

Roles of Agricultural Cooperative Societies in Financing Small-Scale Member Farmers in Kaura Kaduna State Nigeria

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ABSTRACT

The general objective of this study is to examine the Role of the Financing by the Agricultural Co-operatives Societies on their Small-scale Member Farmers, with reference to Kaura and Kuru Local Government Areas, Southern Kaduna Senatorial Zone of Kaduna State. The specific objectives are; to ascertain the amount of credits applied for by small-scale member farmers through agricultural co-operatives. Ascertain the volume of credit granted to small scale member farmers yearly through agricultural co-operatives, ascertain the type of credit facilities available for small-scale farmers member through agricultural co-operatives, determine the effects of the credit facilities on the total output, income levels and living standards of the farmer in the study areas during the study period, ascertain the sources of credit available to agricultural co-operatives. The research questions that guided the study are; what is the amount of credit applied for by small scale member farmers' agricultural co-operatives? What is the volume of credit granted to small scale member farmers through agricultural co-operatives? What were types of credit facilities available for small scale member farmers through agricultural co-operatives? What are the effects of credit facilities on the total output, income levels and living standards of the member farmers in the study areas during the study period through agricultural cooperatives? A survey design was used for the study. The population consisted of all the member of agricultural cooperatives societies in the study area only 16 was use, out of 423 members, only 136 were used for the study. To determine the sample size, Taro Yamani formula was used, for the distribution of sample size of the societies, Kumaisons (1997) was adopted. A questionnaire was developed by the research based on Likert 5-point scale was used for the study (Ogbu, 2010), frequencies, tables and percentages were used, used to compared responses between members of the agricultural co-operative societies. Research result shows that agricultural co-operative societies credit acquired from others financial institutions is high due to low interest rate. Result also shows that agricultural co-operative society member farmers acquired higher credit due to low interest rate of 5% to 10% through the Federal Government effort to diversify the economy through agriculture, and economic participation of members in the co-operatives, according to the cooperative principles, another reason is that members benefited on agricultural credits lead to high productivity than members that are not benefited on the agricultural credits. Result also shows that, agricultural co-operative societies members has higher co-operative effects, because of the credit facilities available for the member farmers to improved positively on the total output, income levels and living standard. It increases their productivity, farm size, among others. Results also reveal that, there are different sources of credit available to agricultural co-operatives in financing their member farmers; this includes internal sources, borrowed sources and external among others. It was recommended among others, that agricultural co-operatives should not depend only on acquiring credits from other financial institution more than their maximum liability that more credit facilities should be granted to agricultural co-operative society members internally. So they can boost their productive capacities, as a means to boost diversify Nigeria economy through agriculture, interest rates should further be reduced, and policy makers should promulgate laws that will favour agricultural co-operatives.

Keywords: Agriculture, Co-operatives, Financing

INTRODUCTION

Before the oil boom, agriculture and its various co-operative facets have done Nigeria a lot of good providing the foreign exchange and the wherewithal needed by the nation to provide the infrastructure and social needs of the people . It is unfortunate that the hen that

laid the golden egg of yesterday is now neglected.

Since its formal introduction into Nigeria in 1935, the Nigeria Co-operative movement has played a very important role in the Nigeria economy, especially in the development of agriculture and rural

sector combining the strength of supporting the micro-small-scale farmers and the weaker group. Co-operative have some major specific capacities such as serving remote rural areas, mobilizing local resources through savings product and favourable the implication of the beneficiaries in a self-held dynamic. The co-operative business model has become increasingly popular in recent years especially in financing small scale member farmers.

The guiding principles of co-operative enterprise are ideally based on the values of self-help, solidarity, equality, self-responsibility, democracy and equity. Co-operative was perceived as an instrument of the ruling parties and the state to transform private ownership of means of production into collective ownership as a transitional stage towards state ownership, [1].

Co-operative societies are viewed as important vehicle for small farmers development because they mobilize local resources into a critical mass and their structure allow them to be more community-oriented [2].

Co-operative is an autonomous association of persons united voluntarily to meet their common economics, social, as well as cultural needs and aspiration through a jointly owned and democratically controlled enterprise [3]. Co-operative have been an effective way for people to exert control over their economic livelihood and this provide opportunity of achieving one or more economic goals in an ever increasing competitive environment. Co-operative society has become weapon that is used to lessen the effect of poverty on the populace in developing nation as Nigeria. Successful co-operative business can be found in virtually every industry in Nigeria, for instance in Kaduna alone there are about 12,000 registered co-operative societies.

In the rural areas, economic activities are generally characterized by a direct or indirect dependence on the exploitation of the land. These economic activities centre principally on farming namely; animal and crop husbandry, poultry, fishing, forestry, food processing, coltage

industry and other farm related activities. It is estimated that agriculture and related activities occupy about 80% of the rural population in Nigeria [4]. It is expected that since agriculture is the main occupation of rural dwellers, there should be a reduction in their poverty level leading to the overall development of such rural areas; small-scale farming can plausibly be seen as a rural development catalyst because their features contain all the element essentials for a healthy development of an integrated rural economy. The small-scale industries contribute to rural economic development in so many ways in Kaduna State, the rural inhabitants engage mostly in small-scale farming. They produce both cash and food crops, they aim at the improvement of their living conditions through increased productivity of agriculture and related enterprises which constitute the main economic activities of the people. If the increased production achieved is to benefit the average man in state when there is equitable distribution of agricultural inputs/ loan which gives due consideration to per capital consumption investment and communal social services. [5].

In Kaduna States, about 90% of the rural dwellers are farmers. Both male and female adult of different ages engaged in farming as their main economic activity. Besides, comparative societies exists in the area especially farmers multi-purpose co-operatives, agricultural co-operatives which aim at providing all the necessary financial supports to the small-scale farmers in the area to boost their productivity. Consequently, how the small-scale farmers in the area were financed by agricultural co-operative societies, between 2008-2017 is the thrust of this study. A number of studies have been undertaken in and outside the country indicates the relationship between agricultural co-operative societies, and financing small scale farmers across the world. while a large number of them strongly believe that agricultural co-operative societies are major catalysts for financing small scale farmers [6]. The focus of this research work would be on Effects of Financing by

Agricultural Co-operative on the small scale member Farmers in Kaduna State, because of the importance role agricultural co-operative society played in improving the standard of living of farmers in Kaduna State and Nigeria at large.

