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AGRICULTURAL COOPERATIVES: A PANACEA TO FOOD INSECURITY IN ETSAKO WEST LOCAL GOVERNMENT AREA, EDO STATE

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ABSTRACT

This study examined the role of agricultural cooperatives in addressing food insecurity among farming households in Etsako West Local Government Area of Edo State, Nigeria. Specifically, the study assessed the contribution of agricultural cooperatives to household food security, identified the services provided by cooperative societies, and examined the challenges affecting their effectiveness. A descriptive survey research design was adopted for the study. Primary data were collected through the administration of structured questionnaires to 150 members of selected agricultural cooperative societies using a multistage sampling technique. Data were analysed using descriptive statistics, including frequencies, percentages, means, and standard deviations, while multiple linear regression analysis was employed to determine the effect of agricultural cooperative activities on household food security at a 5% level of significance. The findings revealed that agricultural cooperatives significantly improved members' access to agricultural credit, farm inputs, extension services, collective marketing, and training programmes, thereby enhancing agricultural productivity and household food security. The regression results further indicated that agricultural cooperative activities had a positive and statistically significant effect on household food security. However, inadequate capital, poor government support, high production costs, weak rural infrastructure, and limited access to finance were identified as major constraints affecting the effectiveness of agricultural cooperatives. The study concluded that agricultural cooperatives remain effective instruments for improving food security and rural livelihoods in Etsako West Local Government Area. The study therefore recommends increased government support, improved access to agricultural finance, strengthened extension services, and enhanced institutional capacity to improve the performance of agricultural cooperative societies and promote sustainable food security.

Keywords: Agricultural cooperatives, food security, household welfare, rural development, smallholder farmers, Etsako West, Edo State.

Introduction

Food security remains one of the most pressing global development challenges despite remarkable advances in agricultural production and food systems. It is widely regarded as a prerequisite for achieving sustainable development, poverty reduction, improved health, and economic growth. According to the Food and Agriculture Organization (FAO), food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. However, the State of Food Security and Nutrition in the World 2024 revealed that between 713 and 757 million people experienced hunger globally in 2023, while about 2.33 billion people faced moderate or severe food insecurity, indicating that the world remains off track in achieving Sustainable Development Goal 2 (Zero Hunger) by 2030.

The challenge of food insecurity is particularly severe in Sub-Saharan Africa, where agriculture remains the primary source of livelihood for most rural households. Agricultural production in the region is constrained by climate change, environmental degradation, rapid population growth, inadequate agricultural financing, poor infrastructure, weak institutions, and limited access to modern farming technologies. These challenges have reduced agricultural productivity and increased the vulnerability of farming households to hunger, malnutrition, and poverty (World Bank, 2024).

Nigeria is richly endowed with vast arable land, favourable climatic conditions, and a large agricultural labour force, making agriculture a critical sector for economic growth and rural development. The sector provides employment for a significant proportion of the population and supplies raw materials for agro-based industries. Despite this enormous potential, agricultural

productivity remains below expectation because the majority of farmers operate on a small scale and face challenges such as inadequate access to credit, poor extension services, high input costs, post-harvest losses, weak market linkages, and poor rural infrastructure. These constraints have continued to undermine food production and household food security across the country.

Recent food security assessments indicate that Nigeria continues to experience a worsening food security situation. The Cadre Harmonisé analysis projected that more than 26 million Nigerians would face high levels of acute food insecurity during the 2024 lean season, while subsequent assessments reported that the figure had risen to over 31 million people because of insecurity, inflation, climate-related shocks, and declining agricultural productivity. These conditions have disproportionately affected rural farming households whose livelihoods depend primarily on agriculture (FAO. 2024).

Empirical evidence has consistently demonstrated the positive contribution of agricultural cooperatives to agricultural development and household welfare. Studies have shown that cooperative membership improves farmers' access to productive resources, facilitates the adoption of improved agricultural technologies, enhances market participation, and increases farm income, all of which contribute to improved household food security. However, the magnitude of these benefits often depends on the effectiveness of cooperative management, members' participation, institutional support, and access to financial resources.

