, which impacts negatively on organizations. However, it is argued that individuals are always motivated to act collectively by their emotions/passion for a cause. In this perspective, Olson’s definition of rationality is considered to be too narrow. In spite of this shortcoming, co-operative societies being organizations formed by collective action voluntarily and democratically controlled by individuals to pursue common benefits which cannot otherwise be effectively achieved individually, the collective action theory, therefore, is suitable for this paper as it sets the premise for co-operative societies to be formed and operated. From the foregoing theoretical review, the researchers were of the view that the “Collective Action Theory” is most suitable and relevant. On this premise, the study is anchored on the Collective Action Theory.

2.3 Empirical Review

The researchers considered the following empirical works

Agba *et al.* (2015) carried out a study on how the operational effectiveness of co-operative organizations can be enhanced to stimulate job creation in Nigeria. It was observed that successive governments have failed to maximally harness the potential of co-operative organizations in addressing the challenge of unemployment plaguing the Nigerian labour market presently. Consequently, these efforts yielded little or no fruit in addressing the issue of unemployment in the country. A plethora of studies revealed that co-operatives are a vital tool for job creation.

Ajani *et al.* (2015) examined empowerment of youths in rural areas through agricultural development programmes: implications for poverty reduction in Nigeria. Rural youths in Nigeria have the potentials needed to participate effectively in agricultural development. Majority of agricultural policies and programmes formulated in Nigeria do not consider constraints confronting youths involved in agricultural development. Major problems encountered by youths in agriculture include lack of interest in agriculture as a result of drudgery in farm operations, lack of competitive market for agricultural products, lack of start-up capital, inadequate labour saving

technologies for ease of operations, inadequate finance/credit facilities, among others. As a result, they are faced with serious economic challenges which result in undue poverty and vulnerability. This has also made youths to seek employment in other sectors of the economy in order to empower themselves economically, resulting in rural-urban migration and leaving the bulk of agricultural production in the hands of old people who often times produce at a subsistence level.

Zerihun (2015) carried out a research on the challenge of job creation in Nigeria. In this paper attempt is made to show the structural nature of jobless growth in Nigeria. This is done from the perspective of, firstly, structural transformation and its effect on the resultant sectoral composition; secondly, from labor market dynamics; and thirdly, from production organization of sectors that are driving GDP growth. We found that the rate of unemployment rose by 1.1% a year between 2000 and 2010. This is caused, on the supply side, by a 2.5% annual increase in the number of new entrants into the labor market; and on the demand side, by sectors' inability to create sufficient number of jobs. Job creation increased only by 1.4% a year. We attributed this to capital intensive growth as seven of the nine broad sectors studied are capital intensive and together they accounted for 61% to 74% of the GDP growth. In addition, the structural nature of jobless growth is evident on country's employment intensity of growth. We found that, under business as usual scenario, the country need to grow by double digit to create 1.8 million jobs annually, equivalent to those that newly enter the labor force every year.

Frederick and Elizabeth (2015) wrote on the role of co-operative societies in poverty alleviation among crop farmers in Benue State, Nigeria. Poverty has remained endemic among small scale farmers in rural areas of most developing societies including Nigeria. The study specifically assessed some roles of co-operatives in poverty reduction as well as challenges militating against co-operatives. This paper utilized secondary data obtained from textbooks, research reports, journals and internet sources. The collective Action theory was used to guide the study. The paper revealed the roles of co-operative societies in poverty alleviation among crop farmers to include but not limited to providing credit at low interest rate, providing goods and services at low cost, expunging the exploitation of the middlemen, protecting the rights of the less privileged, protecting the rights of producers and consumers; and sensitizing and educating members of co-operatives. Challenges identified as hampering these roles include low education and illiteracy of members, low capital base, high interest rates, lack of access to farmland; poor management style, small membership and lack of adequate government support which affects the management of co-operatives.

John *et al.* (2016) examined self-reliance projects: a springboard for rural youth livelihoods. The paper is based on a study conducted to determine the effects of self-reliance projects on the livelihoods of youth in selected rural areas of Nakuru County, Kenya. A descriptive survey research design was used for the study. Data were collected using interviews and questionnaires and analyzed with the aid of SPSS. Descriptive statistics were used in providing the information where frequencies and percentages were derived. Findings indicated that successful rural self-reliance projects are helping build youth business, facilitate their integration into new ventures and improve livelihoods of the rural youth. The study further established that youth need to be supported in trainings for projects' start-ups, finances access and appropriate technologies.

