

Full Length Research Paper

Impact of Cooperative Societies on Rural Farming in Ido Local Government Area of Oyo State, Nigeria

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Received 25 August 2020; Accepted 20 September, 2020

ABSTRACT: The study examined the contribution of cooperative societies to rural farming in Ido local government area of Oyo State, Nigeria. Data were obtained from 60 farmers using the multistage sampling technique and were analyzed using descriptive statistics and multiple regressions. The result showed that 55% of the respondents fall within the age bracket of 20-29 years while 58.3% were females. The regression result showed that the source of credit, the amount borrowed, and usage of the loan with a p-value of the amount borrowed (0.0244), usage of loan obtained (0.0042), and constraints encountered by farmers (0.0039) have a significant impact on agricultural production. Results showed that 10.0% of the respondents sourced the credit for agricultural

production from contributions while 45.0% of the respondents sourced their credit from cooperative societies. 16.7% of the respondent obtains loans less than ₦50,000 while 78.3% of the respondents used the loan obtained for farming. (71.6%) had a major constraint to obtaining loans as a lack of guarantors. It is therefore recommended that the government should support agricultural cooperatives with a regulatory and administrative framework to ensure satisfactory service delivery to the societies.

Keywords: Cooperative societies, rural farming, regression analysis, respondents, credit

INTRODUCTION

Nigeria is known to have a population of about 150 million people, which makes it the most populous country in Africa, and more than 50% of the population lives in the rural areas. It is also known to have a land area of 911,000sq.km, and about 80% of the land is available for various agricultural purposes, including arable land, permanent crops, pastures and irrigated land (FAO, 2013). Farming in Nigeria faces two major challenges; one of the problems is that it is associated with non-availability, or severe limitations to credit facilities which enables farmers to have improved production and profit. The other challenge faced in farming is the various difficulties encountered with the availability, cost, and relevance of the appropriate technology necessary for improved yield. (Oluwaseun and Trudy, 2014).

Cooperative has been practiced globally over the years either as formal or informal institutions. The concept of

farmers' cooperatives is a function of the roles they are expected to perform in such economy that helps to determine the level of economic development and poverty in such a nation (Oluyombo, 2010).

Some writers described cooperatives as a strong organization where different entrepreneurs like farmers contribute their resources together with the view of making profit (Nicky, 2018). Other writers, sees it as voluntary economic institution in which members share the earned dividends – the financial benefit that results from doing business with or without profit. Some writers see cooperative organization as an industrial organization where a number of people may combine as consumers to produce a commodity, the proceeds of which are distributed among the participants.

Rowland, (2014) and UC, (2020) described cooperative society as a business organization where a set of people with similar interest, mutually agree to establish a

business in view to promote their economic activities like production, distribution or marketing of goods and services, and for the provision of welfare benefits to their members.

According to Omeje (2014), Cooperatives are usually organized by members like traders, artisan and peasant farmers who contribute money into a joint fund in order to raise investment, finance and distribute same as soft loans to members. So, the main purpose of this type of cooperative society is to encourage savings among members and also offer credit facilities to members to enable them engage in economic activities. Cooperatives also play significant role in the provision of service, credit, innovative that helps enhance development in farming. Farmers are able to achieve what they might not be able to achieve while working as independently, but through joint effort of contributing to the cooperative society, farm development can be achieved.

Historically, cooperatives have developed in the response to some different situations and its solution should be the aim of the formation of any cooperative societies. The birth of cooperatives is associated with the people who experience some hardship and were under privileged as compared with other people, the present developing countries are under privileged as compared to advanced countries. Their people are in poorer condition and they experience low standard of living, secondly, even within any one of these countries, there are two major groups, urban farmers enjoy modern amenities like tarred road, pipe borne water, electricity etc. The latter lacks most of the materials (David, 2004). It would therefore be expected that cooperative spirit will be developed in these countries especially among under privilege rural farmers, and it dwellers, it is because of the benefits which these area derives from cooperatives that lead many government in developing cooperative societies in the rural areas of these countries (Alutohai, 2006). According to the International Cooperative Alliance (2018), cooperative is an autonomous association of persons united voluntarily to meet their common social and cultural needs and aspiration through a jointly owned and democratically controlled enterprise.

