
SOCIO-ECONOMIC CHARACTERISTICS AND SAVING PATTERN OF FARMERS' COOPERATIVE SOCIETIES IN JOS-SOUTH L.G.A. OF PLATEAU STATE

BY

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Abstract

The study examined socio-economic characteristics and saving pattern of farmers' cooperative societies in Jos South Local Government Area of Plateau State. Primary data were obtained from 120 farmers (Co-operators) purposively selected from 30 cooperative societies using semi-structured questionnaires and analysed using descriptive statistic and multiple regression techniques. Results showed that 73.33% of the cooperatives farmers were male. Also majority 91.66% have one form of education or the other and they had average age of 40.6 years. The average monthly disposable income and expenditure were ₦ 58,908.33 and ₦42,722.05 respectively. While the average monthly saving was found to be ₦ 6,865.83. Similarly, the average loans borrowed from cooperative societies were ₦ 48,866.80. Further the result revealed that education, household income and farm size were found to be positively significant variables that influenced the amount of money been saved by cooperative farmers, while household size was negative but had significant influenced. The study further disclosed that problems affecting the co-operators in the study area comprised loan default, low membership and inadequate fund among others. It is recommended that cooperative societies should advice farmers (co-operators) to avoid loan diversion and create awareness in the communities as well as assisting members to increase their capital base by sourcing funds through formal financing institutions.

Key Words: Cooperative Societies, Savings, Disposable Income and Loan

Introduction

Saving is crucial in a growing economy because it influences the level of economic activities of the nation. This is based on the facts that the money saved is pushed back into the system for investment which leads to growth in business. In 1934 cooperatives began in Nigeria following the submission of the Strickland Report. This was done after examining the 'Adashe' system as basis for introducing modern day cooperative societies in Nigeria (Strickland, 1934). Based on this the British India Cooperative System was introduced into British colonies in Africa (Siebel, 2004). Nigeria cooperative system was derived from local informal financial organization known as 'Assusu' or 'Adashe; in the local language. Co-operative organization in the country is based on three-tier structure; which are societies, unions and apexes.

According to International Cooperative Alliance (ICA, 2005) a cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspiration, through jointly – owned and democratically controlled enterprises. It could also be seen as a business owned and controlled equally by the people who use its services for their mutual

benefits (O'sullivan and Steven 2003). Also cooperative is define as a business enterprise or an organization owned and controlled by the members and they aim at rendering services for the mutual benefits to all members, in order to promote their economic activities.

Most farmers who are co-operative members fail to utilize the services of the society effectively and as a result suffered from lack of funds to invest, in order to increase productivity and standard of living. This also could be tied to the facts that most farmers deviate from their monthly obligation of saving a particular amount, which will enable them to obtain loan from the co-operative financing agency or commercial banks to increase their capital base. The lack of utilization of these facilities make some farmers financially stranded which also lead to inefficient functioning of the cooperative society. This also could be attributed to illiteracy of most rural farmers. Meanwhile, based on the prevailing situations, the some research questions have been raised: What are the socio-economic characteristics of the respondents? What are the factors influencing saving pattern of the cooperative members in the area? What are the loan conditions and saving procedures in the cooperative societies? What are the

constraints confronting the respondents in their societies in the study area?

The act of saving corresponds to nominal preservation of money for future use. It is the conservation of money. Saving is closely related to investment, which leads to increase in the level of income and production. The specific objectives of the study are to:

1. determine the socio-economic characteristics of the farmers (co-operators) in the study area
2. investigate loan conditions and savings procedures in cooperative societies in the study area
3. examine the factors influencing the amount of money been saved by the farmers (co-operators) and
4. identify the constraints faced by farmers in their respective cooperative societies in the study area.

Materials and Methods

The study was carried out in Jos South Local Government Area of Plateau State. The area is made up of four districts namely; Du, Kuru, Gyel and Vwang. The Local Government Area has a population of 301, 492 people (NPC, 2006), and a total land area of 1,037 square kilometres. The area is located within Longitude 8°42' to 8°58'N and latitude 9° 36' E to 9° 53' E. Moreover, it has a cold climate with an average mean temperature of 9°C – 25°C while the mean annual rainfall varies between 131.75cm to 146cm per annum. It is positioned at a high altitude measuring over 1450m above sea level.

