

**AGRICULTURAL COOPERATIVES ACTIVITIES IMPACT ON
IMPROVED PERFORMANCE OF WOMEN COOPERATIVE FARMERS
IN ENUGU STATE, NIGERIA.**

Prof. C. E. Nwoha, P. C. Okonkwo (PhD) and A. C. Erimma (M.Sc.)

Enugu State University of Science and Technology, (ESUT)

DOI: <https://doi.org/10.5281/zenodo.13909175>

Abstract: The study examined the effects of Agricultural cooperatives activities on improved performance of women cooperative farmers in Enugu state. Cooperatives as socio-economic entities are confronted with issues of poor savings mobilization, poor loan acquisition and inadequate training. Specifically, the study examined the activities of cooperatives in the areas of savings mobilization, loan acquisition and training and their effect on increasing the performance of women in Agricultural Cooperatives. The population size was 4000 women in agricultural cooperatives in Enugu state, the sample size of 180 was gotten using simple random sampling technique. The study adopted survey design. The main source of data collection for this study was primary source while the instrument for collection was structured questionnaires. Data collected were analyzed using descriptive statistics (frequencies and percentages). It revealed that out of 169 women that returned their questionnaires 100, 110, 100 respectively strongly agreed that savings mobilization, loan acquisition and training respectively have significant effects on improved productivity of women in agricultural cooperatives in Enugu state. The hypotheses were tested using Chi-Square method, all null hypotheses were rejected while the alternate hypotheses were accepted since the calculated chi-squares were greater than the tabulated values. Women participation in agriculture had made them to be more financially independent and economically vibrant. Based on the findings, it was recommended that government and financial institutions should give adequate support to cooperative societies in the area of credits, also adequate campaigns are needed to sensitize the women and the general public on benefits of agricultural cooperatives towards improving their productivity in the study area. The implication of the study is that improved performance of women in agricultural cooperatives is a confirmation of the primacy of cooperatives as a source of income to rural women.

Keywords: Agricultural Cooperatives, Improved Performance, Women Farmers

Introduction

Background of the Study

The establishment of modern cooperative is meant to enable people to adjust their ways of living and working to meet the requirement of money and market economy. It is not out of place to state that mutuality, which was the basic norm of social living in Africa, contributed to the rise of cooperatives activities. Indeed, cooperative

movement was brought into third world from India, with the aim of stimulating indigenous economic activities gearing towards productivity.

Agricultural cooperatives are the channels use in pooling resources of peasant farmers together, via labor, capitals and land in order to take advantage of improved productivity for extending credit and other farm input factors and organizing collective marketing, for their products to offset high profit motive of the capitalist business. Cooperative societies are voluntary association of people who by pooling their physical resources, functional and human resources together by aiming at improving their standard of living. In developing countries, among the poor, rural women are the poorest and more vulnerable. Nigerian women are perceived as household property that join hand in economic activities of their families with regard to exchange in marriage participation in activities and other areas that yield money (Azikiwe 2012). Women take less part in important gainful economic activities and have limited access to socio-economic activities and limited access to socio-economic rights and privileges (Esere 2001). They enjoy lower social status and are encumbered by harmful traditional practices to exhibit their potentials. They still suffer distribution and marginalization through denials of rights, land ownership, access to credit facilities and farm input. Women are isolated, abused and restricted at the community levels through traditional and religious practices which hampers their development. There is generally unequal burden of domestic maintenance and childcare responsibilities allocated to women as compared to men. They have a low decision making power compared with men.

In most of the developing countries, 30% of women receive less than 1% of the total credit given annually. Women in Nigeria are unable to secure credit facilities from financial institutions due to lack of collateral. This development has resulted to the insecurity and less income on the part of women. Experience has shown that majority of women especially those in rural communities do not benefit from the programmes of the various government even when they are involved in economic activities that need support. micro-credit facilities in some cases do not reach to rural women for enhancement of their production and trade. (Ikeduru 2002).

Agricultural Cooperative creates opportunity for women to help themselves since there is no patriarchy ideology of superiority to men because all members have the same rights and duties in cooperative entity. Cooperative entity has a strategic role to empower women and by joining in this entity, women can prove their competencies and abilities as shown by the success of SMEs (Small and Medium enterprises) managed by women without releasing their role as housewives.

Agriculture cooperative activities include roles of cooperative such as: giving training, consulting for business, improving the skills for organizing, managing, administrating, accounting, and improving the product quality, giving access for productive resources and information. Notwithstanding that Agricultural cooperatives are viewed as breeding ground for enhancing women productivity, an adequate understanding of Agricultural cooperative activities is sine qua non on women productivity but the productivity of women has not been fully achieved

Some problems and challenges of women in Agricultural cooperatives are low access toward market information and technology, the low access toward the capital resources, the low capacity of human resources and cultural factor leading to low formal education for women and the low opportunity for women to be active in the cooperatives. Based on the effects of agricultural cooperatives on improving the women productivity, this study emerged.

