

## ACCESS TO PRODUCTIVE RESOURCES AND SERVICES AMONG AGRICULTURAL COOPERATIVES CROP FARMERS IN OKE-OGUN AREA OF OYO STATE, NIGERIA

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### ABSTRACT

The need to access productive resources and services amid present dynamics and competing demands in production inform farmer's membership of agricultural cooperatives, however, this is not automatic. The study investigated access to productive resources and services among agricultural cooperatives crop farmers in Oke-Ogun area, of Oyo state, Nigeria. A total of 180 respondents served as sample subjects and were selected through multistage sampling procedure. Loan ( $\bar{x}=1.41$ ), farm equipment (non-mechanized) ( $\bar{x}=1.40$ ) and seeds/seedlings ( $\bar{x}=1.34$ ) ranked highest as productive resources/services accessed while loan ( $\bar{x}=1.52$ ), seeds/seedlings ( $\bar{x}=1.41$ ), herbicides and pesticides ( $\bar{x}=1.40$ ) ranked highest as productive resources/services available to the respondents. Primary among the challenges associated with operating agricultural cooperatives were low capital base ( $\bar{x}=0.90$ ) and poor management of the cooperative by its leaders ( $\bar{x}=0.89$ ). Significant relationship existed between benefits derived from agricultural cooperatives ( $r=0.614$ ,  $P=0.049$ ) and accessibility to productive resources in agricultural cooperatives. The study recommends an increase in the capital base of agricultural cooperatives and increased oversight by its regulators to enhance its operations and outcomes.

**Keywords:** Access to productive resources, agricultural services, agricultural cooperatives and Oke-Ogun region.

### INTRODUCTION

Agriculture is a key activity for Nigeria's economy after oil. These activities provide a form of livelihood for many Nigerians, whereas the income generated by oil reaches a restricted share of the population. However, in rural areas more people engage in agricultural practices unlike in urban areas (Varrella, 2000). Despite the contribution to the economy, Nigeria's agricultural sector is faced with many challenges which affects its productivity. These challenges include poor access to land, low level of irrigation farming, climate change and land degradation, low technology, high production cost, limited financing, high post-harvest losses and poor access to markets among others. Agricultural cooperative society is defined as a business organisation in which a group of individuals who have common interest agreed to pool their resources together for production or to distribute goods and services for the purpose of making profit and maintaining the welfare of members. They play a key role in linking farmers to markets, providing a collective platform for negotiating with buyers, offering aggregating, marketing and processing services to their members (ADB, 2018).

A cooperative society is a voluntary association of individuals having common needs who join hands for the achievement of common economic interest. It aims to serve the interest of the poorer sections of the society through the principle of self-help and mutual help. The main objective is to provide support to its members. People come forward as a group, pool their individual resources, utilises them in the best possible way and derive some common benefit out of it. According to Chambo (2009), agricultural cooperatives create the ability for the supply of required agricultural inputs so that

production of commodities is done timely to enhance productivity. They also provide an assured market for commodities produced by isolated small farmers in the rural areas. Agricultural cooperatives help in reducing production cost by organising bulk input purchase for their members (Olabisi, 2010). They are useful in overcoming barrier to access information, services and markets for high value products; they also assist small scale farmers in solving land, labour and capital problems.

The concept of agricultural cooperatives in Nigeria is rooted in the principles of cooperation, solidarity, and collective action. Agricultural cooperatives are formed by farmers who share common interests and objectives, such as accessing inputs, credit, technology, markets, and improving their overall agricultural productivity and profitability (Abdullahi & Ashraf, 2020). The formation of agricultural cooperatives allows farmers to pool their resources, knowledge, and skills, creating a platform for joint decision-making and coordinated efforts. A cooperative is a special type of corporation that is owned and controlled by those who use its service. In furtherance of the mutual benefits, members finance and operate the business. By working together members may be able to meet objectives that they could not meet as individuals. Hence, the financial returns to individual operators may be greater than they would without cooperative effort. Like any other corporation under state law, a cooperative has articles of incorporation and by-laws that govern its actions. It has an elected board of directors and is usually managed on a day-to-day basis by professionals who function under policy set by the board (Oregon State University Extension Service, 2018).