Statement of the Problem

In the sixties and seventies, agriculture contributed over 75% to the gross domestic product of Nigeria. The advent of oil boom has changed the tide coupled with gross neglect of the sector by government and the general public. This may not be unconnected to the lackadaisical attitude, lust for white collar jobs, and inefficient management by agricultural co-operatives, absence of accountability and transparency by authorities. Many parts of the world give preferential treatment to primary producers including agricultural co-operatives societies by way of subsidies in order to boost food production. In the literature, the consensus of opinion is that financial and credit institutions have less preference for agricultural co-operatives that are closely connected with the grassroots. Absence of basic infrastructure, lack of processing and storage facilities, lack of collateral and personnel amongst others have been an impediment to the smooth operation of agricultural co-operative societies for a very long. Small scale farmers have depended greatly on their own meager resources or on loans from family members or friends, and even some times from usurious money lenders who charge very high interest rates, in the neighborhood of 10-20% per annum. The resultant effects of the difficulty in accessing affordable and adequate loans

are the low productivity, physical output and its monetary value. These farmers therefore remain poor and even in some cases descend lower into poverty, especially as a result of high indebtedness and the national rising cost of living.

At the macro level these poor small scale farmers contribute very little to the gross domestic product (GDP) currently the contribution of agricultural to GDP being about 40-42%. Co-operatives societies are to solve problems facing by this agricultural co-operative in their farming activities, which includes; Difficulties as an individual small scale member farmers in accessing credit facilities from conventional commercial banks and even from agricultural development banks owing mostly to lack of the required collaterals security in guarantee, banks unwillingness to deal with the so call many small scale agricultural producers because of the high per members farmers administrative cost, high loan default rate of individual member farmers, high interest rate on various types of agricultural loans, undue delays in granting the loans such that the loans are received after the planting season or when these loans are needed mostly.

These difficulties faced by individual member farmers are greatly reduced when these small scale farmers are organized in to agricultural or farmer cooperatives, against this backdrop of government insistence on self-sufficiency and self-reliance, of agricultural cooperatives societies can make meaningful contribution to food production if given the necessary technical and financial assistance.

METHODOLOGY

Research Design

The research design of this study is a survey design. The choice of this method was base on the fact the entities that make up the population and sample of the study are in different locations within the study area. Therefore, the only way to reach to them was through a survey. According to [7], Survey method enables the researcher to study the objects in their scattered locations. The research

design was also considered suitable for the study because it entails gathering data about the findings obtained from a sample and generalizing the findings obtain from an analysis of the sample to the entire population. [8]. This method was adopted because it enabled the researcher to discover relative incidences and distribution on the characteristics of the population. Besides, it facilitated there searcher to find out how

agricultural cooperatives societies financing small scale farmers in Kaura and Kauru local Government Area of Kaduna state (2008-2017).

The Study Area

Kaduna state is located in Northern part of Nigeria, Kaduna state have 23 Local Government Areas, in which the two Local Governments was chosen. This study was chosen to be carried in Kaura and Kauru Local Government Area of Southern senatorial zone of Kaduna State of Nigeria. Kaura Local Government was carved out of Jama'a Local Government and Kauru Kataf was also carved from Lere Local Government. The Kaura Local Government have three chiefdoms, Marwa, Kagoro, and Attakar chiefdom, with ten wards namely Bondong, Manchok, Zankan, Kaura, Kadarko, Kpak, Mallagum, Fada, Kukum and Agban. While, Kauru have three chiefdom, Kauru Chiefdom, Kumawa Chiefdom and Chawai Chiefdom. Kauru also has 11 wards they are; Geshere, Bital, Kwassam, Kauru East,

Kauru West, Makami, Dawami, Pari, Damakasuwa, and Kamuru wards. Kaura Local Government headquarters is located in Kaura, while Kauru Local Government is located in Kauru, and its headquarters is the Kauru with. All the topography of the two Local Governments are characterized by hills and valleys.

Population of the Study

The population of this study comprises small scale member farmers in 16 agricultural co-operatives societies that are registered with the Kaduna State under the Ministry of Agriculture in Department of Co-operatives, having a total of 143 registered agricultural co-operative societies in Kaura and Kauru Local Government Areas. There are other co-operative societies in study areas they includes multi-purpose co-operative societies, thrift and credit co-operative societies, marketing co-operative societies etc. only agricultural co-operative societies is used in this researched work

Table 1: Selected co-operative societies and the population of Kaura and Kauru Local Government areas in Kaduna South Senatorial District of Kaduna State.

S/No	Location and Names of Societies of Kaura LGA	Registra tion Number	Date of Registra tion	Number of member in a Soc.	Sample size
1	Manchok Progressive Multi-purpose Kaura Co-op Society	NIL	3-2-06	30	10
2	Mantuak Amichi Women Farmers co-op. Society	NIL	22-7-04	30	10
3	Kagoro Kyangchat multi-purpose co-op. Society	NIL	4-8-01	29	9
4	Rafin Gora Zit-tung Dung Farmers Co-op. Society	NIL	25-8-07	25	8
5	Greener Pasture Farmers Co-op. Society	NIL	22-7-05	38	12
6	Kaura Tachira Rice Farmers Co-op Society	NIL	10-2-04	35	11
7	Biniki Farmers Co-op. Society	NIL	7-3-07	20	6
8	Fada Daji Unity Multi-Purpose Co-op. Society	NIL	16-3-06	13	4
TOTAL				220	70