Statement of the Problem

In Nigeria, agricultural cooperatives as developmental platform, when properly organized can aid in the productivity of women in agricultural practices. The rural women whose interest is paramount in agricultural production have key roles to play in food production, crops, livestock, fish production, storage, processing, marketing and other farming activities. These roles can be perfectly carried out in the agricultural sector through an organized channel that can extend the more improved agricultural inputs, production techniques and other support services to rural women. These cooperative activities are carried out to ensure that women become more productive in the society and equally will close the gender gap in the society. Despite the activities of the agricultural cooperatives, the productivity of women in cooperatives have not improved as required. To address the issue of women productivity, various policy initiatives were adopted out of which is promoting women participation in cooperative societies. Cooperative societies are believed to be effective instrument for uplifting the economically and socially weaker sections of the society like women through their own solidarity and collective actions (Krishnaswami 2000). Several studies indicated that Agricultural cooperatives have the power of improving the potentials of women. However, some scholar stated that organizing women into cooperatives increases social pressure and workloads.

Achieving the desired role of women towards enhanced productivity is to give credit investment capital to the members especially the members whose SMEs need expansion or credit to those that want to start business through its saving and lending unit. Previously, they were often trapped in banks with high interest so they need better financial institutions to help them like cooperative entity notwithstanding the cooperative activities available.

The most dominant issues facing the women in agricultural cooperatives from improving their productivity range from poor savings mobilization, loan acquisition to poor training,

Therefore, this study is aimed at filling the knowledge gap in this area by evaluating the effects of agricultural cooperative activities towards improving the productivity of women in Enugu State.

Objectives of the Study

The broad objective of the study is to examine the effects of agricultural cooperative activities on improved productivity of women in Enugu state. The Specific Objectives are to:

1. Examine the extent to which savings mobilization in agricultural cooperatives has improved the performance of women in the study area.
2. Determine the extent to which loan acquisition in agricultural cooperatives has improved the performance of women in the study area.
3. Ascertain the extent to which training in agricultural cooperatives has improved the performance of women in the study area.

Research Questions

1. to what extent has saving mobilization in agricultural cooperatives improve the improved performance of women in the study area?
2. To what extent has loan acquisition in agricultural cooperatives improve the performance of women in the study area?
3. To what extent has training in agricultural cooperatives improve the performance of women in the study area?

Statement of Hypotheses

1. Ho: Saving mobilization has no significant effect on improved performance of women in agricultural cooperatives in the study area.
2. Ho: Loan acquisition has no significant effect on improved performance of women in agricultural cooperatives in the study area.
3. Ho: Training has no significant effect on improved performance of women in agricultural cooperatives in the study area.

Scope of the Study

Unit Scope: The work focused on the effects of agricultural cooperatives activities towards improving the performance of women cooperative farmers in Enugu State.

Content Scope: This was based on two variables. The independent variable was Y, while the dependent variables were represented with X.

Independent variable – Agricultural cooperative activities

Dependent variable – performance of women farmers’

Geographical Scope: Enugu state is one of the states in the south eastern part of Nigeria located at the foot of the Udi plateau. It shares boundaries with all south eastern states and with Kogi and Benue states. The state has a good climatic conditions and most of her citizens are into farming.

Review of Related Literature

Conceptual Review

Cooperative Society

A cooperative is defined by the International Cooperative Alliance (1995) as an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. Chukwu (1990) succinctly puts cooperative societies as institution within whose framework cooperation or joint activities by people take place in a formalized, long term, deliberate and to a great extent, specific form in the social and especially economic sphere of human endeavor. For Ijere (2011) Cooperative is an association of persons joined together to achieve a common end and through the formation of a democratically controlled organization, making equitable contribution to the capital required and accepting a fair share of the risks and benefits of the undertaking in which the members actively participate.

Agricultural Cooperatives

An agricultural Cooperative, also known as farmers’ cooperative, is a form of cooperative formed by farmers or agriculturalists that have combined their resources together for the production and marketing of their produce. They also get some equipment and items to enhance the effectiveness of their production and marketing of the items with the hope of benefiting members financially and economically. These include receiving loans, farm inputs such as fertilizer, professional advice financial education, mobilization of savings, provision of extension services, management of credit and attraction of government’s support, land/soil conservation and irrigation.

Women and Cooperative Movement

Women grouping together to help one another to solve their daily problems is customary in Africa. Therefore, working together in cooperatives would be in line with the local tradition. However, for various reasons, women’s participation in cooperatives is still insignificant, and with exception of saving and credit organization; women are basically absent in the management of cooperatives.

Organizing women into cooperatives helps to consolidate efforts, creates louder voice, achieve self-reliance and serve as vehicle for socio-cultural transformation (Desta 2009). Like other forms of enterprises, the cooperatives reflect the broader society in which they operate, it is not surprising that gender imbalance do exist despite the cooperative principles and values that proclaim equality and equity. Desta further pointed out that the low participation of women is the result of women's social, economic and legal constraints that discriminate against women in regard to property ownership and inheritance.