Oke-Ogun area of Oyo state is given the appellation “food basket of the state”, owing to its contribution to food production and food security in the state. However, owing to climate variations and its attendant adverse effects lately, crop farmers in the area were faced with the impact of climate change. This was occasioned by drought. This led to huge devastating effect on the crop output resulting to crop failure and loss. However, the need to pick-up production activities and bounce back to business led to the huge reliance on agricultural cooperatives by farmers for productive resources and services. It is envisaged that their patronage of agricultural cooperatives will bring a sigh of relief to the farmers and reduce the pressure on farmers demand for formal funding sources and other sources of productive resources/ services that are not agriculture oriented. It is against this background the study investigated the study investigated access to productive resources and services among agricultural cooperatives crop farmers in Oke-Ogun area, of Oyo state, Nigeria. The specific objectives are:

- i. determine the accessibility to productive resources/services in the agricultural cooperatives;
- ii. determine the availability of productive resources/services in the agricultural cooperatives;
- iii. identify the benefits derived from the agricultural cooperatives;
- iv. identify the challenges associated with operating the agricultural cooperatives.

#### **Hypotheses of the study**

H<sub>01</sub>: There is no significant relationship between benefits derived as members of agricultural cooperatives and accessibility to productive resources and /services in agricultural cooperatives crop farmers in the study area.

H<sub>02</sub>: There is no significant relationship between challenges associated with operating the agricultural cooperatives and accessibility to productive resources/services in agricultural cooperatives crop farmers in the study area.

#### **METHODOLOGY**

The study area is Oke-ogun in Oyo State. It is one of the five geo-political zones in Oyo State, they are Ibadan, Ibarapa, Ogbomosho, Oyo and Oke-Ogun. It covers an area of about 63% of the total landmass of the state. It covers an area of about sixty three percent of the total landmass of the state. It is located within latitude 7<sup>o</sup>70' and 9<sup>o</sup> N and longitude 2<sup>o</sup>60' E to 4<sup>o</sup>20' E. It has a total land area of 15, 193,320 km<sup>2</sup>. It comprises of ten (10) local government areas i.e., Iseyin, kajola, Iwajowa, Itesiwaju, Atisbo, Saki East, Saki West, Oorelope, Irepo and Olorunsogo. The vegetation prominent is

derived savanna with rainfall range between 25 °C – 37°C. Dry season occurs from November to February when the dry dust laden blows from the Sahara Desert. The area is endowed with wide expanse of fertile land suitable for the cultivation of yam, millet, guinea corn, cassava, cowpea, maize, sorghum etc.

The target population of the study were all arable crop farmers that are members of agricultural cooperative in Oke-Ogun area of Oyo State. Multi-stage sampling procedure was used in the selection of sample subjects for this study. The first stage was the purposive sampling of fifty percent (50%) of the ten the Local Government Areas that make -up the Oke-Ogun region of Oyo State, these Local Government Areas have preponderance in arable crop production compared to other areas. In the second stage there was the random sampling of fifty percent (50%) of the total number of twenty four registered agricultural cooperatives across the five selected Local Government areas sampled, this gave a total of twelve agricultural cooperatives. The last stage involved the random sampling of 15 respondents each from the agricultural cooperatives initially sampled, having observed an almost equal membership population. This gave a total of 180 respondents who are members of the agricultural cooperatives.

Variables assessed include accessibility to productive resources and services and availability of productive resources and services. Accessibility of these productive resources/services was measured as frequently accessed, occasionally accessed and never accessed. These operational terms were assigned 2, 1 and 0 scores respectively. The weighted mean score for each item was computed and its average was used as decision to categorize the productive resources and services as either assessed or not accessed. The availability of productive resources/services was measured as always available, seldom available and unavailable, these operational measures were assigned scores of 2, 1 and 0 respectively. Furthermore, the weighted mean for each item was computed and its average was used as decision to categorize the productive resources and services as either available or unavailable. Other variables investigated were benefits derived from agricultural cooperatives and challenges associated with operating agricultural cooperatives. The benefits derived were measured as huge benefit, moderate benefit and not a benefit, scores of 2, 1 and 0 was assigned respectively. Challenges associated with operating agricultural cooperatives was measures with response options of not a challenge, mild challenge and not a challenge with scores of 2, 1 and 0 assigned respectively. In both cases the weighted mean average was used to rank and the indices in respect of benefits derived and severity of challenge. Data was analysed by

descriptive and inferential statistics. Statistical Package for social sciences (SPSS) 25  $\alpha = 0.05$  level of significance.