Source: Field Work 2020

S/No	Location & Name of Society in Kauru LGA	Registration Number	Date of Registration	Number of members in a society	Sample size
1	KauruRishiwa Women Multi-purpose Co-op. Society	KDS/KRU/CS/42	NIL	15	5
2	Zambin Tomatoes Farmers Co-op. Society	KDS/KRU/CS/2556	NIL	30	10
3	Ung. GanyeFadama Farmers Co-op. Society	KDS/KRU/CS/2635	NIL	34	11
4	DamakuwaWidows Multi-Purpose Co-op. Society	KDS/KRU/CS/1027	NIL	16	5
5	Shoshiti Multi- Purpose Co-op. Society	KDS/KRU/CS/1025	NIL	27	9
6	KauruPari District Fadama Farmers Co-op. Society	KDS/KRU/CS/6675	NIL	38	12
7	KauruPari District Women Farmers Co-op. Society	KDS/KRU/CS/6673	NIL	25	8
8	BinawaFifilotiUsuwuh Farmers Co-op. Society	KDS/KRU/CS/N/41	NIL	18	6
TOTAL		52		203	66

Source: Field Work 2020

Sample Size Determination

The study uses random sampling technique whereby each individual in the population has the chance of equal selection. Eight (8) dually registered agricultural cooperative societies in both Kaura and Kauru Local Government Area of Kaduna State were selected, making a total fourteen (16). The reason for restricting the population to the eight (8) co-operative societies is because they are representing the entire co-operative societies in Kaura and Kauru Local Government Area.

Out of a total population of agricultural co-operative members in Kaura and Kauru local government area only 136 from agricultural co-operative societies were used for the study.

Sample Size and Sampling Techniques

To determine the sample size for the purpose of questionnaire distribution, the Taro Yamani formula was used.

The formula is stated thus:

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

$$1 + N(e)^2$$

Where: n=sample size

e=Margin of error (5% or 0.05)

1=constant

Substituting values in the above equation:

$$n = \frac{423}{1 + 423(0.05)^2}$$

$$1 + 423(0.05)^2$$

$$n = 423$$

$$1 + 423(0.0025)$$

$$n = 423$$

$$1 + 0.3575$$

$$n = 423$$

$$1.3575$$

$$= 136$$

For the purpose of distribution of sample among co-operative society, [8] formula was adopted. Thus; $nh = Nn$

N

Where n=Total sample size

Nh=The number of items in each co-operative society in the population

N=POPULATION

Nh=The number of units allocated to each co-operative society

Nh=Societies Manchok progressive Multi-purpose.=30, Mantuak Amichi Women Farmers coop. soc.=30, Kagorokyanchat co-op. soc.=29, Rafingora co-op. soc.=25, Green Pasture co-op. soc.=38, Kaura Tachira Rice Farmers co-op. soc.=35, Biniki co-op. soc.=20, Fada Daji Unity co-op. soc.=13, Kauru Rashiwa Women co-op. soc.=15, Zambin Tomatoes Farmers co-op. soc.=15, Ung Ganye co-op. soc.=30, Damakuwa Widows co-op. soc.=34, Shoshiti Multi-purpose co-op. soc.=16, KauruPari co-op. soc.=27, KauruPari Women co-op. soc.=38, BinawaFifiloti co-op. soc.=25

Therefore, substituting values in this formula, each co-operative society

becomes thus;

Manchok Progressive co-op. Society;	$nh = \frac{136 \times 30}{9.5} = 10423$
Mantuak Amichi co-op. Society;	$nh = \frac{136 \times 30}{9.5} = 10423$
Kagoro Kyanchat co-op. Society;	$nh = \frac{136 \times 29}{9.3} = 9423$
Rafin Gora co-op. Society;	$nh = \frac{136 \times 25}{8} = 8423$
Green Pasture co-op. Society;	$nh = \frac{136 \times 38}{12.2} = 12423$
Kaura Tachira co-op. Society;	$nh = \frac{136 \times 35}{11.1} = 11423$
Biniki Farmers co-op. Society;	$nh = \frac{136 \times 20}{6.4} = 6423$
Fada Daji Unity co-op. Society;	$nh = \frac{136 \times 13}{4.2} = 4423$
Kauru Rishiwa Women co-op. Society;	$nh = \frac{136 \times 15}{4.8} = 5423$
Zambia Tomatoes Farmers co-op. Society;	$nh = \frac{136 \times 30}{9.6} = 10423$
Ung. Ganye co-op. Society;	$nh = \frac{136 \times 34}{10.9} = 11423$
Damakuwa Windows co-op. Society;	$nh = \frac{136 \times 16}{5.1} = 423$
Shoshiti co-op. Society;	$nh = \frac{136 \times 27}{8.7} = 9423$
Kauru Pari Fadama Farmers co-op. Society;	$nh = \frac{136 \times 38}{12.2} = 12423$
Kauru Pari Women Farmer co-op. Society	$nh = \frac{136 \times 25}{8} = 8423$
Binawa Fifuloti Farmer co-op. Society;	$nh = \frac{136 \times 18}{5.7} = 6423$

The Population of the study is 423. Based on this, the researcher used the sample size of 136 to be the sample size determination of the study. This was made up of 220 members in Kaura Local Government Area of 8 selected societies, with sample size of 70 while Kauru Local Government Area also made up of 203 members in 8 selected cooperative societies representing. 16 registered co-operative societies can adequately represent others.

Instrumentation

The instrumentation for the study was in 5 section, Likert-type structured questionnaire is adopt which the research can use either 5 or 4 Likert scale of measurement. [13], known as the Effects of Financing by Agricultural Co-operative Societies on their Small Scale Members Farmers in Kaduna State. Between, 2008-2017

Respondent Bio-data

- a. Amount of credit applied for by member farmers Yearly by co-operative societies
- b. Volume of credit granted to member farmers yearly by the co-operative society

- c. Types of credit facilities available to members farmers of agricultural co-operative society.
- d. Effects of credit facilities on member farming activities
- e. Established the problems encountered by agricultural co-operatives.

Section A, has 6 items which required the respondent to tick their sex, age, education house hold size, farm size and name of the co-operative society, highest educational qualification and also supply the name of their co-operative societies.

Section B, has 10 items as five point scale measuring the extent of the amount of credit applied yearly by farmers with the opinions, very great extent great extent, some extent low extent and no extent.

Section C has 10 items with a five point measuring scale and sought information on the volume of credit granted to member farmers through agricultural co-operative societies.

Section D has 8 items with a five point measuring scale and sought information on the types of credit facilities available

to small scale member farmers through agricultural co-operatives.