Cooperative as a Potential Vehicle for Women's Empowerment

In the word of Nippierd (2012) empowerment has always be fundamental to cooperative idea where people get to achieve goals that they will not be able to achieve on their own individual basis. Karumakran (2004) added that empowerment is the central issue in cooperative meaning that if cooperatives fail in improving the members we cannot even talk about the existence of it. Cooperatives provide training, credit facility, employment opportunity and providing high social values like helping each other promote self-reliance and self-responsibility.

As indicated in Agwu (2001), lack of economic opportunities and low social values in their society that place women in dependent position and erode totally their self-reliance and confidence. In cooperative when women become members, they get an opportunity to different economic and social benefits delivered by the cooperative. Nippierd (2012) showed that cooperatives are organized on the principle of one person one vote. The cooperatives form of enterprise provides women with the opportunity of participating in equal terms with men. He also revealed that in cooperatives, as a group, members are able to enjoy large economies of scale and increase their influence and bargaining power. Furthermore, he stated that, the mutual support and encouragement that a group of entrepreneurs can give each other can be also crucial in helping to maintain their self-confidence, solidarity, social responsibility, equality and caring for other which are among the core values on which genuine cooperatives are based.

Cooperatives can be seen as organizations of weak and vulnerable people and a means for their self-reliance against unequal competitions and economic exploitation. meaning that ultimate goal of cooperative is to eliminate injustice. It is confirmed also that cooperatives seek to remedy the economic inequality and the evil of concentration of income and wealth in the hands of the selected few. and thereby prevent the exploitation of the weaker sections by the stronger and promotes distributive justice and seeks to establish a fair balance among different factors of production and just economic relation. Therefore, organizing the most vulnerable groups like women in cooperative will enable them to be empowered and become competent in the existing social and economic system.

Activities of Agricultural Cooperatives towards Improved Productivity of Women

Savings Mobilization

Savings mobilization in Agricultural cooperatives earn cooperatives credibility and such funds can be used as leverage to raise loans at financial institutions for group members (Isuwa 2000), Huppi and Feder (1990) pointed out another advantage of saving mobilization by saying that intra group fund can be used to ensure time repayment. Yinus (1993) contends that saving is major tool in risk management, this may explain why micro finance encourages loaners to make regular deposits with their groups. The Agricultural Credit Guarantee Scheme Fund in Nigeria requires that group members contribute 25% of their loan demand (CBN 2003). Some other organizations require 30% of their loan offer, it implies that group members will contribute different amount based on their individual demand for loan and their financing institutions policy. These underscore the importance of saving mobilization as a major key to improved productivity in Agricultural cooperatives. Saving increases the

revolving capital to members and the more savings mobilized the less dependence on the external source of loanable fund, hence amount of savings mobilized is a measure of productivity. Agricultural cooperative enables the mobilization of savings among farmers as they would be enlightened on the benefits of savings. The culture of savings will then be developed among the cooperative members, who are in this instance, farmers. Agricultural cooperative therefore, play an important role in savings mobilization among its members.

Farm Supply

Agricultural cooperatives are able to obtain high quality farm inputs such as seeds, insecticides, fertilizers etc. The cooperatives are positioned to handle this with comparative advantage of economies of scale. The task of the cooperative is not just to regulate the price of the inputs but also ensure that quality products with appropriate technical knowledge are offered to the farmer through the extension agents.

Loan Acquisition

Credit is a life wire of every cooperative. It is trite that it is cheaper and more secured to assess credit through cooperatives. This applies to cooperatives lending out their money or carrying out on-lending in partnership with financial or development institutions.

The on-lending programme of the former NACB, which has now been revamped and restricted as Nigerian Agricultural Cooperatives and Rural Development Bank is certainly more successful than lending which has more default repayment rate. Agricultural Cooperatives grant loans to members for productive purposes. A small farmer for instance, may be charged relatively high interest rates by cooperatives unlike commercial banks, which are not mindful of high transaction costs on small loan funds, or may be refused credit altogether due to lack of collateral. An agricultural cooperative like a Farmers "Credit Union will be able to raise loan funds at advantageous rate from commercial banks because of its large association size and will then distribute to its members on the strength of mutual guarantees for repayment. Funds procured from government and her agencies as well as from financial institutions are given to members of the cooperative as loans. You have to note that loans received by members from their cooperative societies are usually repaid over a period of time and the interest rate is low.

Training

Agricultural cooperative societies provide professional advice to farmers on how to use chemicals to eradicate pests, diseases as well as on mechanization of agriculture. They prepare farmers" mind ahead of time on their product. The agricultural cooperatives carry out research services into the marketing of their products as well as educating them on the best seedling to plant and the actual period. They disseminate new ideas to farmers through extension workers either through individual method, personal contact, group method and mass media. All these educational functions of agricultural cooperatives are in line with the principles of Rochdale Equitable Pioneers, which include giving cooperative members qualitative and functional education. In addition to providing members with education and training in farm practice, marketing and extension service, agricultural cooperatives also finance the education of members, their dependents and the people from the communities where the cooperative operates.