Udih and Odibo (2016) examined the impact of entrepreneurship growth in the development of Nigerian economy. Two sample cities of Warri and Ughelli in Delta State were used for the study. The study used primary and secondary data to generate the information. The methodology employed was the Narrative Textual Case Study (NTCS) method, while non-probability and convenience sampling technique was used to select the sample size. The data gathered were analyzed using percentages, autocorrelation (Dubin Watson technique) and Chi-

square test statistics were used to test for the level of significance and validity. The research findings were; entrepreneurship growths encourage wealth creation and create employment; increase in entrepreneurship development increases GDP growth rate.

Mbah and Ejike (2016) examined the poverty situation in Awka metropolis of Anambra State, Nigeria using the P-alpha class of poverty measure. The study revealed that 49 percent of respondents were considered to be poor, with 0.17 poverty gap index and a 0.03 severity of poverty index. The indicators were considered to be modest when compared with the national statistics. The causes of poverty in Awka metropolis from the findings include: lack of inadequate supply of some identified basic necessities of life such as shelter, portable water and sanitation, basic healthcare services, electricity and educational services. As a result of these inadequacies, there are psychological distress, increase in destitution, child labour, violent crime, and prostitution.

Paulo (2017) empirically studied co-operative enterprise and youth's employment creation: prospects and challenges, (Reflections from Tanzanian Agricultural Sector). Mainly the paper aims to "determine the opportunities for youth's employment creating through a co-operative enterprise". Specifically the paper aims; to identify the factors contributing to youth's unemployment and their implications to the youths, to determine the alternative approaches of employment creation for the youths through a co-operative enterprise, and to determine the constraints affecting successful creation of youth employments in co-operatives. The design of the paper is descriptive and more qualitative in its approach. The descriptions will base on the practical experience and theoretical conceptualization of the authors on the matters relating to co-operative and youth's employment creation and secondary data. For the case of Tanzania, efforts to minimize unemployment among youths can be done through co-operatives in agricultural sector. They can support employment creation either; directly by employing youths a staffs, finance youths business, facilitate youth access to land and production facilities and forming business for youths with co-operatives, or indirectly by supporting youths to access markets, education and training and linking with creditors. The study will also reveal some challenges in creating youths' employments through co-operatives as well as providing viable recommendations.

Ernest (2017) the role of co-operatives in sustaining the livelihoods of rural communities: The case of rural co-operatives in Shurugwi District, Zimbabwe. The main focus of the research was to analyze the role of co-operatives in sustaining the livelihoods of local rural communities in Shurugwi District in Zimbabwe. Descriptive survey design was used in this mixed method approach to the study. A questionnaire, interviews and observation methods were employed as the main research instruments. Purposive sampling technique was adopted and data were collected from government officials and from members of the six co-operatives in Shurugwi District. A total of 50 research participants were involved in the study. It was found that co-operatives were established as a strategy to sustain livelihoods of rural communities. With the adoption of co-operatives, people in the rural communities managed to generate employment, boost food production, empower the marginalized, especially women, and promote social cohesion and integration, thereby improving their livelihoods and reducing poverty. Most co-operatives face a number of challenges that include lack of financial support, poor management and lack of management skills, and lack of competitive markets to sell their produce.

Okwara and Uhuegbulem (2017) examined the role co-operatives play in economic and rural empowerment. The purpose is to investigate ways in which co-operatives act as tools towards sustainable rural and economic empowerment in Imo state, Nigeria. The research method adopted is exploratory and reveals that co-operatives have alternative business models for local businesses that are both responsive to rural needs which can stimulate economic development by giving people control over their livelihoods create job opportunities and provide a

channel for the overall growth of the Nigerian economy. The results show that co-operatives contribute to economic and rural empowerment through the procurement of farm inputs for members, giving vocational skills and fighting social exclusion in the rural areas. The results also reveal that the gains of cooperation have not been fully realized in the study area especially in job creation.