Section E has 5 items with a five point measuring scale and sought information on the effects of credit facilities on member farming activities.

Section F has 3 items with five point measuring scale and sought information on the sources of credit available in the co-operative societies.

Respondents were required to trade against a response that was considered appropriate by them.

The total instrument has 41 items in totality, the questionnaire as an instrument for data collection proved very useful because respondents are literate and semi-literate. This made reading and filling in of the questionnaire very easy. Also, the questionnaire helped in establishing the findings of the study as information gathered were easily computed into statistical data for the purpose of analysis, [14].

Validity of the Questionnaires

A measuring instrument is valid only when it measures truly and accurately what it intends to measure [15]. Based on the remark of [16], that validation by others is an effective method for content validation of research instruments, the researcher solicited with two experts from Enugu State University Science and Technology and one from Kaduna Polytechnic, whose possess thorough knowledge and high degree of competence in the area of co-operative and research methods. They were requested to judge the appropriateness, comprehensiveness and clarity of items in the questionnaire. Modifications and correction resulting this were fully incorporated in the final draft.

Description of Variables

The topic of this research work was Effects of Financing Agricultural Co-operative Societies on their Small scale Members Farmers in Kaduna State. The independent variable is Effect of Financial Agricultural Co-operative Societies, while the dependent variable is Small Scale Member Farmers. The small scale member farmers are depending to the financing of the agricultural co-operative societies to success.

Procedure for the Administration of instrument

The Effects of Agricultural Co-operative societies on their Small scale Member Farmers in Kaduna State in Kaura and Kuru L.G.A. The name of the societies and number of copies of the instrument were written on each envelope containing them in order to avoid mix-up. The distribution of the instrument to the respondents in each co-operative society was done with the help of the secretaries. A letter was sent along with the copies of the questionnaire seeking the co-operation of the respondents (see Appendix 1). The respondents were given two days within which to fill in and return the questionnaires. This is to enable the respondents to reflect on the instrument in order to fill in questionnaires were given to the secretaries from whom all questionnaires given are dully filled and returns.

Procedure for statistical analysis.

A number of statistical tools were used in the organizations, presentation, analysis and interpretation of data obtained in the study. Such statistical techniques include the following:

- a. Table was used to organize the list of selected agricultural co-operative societies and the population of their members.
- b. Frequency counts and percentages were used to present and analyze the demographic variables of the respondent.
- c. The five (5) Likert scale was adopted to determine the reliability of the instrument from the pilot study.

Summary

The study is a survey research that was carried out in 16 selected agricultural co-operative societies in Kaura and Kuru Local Government in Kaduna state. All the 136 of agricultural co-operative societies from 16 societies form the sample of the study. The sample size was therefore 136. The instrument for the study is known as Effects of financing by Agricultural Co-operatives Societies on their Small Scale Member Farmers. Expect in Faculty of Management Science, Enugu State

University of Technology, and expect from Department of Co-operative Economics and Management, Kaduna Polytechnic validated the research instrument, a pilot study was carried out to determine the reliability, the questionnaire was successfully administered and collected statistical techniques used to analyze data were frequencies, percentages, means, were used.

Presentation and Analysis of Data

This chapter presents the results of the analysis, it is concerned the presentation and analysis, of data collected from the primary and secondary sources. For the

Table 2 percentage distribution of the socio-economic characteristic of the respondents.

purpose of this study, the data collected were presented in tables, frequencies and percentages were used, means, standard deviation standard error and t-test use to compared responses between members of the registered cooperative societies each section of the questionnaire were analyzed separately the related hypothesis was tested for each section.

Analysis of demographic characteristics of the respondents.

The demographic variables of the respondents analyzed the sex, age (year), Education, Household size, farm size and annual income. (N)

Variables	Frequency (F)	Percentages (%)
Sex		
Female	47	34.56
Male	89	65.44
Total	136	100
Age (years)		
20<30	30	22.05
30<40	44	32.35
40<50	29	21.34
>50	33	24.26
TOTAL	136	100
EDUCATION		
Primary	70	51.47
Secondary	40	29.41
Tertiary	6	4.41
No formal Education	20	14.71
Total	136	100
Household Size		
1-5	47	34.56
6-11	61	44.85
11-15	20	14.71
16-20	8	5.88
Total	136	100
Farm Size (Hectare)		
1<3	77	56.62
3-5	24	17.65
5-7	18	13.24
>7	17	12.5
Total	136	100
Annual Income		
10,000<50,000	11	8.08
50,000<100,000	56	41.17
100,000<150,000	42	30.88
150,000<200,000	16	12.76
>200,000	11	8.08

Source: Field Work 2020

The result in table shows that majority (65.44%) of the small scale members farmers were made of males, while, (34.56%) were females. This means that male gender dominates farming activities in the study area. The male dominates of this rural source of livelihood implies the various nature of farming activities operations right from tillage to harvesting which their female counterparts cannot easily undertake. This may be as the result that farming activities require a lot of energy and is intensive especially in the rural areas where old system and implements are used. This agrees with the findings of [17], that small scale farming is being carries out mostly by males, while females involve in light farming operations such as processing, harvesting and marketing. The result in table 1 shows the age of the respondents ranging between 20 and less than 30 years with (22.05%) while, respondents ranging between 30 and less than is predominant with (32.35%). The implication of the foregoing result is farming activities in the study areas enjoy higher patronage by the young able bodies people who are energetic enough to withstand the stress and energy required in farming businesses.

This result suggest that majority of the small scale farming members in the study areas are young farmers who are within the age bracket in which people are innovative and active of work (Asiaballa1989). These small scale member farmers, therefore, can make meaningful effect in agricultural financing. The result in table 1 also shows that majority of the farmers in the study area has primary education with (51.47%), (29.41) of the respondents had secondary education. These results indicated that almost all the respondents were literate enough to give room for good communication in filling of the questionnaires and also in doing their various farming businesses in the study areas.

The result in table above also shows that the societies under the study are typically an agrarian societies characterized by

large family size ranging mainly between 6 to10 children representing (44.85%). The household size of the majority of the respondents suggests that there was abundant supply of family labour in the area of study, which can be harnessed for increased agricultural productivity. In other hand, it could increase poverty if the household does not engage in agricultural farming businesses.