In Edo State, agriculture remains one of the major sources of livelihood, particularly in Etsako West Local Government Area, where farming constitutes the principal occupation of many rural households. Farmers in the area cultivate cassava, yam, maize, rice, vegetables, plantain, and other food crops that contribute significantly to local food supply. Nevertheless, many farming

households continue to experience low productivity resulting from inadequate capital, poor access to improved farm inputs, weak extension services, poor storage facilities, and unstable agricultural markets. These constraints have negatively affected household income and contributed to persistent food insecurity within the area.

Although several agricultural cooperative societies operate in Etsako West Local Government Area, empirical evidence on their contribution to improving household food security remains limited. Most existing studies have focused on agricultural productivity, rural development, or cooperative performance in other parts of Nigeria, with relatively little attention given to Etsako West Local Government Area of Edo State. This geographical and empirical gap underscores the need for a study that examines the extent to which agricultural cooperatives contribute to addressing food insecurity among farming households in the study area.

Against this background, this study examines agricultural cooperatives as a panacea to food insecurity in Etsako West Local Government Area of Edo State. Specifically, the study evaluates the contribution of agricultural cooperative societies to household food security, identifies the challenges affecting their effectiveness, and recommends strategies for strengthening cooperative institutions as instruments for sustainable agricultural development and improved rural livelihoods.

Food insecurity has remained a persistent challenge in Nigeria despite various government policies and interventions aimed at improving agricultural production and ensuring food sufficiency. Over the years, programmes such as the Agricultural Transformation Agenda (ATA), the Anchor Borrowers' Programme (ABP), and other agricultural support initiatives have sought to improve farmers' productivity and rural livelihoods. However, the expected improvements in household

food security have not been fully realized, particularly among smallholder farmers who constitute the majority of agricultural producers in the country. Poor access to agricultural finance, rising input costs, inadequate extension services, poor rural infrastructure, post-harvest losses, insecurity, and climate variability continue to constrain agricultural production and reduce food availability among rural households (FAO et al., 2024; World Bank, 2024).

Agricultural cooperatives have been widely recognized as important institutions for improving farmers' access to productive resources through collective savings, agricultural credit, input procurement, extension services, and collective marketing. These services are expected to enhance agricultural productivity, increase household income, and improve food security among cooperative members. Nevertheless, many farming households in Etsako West Local Government Area still experience difficulties in producing sufficient food and maintaining stable household food supplies throughout the year. This raises concerns about the extent to which agricultural cooperatives are effectively addressing the food security challenges facing their members.

Although several empirical studies have examined agricultural cooperatives and rural development in Nigeria, most of these studies focused on agricultural productivity, cooperative performance, poverty reduction, or farmers' income in states such as Oyo, Kaduna, Ogun, and Enugu. Comparatively, there is limited empirical evidence on the contribution of agricultural cooperatives to household food security in Etsako West Local Government Area of Edo State. The socioeconomic characteristics of farmers, institutional arrangements, and operational capacities of cooperatives differ across locations; therefore, findings from other regions cannot be generalized to Etsako West without empirical investigation.

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It is against this background that this study examines agricultural cooperatives as a panacea to food insecurity in Etsako West Local Government Area of Edo State. Specifically, the study seeks to assess the extent to which agricultural cooperatives contribute to household food security, identify the services provided by cooperative societies, examine the challenges limiting their effectiveness, and provide recommendations for strengthening cooperative societies as instruments for achieving sustainable food security and rural development.

Objective of the Study

General Objective

The general objective of this study is to examine the role of agricultural cooperatives in addressing food insecurity in Etsako West Local Government Area of Edo State.

Specific Objectives

The specific objectives are to:

1. examine the socioeconomic characteristics of members of agricultural cooperative societies in Etsako West Local Government Area;

2. identify the services provided by agricultural cooperative societies to their members;

3. determine the contribution of agricultural cooperatives to household food security among members;

4. examine the challenges affecting the effectiveness of agricultural cooperative societies in addressing food insecurity; and

5. recommend strategies for strengthening agricultural cooperative societies to enhance household food security in the study area.

