

# Influence of Agricultural Cooperative in Promoting Food Security in Ekiti State, Nigeria

<sup>1</sup>Adegoke, T. D., <sup>2</sup>Ojiagu, C. N. & <sup>3</sup>Ariyo, C. O.

<sup>1&3</sup>Department of Finance (Cooperative Economics and Management Unit, & Insurance and Risk Management Unit)

Ekiti State University, Ado-Ekiti, Ekiti State,

<sup>2</sup>Department of Cooperative Economics and Management Nnamdi Azikiwe University, Awka, Anambra State

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## ABSTRACT

The study examined the influence of agricultural cooperative societies in enhancing food security in Ekiti state, Nigeria. The study became imperative because of the prevailing food scarcity that has continued to ravage the state despite the larger part of the population engaging in farming of food crops. The study specifically examined the relationship between agricultural cooperative and food security in Ekiti State, Nigeria and specifically to examine the effect of farm supply inputs and cooperative credit facility in enhancing food security. The study adopted field survey research design through a total population of 47, 594 cooperative members across two senatorial zones in Ekiti State, Nigeria. A total number of 397 questionnaires were distributed, and 381 copies were returned. Validity and reliability of the instrument were established and the data obtained were analysed using descriptive statistics and paired sample t-test with the aid of SPSS version 20. The perception of members of food security revealed that adequate storage facilities can help to eradicate food scarcity as revealed by the mean value of 4.39. The also agreed that food security cab be enhanced through improvement on agricultural productivity by agricultural cooperative as shown by mean value of 3.59. All the mean responses of the cooperative members were more than 3.0 on farm supply inputs and credit facilities. This implies that members agreed that cooperatives contributed greatly to their financial empowerment and as well provided them with adequate farm inputs to improve their agricultural productivity.

The study thereby recommended that, since farm inputs have a positive effect on food availability, hence, government stakeholders and respective management should not hesitate to provide farm input supplies to cushion the effect of pesticides on farm crops and plants and also, make credit facilities available to members to boost their plantation.

**Keywords:** Farm supply inputs, Cooperative credit facility, SPSS, Farm crops.

## INTRODUCTION

Globally, national government, international development agencies and policy makers in the area of agriculture see cooperative as an important tool in enhancing food security and a significant tool in developing human well beings (Dyalvane, 2015b). As a result of this, the importance of agricultural cooperative cannot be overemphasized. It has become a key agent in the developmental projects and goals that are aimed at reducing food insecurity. More importantly, agricultural cooperatives through its channels: Farm supply cooperative (Fertilizer, pesticides, herbicides); Agricultural Marketing cooperative; and Agricultural service cooperatives (Credit facilities, extension services, storage facilities), play important

roles in supply of farm inputs to the farmers, food distribution, food production and supporting food security in no small measure. In the same vein, cooperatives help in creating productive employment, raise income and help to reduce poverty (Dyalvane, 2015a). This implies that agricultural cooperatives serve as an avenue for job creation, increase farmers'/members income through produce sales, and in turn improve the standard of living of members.

A plethora of agricultural cooperative societies improve their farm productivity by securing farm inputs at low cost which encourages sustainable farming techniques, provides credit facilities to its members, having retail stores, through agricultural marketing cooperative, where food produce can be made available at a lower cost and developing member's management and organizational skills. Generally, it is believed that production and productivity can be improved through expansion of cooperatives channel for economic and nation development (Biru, 2014).

Cooperative can help in ensuring that farmers have access to farm inputs, credit facilities, output markets, and opportunities to engage in more diversified higher value cooperative production. As agricultural cooperative is an association of farmers who collectively combine their resources together for various reasons, especially at improving farm productivity, such can act as an active agent to improve food security through its channels, and these channels provide strong economic benefit to farmers. It is particularly impossible for humans to survive without adequate food hence, food is life and has become an instrument of national power (Ojo and Adebayo, 2012). The large number of farmers in Nigeria consists of small holder-farmers, growing crops at least in parts to be used by individual families, with farming being a significant source of their livelihood. Continually, these smallholder farmers, despite being more in numbers are always poor and food insecure, and this in turn affect their productivity. These people are constrained by a number of problems such as, intensive manual labour, animal traction, limited use of agrochemical, lack access to modern inputs, lack of adequate credit facilities, poor research and extension services and, lack of viable markets, which make them to have a weak bargaining power in the product value chain (Olakunle, 2013).