Previous studies have shown that cooperative mainly carry out the function of credit delivery to farmers but there is ample evidence that farmers faces difficulties in obtaining credit and the problem of sourcing for capital still lingers on the fall in agricultural production, this could be attributed to the inadequate infrastructure, under mechanization and inadequate capital.

Agriculture in the post independent years was the main stay of Nigeria economy with the small scale farmers producing the food crops grown and commonly sells 80 per cent of total production and consume only 20 per cent in Nigeria using traditional methods coupled with obsolete farming implement until the oil boom in 1970s. Thus, the rural farming suffered serious neglect which leads to a

rapid decline in productive to less than 3% in the 2000s. Over the past 20 years, value-added per capital in agriculture has risen by less than 1 percent annually. It is estimated that Nigeria has lost USD 10 billion in annual export opportunity from groundnut, palm oil, cocoa and cotton alone due to continuous decline in the production of those commodities (FAO, 2020).

Olajide and Ogunfiditimi (1980) as cited by Toluwase and Apata (2013) suggested agricultural cooperative as a means to shorten the gap as well as rural transformation of agricultural sector as a part of dynamic social order since extension services have not been able to reach out to all the rural farmers. There is need therefore, to access the contribution of cooperative societies to rural farming on their productivity, source of agricultural information and means of loan security. The study therefore seeks to examine the contribution of agricultural cooperative societies to rural farming in Ido Local Government.

METHODOLOGY

The study was carried out in rural farming communities in Ido local government area of Oyo State. It has its local government headquarters at Ido. It shares boundaries with Oluyole, Ibarapa East, Akinyele, Ibadan South-West and Ibadan North-West local government in Oyo State and Odeda local government in Ogun state. The area measures 986km² and a population of 146,200 (NPC, 2016). It has 612 villages. It has extensive fertile soil, which is suitable for agriculture. The people are predominantly farmers and farming is accountable for about 63% of total economic status in the local government area. The fertile land supports the growth of arable and cash crops.

Sampling procedure

A multistage sampling technique was used to carry out the study. The first stage is the purposive selection of Ido local government based on the high concentration of farmers in the local government. At the second stage, four wards were purposively selected out of the 10 wards within Ido local government, which are: Akufo, Apete, Bakatari and Ido, this is because they are the farming communities within Ido local government. The third stage involved a random selection of 15 farmers from Akufo, 14 farmers from Apete, 16 farmers from Bakatari and 15 farmers from Ido local government, making a total 60 respondents. The data was collected through personal interview and structured questionnaires from the respondents in the study area. A total number of 60 questionnaires were administered to the respondents.

Method of data analysis

Statistical tools such as frequency distribution method were used for socio-economic characteristics of the

respondent in the study area, amount respondent's wants to borrow, usage of loans and constraint to obtaining loans in the study area. Multiple regression model was used determine the impact of credit on contribution to agricultural production in the study area.

Model specification

A multiple regression model was adopted to determine the impact of source of credit, amount borrowed, usage of loan obtained, and constraint encountered by farmers on contribution to agricultural production in ido local government area, Oyo State, Nigeria. The functional form of the model is;

$$CAP = f (SOC, AMB, ULO, CEF) \dots\dots\dots (1)$$

Structural form:

$$CAP_i = \beta_0 + \beta_1 SOC_i + \beta_2 AMB_i + \beta_3 ULO_i + \beta_4 CEF_i + \varepsilon$$

Where;