Research Questions

The study seeks to answer the following research questions:

1. What are the socioeconomic characteristics of members of agricultural cooperative societies in Etsako West Local Government Area?

2. What services do agricultural cooperative societies provide to their members?

3. To what extent do agricultural cooperatives contribute to household food security among members?

4. What challenges affect the effectiveness of agricultural cooperative societies in addressing food insecurity?

5. What strategies can strengthen agricultural cooperative societies to improve household food security in the study area?

Research Hypothesis

H_0: Agricultural cooperative activities have no significant effect on household food security in Etsako West Local Government Area of Edo State.

H_1: Agricultural cooperative activities have a significant effect on household food security in Etsako West Local Government Area of Edo State.

LITERATURE REVIEW

Conceptual Review

Agricultural Cooperatives

Agricultural cooperatives are voluntary, member-owned, and democratically controlled organizations established to improve the economic and social welfare of farmers through collective action. They enable members to pool resources, access agricultural credit, procure farm inputs at affordable prices, receive extension services, process and market agricultural produce, and improve their bargaining power within agricultural value chains. According to the International Cooperative Alliance (ICA, 2023), cooperatives are autonomous associations of persons united voluntarily to meet their common economic, social, and cultural needs through jointly owned and democratically controlled enterprises.

In Nigeria, agricultural cooperatives have become important instruments for rural development because they address many of the challenges confronting smallholder farmers. Through collective savings, group lending, bulk purchasing of farm inputs, and collective marketing, cooperatives reduce production costs and improve members' access to productive resources. The Food and Agriculture Organization (FAO, 2023) observed that strong farmer organizations contribute significantly to increased agricultural productivity, improved market participation, and sustainable rural development.

Agricultural cooperatives also serve as platforms for knowledge sharing, innovation, and capacity building. Members benefit from training programmes, improved farming practices, financial literacy, and exposure to new technologies, all of which contribute to improved farm performance and household welfare. Studies have shown that cooperative membership enhances farmers'

resilience by improving access to finance, information, and institutional support (Kehinde et al., 2025; Adegoke et al., 2023).

Food Security

Food security refers to a situation where all individuals have continuous physical, social, and economic access to sufficient, safe, and nutritious food required for an active and healthy life. The concept extends beyond food availability to include accessibility, utilization, and stability. According to FAO et al. (2024), food security is built on four interrelated pillars: food availability, food accessibility, food utilization, and food stability.

Food availability refers to the presence of adequate quantities of food through domestic production, imports, or food reserves. Food accessibility relates to the ability of households to obtain food through production, purchase, or transfers. Food utilization emphasizes proper biological use of food through adequate nutrition, clean water, sanitation, and healthcare. Food stability ensures that these three dimensions are maintained consistently over time without significant disruptions resulting from economic crises, climate change, conflicts, or natural disasters (FAO et al., 2024).

In Nigeria, food insecurity continues to affect millions of households due to declining agricultural productivity, inflation, insecurity, climate variability, high food prices, and poverty. These challenges are particularly severe among rural farming households that depend largely on rain-fed agriculture and have limited access to productive resources (World Bank, 2024).

Agricultural Cooperatives and Food Security

Agricultural cooperatives contribute to food security by improving farmers' access to productive resources and enhancing agricultural productivity. Cooperative members benefit from affordable agricultural credit, subsidized farm inputs, extension services, improved production technologies, and collective marketing arrangements. These services increase farm output, improve household income, reduce production risks, and enhance food availability and accessibility.

Collective marketing enables farmers to negotiate better prices for their produce, reducing exploitation by middlemen and increasing farm income. Similarly, access to cooperative credit enables members to purchase improved seeds, fertilizers, herbicides, machinery, and other inputs necessary for increased agricultural production. Extension services provided through cooperatives also facilitate the adoption of climate-smart agricultural practices, thereby improving productivity and food security.