Possible shocks and stresses to household food security are likely to impact negatively on a large proportion of population already facing vulnerability to food insecurity, increasing hunger and malnutrition. For a number of households, most especially in Nigeria, who face inadequate and instable food supplies, lack of purchasing power, poor nutrition, weak institutional support network, weak food emergency management system are some of the ways in which people get trapped in the cycle of food insecurity (Dyalvane, 2015). The household food security situation in Nigeria shows the level at which the household have access to adequate and quality nutritional food. Examining the main components of food security in Nigeria will reveal the food situation prevalent in the nation's household. These components include; availability, stability, accessibility and utilization of food. Therefore, food security can be achieved where there is availability of food to the populace, having access to quality and nutritious food as and when needed.

Meanwhile, the Nigeria government in her capacity has done a lot in the area of improving agricultural productivity through several policies and programs such as, Operation Feed the Nation (1986), Special programmes for Food Security (2001), National food Security (2001), Anchor Borrowers Programme (2016), Presidential Fertilizer Initiative (2017), National Youth Empowerment Scheme (2020) (NBS, 2020), most of the states cannot afford adequate food in their households and the problem of food insecurity still persist in the country as a result of several challenges ranging from continuous usage of subsistence farming methods, lack of modern farm inputs, inadequate capital and farmer's/ herder clashes.

In Ekiti state, the issue of food insecurity is really biting hard, despite being one of the South-western states where majority of her population predominantly engaged in agriculture as their primary occupation. Olusola and Lere (2018) revealed that in 2010, about 35.8% of the total population in the State still wallowed in abject food shortage. This situation became worse in 2015 when the United Nation Development Programme reported about 50% food insecurity in Ekiti State (UNDP, 2016). It is on this background that

the study investigated the influence of agricultural cooperative in promoting food security in Ekiti State and, specifically to examine the effect of farm supply inputs, and cooperative credit facilities in promoting food security in Ekiti State, Nigeria.

### **Agricultural Cooperative**

Several activities were expected from agricultural cooperatives towards enhancing food security both locally and internationally. In Nigeria, agricultural cooperative provide locally needed services, employment through access to credit for productivity and input to farmers, cooperatives also provide services which will facilitate output to members (Jimoh, 2012).

Farmers in Ekiti State like their counterparts in other parts of Nigeria are trapped in continual decline in food production, food malnutrition, food instability and inaccessibility of food as a result of the absence of these activities.

Therefore, there is need for farmers to form agricultural cooperative societies in other to allow them pool their resources together for increased agricultural productivity and also reduce the problem of food shortage in the state.

Agricultural cooperatives increasing involvement in production and farm inputs distribution has been widely reported. These include marketing, processing, supply of farm inputs (seeds, fertilizers, chemicals and modern farm implements) consumer goods, credit and banking, insurance, warehousing, farm extension and relevant support such as research and publication.

### **Concept of Food security**

The concept of food security has developed into what generally agreed by all and sundry as a standard definition that was adopted during the World food Summit in 1996. It was agreed that food security exists when all people, at all time, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life, (FAO, 2008).

On the otherhand, food security exists when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life. Generally speaking, a country is food-secure when most of its population has access to food of adequate quantity and quality compatible with decent existence at all times (Idachaba, 2004).

Food is not only a basic need; it also provides the physiological foundation upon which other considerations and human activities are structured. On the other hand, food security does not stipulate having enough quantities of food, but also, the availability of these consumable foodstuffs to the general populace at affordable prices. This simply means, we must not only concern about the mass production of these foodstuffs, but we must also make sure that the citizens have purchasing power to acquire food items that guarantee good feeding and nutrition (Onugu & Abdulahi, 2012)

Food security should encompass four features ranging from food Availability, Accessibility, stability and utilization.