Gap in Empirical Review

Many authors have written on agricultural co-operatives in different forms with different variables. However, the few studies that investigated the effect of agricultural co-operatives on poverty reduction among rural farmers, none of the used farmers' co-operative society as agricultural co-operative variable and variables like employment creation, education and training, credit facilities, storage and processing farmers' produce and farm inputs among others for poverty reduction. More so, this study used data up till 2021 thereby leaving a huge gap in timeframe and variables. These were the gaps that the current study filled.

3 Methodology

Research Design

This study adopted survey research design. This is suitable for the work given the effect of agricultural co-operatives on poverty reduction among rural farmers in South East, Nigeria.

Area of the Study

The area of study for this work is Enugu state, it is one of the 36 states of Nigeria, and made up of seventeen local government areas.

Sources of Data

The researcher made use of two sources of data, primary sources of data and secondary sources of data. Primary data were sourced from the field i.e. from the members of selected co-operative societies that presented first-hand information to the researcher in the course of the study, from the three Senatorial Districts that make up the State. Secondary data are data that do not originate from the researcher. They are merely assembled by other people who have carried out similar studies. Secondary data came from already existing works like journals, textbooks, etc.

Population of the Study

The population of the study comprised 1476 members of registered co-operatives that are predominantly farmers, drawn from Enugu State as accessible population as shown in the appendix.

Sample Size Determination

The Cochran formula was adopted in the determination of the sample size of the study. The formula allows a researcher to calculate an ideal sample size given a desired level of precision, desired confidence level and the formula is given below:

$$n = \frac{n_o}{1 + \frac{(n_o - 1)}{N}}$$

$$n_o = \frac{Z^2 pq}{e^2}$$

Where:

n = Sample Size

n_o = Representative Sample for Proportion

$$\begin{aligned}
 N &= \text{Total Population} \\
 Z^2 &= \text{The abscissa of the normal curve} = 1.96 \\
 p &= \text{Proportion of success in the population from pilot survey} = 0.5 \\
 q &= \text{Proportion of failure in the population from pilot survey} = 0.5 \\
 e &= \text{error limit} = 0.05 \\
 n_o &= \frac{(1.96)^2 (0.5 \times 0.5)}{(0.05)^2} \\
 n_o &= \frac{3.8416 \times 0.25}{0.0025} \\
 n_o &= 384.16
 \end{aligned}$$

$$\text{Therefore, } n = \frac{384.16}{1 + (384.16 - 1)} = \frac{384.16}{1476}$$

$$n = \frac{384.16}{1+0.260}$$

$$n = 305$$

Sampling Technique

The simple random sampling technique was used as all the elements had equal chance of being selected.

Method of Data Analyses

The data from the questionnaire were analyzed using frequency tables, simple percentages, and means. Also, the five research questions for the study were analyzed with a 5-point Likert scale. The various null hypotheses formulated were tested using chi-square and one-sample t-test statistical tools, respectively, at a 0.05 level of significance through Statistical Package for Social Sciences (SPSS, 23) for the t-test.

4. Data Presentation, Analysis, and Discussion Of Findings

Table 4.1 Questionnaire Response Rate

Features of Questionnaire	Number	Percentage (%)
Questionnaire administered	305	100
Questionnaire collected	256	83.93
Questionnaire withheld	49	16.07
Questionnaire used for analysis	256	83.93

Source: Fieldwork, 2025.

As shown in 4.1, 305(100%) copies of questionnaire were distributed, 256(83.93%) copies were returned, while 49(16.07%) copies were withheld. Thus given 83.93% response rate.

Descriptive Analysis of Research Questions

Question One: What is the impact of agricultural co-operatives on job creation for member rural farmers in Enugu State, Nigeria?