The respondents on the farm sizes shows that (56.62%) of the small scale members farmers sizes varying between 1 and less than 3 hectares in table 1. This indicates that the small scale member farmers were mostly small scale producers. Those small members farmers, whose farm sizes were more than 3 hectares were those who had some good numbers of experienced and years in farming activities, and had gradually expanded their farm sizes for the same number of years as Southern Kaduna people are blessed with vast land, another factor is the profit gained from efficient utilization of agricultural cooperatives financing, and accessed to such financing and credit available to the members.

The result in table 1 also shows that (41-17) of the small scale members farmers earned an annual farm income of between =N=50,000 and less than =N=100,000 while (12.76%) of the small members farmers earned as annual farm income of between =N=100,000 and less than =N=200,000. These annual incomes of the small scale member farmers were too poor for any meaningful economic activity in view of the large household mentioned above in the size of the respondents. This could be as the result of ineffective utilization of agricultural credits / loans collected by the individual small scale member farmers.

This result indicates that the annual income is grossly inadequate to cater for the economic well-being of the respondents considering the large family size. This inadequate income is attributes to small of farm sizes, that most of the respondents operates and their generally low level of education. This is acceptable or the fact that co-operative education

effect determined the small scale members farmers to managers as well as overall production [19]. Education level

plays a good role in adoption of new policy and undertaking risk.

Table 3 Amount of credit applied for yearly by small-scale member farmers.

Items statement	SA	A	U	D	SD	X	Remarks
Amount applied in 2011	40	60	-	30	6	3.72	Agree
Amount applied in 2012	50	80	-	4	2	4.26	Agree
Amount applied in 2013	65	40	-	11	20	3.87	Agree
Amount applied in 2014	70	30	-	26	10	3.69	Agree
Amount applied in 2015	50	62	-	15	9	3.94	Agree
Amount applied in 2016	90	30	-	10	6	4.38	Agree
Amount applied in 2017	35	69	-	15	17	3.66	Agree
Amount applied in 2018	48	60	-	18	10	3.86	Agree
Amount applied in 2019	77	40	-	10	9	4.51	Agree
Amount applied in 2020	58	45	-	13	20	3.79	Agree

N =136, Grand Mean= 7.94

Key: SA/Strong agree, A=Agree, U = Undecided, D = Disagree, SD=Strongly Disagree

From the data in table 2, it is clear that the credit applied yearly by small scale members farmers is granted, based on the means scores of the frequency of responses of the respondents to the items statement in the table. Results show among others that credit applied in 2011 (=N=1,000,000 to =N=3,000,000) is granted with =N=136, x=3.72: credit applied in 2012 by the cooperative societies is =N=4,000,000 to =N=6,000,000 was granted with respondents N136: x=4.26: credit applied in 2013 =N=7,000,000- =N=9,000,000 was granted based on the respondents N136: x=3.87: amount of credit applied in 2014

was between =N=10,000,000 to =N=12,000,000, the respondent agreed with frequency =N=136:x=3.69: amount of credit applied in 2015 (N136:x=3.94): credit applied in 2016 (N136: X=4.38): amount of credit applied in 2017 was between =N=20,000,000 to =N=24,000,000 the respondent agreed with frequency (N136: X=3.66): credit facilities applied in 2018 (N136: X=3.86): credit applied by the small scale members farmers cooperatives in 2019 (N=136: X= 4.5) and loan/credit applied in 2020 amounted to =N=29,000,000 to N35,000,000, the respondents agreed with frequency N136: X 3.79).

Table 4 volume of credit granted to small scale members farmers yearly.

Item statement	Very Adequate	Fairly Adequate	Adequate	Below Adequate	Not Adequate	X	Remarks
Credit Granted in 2011	77	30	-	20	9	4.07	Agree
Credit Granted in 2012	50	60	-	15	11	3.90	Agree
Credit Granted in 2013	58	45	-	13	20		Agree
Credit Granted in 2014	60	39	-	30	7	3.85	Agree
Credit Granted in 2015	40	66	-	10	20	3.56	Agree
Credit Granted in 2016	30	60	-	26	20	3.39	Agree
Credit Granted in 2017	80	50	-	2	4	4.47	Agree
Credit Granted in 2018	65	41	-	20	10	3.96	Agree
Credit Granted in 2019	69	35	-	17	15	3.92	Agree
Credit Granted in 2020	66	30	-	27	13	3.80	Agree

N=Grand Mean=7.74

From the data on table 4.3 small scale farmer collect credit from different sources as approved the management. Credit granted in 2011 (=N=136: X =4.07): credit granted in 2012 (=N=136:X=3.90), Credit granted in 2013 (=N=136: X =3.79): Credit Granted in 2014 (=N=136:

X=3.85): credit granted in 2015 (=N=136: X=3.56) credit granted in 2016 (=N=136: X=3.39): credit granted in 2017: (=N=136:X=4.47): credit granted in 2018 (=N=136: X=3.96): credit granted in 2019 (=N=136:X=3.92) and credit granted in 2020 =(N=136:X=3.80).

Table 5 types of credit available to small scale members farmers in agricultural cooperative

Statement	SA	A	U	D	SD	X	Remark
Bridging Credit	67	31	-	21	17	3.80	Agree
Crop Credit	69	30	-	21	17	3.83	Agree
Livestock Credit	70	60	-	3	3	4.40	Agree
Social Credit	50	55	-	17	14	3.80	Agree
Capital Credit	69	41	-	16	10	4.05	Agree
Spray Machine	64	32	-	25	15	3.77	Agree
Cash Credit	40	50	-	23	23	3.44	Agree

N=136, Grand Mean=5.41

From Table 5, agricultural co-operative has different types of credit in financing small scale members farmers, based on the mean score of the frequency of respondents on the item statement. Result shows that bridging credit (N=136:

X=3.80): crop credit (N=136:X=3.83): livestock credit (N=136: x = 4.40): social credit (N=136:x=3.80): capital Credit (N=136: x =4.05): spray Machine (N=136:x =3.77) and Cash Credit (N=136: x=3.44).