**RESULTS AND DISCUSSION**

**Accessibility to productive resources and services in agricultural cooperatives**

Table 1 reveals that loan ( $\bar{x} = 1.41$ ), farm equipment (non-mechanized) ( $\bar{x} = 1.40$ ), seeds/seedlings ( $\bar{x} = 1.34$ ) ranked highest as productive resources/services accessed by the respondents. The foregoing establishes the priorities of the agricultural cooperatives. It is tenable to posit that these productive resources and services are of primary concern to farmers. Loans provide vital launch pad for farmers to take advantage of the demand and supply dynamics along their production value chain. It is equally acknowledged that considering urgent need to support their scale of business and deface the utilisation of crude tools in carrying out their operations is of prime importance. It is also noted that the monetary demand for these productive resources are somewhat affordable hence its access by farmers and by extension fulfilling the objective of establishing the agricultural cooperative. This notion is consistent with the view of Oloyede *et al.* (2000) that small-scale farmers often face challenges in accessing essential

resources, such as credit, inputs (seeds, fertilisers, pesticides), machinery, and technical knowledge .

Other productive resources/services accessed were extension services ( $\bar{x} = 1.24$ ), Information and Communication Technologies ( $\bar{x} = 1.09$ ), and fertiliser ( $\bar{x} = 1.08$ ). Their access to these resources and services further attests to the quest of farmers for enhanced service delivery, hence the need to explore agricultural extension and advisory services for enhanced production outcome. Through this they are acquainted with requisite knowledge along their enterprise endeavour. Olayiwola and Sanusi (2020) attest that the benefit of agricultural cooperatives extends beyond resource access cooperatives foster innovation by creating a platform for knowledge sharing and collaboration among farmers. Their access to Information and Communication Technologies will further enable them to harness the numerous potentials available in the digital space. This includes but is not limited to deployment of its devices for personal communication, assessing the demand and supply of goods and services for their enterprise activity and other internet enabled ancillary services. Furthermore, the role of fertiliser as an important production resource in their enterprise would have informed the priority given by the agricultural cooperative hence accounting for the extent of access received.

**Table 1: Distribution of respondents according to accessibility to productive resources and services in agricultural cooperatives**

Productive Resources /Services	Always Available %	Seldom Available %	Unavailable %	Weighted Mean
<b>Productive resources</b>				
Loan	49.2	42.5	8.3	1.41
Farm equipment (mechanized)	12.5	42.5	45.0	0.67
Farm equipment (non-mechanized)	44.2	45.8	5.8	1.34
Seeds/Seedlings	44.2	51.7	4.2	1.40
Herbicides and Pesticides	36.7	57.5	5.8	1.30
Information and Communication Technologies	20.0	69.2	10.8	1.09
Fertiliser	21.7	65.0	13.3	1.08
<b>Productive services</b>				
Extension Expert Services	30.0	64.2	5.8	1.24
Irrigation Services	12.5	8.3	79.2	0.33

Source: Field survey, 2022.

**Availability of productive resources and services in agricultural cooperatives**

An assessment of availability of productive resources and/services reveals that loan ( $\bar{x} = 1.52$ ), seeds/seedlings ( $\bar{x} = 1.41$ ), herbicides and pesticides ( $\bar{x} = 1.40$ ) ranked highest as productive resources available to the respondents (Table 2). The data reflects that these resources are some of the prime objectives for which these agricultural cooperatives are set up to achieve, hence the availability of these productive resources and services are the plausible deliverables expected of them. This view is

consistent with Amaza and Oladeebo, (2018) who reported that by joining forces, agricultural cooperatives provide its members with improved access to credit, machinery, seeds, fertilisers and technical knowledge. Also available were Information and communication Technologies ( $\bar{x} = 1.39$ ) and fertiliser ( $\bar{x} = 1.29$ ). The growing concern, appreciation, application and advancement in the digitalization of agricultural activities are plausible reasons for embracing Information and Communication technologies as part of its productive resources by agricultural cooperatives.