In the study area; there were two hundred registered and functional farmers' cooperative societies. Generally, in the societies farmers voluntarily come together with a common bond of interest to achieve a lawful common economic and social need, making equitable contribution to the capital required and accepting fair share of the risk and benefits associated. The major task of cooperative member is saving of specific amount which will empower them to obtain loan from the society for agricultural production. (Adeyemo and Bamire, 2005). Further, farmers in the study area benefit from Cooperative Societies in terms of marketing farm produce and provision of other services such as finished goods, inputs at a low price; means of sourcing credit facilities from financing agencies; and it empowers its members to improve their quality of life as well as enhancing their economic opportunities through self-help.

Sampling Technique and Sample Size

A purposive sampling technique was used in selecting three districts out of four districts and two villages from each district totalling six villages in the

study area. This was based on the large number of farmers' cooperative societies in those areas. The sampling frame consists of 200 cooperative societies which were the registered and functional in the study area that was sourced from the Plateau State Cooperative Federation Limited. The three districts selected were Du district comprising of Kwang and Hei villages, Kuru district comprising of Danye and Dahwol villages, Gyel district comprising of Tahei and Bwandang villages. In each village five cooperative societies were selected and four respondents were further selected in each of the society, this gave total sample size of 120 respondents.

Data Collection

Primary data were collected using semi-structured questionnaires from 120 farmers (co-operators). Based on the list of the functional farmers cooperatives societies obtained from the Plateau State Cooperative Federation Limited, Thirty (30) farmers' cooperative societies were purposively selected from the specific districts and villages as stated earlier; and a total number of 4 questionnaires were given to each cooperative society. The types of data collected involves those on socio-economic characteristic of the co-operators and information on farming and saving pattern of farmers' cooperative societies.

Analytical Techniques

Mean, frequency distributions and percentage were used in analyzing objective number 1, 2 and 4. Multiple regression analysis was used in analyzing objective three. The aim of multiple regression analysis is to predict the single dependent variable by a set of independent or explanatory variables (Eboh, 2009). Hence, multiple regressions were used to determine factors influencing the amount of money saved by farmers in their respective cooperative societies. The model is implicitly specified as:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + b_{10}x_{10} + b_{11}x_{11} + e$$

Where,

- a = Intercepts
- $b_1 - b_{11}$ = Regression coefficient
- e = Error term

Y = Total monthly savings by a member (₦)

X₁ = Age of the members (years)

X₂ = Gender of cooperative farmers (1 for male, 0 for female)

X₃ = Household size (Number of people)

X₄ = Occupation (1 for farming, 0 for otherwise)

X₅ = Form of education (Numbers of years)

X_6 = Year of membership in cooperative (Numbers of years)
 X_7 = Farm size (Number of hectares)
 X_8 = Monthly income (₦)
 X_9 = Household expenditure (₦)
 X_{10} = Amount of Money borrowed (₦)
 X_{11} = Interest charged on borrowed money (₦)
 e = Error Term

Results and Discussion

Socio-Economic Characteristics of Cooperative Farmers:

The socio-economic characteristics play a vital role in creating awareness and knowledge among members and hence influence their farming and savings variables. The demographic variables of interest considered in this research include age, sex, education, occupation and years of experience in cooperative activities. The results in Table 1 revealed that cumulatively, 83.17% of the respondents were between the ages of 21-50 years. This indicates that the farmers were in their active and productive years being within the world age of labour force. This finding is in conformity with that of Adeyemo and Bamire (2005) and Abubakar, Yakubu, and Bube (2011) in which they disclosed that farmers between the ages of 17-53 years are very active in their economic activities. Hence, they were capable of making meaningful contributions to the development

of the cooperative societies for their mutual benefit. Also the result showed that while only 8.33% did not acquire formal education, the remaining respondents had one form of education or the other. This implied that majority of the farmers were literate and this level of awareness may assist them in tracking developments in new technologies as well as to handle the affairs of the societies effectively. This result is in line with the findings of Adeyemo and Bamire (2005) who stated that education influence farmers investment decisions in relation to savings. Further the result disclosed that most of the respondents (40.00%) engaged in farming and trading, while 39.17% of them combined farming with civil service. This means that diversification in occupation facilitates better income generation, which still help the farmers to stand in terms of risk and financial crisis due to crop failure. This finding agrees with that of Omolehim, Ajayi, Adeniyi and Ajayi, (2008) who revealed that occupational diversification boost income of the farmers. Similarly, the result indicated that majority 73.33% and 80.00% of the respondents were male and had 1-10 years of experienced in their societies. This result disagreed with the finding of Abubakar et al (2011) in which all the co-operators (100.00%) were male in the study area. This may be due to socio-cultural and religion background of the respondents in the study area.