**Food Availability:** This is when all people have sufficient quantities of food available on a consistence basis. This is determined by food production and trade ( FAO, 2008). On the other hand, it is the amount of food that is physically present in a country or area through all forms of domestic production, stocks, commercial imports and food aid

**Food Accessibility:** This refers to economic, social and physical access to food by all people at all times.

That a sufficient amount of food is available at the regional, national and international level does not mean it is accessible to the household (Matemilola & Elegbede, 2017)

**Food Utilization:** According to USAID, it means proper food processing and storage techniques are employed; adequate knowledge of nutrition and child care techniques exists. This is determined by food quality, nutritional values, how is the food prepared and stored, and also, the feeding method.

**Food Stability:** It describes the temporal dimension of food and nutrition security, respectively the time frame over which food and nutrition security is being considered. Stability is given when the supply on household level remain constant during the year and in the long term. On the other hand, it means stability of food availability, accessibility and utilization over time.

In line with the above components of food security, agricultural cooperatives serve as link in making sure that food are available through improvement in agricultural productivity. This is made possible by providing enabling environment for the members and non-members of farm cooperatives by providing them the necessary assistance through adequate provision of farm supply inputs, credit facilities, farm extension services and agricultural marketing to help members farmers'

## **Role of Agricultural Cooperatives in enhancing food security**

### **Provision of farm Supply Input**

Agricultural cooperative Organizations are able, through their networks, to have access to high quality farm inputs such as improved seedlings, insecticides, pesticide, fertilizer etc. Hermida (2008) stated that agricultural cooperatives play significant role in improving food availability by making production inputs such as fertilizer, seeds and chemical substance available to the farmers. Nweze (2002) attested to the above fact that agricultural cooperatives serve as avenues for channeling farm inputs to the farmers and through their nation-wide structure, they have developed a strong and reliable arrangements for the distribution of food crops, fertilizers, agro chemicals, credits, seeds and seedlings.

This has been discovered to be so in the nation's context as the Nigeria government policies of distributing these farm inputs, usually at subsidized prices to farmers through the agricultural cooperative societies. The task expected of the cooperative societies is not just to regulate the prices of the inputs, but also to ensure that quality products with appropriate technical knowledge are offered to farmers through their extension agents.

### **Provision of credit facilities**

The importance of agricultural credit through the cooperative societies in improving food security cannot be overemphasized. Otto (2006) opined that loans and credit provided by agricultural cooperatives to members are provided with traditional and less stringent conditions than methods adopted by commercial banks and other financial institutions. Abdulquadri and Mohammed (2011) opined that agricultural production is capital intensive generally and in developing countries like Nigeria where majority of her farmers are in the rural areas with traditional method of farming, and these small scale farmers need capital to be injected into agriculture to increase food production.

The critical role of credit in economic development has never been in doubt, either directly or indirectly in building the capacity of the rural small-holder farmers (Mohammed, 2009). With adequate supply of credit to farmers in Ekiti State, the retarded agricultural sector in the state will make progress because agricultural credit can stimulate the growth of agriculture, enhance productivity and at the same time improve food productivity in Ekiti state.

## THEORETICAL LITERATURE

### Diffusion Theory

The study was anchored on diffusion theory which was propounded by an American Sociologist called Evereth Rodger in 1962. The theory was propounded in an attempt to explain the existence of substantial productivity differences among farmers in the same society and geographical regions (Omeje and Ogbu, 2015). In this theory, these differences arise because of variations in farmer's usage of innovations such as new varieties of seeds, mechanical and technical inputs. Farmers in the same geographical environment would adopt modern techniques like mechanical equipment, improved seeds, chemical inputs and with this, it guarantees food security while others will oppose the use of these modern innovation due to lack of technical know-how, cultural believe and poor harvest, which will lead to food insecurity. The diffusion of innovations to farmers' required reorientation and rehabilitation, which can only be made possible through communication and other support services (Ake, 2019)

This theory made us to understand that farmers in different cooperative societies can have different yield even when they are given the same incentives such credit facilities, fertilizers, rice, maize, improved seedlings etc as a result of their different abilities in adopting new farming techniques and innovations.