Extension Services

Provision of extension services to cooperatives is equally part of training in cooperatives. Extension is a way of service aimed at getting knowledge developed from one environment to the other. Agricultural extension is a bridge between the researchers and the farmers. In other words, agricultural extension is a connecting link between the researches and farming communities. Through the agricultural agents, farmers acquire certain skills in both

animals and crop production. It improves the farmers "standard of living, conduct and organizes training for farmers. The extension services help to increase and improve food production. Extension workers disseminate information to primitive farmers through personal contact, group method, mass media, seminars, excursion, film shows, and agricultural show and so on.

Conceptual Framework

Independent Variables

Agricultural cooperatives activities

- a) training
- b) credit obtained at low rate
- c) input supply
- d) marketing
- e) processing

Dependent Variables

- a) education
- b) shares
- c) farm size
- d) occupation
- e) food supply

Observable Effects

- a) better quality crop output
- b) total output increased
- c) increase per hectare
- d) more varieties of crop
- e) crop output has met local demand

Theoretical Framework

System Theory

This study is based on system theory which the most relevant theory. This theory was propounded by Ludwig (1951), the theory stated that any part of the organization activities affects all other parts. Ludwig (1951) outlined that a system consists of a number of separate components or parts with each part making specific contributions to the overall development of the system. The general system theory is important in understanding interdependency of groups in a given society. Women as a group are part and parcel of the society. Due to the world population of women their activities will have significant impact on the world at large if their performance is improved.

Pecking order theory

This theory is known as the pecking order model that relates to company's structure which propounded by Stewart Myers and Nicholas Majluf in 1984. the theory states that managers follow a hierarchy when considering sources of fund. Managers show preference on their retained earnings (internal sources) before external sources of finance which requires a higher rate of return to compensate for higher risks. the implication of this theory is that in cooperatives, internal source of funds showed be encouraged as external borrowing.

Empirical Review

Ajani, Igbokwe 2011 examined a study on the Implication of Feminization of Agriculture on women farmers in Anambra state. The study made use of both primary and secondary sources of data. The sample size was 120 rural women in Anambra state. Most women are taking up agricultural activities which was previously taken to be men dominated. Mean was used in analyzing the research questions and t-test statistics to draw inferences about the hypothesis. The study revealed that most women went into agricultural activities because of increase in family responsibility, increase in the price of food items, rural-urban migration of men for white collar jobs, shortage of farm labor and education of children. The study recommended that the formulation of appropriate agricultural empowerment policies and programmes will help to boost their productivity.

Bhup (2012) conducted a study on role of saving and credit cooperatives in women empowerment. a case study of Tarigaun V.D.C of Dung District, Nepal. Specifically, the study examined activities of saving and credit cooperatives, the economic and empowerment status of women and the economic change of women through the savings and credit cooperatives. Descriptive statistics design was used for the study. The sample of the study consisted of 50 members selected from a total of 413 women members of cooperatives in Nepal. The main source of data collection was a structured questionnaire. Data collected were analyzed using frequency and percentages. The findings of the study revealed that involvement of women in income cooperative society has a positive effect in their family's health, education and improved living standard.

Ibitoye (2012) x-rayed the topic the survey of the performance of Agricultural cooperative societies in Kogi state, Nigeria. The sample size was 280 members of cooperatives. Primary and secondary sources of data were used in data collection. Findings showed that finance is the major factor hindering the performance of cooperatives. It was recommended that government should increase the supply of credit to cooperative farmers and also to embark on enlightenment campaign to increase the participation of rural farmers in cooperatives activities.

Ekesionye, Okolo 2012 carried out a study on "Women Empowerment through Participation in Economic Activities as Tools for Self-Reliance and Development of the Nigerian Society". both primary and secondary sources of data collection ere used and 402 women were randomly selected from the 6 local government areas in Anambra state. the study revealed that women engage in different activities such as personal saving, loans and credits, food supply and distribution were some of the activities carried out by women. the recommended that the provision of soft loans and credits, training and re-training and establishment of cooperative societies will enhance women participation in economic and social activities in Anambra state.

Tesfay and Tadele (2013) examined the role of cooperatives in promoting socio-economic empowerment of women in South-Easternzone of Tigray and Ethiopia. Both primary and secondary data were used for the study. Primary data were collected through questionnaire and discussion and secondary data were collected were collected from documents of cooperatives. sample of the study consisted of one hundred and sixty women drawn from the 75 registered multipurpose cooperatives in the study area. The collected data were analyzed using descriptive statistics. The findings showed that women participation in cooperatives was very limited, However, the result revealed that the women members have improved their income and livelihood through the cooperatives.

Yaro, Yakse (2013) studied on 'Exploring the Challenges and Prospects of Empowering Rural Women in Nigeria". Both primary and secondary sources of data were used. The sample size was 250 members. Data collected were analyzed using mean to answer the research questions and t-test statistics to draw inference from the hypothesis. The study revealed that government gives poor priority to women education, also women are not given opportunity to own loans land and credits were not granted to women to enable them carry out agricultural activities and other activities that will make them to be self-reliant. it was recommended that women education should be given top priority and women should be given opportunity to own land and that soft and credit should be extended to women.