CAP_i = Contribution to Agricultural Production at a point in time

SOC_i = Source of Credit at a point in time

AMB_i = Amount Borrowed at a point in time

ULO_i = Usage of Loan Obtained at a point in time

CEF_i = Constraint Encountered by Farmers at a point in time

β_0 = Intercept of the model

$\beta_1, \beta_2, \beta_3, \beta_4$ = Slope of the independent variables

ε = Error term

RESULTS

The result in (Table 1) revealed that 55% of the respondents were male while 45% were females which indicates that male are engaged mostly in Agriculture simply because farming demands a lot of strength and energy to work (Balogun, 2008). Result also showed that 48.3% of the respondents were between the age of 20-29 years this implies that majority of the farmers are young and within their active age. About 63.3% of the respondents are non head of the family in terms of family status which may make them to be more focused because they have fewer responsibilities. About 36.7% are heads of the family. Majority 48.3% of the respondent had tertiary education which goes in line with (Fawole and Fasina, 2005, Awotide *et al.*, 2016) who recognized that farmers education have a significant positive influence in the adoption of any agricultural improvement and they will greatly appreciate the provision of cooperative societies. More so, 58.3% of the respondents are farmers which are the highest percentage. This showed that most people in the study area have high interest in farming while 8% of the respondents are engaged in other non-farming occupation. About, 35.0% have household size of 5-10 people this implies that the

majority of the respondents in the study area have large family size and they can assist in farming which may reduce labour cost, 33.3% have less than 5 people within their households while 3.1% have about 10 people within their households.

From the regression result above, source of credit, amount borrowed, and usage of loan obtained have positive impact on agricultural production, while constraints encountered by farmers have negative impact on agricultural production. However, the p-value of amount borrowed (0.0244), usage of loan obtained (0.0042), and constraints encountered by farmers (0.0039) have significant impact on agricultural production, while source of credit does not have a significant impact on agricultural production.

The positive coefficient of source of credit (1.096) implies that an additional source of credit will bring about 1.096 increases in agricultural production. The positive and significant coefficient of amount borrowed (0.831) implies that, a naira increase in the amount borrowed will lead to 0.831 increase in agricultural production. The positive and significant coefficient of usage of loan obtained (1.531) implies that, an increase in the usage of the loan obtained will induce 1.531 increase in agricultural production. The negative, but significant coefficient of constraints encountered by farmers (-0.134) implies that, an increase in the constraints encountered by farmers will bring about 0.134 decrease in agricultural production.

The R-square value of 0.8135 as shown in the regression result in the (Table 2) implies that 81 percent variations in agricultural production was explained by the independent variables (source of credit, amount borrowed, usage of loan obtained, and constraints encountered by the farmers) in the model. The probability of F-statistics (0.0000), shows the overall significance of the model as the p-value is less than the 5 percent significance level. Thus, it was concluded that all the variables are jointly significant.

DISCUSSION

The above result shows that cooperative societies have impact on rural farmers, given the significance of amount borrowed, usage of loans obtained, and constraints encountered by farmers. The implication of amount borrowed is the availability of financial resources for the purpose of purchasing farm implements, seedlings, and proper preparation of farmlands in the case of seasonal food and cash crops. This could serve as boost to agricultural production as a result of available funds to embark on necessary activities. The result of the analysis showed that an increase in the usage of loans obtained have the tendency of increasing agricultural production as farmers will be equipped with more tools, machineries and other incentives necessary to boost agricultural

Table 1: Socio-economic characteristics of the respondents.

VARIABLES	FREQUENCY	PERCENTAGE
Gender		
Male	33	55.0
Female	27	45.0
Total	60	100.0
Age		
20-29	29	48.3
40-49	6	10.0
50-59	8	13.3
Above 60	3	5.0
Total	60	100.0
Family status		
Head	22	36.7
Non head	38	63.3
Total	60	100.0
Marital status		
Married	28	46.7
Single	27	45.0
Widowed	5	8.3
Total	60	100.0
Educational status		
No formal education	8	13.3
Primary education	9	15.0
Secondary education	14	23.3
Tertiary education	29	48.3
Total	60	100.0
Religion		
Christianity	21	35.0
Islam	35	58.3
Traditional	4	6.7
Total	60	100.0
Occupation		
Trading	8	13.3
Civil servant	4	6.7
Student	13	21.7
Farmer	35	58.3
Total	60	100.0
Household size		
Less than 5	20	33.3
5-10	21	35.0
Above 10	19	31.7
Total	60	100.0

SOURCE: Field Survey Data, 2020.