### Empirical Review

Adu, H. (2020) examined Food Security and Agriculture in Nigeria: The palace of Biodiversity, examined biodiversity and its support to modern day agriculture and human well-being in Nigeria. The study made use of reviewed works of several scholars and the study believed that the growth of modern day farming systems has led to a broader conversion of land with significant consequences for food security, nutrition and health due to the depletion of wild fauna and flora in the natural ecosystems. In order to feed the ever growing population of the country, incorporating biodiversity conservation and food production need to be done in a forward-looking and acceptable ways. In order to be food secured Nigeria have ratified some selected policy and legislative frameworks related to biodiversity and food security. The study believed that, Biodiversity, if properly managed, can serve as an important source of food and other resources that can contribute toward food security.

**Biru (2014)**, Role of Agricultural Cooperative in Promoting Food Security and Rural Women's Empowerment in Eastern Tigray Region, Ethiopia. The study adopted purposive sampling for the selection of multipurpose cooperative and respondents, and data analysis employed various statistical tools like percentage (%), mean, standard deviation and regression analysis. The revealed that cooperative contributed a lot in improving the standard of living of its members residing in the rural areas. They engage in a lot of economic activities which help the members in promoting food security and gender equality.

Adekunle (2018) examined Effect of Membership of Group-Farming Cooperative on Food Production and Poverty Status. Probit regression estimate was employed to analyse the decision to join group-farming cooperative and ordinary least square was employed to examine the effect of membership of group-farming on food production and productivity of farmers. It was revealed that group-farming cooperative has a positive and statistically significant 5% significant level; prevalence of poverty is higher among non-members of group-farming cooperatives.

Matemilola and Elegbede (2017) studied the challenges of food security in Nigeria and believed that there are still a number of challenges militating against the improvement of food security in Nigeria.

He therefore recommended that, to surmount this challenges, the government must go back to the drawing board by providing enabling environment through promoting decent employment in the agricultural sector

and non-farmer sector, as well as providing credit facilities to serve as platform for the most vulnerable to cope with the economic realities particularly in the rural areas.

Taiwo, Agbasi, Lawal and Okafor (2015) evaluated farmers' access to productive resources through cooperative societies and its effect on their performance in rural communities of Anambra State, Nigeria. 126 questionnaires were administered to the respondents; t-test statistics and regression analysis were used, the results showed that various services rendered by farmers' cooperative to their members include agricultural credit, improved seedlings, fertilizers etc but the cooperative members disagreed that they have access to these things. Obayelu and Orosile (2015) examined the effect of livelihood activities of Food security status of Rural household in Ekiti, Nigeria. Primary data were collected from about 150 households through a multi-stage sampling procedure. It was discovered that the highest food poverty headcount was observed among female crop farming non-farm households with one to six members, while household with more than 12 members were food poor.

Anigbogu, Agbasi and Okoli (2015) examined socioeconomic factors influencing agricultural production among cooperative farmers in Anambra State, Nigeria. The study made use of regression model of the ordinary least square, the study revealed that eight (8) (age, Educational qualification, farming Experience, Farm Size, Income, Seedling Obtain, Fertilizer Obtain and Fertility of the land) out of the fourteen coefficients of the variables included in the variables are significant. Twelve (12) of the coefficients have positive relationship with the cooperative farmers output.

## METHODOLOGY

This study was conducted in Seven (7) Local Government Areas of Ekiti State. . Ekiti state is located between latitudes 7° 25' and 8° 05' East of Greenwich Meridian and between longitude 40° 45' and 46° 05' North of the Equator (NIMET, 2016). The state is bounded to the North by Kwara and Kogi States, while it is bounded to the State of Osun at the West, bounded to Edo to the East, and Ondo to the South. Ekiti State is surrounded almost entirely by land, having no coastal boundary (Oluwasusi and Tijani, 2013).

The population of the study was made up of all members of registered active agricultural cooperatives in selected Local Governments in Ekiti State. There are sixteen (16) Local Government Areas in Ekiti State, with a total number of two thousand, nine hundred and thirty five (2,935) agricultural cooperative societies, with a membership strength of forty seven thousand, five hundred and ninety four (47,594) members in Ekiti State which served as the population of the study. ( Ekiti State Ministry of Commerce, Industry and Cooperatives, 2020).