Amechi, Uhegbu, Unagha (2017), studied the participation of women in cooperatives activities in Imo state Nigeria: the information factor. the study revealed how women get involved in cooperatives activities despite poverty. Survey design was adopted to investigate a sample of 1184 women from 27 LGAs that made up Imo state. Both primary and secondary data were used in the collection of data. It was revealed that talk shows and group discussion were effect ways to disseminate information to women. It was recommended that government should provide information to women using right media. They concluded by stating that cooperative activities

were the sure ways in improving the economic and social wellbeing of rural women and therefore should be vigorously encouraged.

Okafor, Okafor, Uzundu (2018) examined the role of women cooperatives in agricultural development in Anambra state, a study of Awka south. Both primary and secondary sources of data were used. 65 farmers were randomly selected from 6 women cooperatives in the area. Descriptive statistics were used such as: frequency, tables, percentages, means and standard deviation, t-test and likert scale. It was revealed that women cooperatives have played a great role in the processing and marketing of the members produces. Nwankwo et al (2019), carried a study on the effect of agricultural credit on farm output of members of selected cooperative societies in Anambra State Nigeria. Data was collected from 260 cooperative farmers from 10 cooperative societies in Anambra East LGA in Anambra State. Also 260 non-cooperative farmers were equally selected to act as control group. Descriptive and inferential were applied to collected data. Evidence from the study showed that cooperative members had more access to agricultural credit than non-members. Furthermore, results from the regression analysis showed that farm size, farm inputs, credit and access to cooperative credit were positive and important determinants of farm output. The implication of the significance of access to cooperative credit is a confirmation of the primacy of cooperative as a source of credit to rural farmers. Indeed, significance of use of credit and access to cooperative credit equally confirms the main thrust of Vroom's expectancy theory that a particular course of action is chosen based upon perceptions, attitudes, and beliefs of a positive return.

Okere, Ekine (2020), examined the effects of cooperative funding on the performance of Agricultural cooperatives in Rivers state. The work made use of both primary and secondary sources of data collection. Data collected were analyzed using descriptive techniques and inferential statistics. The population size was 99 members of agricultural cooperatives. The result revealed that cooperative funding has significant effect on the performance of agricultural cooperative through improving the welfare and businesses of its members in Rivers state.

Methodology

Research Design

This study adopted the survey research design. Survey research design is a systematic means of data collection that dates back to the ancient time and is widely employed in educational research. A survey research is therefore, one in which a group of people or items are studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group.

Area of Study

The study was carried out in Enugu state, south eastern Nigeria. Enugu state has 17 local government areas grouped into three senatorial zones of Enugu East, Enugu West and Enugu North. The people of Enugu state are predominantly traders and farmers. The state has common boundaries with these states: Imo, Ebonyi, Benue, Kogi, Anambra and Abia. According to 2006 census, the population of the state was 3,257,298.

Sources of Data

In conducting this research, data were collected from both primary and secondary sources of data, Primary data refer to original data collected by the researcher that were obtained first hand by the researcher such as data gotten through oral interviews, observations and questionnaire.

Secondary data are data that are not original the researcher, they are merely assembled by other people who have carried out similar studies. The secondary data were gotten from textbooks, journals and articles.

Population of the Study

The population here refers to the total number of women in agricultural cooperatives in Enugu state. The population size is 4000 members of women in cooperatives in Enugu state from 50 registered agricultural cooperative societies gotten from the ministry of capital development and poverty reduction, cooperatives division Enugu.

Determination of Sample Size

Simple random sampling technique was used in determining the sample size. Six cooperatives were selected, two from each senatorial zone in Enugu state. Thirty members from each of the six selected cooperatives were selected making the sample size 180.

Table 1: Enugu State Senatorial Zones

Enugu West Zone	Membership Population	Number randomly sampled
Nwannedinamba Fmcs	67	30
Agbaogugu		
Ugoeze Fmcs Ltd Akpugoeze	80	30
Total	147	60
Enugu East	Membership Population	Number randomly sampled
Agbani Women Fmcs Ltd	60	30
Echidi Fmcs Ltd Eha-Amufu	70	30
Total	130	60
Enugu North	Membership population	Number randomly sampled
Echara Fmcs Ltd Nsukka	64	30
Unique Orba Fmcs Ltd	200	30
Total	264	60
Sample size		180

Source: Field Survey, 2023

Sampling Techniques

Probability sampling technique was used. This is the kind of sampling selection where randomization is used instead of deliberate choice.

Method of Data Collection

Data were collected through questionnaires and hypotheses testing. Both quantitative and qualitative methods were used in collecting data.

Validity of the Instrument

The researcher used face and content validity to validate the instrument. a total number of five experts three from academic and two from the organizations of the study looked into the instrument to make sure that the instrument is in line with the objectives stated in section one.