Table 6 effect of credit facilities on total output, income and standard of living of small scale member farmers.

Item Statement	SA	A	U	D	SD	X	Remark
Increase in farm size	52	60	-	11	8	3.89	Agree
Increase in capital base	45	73	-	18	0	4.06	Agree
Increase In output	81	30	-	14	11	4.14	Agree
Increase in input	66	70	-	0	0	4.48	Agree
Increase in income	35	69	-	18	14	2.66	Agree

N=136: Grand Mean=3.84

From the data on Table 4.5 agricultural credit facilities has co-operative effects on the small scale member farmers, result shows that increased in farm size (=N=136: x =3.89): increased in capital base (=N=136: x=4.06): increased in output (=N=136: x = 4.14): increased in

income (=N=136: x=4.48) but the respondents disagree that credit facilities does not increased their standard of living (=N136: x=2.66). This may be as the result of high cost of agricultural farming business.

Table 7 sources of credit available in the co-operative societies.

Item Statement	SA	A	U	D	SD	X	Remark
Owned or/Internal Source	80	56	-	-	-	4.58	Agree
Internal/Borrowed Source	75	45	-	15	4	4.30	Agree
Borrowed or External Sources	50	35	-	36	15	3.50	Agree

N=136, Grand Mean=2.48

From the data in table 4.6: agricultural co-operative borrowed from internal and external sources. Results shows that owned or internal sources (=N=136< X=4.30) and borrowed or external sources (N=136: X =3.50). This is with agreement with [20] that sources of co-operative financing can either be internal or external sources of finance.

to member farmer. It goes further to confirm contrary to [22] availability of credit information asymmetric is one major cause of credit constraint in small scale businesses. Another reason why the credit applied by agricultural cooperative is high is that fixing the minimum liability, the general meeting must have seen that the co-operatives under study has security like shares and reserve is high that will enable the co-operatives to pay back the credit acquired from commercial banks or other cooperative societies, which is in agreement with [23] that members are in the best position to decide the extent of liability and possible pain which they are prepared to bear. The reasons why this findings is different from the findings of [24] is that, agricultural co-operatives has access to credit due to the Federal government policies on agriculture to diversify the economic, to avoid over dependent on oil, and information on credit facilities to agricultural co-operatives are made available to access this credit. The justification for the results is from the fact that most agricultural co-operative society's access credit and pay low interest rate on credit facilities, the agricultural co-operatives used internal

Discussions of Results

The specific objectives of the study was to; ascertain the amount of credit applied for by small scale member famers, ascertain the volume of credit granted to small scale member farmers through agricultural co-operative, ascertain the types of credits facilities available for small scale farmers through agricultural co-operatives, determine the effects of the total output, income levels and living standards of the member farmers in the study areas during the study period, ascertain the sources of credit available to co-operative societies.

Table 2: shows that amount of credit applied yearly by agricultural co-operative society are high in the study area. This is contrary to the report of [21] that the conditions given for accessing small scale member farmer's credits by agricultural co-operative were accessible

sources of the agricultural cooperative funds to extend credit to their member farmers.

Table 3: Reveals that the volume of credit granted yearly by agricultural co-operative society shows the volume of credit granted to agricultural co-operative member is high. This confirm the report of [25] members uses their loan facilities collected to finance agricultural activities and interest on such credit facilities is low compare to other financial institutions. It goes further to confirm [26], that interest rate paid on agricultural co-operative credit is lesser than those charged by formal finance ponders. [27] also confirm that credit to small scale farmers yield income, and improved farmers inputs on beneficiaries more than non-beneficiaries, they also report that credit lead to improvement of economic transactions, increase quality of life. [28] reported that access to agricultural credit has positive effects on agricultural production. The justification for the result is from the fact that credit facilities in agricultural co-operative yield more income and also improved farmers productivity, and the interest rate of this credit are lesser that may influence the high rate of credit granted to the members of agricultural co-operative societies.

Table 4 reveals that the effects of credit facilities on farming activities of agricultural co-operatives society is positive effects to the members of agricultural co-operative society. [29] report that agricultural co-operative credit is major supporters of member farmers in the urban and rural areas which help increased the incomes of farmers. Eastern African Farmers Federation [30] reported that access to credit to agricultural co-operative level to increase in farming size and also improved the standard of living of the farmers. [6] report that agriculture is the main occupation of the rural areas, when granted credit will leads to reduction in the poverty levels.

The justification on the effect of credit facilities in farming activities of members of agricultural co-operative society, the credit received by this cooperative

member is judiciously put to used that resulted in significant increase of income, farm size and also improved their standard of living. Another justification is that this credit given to member farmers should be given to small scale farmers in kind rather than in cash [4] this has relieved farmers from diverting this loans from the intended project, which leads to great effect of transforming this small-scale farmers to large scale farmers, farming in commercial quantity.

Table 5: reveals that the sources of credit small scale farmers all agreed with the variables. This confirm the report of [10] there are different sources of finance in agricultural co-operative credit available to small-scale member farmers which includes internal, borrowed, external sources , further more [8] report that types of agricultural credit can be in cash or in kind. The justification on the sources of credit available to agricultural co-operative is that this source helps the member farmers to access these types of credit at lower rates of interest ranging from 5% to 10%, which is better than commercial Banks who change interest rate to agricultural co-operative between 20% to 30%, sometime even charge more. These credits can also be either in cash or kind, long term or short term credit depending to the member farmer needs.