The role of soil health and fertility cannot be overemphasized as a key component in the entire crop production process, hence the availability of

fertiliser as a productive resource by agricultural cooperatives is also a notable priority.

**Table 2: Distribution of respondents according to availability of productive resources in agricultural cooperatives**

Productive Resources /Services	Always Available %	Seldom Available %	Unavailable %	Weighted Mean
<b>Productive resources</b>				
Loan	60.8	30.8	8.3	1.52
Farm equipment (mechanized)	20.0	65.0	15.0	1.05
Farm equipment (non-mechanized)	19.2	64.2	16.7	1.02
Seeds/Seedlings	49.2	42.5	8.3	1.41
Herbicides and Pesticides	52.5	24.2	23.3	1.40
Information and Communication Technologies	4.2	30.8	65.0	1.39
Fertiliser	52.5	24.2	23.3	1.29
<b>Productive resources</b>				
Extension Expert Services	15.0	56.7	28.3	0.86
Irrigation Services	12.5	56.7	28.3	0.32

Source: Field survey, 2022

**Benefits derived from agricultural cooperatives**

Result of analysis in Table 3 reveals that increased savings culture ( $\bar{x} = 0.71$ ), protection of interest ( $\bar{x} = 0.70$ ), acquisition of loan ( $\bar{x} = 0.65$ ) were most prominent among the benefits derived from agricultural cooperatives. It is noted that one of the cardinal objectives of agricultural cooperatives is the harnessing of resources, hence the cooperative platform provides appropriate mechanism to increase their savings through increased savings culture. Owing to collective interest of its members, members of agricultural cooperatives come together to protect their interest, hence they are further driven to keep to the rules and regulations guiding the cooperatives in a bid to ensure its sustained existence. Also established is the pulling of resources (loans) from the cooperative. This is to boost their enterprise and livelihood activities.

Other benefits derived from the agricultural cooperatives as described were friendly interest on loans ( $\bar{x} = 0.64$ ), increased productivity ( $\bar{x} = 0.61$ ) and prompt access to farm inputs ( $\bar{x} = 0.61$ ). The friendly interest charged on loans compared to other funding outlets assessed by the farmers is one of the plausible benefits of their membership of agricultural cooperative. Furthermore, increased productivity of their enterprise when compared to the inputs and time invested into the venture was also acknowledged as a benefit derived from the cooperative. The prompt access to farm inputs gives credence to the importance they place on these inputs, acknowledging the role these inputs play in carrying out their job function is established to be the derived from them.

**Table 3: Distribution of respondents according to benefits derived from agricultural cooperatives**

Benefits derived from agricultural cooperatives	Huge benefit %	Moderate benefit %	Not a benefit %	Weighted Mean
Acquisition of loan	10.0	45.8	44.2	0.65
Prompt access to farm inputs	15.0	31.7	53.3	0.61
Access to extension services	2.5	52.7	45.8	0.56
Increased productivity	15.8	30.8	53.3	0.62
Limited liability	12.5	43.3	50.8	0.61
Access to corporate power	12.5	29.2	58.3	0.54
Increased savings culture	25.0	21.7	53.3	0.71
Friendly interest on loan	16.7	30.8	52.5	0.64
Protection of interest	25.0	20.0	55.0	0.70

Source: Field survey, 2022

**Challenges associated with operating agricultural cooperative**

Data in Table 4 reveals some of the challenges associated with operating agricultural cooperatives as observed by the respondents. Primary among these challenges were low capital base ( $\bar{x} = 0.90$ )

and poor management of the cooperative by its leaders ( $\bar{x} = 0.89$ ). Considering the weak capital base of the cooperative, the cooperatives may not have the required finance to fund its operations. Hence members may not get the needed resources/services they request for and in cases

where they get them, they are not provided with the needed quantity requested for. Poor management of the cooperative by the its leaders may be as a result of inability of members to reconcile their interests and improper handling of human and , material and financial resources by its stakeholders. With this, the deliverables that is accruable to such cooperatives cum its members will not be achieved by them. This view is consistent with the submission of Moreira *et al.* (2016) advocating the need for cooperatives to balance their members' economic, social, and political interests