Reliability of the Instrument

The reliability of the research instrument was established using the responses of 20 members of a cooperative society in Enugu state. Indeed, the reliability of the instrument was established using test re-test technique, the reliability of the instrument was 75%, showing that the instrument is reliable. In the test re-test, the respondents were issued questionnaire to fill, after which they returned the marked questionnaire, one month later, the researcher issued another set of questionnaire having the same questions with the already marked questionnaire

to the already selected respondents, who marked the same answer with what they had been previously marked. Croubach's Alpha tends to measure the stability, dependability and predictability of the instrument (Asika 1991). In line with the percentage released, Herizon and Muture (2015) and Santos (1999) posit that if the reliable coefficient is more than 0.7, than data are reliable.

Methods of Data Analysis

Descriptive statistics such as frequency, tables and percentages were used to determine the research questions and chi-square was used to test the hypotheses,

Data Presentation and Analysis

Data Presentation

The researcher made used of the sample size which was 180 and 169 (93.9%) copies of questionnaire were duly filled and returned.

Table 2: Questionnaire Response Rate

Options	Frequency	Percentage (%)
Returned	169	93.9
Not returned	11	6.1
Total	180	100

Source: Field Survey, 2023.

Table 3 Socio-Economic Characteristics of the Respondents

Variables (%)	Frequencies	Percentage
A) Sex		
Male	40	23.67
Female	129	76.33
Total	169	100
B) Age		
Less than 25	11	6.51
25-50	140	82.84
Above 50	18	10.65
Total	169	100
C) Educational Qualifications		
Illiterates	40	23.67
FSLC	99	58.57
Secondary & above	30	17.76
Total	169	100
D) Years of Membership		
1-10	40	23.67
11-20	70	41.42
Above 20	59	34.91
Total	169	100

E) Primary Occupation

Farming	90	53.25
Civil servant	20	11.83
Trading	29	17.16
Artisan	30	17.76
Total	169	100

Source: Field Survey, 2023.

Table 4 Savings mobilization in Agricultural cooperatives and improved performance of women farmers in Enugu State

Options	Frequency	Percentage (%)
Strongly agree	100	59
Agree	50	30
Disagree	10	6
Strongly disagree	9	5
Total	169	100

Source: Field survey, 2023.

Table 5 Performance of women farmers has been enhanced by loan acquisition in Agricultural cooperative societies

Options	Frequency	Percentage (%)
Strongly agree	110	65
Agree	50	30
Disagree	7	4
Strongly disagree	2	1
Total	169	100

Source: Field Survey, 2023.

Table 6 Training has significant impact on women farmers performance in Agricultural cooperatives

Options	Frequency	Percentage
Strongly agree	100	59
Agree	50	30
Disagree	13	8
Strongly disagree	6	3
Total	169	100

Source: Field Survey, 2023.

Table 7 Main sources of funds available to the Agricultural cooperatives

Options	Frequency	Percentage (%)
Entrance fees	10	5.92
Shares	90	53.3
Grants	20	11.83
Loans	49	29
Total	169	100

Source: Field Survey, 2023.

Table 8 Loan Schedule

Names of Cooperatives	Capital Mobilized	Loan Issued	Loan Beneficiaries	Loan Recovered	Loan Defaulters
Nwannedimba	N1000000	N700000	10	N560000	2
Agbaogugu					
Ugoeze Fmcs Ltd	N1500000	N1100000	20	N715000	7
Akpugoeze					
Agbani Women Fmcs Ltd	N800000	N650000	7	N464,286	2
Echidi Fmcs Ltd	N1500000	N1200000	20	N1020000	3
Eha-Amufu					
Echara Fmcs Ltd	N100000	N800000	15	N640000	3
Nsukka					
Unique Orba Fmcs Ltd	N2000000	N1600000	20	N1280000	4

Source: Field Survey, 2023.

Table 9 Government assistance in providing loan and extension service is important

Options	Frequency	Percentage (%)
Strongly agree	140	82.8
Agree	29	17.2
Disagree	0	0
Strongly disagree	0	0
Total	169	100

Source: Field Survey, 2023.

Data Analysis

From table 2 revealed that from the data presentation, out of the 180 questionnaire distributed, only 169 (93.9%) were duly filled and returned while 81(6.1%) were not duly filled and returned to the researcher.

From table 3, it was revealed that majority of respondents were female, under the age bracket of 25-50 years, with first school leaving certificate being the highest educational qualification. in respect to years of membership, it was revealed that majority of the members have stayed in the cooperatives between 10-20 years, while the primary occupation of the majority was farming.

From Table 4, it was revealed that 100(59%) of the respondents strongly agreed that saving mobilization in agricultural cooperatives has improved the performance of women in Enugu state. 50(30%) agreed, 10(6%) disagreed while 9(5%) strongly disagreed. Therefore, it can be concluded that saving mobilization in agricultural cooperatives has improved the performance of women in Enugu state.

From table 5, it was revealed that 110(65%) of the respondents strongly agreed that productivity of women could be improved through loan acquisition in Agricultural cooperatives in Enugu state. 50(30%) agreed, 7(4%) disagree while 2(1%) strongly disagreed. Therefore, it could be deduced that loan acquisition improves performance of women in agricultural cooperatives in Enugu state.