Recent studies have confirmed that cooperative membership positively influences household food security through increased agricultural production, improved income, better market access, and enhanced livelihood resilience (Adegoke et al., 2023; Kehinde et al., 2025). Nevertheless, the effectiveness of agricultural cooperatives depends largely on institutional capacity, effective leadership, financial sustainability, and government support.

Theoretical Review

Collective Action Theory

This study is anchored on the Collective Action Theory developed by Olson (1965). The theory explains that individuals can achieve greater economic and social benefits by working together

than by acting independently. According to Olson (1965), collective action enables individuals with common interests to pool resources, share risks, reduce costs, and pursue objectives that would be difficult to accomplish individually.

The theory is highly relevant to agricultural cooperatives because cooperative societies are established on the principle of collective ownership and mutual assistance. Farmers who belong to cooperatives jointly mobilize savings, access agricultural credit, procure farm inputs, share agricultural information, and market their produce collectively. Through these collective efforts, members improve agricultural productivity, increase household income, and strengthen food security.

The theory provides an appropriate framework for this study because it explains how cooperative participation enhances farmers' access to productive resources and contributes to improved household food security in Etsako West Local Government Area of Edo State.

Empirical Review

Several empirical studies have examined the relationship between agricultural cooperatives and food security, particularly among smallholder farmers in developing countries. The findings generally indicate that cooperative membership improves farmers' access to productive resources, enhances agricultural productivity, and contributes positively to household food security.

Adegoke, Ojiagu, and Ariyo (2023) investigated the influence of agricultural cooperatives on food security among rural farmers in Ekiti State, Nigeria. Using a descriptive survey design and regression analysis, the study found that cooperative membership significantly improved farmers' access to agricultural credit, farm inputs, and extension services. The study further reported that

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cooperative members recorded higher agricultural productivity and better household food security than non-members. The authors concluded that strengthening cooperative institutions would significantly improve rural food security.

Olaoye, Muhammad, and Jibril (2024) examined the impact of agricultural cooperatives on the well-being of smallholder farmers in Kaduna State, Nigeria. The study employed structured questionnaires and multiple regression analysis to assess the influence of cooperative membership on farmers' livelihoods. The findings revealed that cooperative societies significantly improved members' income, agricultural productivity, access to markets, and financial inclusion. However, inadequate funding and weak institutional support were identified as major constraints affecting cooperative performance.

Kehinde et al. (2025) assessed the contribution of agricultural cooperative membership to poverty reduction among smallholder farming households in Nigeria. The study adopted an econometric approach and established that cooperative membership positively influenced household income, improved access to productive resources, and reduced poverty among participating farmers. The study emphasized that strengthening farmer cooperatives could contribute significantly to improving food security and sustainable rural livelihoods.

Outside Nigeria, Mwangi and Kariuki (2021) investigated the role of agricultural cooperatives in improving food security among smallholder farmers in Kenya. The study found that cooperative participation enhanced farmers' access to extension services, agricultural credit, improved farm inputs, and market opportunities. These factors significantly increased agricultural productivity and improved household dietary diversity.

Similarly, Verhofstadt and Maertens (2021) examined the effects of farmer organizations on food security among rural households in East Africa. Their findings indicated that membership in farmer cooperatives significantly increased household income and improved food consumption through better market integration and enhanced access to agricultural services.

Despite the positive findings reported in previous studies, differences exist regarding the magnitude of the impact of agricultural cooperatives on food security due to variations in institutional capacity, government support, geographical location, and socioeconomic conditions. Furthermore, most empirical studies have concentrated on states such as Ekiti, Kaduna, Ogun, Oyo, and parts of East Africa, with limited attention given to Edo State, particularly Etsako West Local Government Area.

Consequently, there remains a gap in empirical knowledge regarding the extent to which agricultural cooperatives contribute to household food security in Etsako West Local Government Area of Edo State. This study seeks to fill this gap by providing evidence on the contribution of agricultural cooperative societies to food security among farming households in the study area.

METHODOLOGY

Research Design

This study adopted a descriptive survey research design. The design was considered appropriate because it enables the collection of quantitative data from respondents regarding their participation in agricultural cooperative activities and their household food security status. The survey design also provides an effective means of examining relationships between variables and generating findings that can be generalized to the target population.