The total number of population for the functional agricultural cooperative societies in the Seven (7) Local Government Areas (Ado, Oye, Moba, Irepodun/Ifelodun, Ikole, Ido-Osi and Gbonyin) with membership strength of 407 was used in this study.

The sample size employed in the study was Yamane (1967) for finite population and its formula

$$n = \frac{N}{1 + N(e)^2}$$

were used to determine the population figure. The sampling technique used in the study was multistage sampling technique in order to determine the actual sample.

Using Yemane formula, below figure was arrived at;

$$n = \frac{47,594}{1 + 47,594 (0.05)^2} = \frac{47,594}{119.985}$$

$$n = 397$$

from the 397 copies of questionnaires that were distributed, 381 copies of the questionnaires were filled and returned while 16 copies of the questionnaires were not returned.

Multistage sampling technique was employed in the study to determine the actual sample for the study. This was done in four (4) stages. The first stage was the random selection of two (2) Senatorial zones (South and Central) from the three (3) senatorial zones (South, Central and North) in Ekiti State. In the second stage, judgmental/purposive sampling technique was adopted to select 7 Local Government Areas from the two (2) senatorial zones (South and Central). In the third stage, simple random sampling was adopted to select one (1) town each from the 7 selected Local government areas in the senatorial zones, bringing the total towns selected to 7. This was done because the towns selected are predominantly into farming of food crops such as Rice, Yam, Cassava, Plantain etc. In the final stage, purposive sampling was used to select 8 cooperative societies with their numbers being active cooperators. This was done as a result of continuous decline in the number of active members of the societies in the study areas.

### **Agricultural Cooperative Societies in Irepodun/Ifelodun, Ado, Oye, Gbonyin and Ikole Local Government Areas.**

<b>LGAs</b>	<b>Name of the Agric. Cooperative Societies</b>	<b>Membership Figures</b>
<b>Ikole</b>	Egbeoba Cooperative Multipurpose Ltd	60
	Gbonyin Area Cooperative Multipurpose Ltd	52
<b>Irepodun/Ifelodun</b>	Ileri Oluwa Cooperative Multipurpose Ltd	55
<b>Ado</b>	Ekiti Central Cooperative Multipurpose Ltd	50
<b>Oye</b>	Ifemuyiwa Cooperative Multipurpose Ltd	40
<b>Moba</b>	Ekiti Ifedore Cooperative Multipurpose Ltd	50
<b>Ido-Osi</b>	Ifesowapo Cooperative Multipurpose Ltd	60
	Total	<b><u>407</u></b>

**Source: Ministry of Commerce, Industry and Cooperative, Ekiti State, (2021)**

### **Sources of Data**

The study employed the two basic sources of data collection, namely; Primary and Secondary data collection. The Primary data collection was sourced through a structured questionnaire. The questionnaire was designed in line with the objectives of the study, and the researcher also employed the use of multiple choice questions. The information on the secondary data was sourced from the Ministry of Commerce, Industry and Cooperatives Ekiti state on various agricultural cooperative societies from the Seven (7) Local Government Areas under study.

### **Research Instrument**

The information for this study was extracted from questionnaires as the main research instrument. The

questionnaire consisted of two parts. The first segment covered the background and the bio-data of the respondents, including the socio-economic profile of farmers who are members of agricultural cooperative, while the second part covered questions relating to the agricultural cooperative societies and food security enhancement in Ekiti State, Nigeria was divided into 5-likert sections A, B, C, D and E. A is strongly agreed, B is agreed, C is undecided, D is disagreed and E is strongly disagreed.

### Validity of the Research Instrument

Content validity of an instrument is deemed to be good, if it contains a representative sample of the universe of the subject matter of interest. The research instrument was validated to ensure face and content quality, by undergoing series of scrutiny by the experts and professionals in the study area by adding relevant information to the questionnaire to validate its content and structure before being administered to the respondents in the target Local Government Areas in Ekiti State.

### Reliability of the research Instrument

The test for reliability and internal consistency of the research instrument was determined through the Cronbach's alpha coefficient. The Cronbach coefficient is expected to show an acceptable degree of reliability when the coefficient is greater than 0.70 and this is considered to be satisfactory.