From table 6, it showed that 100(59%) of the respondents strongly agreed that training has significant impact on women productivity in Agricultural cooperatives in Enugu State. 50(30%) agreed, 13(8%) disagreed while 6(3%) strongly disagreed. this revealed that training enhances the performance of women in agricultural cooperatives in Enugu state.

Table 7 showed that respondents that chose entrance fees as the main source of fund available to agricultural cooperatives were 10 (5.92%), 90(53.3%) chose shares, 20(11.83%) chose grants while 49(29%) chose loan. This table revealed that the major source of fund available for cooperatives was shares.

Table 8, revealed the capital mobilized, amount issued as loan, number of loan beneficiaries, the amount recovered and the number of loan defaulters in all the different cooperatives chosen in different senatorial zones in Enugu state. the table showed that the beneficiaries of the loan are paying up notwithstanding that some are defaulting in paying up the loan issued to them.

Table 9, revealed that 140 (82.2%) of the respondents strongly agreed that government assistance in the issuance of loan and provision of extension services are very important in boosting the cooperative performance in Enugu state, while 29 (17.2%) agreed. none of the members disagreed nor strongly disagreed.

Test of Hypotheses

The hypothesis will be tested using the Chi-square formular stated below:

$$X^2 = \sum \frac{(O-E)^2}{E}$$

E

Where:

X^2 = calculated chi-square

O = observed frequency

E = expected frequency

\sum = summation

The expected frequency (E) is calculated by adding all the observed (O) and dividing by the number of observations.

Decision rule: if the calculated Chi-square (X^2) is greater than or equal to the table value at 0.05 level of significance, the alternate hypothesis (H_1) is accepted, but if the calculated Chi-square value is less than the table value, the null hypothesis (H_0) is accepted.

Test of Hypothesis One:

H_0 : Savings mobilization has no significant effect on improved performance of women farmers in Agricultural cooperatives in Enugu state.

H_1 : Savings mobilization has significant effect on improved performance of women farmers in Agricultural cooperatives in Enugu state.

Data from table 4.1.3 was used to test the hypothesis

Variable	O	E	O-E	(O-E) ²	(O-E) ² /E
Strongly Agree	100	42.25	37.75	1425	33.7
Agree	50	42.25	7.75	60	1.42
Disagree	10	42.25	-27.25	742	17.5
Strongly Disagree	9	42.25	-28.25	798	18.8
Total	169	169			71.42

Source: Researcher Calculation, 2022.

The calculated Chi-square value 71.42

$$Df = (C-1)(R-1) = (2-1)(4-1) = 3$$

Table value at 0.05 of significance and 3 degree of freedom = 7.815

Decision: Since the calculated chi-square (X²) value of 71.28 is greater than the tabulated value of 7.815, we reject the null hypothesis (H₀) and accept the alternate hypothesis (H₁). Therefore, it can be concluded that savings mobilization has significant effect on the improved performance of women farmers in Agricultural cooperatives in Enugu state.

Test of Hypothesis Two

H₀: Loan acquisition has no significant effect on improved performance of women farmers in Agricultural cooperatives in Enugu state.

H₁: Loan acquisition has significant effect on improved performance of women farmers in Agricultural cooperatives in Enugu state.

Data from table 4.1.4 was used to test the hypothesis

Variable	O	E	O-E	(O-E) ²	(O-E) ² /E
Strongly agree	110	42.25	67.75	4556	108
Agree	50	42.25	7.75	60	1.42
Disagree	7	42.25	-35.25	1243	29.4
Strongly disagree	2	42.25	-40.25	1620	38.34
Total	169	169			177.16

Source: Researcher Calculation, 2023.

The calculated Chi-square value 177.16

$$Df = (C-1)(R-1) = (2-1)(4-1) = 3$$

Table value at 0.05 of significance and 3 degree of freedom = 7.815

Decision: Since the calculated chi-square (X²) value of 177.16 is greater than the tabulated value of 7.815, we reject the null hypothesis (H₀) and accept the alternate hypothesis (H₁). Therefore, it can be concluded that loan acquisition has significant effect on the improved performance of women in Agricultural cooperatives in Enugu state.

Test of Hypothesis Three

H₀: Training has no significant effect on improved performance of farmers in Agricultural cooperatives in Enugu state.

H₁: Training has significant effect on improved performance of women farmers in Agricultural cooperatives in Enugu state.

Data from table 6 was used to test the hypothesis

Variable	O	E	O-E	(O-E) ²	(O-E) ² /E
Strongly agree	100	42.25	57.75	3335	78,9
Agree	50	42.25	7,75	60	1,42
Disagree	13	42.25	-29.25	855	20.25
Strongly disagree	6	42.25	-36.25	1314	31.10
Total	169	169			131.67

Source: Researcher Computation, 2023.