Study Area

The study was conducted in Etsako West Local Government Area of Edo State, Nigeria. Etsako West is one of the eighteen Local Government Areas in Edo State, with its administrative headquarters located in Auchi. The area is predominantly agrarian, with farming serving as the principal occupation of many households. Major crops cultivated include cassava, yam, maize, rice, vegetables, and plantain, while livestock farming also contributes to household livelihoods. The presence of several registered agricultural cooperative societies and active farming communities makes the area suitable for investigating the contribution of agricultural cooperatives to food security.

Population of the Study

The population of the study comprised members of registered agricultural cooperative societies operating in Etsako West Local Government Area of Edo State.

Sample Size and Sampling Technique

A multistage sampling technique was adopted. First, five active agricultural cooperative societies were purposively selected from different farming communities within Etsako West Local Government Area based on their level of activity and membership strength. Thereafter, simple random sampling was used to select 30 respondents from each cooperative society, giving a total sample size of 150 respondents.

Sources of Data

The study relied primarily on primary data obtained through the administration of structured questionnaires. Secondary data were sourced from textbooks, peer-reviewed journal articles,

government publications, reports from the Food and Agriculture Organization (FAO), the World Bank, and other relevant publications.

Instrument for Data Collection

Primary data for this study were collected using a structured questionnaire designed in line with the study objectives and relevant literature on agricultural cooperatives and food security. The questionnaire consisted of five sections. Section A elicited information on the socio-economic characteristics of respondents. Section B contained questions on cooperative membership and participation. Section C focused on the services provided by agricultural cooperatives. Section D assessed the contribution of cooperatives to household food security, while Section E examined the challenges limiting the effectiveness of agricultural cooperatives. Most of the items were measured using a five-point Likert scale ranging from Strongly Agree (5) to Strongly Disagree (1)

Validity of the Instrument

To ensure face and content validity, the questionnaire was subjected to expert review by specialists in Cooperative Economics and Management, Agricultural Economics, and Research Methodology. Their observations and recommendations were incorporated into the final version of the instrument before administration.

Reliability of the Instrument

The reliability of the instrument was determined through a pilot study conducted among members of an agricultural cooperative society outside the study area. The responses obtained were analysed using Cronbach's Alpha reliability test. The instrument yielded a reliability coefficient of 0.81,

indicating a high level of internal consistency and confirming that it was suitable for data collection.

Method of Data Collection

The researcher personally administered the questionnaires with the assistance of trained research assistants who were familiar with the study area. This approach enhanced respondents' understanding of the questionnaire and ensured a high retrieval rate. Completed questionnaires were collected immediately after completion to minimize non-response and data loss.

Model Specification

To determine the effect of agricultural cooperative activities on household food security, the study adopted the following multiple linear regression model:

$$HFS = \beta 0 + \beta 1AC + \beta 2FI + \beta 3ES + \beta 4CM + \beta 5TR + \mu$$

Where:

HFS = Household Food Security (Dependent Variable)

β_0 = Constant

$\beta_1 - \beta_5$ = Regression Coefficients

AC = Access to Agricultural Credit

FI = Access to Farm Inputs

ES = Extension Services

CM = Collective Marketing

TR = Cooperative Training and Capacity Building

μ = Error Term

A Priori Expectation

It is expected that:

$\beta_1 > 0$

$\beta_2 > 0$

$\beta_3 > 0$

$\beta_4 > 0$

$\beta_5 > 0$

This implies that improved access to agricultural credit, farm inputs, extension services, collective marketing, and cooperative training is expected to positively influence household food security among cooperative members.

Method of Data Analysis

Data collected for the study were coded and analysed using the **Statistical Package for Social Sciences (SPSS) Version 26**. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to describe the socio-economic characteristics of respondents and summarize responses to the study objectives. Inferential statistics involving multiple linear regression analysis were employed to examine the effect of agricultural cooperative activities on household food security. The hypothesis was tested at a **5% level of significance**.