The Cronbach's alpha was **0.790**, which indicated a good level of internal consistency for the scale.

### Method of Data Analysis

The study made use of descriptive statistics and inferential statistics. The descriptive statistics included frequency and percentage used to analyze the socio-economic characteristics of the respondents, while the inferential statistics (Paired sample test) was used to examine people's responses to the likert-type of questions with respect to determining the members opinions on the assessment of the agricultural cooperative society's contributions to the improvement of food security in Ekiti State

### Interpretation of Finding

**Table 2 Socio-Economic Characteristics of Respondents**

Item	Frequency	Percentage (%)
<b>Age group</b>		
20-30 years	8	2.1
40-50 years	157	41.2
50 years and above	118	31
Total	381	100
<b>Gender:</b>		
Male	239	62.7
Female	142	37.3
<b>Marital Status:</b>		
Married	254	66.7
Single	127	33.3
Total	381	100
<b>Farming Experience:</b>		
Less than 5 years	31	8.1



5-8 Years	204	53.5
8 years and above	146	38.3
Total	381	100
<b>Educational Qualification:</b>		
No formal education	14	3.7
Primary education	130	34.1
Secondary education	124	32.5
Tertiary education	113	29.7
Total	381	100
<b>Years of Membership:</b>		
Less than 5 years	87	22.8
5-10 years	231	60.5
10 years and above	63	16.5
Total	381	100
<b>Farm size:</b>		
Less than 3 hectares	83	21.8
3-7 hectares	197	51.7
Above 7 hectares	101	26.5
Total	381	100
<b>Farming System:</b>		
Mono cropping	165	43.3
Mixed farming	216	56.7
Total	381	100
<b>Occupation:</b>		
Trading	169	44.4
Artisan	117	30.7
Others	95	24.9
Total	381	100

**Source: Field Survey, 2021**

The above table shows the socio-economic characteristics of respondents explained one after the other. The distribution of respondents according to age revealed that majority of the respondents were between the age group of 40-50 (i.e. 41.2%), followed by the age group 50 years and above (31%), followed by the age group of 30-40 years (25.7%), and 20-30 age group (2.1%). This shows that majority of the respondents were more of adults than youths involved in cooperative activities. As shown in Table 1, it is clearly observed that 62.7% of the respondents' were male while 37.3% of the respondents were female. Although the male gender were more than the female gender in the cooperative societies, the female gender were also involved in farming activities and more disposed to cooperative activities and as a result, they benefitted more from cooperative programs as a result of their commitment to the cooperative.

The analysis of respondents according to their marital status revealed that 66.7% of the respondents were married, constituting majority of the respondents and 33.3% were single. This showed that majority of the respondents are married and were more disposed to joining the cooperative society to improve their income, asset and family living standards. In the aspect of farming experience, the analysis above showed that

majority of the respondents had farming experience between 5-8 years representing 53.5%, followed by above 8 years (i.e. 38.3% of respondents), only few of the respondents had farming experience between 1-5 years (i.e 8.1% of the respondents) which revealed that majority of the respondents had been into farming for over 5 years.

The distribution, according to educational qualification, revealed that the respondents have acquired one level of education or the other ranging from primary (34.1%), secondary (32.5%), and tertiary education (29.7%) which constituted majority of the respondents as compared to 3.7% of the respondents who had not acquired any formal education. The distribution of the respondents, according to years of membership with cooperative, showed that majority of the respondents representing (60.6%) have been membership of cooperative between 5-10 years, followed by 22.8% of the respondents who had been members of cooperative society between 1-5 years and 63% of them between 10 years and above. This indicated that cooperative has been in existence over long time ago with larger membership within 5-10 years.

The distribution of respondents according to the farm size showed that 51.7% of the respondents occupied about 3-7 hectares of land for their farming and 26.5% of the respondents also occupied a farm size of above 7 hectares of land for farming purposes which cannot be compared to the 21.8% of the few respondents who occupied less than 3 hectares of land for their farming activities. This stipulates that large size (hectares) of land is required for productive farming activities.