The calculated Chi-square value 131.67

$$Df = (C-1)(R-1) = (2-1)(4-1) = 3$$

Table value at 0.05 of significance and 3 degree of freedom = 7.815

Decision: Since the calculated chi-square (X²) value of 131.67 is greater than the tabulated value of 7.815, we reject the null hypothesis (H₀) and accept the alternate hypothesis (H₁). Therefore, it can be concluded that training has significant effect on the improved performance of women farmers in Agricultural cooperatives in Enugu state.

Summary of Findings

The study examined the effects of agricultural cooperatives activities on improved performance of women in Enugu state. Based on the analysis carried out in this study, the following findings were made:

1. It could be deduced that savings mobilization has boosted the performance of women farmers in agricultural cooperatives to be more productive in their agricultural practice in the study area.
2. it could be also seen than loan acquisition in agricultural cooperatives has improved the performance of women farmers by making access to credit to be easier for the women in the area.
3. it was also discovered that training and retraining have help the women in agricultural cooperatives to be properly informed on the latest techniques available in farming practices.

Conclusion

This work has explored the relationship between agricultural cooperatives activities and improved performance of women. Participation of women in agricultural cooperatives has made the women to be more economically independent. The findings of this study have immense relevance to policy decision regarding women productivity in Enugu state. Women involvements in cooperatives have been enhanced through savings mobilization, loan acquisition and adequate training in the study area.

Recommendations

Based on the above findings, the following recommendations were made:

- i. government and financial institutions should give adequate support to agricultural cooperatives in terms of credit facilities and that barbaric cultures that prevent women from land ownership and all forms of discrimination against women should be abolished
- ii. women should be sensitized through the mass media on the importance of organizing agricultural cooperatives in their various localities.
- iii. Constant training and retraining should be encouraged in the cooperatives to enhance the productivity of women.

References

- Agwu, N. M. (2001), Institutional barriers on women in agricultural production in Nigeria, Awka, Chimex Publishers.
- Ajani, E.N., and Igbokwe, E.M. (2011), Implication of feminization of agriculture in Amambra State. <http://www.researchgate.net>.
- Amaechi, Uhegbu, Unegha, (2017), Participation of women in cooperative activities in Imo State, Nigeria. <http://www.researchgate.snet>.
- Azikiwe, U. (2002) Women education and empowerment, Nsukka Fulladu Publishing Company, Enugu State, Nigeria.
- Bhup, B.K.C, (2012), Role of saving and credit corporative in women empowerment, a study of Tarigun VDC of Dang District, Nepal. A Thesis submitted to the Central Department of Economics, Nepal.
- Chukwu, S.C. (1990), Economics of cooperative business enterprise, Marburg Consult Marburg.
- Desta, S. (2009), Economic empowerment reflection document of the forum on gender, Adisa-ababa, Henrich Bull Foundation, Ethiopia.
- Ekesionye, E.N. and Okoro N. (2012), Women empower and participation in activities: Indispensible tools for self-reliance and development of Nigeria society. <http://www.academucjournal.org>.
- Esere M. O. (2012), Women empowerment and its challenges to gender counseling, ABU Zaria. *Journal of Humanity and Development*, 11-31.
- Huppi M, Feder G. (1990), “The role of group and credit cooperative: A rural lending”, World Bank paper series, the World Bank Washington.
- Ibitoye, S.J. (2012), Survey of performance of agricultural corporative in the Kogi State, Nigeria, European scientific journal, October ed, Vol. 8.
- Ijere, M.O. (2011), Women in corporation, Nsukka, Centre for rural development and cooperatives, Vol 16.
- Ikeduru, N.G. (2002), Women entrepreneurship and development: The Gendering of Microfinance in Nigeria, A paper presented at the 8th Interdisciplinary Congress on women, Makere University, Kampala.
- Isuwa, A. (2000) Critical issues in loan and deposit: product design and implementation. A paper presented at the micro and rural finance conference in Abuja, Nigeria.
- Krishnaswani, R. (2008), Fundamentals of corporation, India, Asher Publishers, New Delhi.
- Ludwig, B. L. (1951), General systems theory: A New approach to unity of science, human biology, 302.

Nippred, A. (2002), Gender issues in cooperatives, ILO, Cooperative branch, Geneva.

Nwankwo, F.O., Ogbodo, C.O., and Onwuchekwa, F.C. (2019), Credit and farm output of cooperative members in Anambra State, Nigeria, <http://www.researchgate.net>.

Okafor, E.O., Okafor I.P., and Uzundu C. (2018), Role of women in agricultural development in Awka, Anambra State. <http://www.researchgate.net>.

Okere, A.U. and Ekine, D.I. (2020), Effect of corporative funding on the performance of agricultural cooperatives in River State. <http://www.iiardpub.org>.

Tesfay, A., and Tadele, H. (2013), The role of cooperatives in promoting social economic empowerment of women in Ethiopia, *International journal of corporative development*, Vol.. 1(1-11).

Yaro, K. and Yakse N. (2013), Challenges and prospect of empowering rural women in Nigeria, <http://www.researchgate.net>.

Yinus M. (1994), Grameen Bank, Bangledash Dhaka.