RESULTS AND DISCUSSION

Socio-economic Characteristics of Respondents

Table 1: Socio-economic Characteristics of Respondents (N = 150)

Variable	Category	Frequency	Percentage (%)
Gender	Male	92	61.3
	Female	58	38.7
Age (Years)	20–30	18	12.0
	31–40	42	28.0
	41–50	51	34.0
	51–60	27	18.0
	Above 60	12	8.0
Marital Status	Single	22	14.7
	Married	101	67.3
	Divorced	8	5.3
	Widowed	19	12.7

Variable	Category	Frequency	Percentage (%)
Educational Level	No Formal Education	21	14.0
	Primary Education	33	22.0
	Secondary Education	57	38.0
	Tertiary Education	39	26.0
Farming Experience	1–5 Years	25	16.7
	6–10 Years	43	28.7
	11–15 Years	49	32.6
	Above 15 Years	33	22.0

Source: Field Survey, 2026.

Discussion

The results indicate that male respondents constituted the majority (61.3%) of the sampled cooperative members, suggesting that men are more actively involved in agricultural cooperative activities in the study area. The majority of respondents were between 41 and 50 years of age, indicating that cooperative membership is concentrated among economically active individuals. Furthermore, most respondents were married and had attained at least secondary education, implying that they possess the educational background necessary to adopt improved agricultural technologies and effectively participate in cooperative activities. The findings also reveal that respondents had considerable farming experience, suggesting that they possess adequate knowledge of agricultural production and cooperative operations.

Effect of Agricultural Cooperative Activities on Household Food Security

Table 2: Multiple Regression Analysis of the Effect of Agricultural Cooperative Activities on Household Food Security

Variables	Coefficient (β)	Standard Error	t-value	p-value
Constant	1.284	0.416	3.087	0.002
Access to Agricultural Credit	0.327	0.081	4.037	0.000
Access to Farm Inputs	0.294	0.073	4.027	0.000
Extension Services	0.186	0.067	2.776	0.006
Collective Marketing	0.251	0.079	3.177	0.002

Variables	Coefficient (β)	Standard Error	t-value	p-value
Cooperative Training	0.219	0.071	3.085	0.003

R = 0.804

R^2 = 0.646

Adjusted R^2 = 0.633

F-value = 52.184

Prob (F-statistic) = 0.000

Source: Field Survey, 2025.

Discussion of Regression Results

The regression result indicates that agricultural cooperative activities have a significant positive effect on household food security among members of agricultural cooperative societies in Etsako West Local Government Area.

The coefficient of determination (R^2 = 0.646) shows that approximately **64.6%** of the variation in household food security is explained by access to agricultural credit, farm inputs, extension services, collective marketing, and cooperative training. The remaining **35.4%** is attributable to other factors not included in the model.

Access to agricultural credit recorded the highest positive coefficient (β = 0.327; $p < 0.001$), indicating that improved access to cooperative credit significantly enhances household food security. Access to farm inputs also had a positive and statistically significant effect (β = 0.294; $p < 0.001$), suggesting that cooperative support in providing fertilizers, improved seeds, agrochemicals, and other inputs contributes to increased agricultural productivity.

Similarly, extension services (β = 0.186; p = 0.006), collective marketing (β = 0.251; p = 0.002), and cooperative training (β = 0.219; p = 0.003) all exerted positive and significant influences on household food security. These findings imply that farmers who actively participate in cooperative activities are more likely to achieve improved agricultural output, higher income, and better household food security.

The overall regression model was statistically significant (F = 52.184; $p < 0.001$), indicating that the explanatory variables jointly influence household food security among respondents.

Test of Hypothesis

Hypothesis

H_0: Agricultural cooperative activities have no significant effect on household food security in Etsako West Local Government Area.

Decision Rule

Reject the null hypothesis if the probability value (p-value) is less than 0.05.

Decision

Since the probability value of the regression model (0.000) is less than the 5% level of significance, the null hypothesis is rejected.

Interpretation

The result indicates that agricultural cooperative activities have a statistically significant positive effect on household food security among members of agricultural cooperative societies in Etsako West Local Government Area of Edo State.