Summary of Findings

Based on the responses of respondents to the research questions Effects of Financing by Agricultural co-operative societies on their Small scale member farmers as contained in the tables, the following are the findings of the study;

1. Agricultural co-operative Societies amount of credit applied yearly is high due to Federal government policies on agriculture to diversify the economy, also the effort of Federal government to reduce the interest rate charged by commercial banks through the Central Bank of Nigeria (CBN)
2. Member farmers' volume of credit granted by the agricultural co-operative societies is higher, because of low interest rate of 5% to 10%,

- and economic participation in the co-operative societies. The members applied this credits to use in their individual private agricultural businesses, this improved or increases their productivity, and standard of living.
3. Members effects on credit facilities is positively and higher, this is as the result of credits facilities available for them when joined the cooperative, than when they are on their own. Members that benefits on this credit facilities are better in the private farming businesses than non-beneficiaries, this includes increased in farmland size, capital base increased in income acquiring farm machineries. Increase income, among others.
 4. The sources of credits available in agricultural co-operative are numerous and they are carefully designed and executed to cater for the welfare of members to improve in their farming activities for higher productivity. These sources of credit are internal sources, which are source within the agricultural co-operatives, borrowed sources is the credit borrow from members savings, external sources is the credit source outside the co-operatives that is from commercial banks, government, grant from international bodies and from one co-operative society to another. s

Summary

The general objective of this study is to examine the Effects of the Financing by the agricultural co-operatives societies on their small-scale Member farmers, with reference to Kaura and Kauru Local Government Areas, Southern Kaduna Senatorial Zone of Kaduna State. The specific objectives are; to ascertain the amount of credits applied for by small-scale member farmers through agricultural co-operatives. Ascertain the volume of credit granted to small scale member farmers yearly through agricultural co-operatives, ascertain the type of credit facilities available for small-scale farmers member through agricultural co-operatives, determine the effects of the credit facilities on the total output, income levels and living standards of the farmer in the study areas during the study period, ascertain the sources of credit available to agricultural co-operatives. The research questions that guided the study are; what is the amount of credit applied for by small scale member farmers' agricultural co-operatives? What is the volume of credit granted to small scale member farmers through agricultural co-operatives? What were types of credit facilities available for

small scale member farmers through agricultural co-operatives? What are the effects of credit facilities on the total output, income levels and living standards of the member farmers in the study areas during the study period through agricultural cooperatives? A survey design was used for the study. The population consisted of all the member of agricultural cooperatives societies in the study area only 16 was use, out of 423 members, only 136 were used for the study. To determine the sample size, Taro Yamani formula was used, for the distribution of sample size of the societies, [12] was adopted.

A questionnaire was developed by the research based on Likert 5-point scale was used for the study [4], frequencies, tables and percentages were used, used to compared responses between members of the agricultural co-operative societies. Research result shows that agricultural co-operative societies credit acquired from others financial institutions is high due to low interest rate. Result also shows that agricultural co-operative society member farmers acquired higher credit due to low interest rate of 5% to 10% of Federal Government effort to diversify the

economy through agriculture, and economic participation of members in the co-operatives, according to the cooperative principles, another reason is that members benefited on agricultural credits lead to high productivity than members that are not benefited on the agricultural credits. Result also shows that, agricultural co-operative societies members has higher co-operative effects, because of the credit facilities available for the member farmers to improved positively on the total output, income levels and living standard. It increases their productivity, farm size, among others. Results also reveal that, there are different sources of credit available to agricultural co-operatives in financing

their member farmers; this includes internal sources, borrowed sources and external among others.

It was recommended among others, that agricultural co-operatives should not depend only on acquiring credits from other financial institution more than their maximum liability that more credit facilities should be granted to agricultural co-operative society members internally. So they can boost their productive capacities, as a means to boost diversify Nigeria economy through agriculture, interest rates should further be reduced, and policy makers should promulgate laws that will favour agricultural co-operatives.

CONCLUSION

Based on the research findings, it is concluded that agricultural co-operatives if well managed will boost food production, and it will increased gross

domestic product and increases foreign exchange, which will help Nigeria than over depending on oil as our only source of major income in the country.

RECOMMENDATION

The following recommendation are made base on the research findings so as to facilitate the possibility of agricultural co-operative societies to boost productivity and also serve as foreign exchange with other countries with high technologies expertise.

the members, so that members will filled the co-operative effects. To do this, there should be effective coordination and control of all viable sources of funds to agricultural co-operative. Without funds, it will be difficult for the agricultural cooperatives to function well for the members to fill the co-operative effects.

1. Agricultural co-operative should ensure of more internal sources of credit than external sources. This could be done by encouraging members to save more, and the government should also make deliberate effort to promulgate Laws that will compile other financial institutions to grant loan to agricultural co-operative for not more than 5% interest rate on credit/ loans.
2. Members of agricultural co-operatives should make a deliberate effort to collect credits from their various co-operative societies. This can be done through co-operative education, like seminars, conferences, co-operative talk shows and printed materials to patronize the co-operative society, since they are owners as well as customers (Dual identity)
3. Agricultural co-operative should be properly funded to enable them carry out their primary responsibilities to

4. The government and the management committee should device more different type of credit needed for by members to carry their individual farming business. This can be done by carrying research studies on financing agricultural co-operative farmers, on access of agricultural credits in rural areas as well as the urban centres, to discuss their constraints on the type of credit available for them.

Contribution to knowledge

This researched work topic Effect of Financing by Agricultural Co-operative Societies on their Small Scale Member Farmers will contribute to knowledge of how agricultural co-operative will better be finance and how to access credit easily without constraints. This researched confirm the Perking Order Theory which says that small scale prefer to use internal

sources first and will resort to external sources only if internal sources are inadequate. Agricultural co-operative societies resulted for internal sources of credit, because it is cheaper to access and the interest rate is lesser compared to external sources of credit in the agricultural co-operatives.

The research refuted the Financial Contract Theory, where the theory says that asymmetric information arises when one of the two parties engaged in a business happens to have more or different information than the other. The member farmers in the demographic variables has different educational degree, that enable entered into any financial contract with good understanding of the terms and condition, this means that both the parties has equal knowledge on the financial contract they enter into.

Suggestion for Further Research.

1. The study should be replicated in other cities, rural areas as well as other states in order to confirm or disapprove the findings of the study.
2. Another study should be conducted using a different research design and other instruments like interview expo factor among others, if the same result will be achieved.
3. Research should be conducted on analysis of peasant farmers Access to agricultural credits in the rural areas.
4. Research should be conducted on the evaluation of agricultural credit facilities in rural production and urban development.
5. Research should be replicated using chi-square, Mann-Witney test one-way Anwa, among others in analysis the hypothesis to see whether a different result will be obtained.