production. However, constraints encountered by the farmers have a negative effect on agricultural production. These constraints limit the capacity of farmers to increase production. Table 3 showed that 10% of respondents source credit for the agricultural production from contributions. This implies that there is appreciable level of social interaction among the farmers and with their neighbor. Also 5.0% of the respondents' source for credit from commercial bank. These indicates that majority of the respondents 95% are not getting the credit from the bank which may be as a result of lack of collateral, lack of information, high interest rate etc. 18.3% and 10.0% of the respondent source for credit from the money lenders, friends and relative respectively who could be relatives,

neighbors or friends to the respondent. These mean that there is a social support to some extent in the study area. 6.6% of the respondent get the credit from both personal savings and traditional savings. These indicate low saving habit of the respondent which may be as a result of constant high rate of expenditure from their income. Also 5.0% of the respondent gets their credit from the insurance. Lastly, 45.0% of the respondents source their credit from cooperative societies. This indicates that majority of the total respondents belongs to one cooperative society or the other, and that they are really benefiting from the societies under the environmental of mutual trust. Table 4 showed the amount of money borrowed by the respondent. 16.7% of the respondent

Table 2: Ordinary least square result.

Variables	Coefficients	T-Statistics	Prob. Value
Constant	2.569	1.242	0.2252
Source of Credit	1.096	1.492	0.0678
Amount borrowed	0.831	0.391	0.0244
Usage of loan	1.531	3.137	0.0042
Constraints encountered by farmers	-0.134	-3.165	0.0039

Dependent Variable = Contribution to Agricultural Production
 Observations = 60
 R-square = 0.8135
 Prob (F-statistics) = 0.00000 Source: Author's Computation , 2020.

Table 3: Sources of credit to rural farmers

SOURCE	FREQUENCY	PERCENTAGE
Contribution	6	10.0
Commercial banks	3	5.0
Money lenders	11	18.3
Personal savings	2	3.3
Friends and relatives	6	10.0
Traditional savings	2	3.3
Insurance	3	5.0
Cooperative society	27	45.0

SOURCE: Field Survey Data, 2020.

Table 4: Amount of money willing to be borrowed from the association.

AMOUNT	FREQUENCY	PERCENTAGE
Below ₦50,000	10	16.7
₦50,000- ₦80,000	14	23.3
Above ₦100,000	36	60.0

SOURCE: Field Survey Data, 2020.

Table 5: Usage of loan obtain.

STATEMENT	FREQUENCY	PERCENTAGE
Personal use	8	13.3
Farming	47	78.8
Others	5	8.4

SOURCE: Field Survey Data, 2020.

Table 6: Constraint encountered by farmers.

CONSTRAINT	FREQUENCY	PERCENTAGE
Guarantor	43	71.6
Long period of waiting for loan	3	5.0
High Interest Rate	2	3.3
Government policies	6	10.0
Poor communication	1	1.7

SOURCE: Field Survey Data, 2020.

obtain loan that is less than ₦50,000. This implies that respondent that fall into these categories have low borrowing capacity and low value collateral, this could be as a result of small scale farming being operated by the farmers. 23.3% of the respondents obtained loan between ₦50,000 and ₦80,000, this indicates that the respondent has low borrowing capacity. Lastly, 60.0% of respondent will borrow above ₦100,000. This indicates

that farmers in these categories has high borrowing capacity and highly valued collateral security as well as large scale farming being operated by the farmers. Table 5 reveals the uses of the loan obtained by respondents. 13.3% of the respondents use the loan obtained for their personal use also 78.3% of the respondent use the loan obtained for farming which is the main purpose for which the loan is granted. This implies that the farmer's attitude

is encouraging as they use the money on farming activities. Lastly, 8.4% of the respondents use the loan obtained for other uses which may or may not be relevant to their farming expenditure. This implies wrong use of loan received by the farmers as this contradicts the main purpose of receiving or giving loans to the farmers and this can cause delay or difficulty in repaying the obtained loan. Table 6 revealed that problems faced by farmers in obtaining loans for agriculture. The major constraint to obtaining loans by farmers is lack of guarantors (71.6%) which implies that if the respondents does not have guarantors it will be difficult to obtain loans. The result showed that (5%) of the respondents had the constraint of waiting long for the loan this can affect the farming activities since agriculture is a time bound enterprise. The result also showed that another constraint to obtaining loans is high interest rate (3.3%), this may make it difficult to pay back loans and this may discourage farmers for applying for loans. Government policies (10%) are another constraint farmer's encounter in obtaining loans.