Also identified as challenges associated with agricultural cooperatives as revealed in Table 5 were poor response of members towards repayment ( $\bar{x}$  =0.71) and bias when giving out productive resources by leaders of the cooperative ( $\bar{x}$  =0.70). The poor response of members towards repayment of loan is a huge burden to agricultural cooperatives, with this other members will not be able to

conveniently have access to the resources/services that is provided by the cooperative. It is acknowledged that the availability of these resources will make funds available to be ploughed back into the pool for disbursement and utilisation by the cooperatives. Introducing bias by leaders when giving out productive resources will weaken the interest of the members and their commitment to the operations and activities of the cooperative. Hence, the sustenance of this practice will further weaken members zeal. interest and participation in the activities that will uphold the operations of the cooperative. This view is consistent with the findings of Oyeboode *et al.*, (2022) that a common attribute attached to securing an agricultural loan includes the following but is not limited to huge collateral requirements, bureaucracies, untimely disbursement of funds and constraining conditions attached to repayment among others.

**Table 4: Challenges associated with operating agricultural cooperatives**

Identified challenges	Serious challenge %	Mild challenge %	Not a challenge %	Weighted Mean
Low capital base	37.5	15.0	47.5	0.90*
Poor management of the cooperative by its leaders	38.3	12.5	49.2	0.89*
Rigid rules and regulations	30.8	17.5	51.7	0.56
Corruption and sharp practices	43.3	30.8	53.3	0.62
Non prioritization of needs of cooperative members	12.5	43.3	50.8	0.61
Short repayment duration of loans	12.5	29.2	58.3	0.54
Poor response of members towards repayment	25.0	21.7	53.3	0.71*
Power tussle	16.7	30.8	52.5	0.64
Bias when giving out productive resources by leaders of the cooperative	25.0	20.0	55.0	0.70*

\* Challenges associated with operating agricultural cooperatives

Source: Field survey, 2022

### Hypotheses Testing

Table 5 reveals that there is association between the sex, highest educational attainment of the respondents and accessibility to productive resources and services in agricultural cooperatives, this is depicted by ( $\chi^2 = 47.62, p= 0.002$ ) and ( $\chi^2 = 47.62, p= 0.002$ ) respectively. The association between highest educational attainment and accessibility to productive resources and services in agricultural cooperatives suggests that the respondents will understand the operational dynamics of the agricultural cooperatives and deploy the resources/services to judicious use in their enterprise. Significant relationship existed between years of cooperative membership ( $r=0.414, p= 0.018$ ), average farm size ( $r= 0.338, p= 0.036$ ), average monthly income ( $r= 0.876, p= 0.026$ ) benefits derived from agricultural cooperatives ( $r= 0.614, p= 0.049$ ) and accessibility to productive

resources and services in agricultural cooperatives. Considering the number of years the cooperative members have spent could be a criterion for accessing productive resources and services, older members will be more attuned to keeping to the terms and conditions set by the cooperatives compared to younger members. As farmers' income increases they are more attuned to make more investments into the cooperatives hence their accessibility to productive resources and services. It is also plausible to state that larger farm holders bear commercial interest hence they are more attuned to access productive resources and services provided by agricultural cooperatives. Considering the benefits derived from agricultural cooperatives, members will be willing to invest more into the cooperative to afford them the opportunity to access productive resources and services from the agricultural cooperatives.

**Table 5: Results of hypotheses**

Variables	r	p value
Benefits derived from agricultural cooperatives	0.614	0.049
Challenges associated with operating agricultural cooperatives.	-0.051	0.583

Source: Field survey, 2022

**CONCLUSIONS AND RECOMMENDATIONS**

The study concluded that productive resources/services regularly accessible were loan, farm equipment (non- mechanized) and seeds/seedlings. Prominent among the challenges associated with agricultural cooperatives were low capital base and poor management of the cooperative by its leaders. Association /relationship existed between sex, highest educational attainment, years of cooperative membership, average farm size, average monthly income, Relationship existed between benefits derived from agricultural cooperatives and accessibility to productive resources and services in agricultural cooperatives. The study recommends an increase in the capital base of agricultural cooperatives and increased oversight by its regulators to enhance its operations and outcomes.

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