REFERENCES

1. Achebe, S. (2006) Poverty, Growth and Inequality in Nigeria. National Bureau: Achievement Goals, the Kaduna declaration.
2. Adomola, C. E. & Umar O. S, (2001). *Capital Resource Sourcing and Allocation of Food Crops Enterprises, Journal of Agricultural and Development*.
3. Afolabi, M. (1993). *Introduction to Research for Writing Proposals, Projects and Thesis*. Zaria: Alpha publishers.
4. African Development Bank, Group. Small Holder Agriculture in East Africa: Working Paper No.105.AFDDB. (<http://www.afdb.org>).
5. African Development Report, (2001). Fostering Good Governance in Africa. Oxford University and Assessment Press. New York.
6. Akabueze, B. (2002). Financing Medium and Small Enterprise. Enugu: SNAPP Press Ltd.
7. Akinade, S. B. (2002). Capital Resourcing and Allocation of Food Crops Bulletin Central Bank of Nigeria.
8. Akigbande, A. U. (2013). *Evaluation of Agricultural Credit Utilization by Cooperative Farmers in Benue state of Nigeria*. *European Journal of Economics, Finance and Administration Sciences*.
9. Asogwa, B. C. (2015). *Analysis of Peasant Farmers Access to Agricultural Credit in Benue State, Nigeria*. *British Journal of Economics Management and Trade*.
10. Babangida, I. (2015). *World Co-operation Movement at a Glance*, Nagarta published, no KK 11 Jimeta Road, Asokolaye, Bye-pass, Kaduna North, Kaduna.
11. Ben, A. O. (2007). *Small Business Management, A Contemporary Approach, First Edition, data prints, Kaduna*.
12. Birchall, J. (2004). Cooperative and the Millinnium Development, International Labour Office, Geneva.
13. Brett, E. O, (1986). State Power Economic Inefficiency: Explaining Political Failure in Africa IDS Bulletin, volume 17 No 3.
14. Chuckwu, S. C, (2012). *Co-operative Education Published by John Best Publishing co. 54, Obiagu Road New Layout, Enugu*.
15. Chukwu, S. C. (1990). *Economics of Cooperative Business Enterprise*. Marbug: Marburg Consult.

- Committee for the Promotion and Advancement of Cooperatives, (1995). Capital Formation in Agricultural Cooperative, Report of COPAC International Technical Meeting Rome, 8-9 November, 1995.*
16. Costa, P. A. (2009). Agricultural Cooperatives and Farmers Organizations Role in Rural Development and Poverty Reduction, Mimeco Prepared for the Export Group Meeting of IYOC, Stockholm.
 17. Eastern Africa Farmers Federation, (2013). Agricultural Financing Models and Approaches for Farmers and Farmer Organization in Eastern African.
 18. Ebue, M. I, (2011). *Co-operatives and Small Business Management Enugu, first MELFIN PUBLICATIONS.*
 19. Ekwere, G. E. & Eden, I. D. (2014). *Evaluation of Agricultural Credit Facilities in Agricultural Production and Rural Development, Global Journal of Human Social Science and Geography, Geo-Sciences, Enviromental Disater, USA.*
 20. Evbunwam, G. O., (2013). Agricultural Value Chain Financing Micro and Small Scale Farmers in Negeria, Africa Managers Association Coferece, Ota Ogun State Negeria.
 21. Fairbairn, B. J., Bold, M., Fulton, L., Hammond, K., & Ish, D. (1991). Co-operatives and Community Development, Economics in Social Perspective. Saskkatoon Saskatchewan, Canada: Centre for the study of Cooperative, University of Saskatchewan.
 22. Felix, A. O. (2007). *Co-operative Administration and Management, 1 Amazing Grace Crescent Off 33 New Layout, Enugu.*
 23. Ghorbani, M, Kohansal, M. R, Mansoon, H. (2005). *Effect of Credit Accessibility of Farmers on Agricultural Investment and Investigation of Policy option in Khorasen-Rasavi, Province. Journal of Applied Sciences, 2005; 8:4455-4459.*
 24. High Level Panel of Exports, (2012). Food Security and Nutrition: Investing in Small holders Agricultural for Food and Nutrition (available at <http://www.fao.org/fscforum/discussions/smallholder-investment/vo>).
 25. Husseini, A, Adewumi, J. A (2008). Credit Acquisition and Utilization by Small Scale Farmers, Unpublished HND Project Submitted to the Department, College of Agriculture, Yendov, Benue state.
 26. Idachaba, F. C, (2006). Inputs and Output Marketing System. Collected Essay in Government and Nigeria Agricultural, Commodity and form Input Subsidies, University Press, Ibadan Nigeria.
 27. Idris, O. B. (2013). *Youth Employment Steps to Secure Nigeria Future Prosperity International Food Policy Research Institute Sustainable Solution for ending International Cooperative Alliance, (1995).Review of International Co-operative (R.C), Volume 88, Geneva.*
 28. Idris, O. B. (2015). Review of Small Farmers Access to Agricultural Credit in Nigeria, International Food Policy Research Institute, hunger and poverty Kano.
 29. Ihimodo, R. S, (2005). The Role of Group and Credit Co-operative in Rural Lending. Wolrd Bank Research.
 30. Ikepafen, O. A. (2015). Financing Agricultural Co-operative Societies in Nigeria, Ogun State.
 31. International Labour Organization, (2002). Co-operative for People Centered Rural Development, Retrieved from [htt://www.Malumndu.Blogspot.com.../role-ofCo-operative-Societies-inrural.html](http://www.Malumndu.Blogspot.com.../role-ofCo-operative-Societies-inrural.html).
 32. Joseph, E. O. (2010). *Practical Approach to Research Project writing, Published in Nigeria by Shovarypress.*
 33. Krejcie & Morgan, (1970). *Choosing Research Sample. Educational and Psychological Measurement Pp.*

www.iaajournals.org

607-610(2rd Ed), *New work Holt, Rinehart and Winston.*

34. Leistritz, F. I. (2004). *Measuring the Economic Impact of Producer Cooperatives in Merrett C D. and*
- 35.

Akut et al

Walzer N. (Eds) *Cooperatives and Local Development. Theory and Application for the 21st Century*, M. E. Sharpe Inc, New York.