Table 4.2 Responses on the impact of agricultural co-operatives on job creation for member rural farmers in Enugu State, Nigeria

S/n	Items	SA	A	UD	D	SD	Mean
Item1	Promoting or enabling self-employment	98 (30.28%)	78 (29.69%)	10 (3.90%)	42 (16.41%)	30 (11.72%)	3.90
Item2	Being a common workplace	78 (30.47%)	90 (35.16%)	8 (3.12%)	34 (13.28%)	46 (17.97%)	3.72
Item3	Being employees themselves	82 (32.03%)	96 (37.50%)	11 (4.30%)	38 (14.84%)	29 (11.33%)	3.88
Item4	Inducing wage payment	100 (39.06%)	72 (28.13%)	6 (2.34%)	44 (17.19%)	34 (13.28%)	3.88
Item5	Taking advantage of spillover effects	74 (28.91%)	92 (35.94%)	9 (3.51%)	32 (12.50%)	49 (19.14%)	3.68
AGGREGATE							3.81

Source: Fieldwork, 2025.

The result from table 4.6 reveals that 98(38.28%) of the respondents strongly agree that promoting or enabling self-employment is one of the impacts of agricultural co-operatives on job creation for member rural farmers in Enugu State, Nigeria. 76(29.69%) of the respondents agree. On the other hand, 42(16.41%) of the respondents disagree and 30(11.72%) of the respondents strongly disagree. Meanwhile, 10(3.90%) of the respondents were undecided. Item 2 reveals that 78(30.47%) of the respondents strongly agree that being a common workplace is one of the impacts of agricultural co-operatives on job creation for member rural farmers in Enugu State, Nigeria. 90(35.16%) of the respondents agree. On the other hand, 34(13.28%) of the respondents disagree and 46(17.97%) of the respondents strongly disagree. Meanwhile, 8(3.12%) of the respondents were undecided. Item 3 reveals that 82(32.03%) of the respondents strongly agree that being employees themselves is one of the impacts of agricultural co-operatives on job creation for member rural farmers in Enugu State, Nigeria. 96(37.50%) of the respondents agree. On the other hand, 38(14.84%) of the respondents disagree and 29(11.33%) of the respondents strongly disagree. Meanwhile, 11(4.30%) of the respondents were undecided. Item 4 reveals that 100(39.06%) of the respondents strongly agree that inducing wage payment is one of the impacts of agricultural co-operatives on job creation for member rural farmers in Enugu State, Nigeria. 72(28.13%) of the respondents agree. On the other hand, 44(17.19%) of the respondents disagree and 34(13.28%) of the respondents strongly disagree. Meanwhile, 6(2.34%) of the respondents were undecided. Item 5 reveals that 74(28.91%) of the respondents strongly agree

that taking advantage of spillover effects is one of the impacts of agricultural co-operatives on job creation for member rural farmers in Enugu State, Nigeria. 92(35.94%) of the respondents agree. On the other hand, 32(12.50%) of the respondents disagree and 49(19.14%) of the respondents strongly disagree. Meanwhile, 9(3.51%) of the respondents were undecided. From the foregoing, the descriptions in the table shows the mean generated for all the statements on the questionnaire. Results indicate that the respondents are of the opinion that agricultural co-operatives has impact on job creation for member rural farmers in Enugu State, Nigeria. This is based on the aggregate mean score 3.81, which is above the minimum acceptance mean of 3.0.

Question Two: What is the effect of agricultural co-operatives on increased income for member rural farmers in Enugu State, Nigeria?

Table 4.7 Responses on the effect of agricultural co-operatives on increased income for member rural farmers in Enugu State, Nigeria

S/n	Items	SA	A	UD	D	SD	Mean
Item6	Improved income for members	88 (34.38%)	94 (36.72%)	7 (2.73%)	28 (10.94%)	39 (15.23%)	3.85
Item7	Promotion of savings for members	90 (35.16%)	82 (32.03%)	12 (4.69%)	38 (14.84%)	34 (13.28%)	3.80
Item8	Enhanced living standard for members	73 (28.52%)	89 (34.77%)	5 (1.95%)	56 (21.88%)	33 (12.88%)	3.75
Item9	Poverty reduction	70 (27.34%)	86 (33.59%)	11 (4.30%)	52 (20.31%)	37 (14.46%)	3.65
Item10	Improving capacity building for members	75 (37.11%)	95 (29.30%)	8 (3.12%)	44 (17.19%)	34 (13.28%)	3.76
AGGREGATE							3.76

Source: Fieldwork, 2025.