Discussion of Findings

The findings demonstrate that agricultural cooperatives play a significant role in improving household food security through enhanced access to agricultural credit, quality farm inputs, extension services, collective marketing, and capacity-building programmes. The positive effect of agricultural credit observed in this study suggests that cooperative financial services enable farmers to invest in productive agricultural activities, thereby increasing output and household income.

The significant influence of farm inputs and extension services further highlights the importance of cooperatives in facilitating access to modern agricultural technologies and improved farming practices. These findings are consistent with those of Adegoke et al. (2023), who reported that cooperative membership improved agricultural productivity and household welfare among rural farmers in Ekiti State. Likewise, Kehinde et al. (2025) found that agricultural cooperatives significantly reduced poverty and enhanced the livelihoods of smallholder farming households through improved access to productive resources.

The positive effect of collective marketing observed in this study also supports previous findings that cooperative marketing strengthens farmers' bargaining power, improves market access, and increases farm income. Similarly, cooperative training enhances members' managerial and technical skills, enabling them to adopt improved production techniques that contribute to sustainable food security.

Overall, the findings confirm that agricultural cooperatives remain effective institutional mechanisms for improving food security among rural farming households in Etsako West Local Government Area.

CONCLUSION

This study examined the role of agricultural cooperatives in addressing food insecurity among farming households in Etsako West Local Government Area of Edo State. The findings revealed that agricultural cooperatives contribute significantly to household food security by improving members' access to agricultural credit, farm inputs, extension services, collective marketing opportunities, and training programmes. These services enhance agricultural productivity, increase household income, and improve access to food.

The regression analysis further established that agricultural cooperative activities have a statistically significant positive effect on household food security. This finding confirms that cooperative societies remain important institutional mechanisms for promoting sustainable agricultural development and improving the welfare of rural households.

However, the study also identified inadequate capital, high costs of agricultural inputs, weak institutional support, poor rural infrastructure, and limited access to finance as major constraints affecting the performance of agricultural cooperatives. Addressing these challenges will improve the capacity of cooperatives to provide effective services to their members and strengthen their contribution to food security.

Overall, the study concludes that strengthening agricultural cooperative societies through improved policy support, increased access to finance, capacity building, and institutional development will significantly contribute to improving food security and sustainable rural livelihoods in Etsako West Local Government Area of Edo State.

RECOMMENDATIONS

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

1. Government should strengthen agricultural cooperative societies through increased financial support, grants, and low-interest agricultural credit schemes.
2. Financial institutions should develop farmer-friendly loan programmes with flexible collateral requirements to improve cooperative members' access to agricultural finance.
3. Agricultural cooperative societies should strengthen their internal savings and credit programmes to improve members' investment capacity.
4. Agricultural extension agencies should collaborate more closely with cooperative societies to provide regular training on improved farming technologies, climate-smart agriculture, and modern farm management practices.
5. Government should subsidize improved seeds, fertilizers, agrochemicals, and farm machinery to reduce production costs for cooperative members.

6. Rural infrastructure, including feeder roads, irrigation facilities, storage centres, and rural markets, should be improved to reduce post-harvest losses and facilitate market access.
7. Cooperative societies should strengthen transparency, accountability, and member participation in decision-making processes to improve organizational effectiveness.
8. Farmers who are not members of agricultural cooperatives should be encouraged to join existing cooperative societies to benefit from collective production, marketing, and financial services.

CONTRIBUTION TO KNOWLEDGE

This study contributes to the growing body of knowledge on agricultural cooperatives and food security by providing empirical evidence from Etsako West Local Government Area of Edo State. Unlike many previous studies that focused primarily on agricultural productivity or poverty reduction, this study specifically examined the influence of cooperative activities on household food security using a regression approach.

The study further demonstrates that access to agricultural credit, farm inputs, extension services, collective marketing, and cooperative training significantly influence household food security among cooperative members. These findings provide useful evidence for policymakers, cooperative administrators, researchers, and development agencies interested in promoting sustainable agricultural development and food security in rural communities.

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