The farming system of the respondent revealed that 56.7% engaged in mixed farming and 43.3% of the respondents engaged in mono-cropping farming system. Thus, it can be said that majority of the respondents do not depend on a particular farming system. Finally, the distribution of respondents according to the type of occupation shows that 44.4% of the respondents engaged in trading activities, followed by 30.7% who are artisans and 24.9% of the respondents engaged in other occupation.

Based on the analysis of the socio-economic characteristics of respondents, it can be inferred that majority of the respondents shared the same socio-economic profile in terms of their background, farming experience, farm size and farming system

### Test of Hypotheses

**Ho<sub>1</sub>**: Cooperative Farm Supply Inputs have no significant influence in enhancing food security in Ekiti state.

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Cooperative Farm input has no significant influence on food availability in Ekiti State	.92400	1.19157	.06126	.80416	1.04429	15.145	380	.000

**Source: Researcher's computation using SPSS version 20, 2021**

Paired T-test which is appropriate for testing the mean difference between paired observations The paired sample test seals up the relationship between cooperative farm input and food security amongst the cooperative farmers in Ekiti State as indicated by the t-value = 15.145 and probability value = 0.000 as

shown in Table. This implies that cooperative farm input has significant influence in enhancing food security in Ekiti State.

**Test of Hypothesis II**

**H<sub>02</sub>:** Cooperative Credit Facilities has no significant influence in enhancing food security in Ekiti State.

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 2	Cooperative credit facility have no significant influence in enhancing food stability in Ekiti State	.92128	1.2413	.06469	.7963	1.0466	14.485	380	.000

**Source: Researcher’s computation using SPSS version 20, 2021**

The Table revealed that there is a significant relationship between cooperative credit and food security in Ekiti State as revealed in the t-value = 14.485 and associated p-value of 0.000 in table, therefore, the null hypothesis is rejected.

**DISCUSSION OF FINDINGS**

The study ascertained the influence of Agricultural Cooperative Society in enhancing food security in Ekiti State. The independent variable (agricultural cooperative) was proxied by cooperative farm inputs, cooperative credit facilities, while food security was the dependent variable.

The result for hypothesis 1 indicated by the t-value = 15.145 and probability value = 0.000 as shown in Table 4.2. This implies that cooperative farm input has significant influence in enhancing food security in Ekiti State at 5% level of significance.

The result for hypothesis II revealed a significant influence of cooperative credit facility with food security in Ekiti State as revealed in the t-value = 14.485 and associated p-value of 0.000 in Table 4.3. Therefore, the null hypothesis is rejected.

The finding of this study supports the results of Onugu and Abdulahi (2012), Toluwase and Apata (2013), Biru (2014), Adedapo and Alabi (2014), Anigbogu, Agbasi and Okoli (2015), Okafor and Agbasi (2016), Adekunle (2018), Audu (2020) that Agricultural Cooperative Society enhances food security and, also improves food productivity in Nigeria

**CONCLUSION**

Consequent to the analysis carried out in this study, some conclusions were drawn from the result obtained. In conclusion, nevertheless stand to be corrected in further studies especially with the adoption of other method of analysis such as regression, the study concludes that there appears that agricultural cooperative enhance food security in Ekiti State. This implies that if farm supply inputs and credit facilities are provided

for the Agricultural cooperative societies, food insecurity can be curtailed in the state.

The study revealed that cooperative farm supply inputs and cooperative credit have significant positive influence in enhancing food security in Ekiti State at 5% level of significance. This therefore means that efforts at formulating an effective food security strategy in the state and elsewhere must take advantage of the agricultural cooperative platform in channeling of farm resources to rural farmers and cooperators.

The study hereby recommends that since the farm supply inputs have positive and significant effect on food security, the government, stakeholders and respective management should not hesitate to provide farm supply inputs such as pesticides- to cushion the effect of pests, provide fertilizers to increase farm productivity and assist farmers with modern farm inputs to improve productivity. The study also suggested that government should give listening ears to the prayers of cooperative societies by providing credit facilities to the farmers at a reasonable rate in order to help the local farmers to expand their farming scope and increase their farm yields.

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