Item 6 result in table 4.7 reveals that 88(34.38%) of the respondents strongly agree that improved income is one of the effects of agricultural co-operatives on the provision of improved income for member rural farmers in Enugu State, Nigeria. 94(36.72%) of the respondents agree. On the other hand, 28(10.94%) of the respondents disagree and 39(15.23%) of the respondents strongly disagree. Meanwhile, 7(2.73%) of the respondents were undecided. Item 7 reveals that 90(35.16%) of the respondents strongly agree that promotion of savings is one of the effects of agricultural co-operatives on the provision of improved income for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria. 82(32.03%) of the respondents agree. On the other hand, 38(14.84%) of the respondents disagree and 34(13.28%) of the respondents strongly disagree. Meanwhile, 12(4.69%) of the respondents were undecided. Item 8 reveals that 73(28.52%) of the respondents strongly agree that enhanced living standard for members is one of the effects of agricultural co-operatives on the provision of improved income for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria. 89(34.77%) of the

respondents agree. On the other hand, 56(21.88%) of the respondents disagree and 33(12.88%) of the respondents strongly disagree. Meanwhile, 5(1.95%) of the respondents were undecided. Item 9 reveals that 70(27.34%) of the respondents strongly agree that poverty reduction is one of the effects of agricultural co-operatives on the provision of improved income for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria. 86(33.59%) of the respondents agree. On the other hand, 52(20.31%) of the respondents disagree and 37(14.46%) of the respondents strongly disagree. Meanwhile, 11(4.30%) of the respondents were undecided. Item 10 reveals that 75(37.11%) of the respondents strongly agree that improving capacity building for members is one of the effects of agricultural co-operatives on the provision of improved income for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria. 95(29.30%) of the respondents agree. On the other hand, 44(17.19%) of the respondents disagree and 34(13.28%) of the respondents strongly disagree. Meanwhile, 8(3.12%) of the respondents were undecided. From the foregoing, the descriptions in the table shows the mean generated for all the statements on the questionnaire. Results indicate that the respondents are of the opinion that agricultural co-operatives have effect on the provision of improved income for member rural farmers in Enugu State, Nigeria. This is based on the aggregate mean score 3.76, which is above the minimum acceptance mean of 3.0.

Test of Hypotheses

Hypothesis I: Agricultural co-operatives have no significant impact on job creation for member rural farmers in Enugu State, Nigeria

Table 4.11: Observed Frequencies for Hypothesis I

Options	Item 1	Item 2	Item 3	Item 4	Item 5	Total
SA	98	78	82	100	74	432
A	76	90	96	72	92	426
UD	10	8	11	6	9	44
D	42	34	38	44	32	190
SD	30	46	29	34	49	188
Total	256	256	256	256	256	1280

Table 4.12: Chi-square Table

Items	responses	O	E	χ^2
1	SA	98	86.4	1.5574
	A	76	85.2	0.9934
	UD	10	8.8	0.1636
	D	42	38	0.4211
	SD	30	37.6	1.5362
2	SA	78	86.4	0.8167
	A	90	85.2	0.2704
	UD	8	8.8	0.0727
	D	34	38	0.4211
	SD	46	37.6	1.8766
3	SA	82	86.4	0.2241

	A	96	85.2	1.3690
	UD	11	8.8	0.5500
	D	38	38	0.0000
	SD	29	37.6	1.9670
4	SA	100	86.4	2.1407
	A	72	85.2	2.0451
	UD	6	8.8	0.8909
	D	44	38	0.9474
	SD	34	37.6	0.3447
5	SA	74	86.4	1.7796
	A	92	85.2	0.5427
	UD	9	8.8	1.0045
	D	32	38	1.9474
	SD	49	37.6	3.4564
$\Sigma=$				27.3387

Source: Fieldwork, 2025, as generated from χ^2 output

Interpretation and Decision

Since the calculated value (27.3387) is greater than the table value (26.296), the H_0 (null hypothesis) should be rejected. This implies that agricultural co-operatives had significant impact on job creation for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria.

Hypothesis II: Agricultural co-operatives have no significant effect on increased income for member rural farmers in Enugu State, Nigeria.