Conclusion

The study examined the impact of cooperative societies on rural farming in Ido local government area. Majority of the respondents were male. The regression result showed that, source of credit, amount borrowed, and usage of loan obtained have positive impact on agricultural production, while constraints encountered by farmers have negative impact on agricultural production. Few of the respondents sourced for loans from commercial banks, Majority of the respondent used the loan obtained for farming. The major constraint to obtaining loans by farmers is lack of guarantors.

Recommendations

Based on the findings the following recommendation are proposed to assist cooperative societies to be effective and responsive to problems that rural farmers face in relation to increase productivity:

- (i) There should be no discrimination in granting loan to farmers.
- (ii) Loans should be disbursed as at when due as farming activities are time bound.
- (iii) Good communication with farmers on available loans should be encouraged as this will make the farmers informed on available credit opportunities.
- (iv) There should be consistency in government policies as this will give the farmers confidence to apply for loans when needed without the fear of fluctuating interest rates.

REFERENCES

Alutohai GO (2006). Sustainability of farm credit delivery by cooperatives and NGOs in Edo and Delta state, Nigeria. Educational research and reviews. An Open Access Journal Volume

- 1, 2014 - Issue 1
- Awotide AB, Karimov AA, Diagne A (2016). Agricultural technology adoption, commercialization and smallholder rice farmers' welfare in rural Nigeria. *Agricultural and Food Economics* Volume 4, Article number: 3 (2016).
- Balogun ED (2008). Banking and credit facilities for integrated rural development paper presented at the national seminar on rural development policy in Nigeria, Sheraton hotel. Abuja.
- David CH (2004). Brief history of the creation of federal capital territory (FCT).
- FAO (2020). Food and Agriculture Organization of the United State. Nigeria at Gance. FAO in Nigeria.
- FAO (2013). *Nigeria-land Use and Crop Production Data*. Rome: United Nations Food and Agricultural Organization.
- Fawole OP, Fasina O (2005). Factors predisposing farmers to organic fertilizer Use in Oyo State, Nigeria. *Journal of rural economics and development* 14(2):81-91.
- International Cooperative Alliance. (2018). Cooperative identity, values & principles. Avenue milcamps 105, 1030 Brussels, Belgium.
- Nicky L (2018). The Advantages of a Cooperative Business. Small business Technology and Customer Support/ Business Internet Advantage.
- NPC (2016) National Population Commission of Nigeria.
- Olajide SO, Ogunfiditimi JK (1980). Small Scale Farmers and Extension Service. Nigeria Small Scale Farmers Problems and Prospect in Integrated Rural Development (CARD), University of Ibadan.
- Oluwaseun K, Trudy H (2014). Impact of cooperative membership on farmers' uptake of technological innovations in Southwest Nigeria. *Journal Development Studies Research*.
- Oluoyombo O (2010). Assessing the Impact of Savings and Credit Cooperative Among Monthly Income Earners *Journal of Research in National Development*, Vol. 8, No 2b, pp. 407-415.
- Omeje PE (2014). *The Mastery of Economics*, Masckho – Ricckho, Lagos.
- Rowland AE (2014). Impact Of Cooperative Societies In National Development And The Nigerian Economy. *Global Journal Of Social Sciences* Vol 13, 2014: 19-29
- Toluwase S.O.W. and Apata OM (2013). Impact of Farmers' Cooperative on Agricultural Productivity in Ekiti State, Nigeria Department of Agricultural Economics and Extension Services, Ekiti State University, Ado-Ekiti, Nigeria.
- UC (University Of California), (2020). Division of Agriculture and Natural Resources, University of California, Division of Agriculture and Natural Resources.