Table 4.13: Observed Frequencies for Hypothesis II

Options	Item 6	Item 7	Item 8	Item 9	Item 10	Total
SA	88	90	73	70	75	396
A	94	82	89	86	95	446
UD	7	12	5	11	8	43
D	28	38	56	52	44	218
SD	39	34	33	37	34	177
Total	256	256	256	256	256	1280

Table 4.14: Chi-square Table

Items	responses	o	e	x²
6	SA	88	79.2	0.9778
	A	94	89.2	0.2583
	UD	7	8.6	0.2977
	D	28	43.6	5.5817
	SD	39	35.4	0.3661
7	SA	90	79.2	1.4727

	A	82	89.2	0.5812
	UD	12	8.6	1.3442
	D	38	43.6	2.7193
	SD	34	35.4	0.0554
8	SA	73	79.2	1.4854
	A	89	89.2	0.0004
	UD	5	8.6	1.5070
	D	56	43.6	3.5266
	SD	33	35.4	0.1627
9	SA	70	79.2	2.0687
	A	86	89.2	0.1148
	UD	11	8.6	0.6698
	D	52	43.6	0.6183
	SD	37	35.4	0.0723
10	SA	75	79.2	1.2227
	A	95	89.2	0.3771
	UD	8	8.6	0.0419
	D	44	43.6	0.0037
	SD	34	35.4	0.0554
		$\Sigma=$		26.5810

Source: Source: Fieldwork, 2025, as generated from χ^2 output

Interpretation and Decision

Since the calculated value (26.5810) is greater than the table value (26.296), the H_0 (null hypothesis) should be rejected. This implies that agricultural co-operatives had significant effect on increased income for member rural farmers in Enugu State, Nigeria.

Discussion of Findings

Impact of Agricultural Co-operatives on Job Creation for Member Rural Farmers in Enugu State, Nigeria

Result from test of hypothesis I showed that agricultural co-operatives had significant impact on job creation for member rural farmers in Enugu State, Nigeria [$\chi^2(16, N = 256) = 27.3387, p < 0.05$]. Findings from research question one further affirmed this result as they revealed that promoting or enabling self-employment was one of the impacts of agricultural co-operatives on job creation for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria; being a common workplace; being employees themselves; inducing wage payment and that taking advantage of spillover effects were the major impacts of agricultural co-operatives on job creation for member rural farmers in the State.

Effect of Agricultural Co-operatives on Increased Income for Member Rural Farmers in Enugu State, Nigeria

Hypothesis II revealed that agricultural co-operatives had significant effect on the provision of improved income for member rural farmers in South East [$(16, N = 256) = 26.5810, p < 0.05$]. It was also revealed – in line with the studies of Nurudeen and Olumuyiwa (2021), Budi *et al.* (2021) and Abraham *et al.* (2020) – that improved

income for members; promotion of savings and enhanced living standard for members were the major effects of agricultural co-operatives on the provision of improved income for member rural farmers in Enugu State, Nigeria.

5 Summary of Findings, Conclusion, and Recommendations

Summary of Findings

From the analysis of data, the following findings were established:

- i. Agricultural co-operatives had a significant impact on job creation for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria [$\chi^2(16, N = 256) = 27.3387, p < 0.05$].
- ii. Agricultural co-operatives had a significant effect on income for member rural farmers in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria [(16, $N = 256$) = 26.5810, $p < 0.05$].

Conclusion

Taking the analysis into cognizance, the study therefore conclude that agricultural co-operatives in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria have made significant contributions to job creation; income increment, access to credit facilities; provision of farm inputs at subsidized rates for member rural farmers and assisted members positively in storage and processing of farm produce in the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria.

Recommendations

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

- i. There is need to develop and implement comprehensive training programs for members of agricultural co-operatives to enhance their agricultural skills, management abilities, and understanding of modern farming practices. This will further amplify the positive impact of co-operatives on job creation and income improvement.
- ii. The management of co-operatives should always work closely with financial institutions and relevant stakeholders to create specialized and accessible credit facilities for agricultural co-operatives. This will ensure that co-operative members have sustained and affordable access to credit, fostering continued growth and productivity.

Contribution to Knowledge

The study has truly contributed to knowledge on the effect of agricultural co-operatives on poverty reduction among rural farmers in Enugu State, Nigeria, highlighting the different activities of theirs that reduce poverty.

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