Table 1: Socio-economic characteristics of the farmers (co-operators) in the study area

Variables	Frequency	Percentage (%)
Age		
21-30	19	15.83
31-40	47	39.17
41-50	35	29.17
51-60	17	14.17
61-70	2	1.66
Total	120	100.00
$\bar{X}=40.6$ years		
Sex		
Male	88	73.33
Female	32	26.67
Total	120	100.00
Form of education		
No formal education	10	8.33
Primary education	22	18.33
Secondary education	43	35.83
Tertiary education	45	37.50
Total	120	100.00
Occupation		
Farming only	25	20.83
Farming and trading	48	40.00
Farming and civil service	47	39.17
Total	120	100.00
Experience in societies		
1-10	96	80.00
11-20	23	19.17
21-30	1	0.83
Total	120	100.00

$\bar{X}=8.0$ years (years of experience in societies)

Source: Field Survey, 2010

Information on Savings by Farmers in Cooperative Societies

This section covered the financial information as related to the saving pattern among respondents.

Farmers Monthly Disposable Income and Expenditure

Table 2 showed the distribution of respondents according to monthly income and expenditure. The result revealed that majority (58.33%) and (51.67%) of the respondents had

monthly income and expenditure of ₦1,000-₦50,000 and ₦1,000-₦40,000 respectively. In addition, the average monthly income and expenditure were ₦58,908.33 and ₦42,722.05 respectively. Despite the fact that respondents engaged in more than one economic activity, their income levels were low. This may be due to inflation and low output as a result of poor resources as well as low investment which in turn lead to fewer earnings. However, farmers low income level was attributed to their smaller farm sizes by Odaemenem, (2010).

Table 2: Farmers (co-operators) monthly disposable income and expenditure

Variable	Frequency	Percentage (%)
Farmers' monthly disposable income (₦)		
1,000-50,000	70	58.33
51,000-100,000	41	31.17
101,000-150,000	6	5.00
151,000-200,000	3	2.50
Total	120	100.00
$\bar{X} = ₦ 58,908.33$		
Farmers' monthly expenditure (₦)		
1,000-40,000	62	51.67
41,000-80,000	53	44.17
81,000-120,000	5	4.16
Total	120	100.00

$\bar{X} = ₦ 42,727.05$ (Monthly expenditure)

Source: Field Survey, 2011

Loan Conditions and Duration in Cooperative Societies

Table 3 shows distribution of respondents according to conditions for obtaining loan and loan duration in their societies in the study area. Accordingly, the result disclosed that majority (55.00%) of them mentioned membership plus contributions were the basic conditions for obtaining loan, while membership only constituted 16.67% as a

condition for obtaining loan. Thus, for a co-operator to have access to loan must be a financially contributing in the societies. This agrees with the findings of Adeyemo and Bamire (2005) which stated that for a farmer to obtain loan from the cooperative society entails been a registered member with financial contribution in the society. Also the result revealed that majority (74.17%) of the respondents had long duration of payment of their loans.

Table 3: Loan condition and duration in cooperative societies

Variables	Frequency	Percentage (%)
Loan conditions		
Membership only	20	16.67
Membership and contribution	66	55.00
Contribution only	18	15.00
Contribution and application	16	13.33
Total	120	100.00
Loan duration (Months)		
1-12	31	25.83
13 - 24	89	74.17
Total	120	100.00

$\bar{X} = 15.4$ months (Loan duration)

Source: Field Survey, 2010

Amount of Loan Obtain and Interest rates

The result in Table 4 showed the amount of loan obtain and interest rate in cooperative societies. The result revealed that majority 73.33% of the respondents borrowed between ₦1, 000 – ₦60,000, while 22.50% who borrowed up to ₦ 60,001 to ₦ 120,000. However, the average amount borrowed in the societies was found to be ₦ 48,866.80. The small

amount borrowed by the majority of the farmers indicates that most of the respondents operate at small scale levels. Further, the result disclosed that majority (57.50%) of the members obtained loan at an interest rate of 10% and the average interest rate charged in the societies was 10.6%. This implies that a moderate interest rate which aid borrowing and repayment of loan was used in the societies.

Table 4: Amount of loan obtained and interest rate

Variables	Frequency	Percentage (%)
Amount of loan obtained (₦)		
1,000 - 60,000	88	73.33
60,001 - 120,000	27	22.50
120,001 – 180,000	5	4.17
Total	120	100.00
$\bar{X} = ₦ 48,866.80$		
Interest rate (%)		
5	5	4.17
10	69	57.50
11	23	19.17
12	13	10.83
15	10	8.33
Total	120	100.00

$\bar{X} = 10.6\%$ (Interest rate)

Source: Field Survey, 2010

Monthly Savings

This is a particular amount of money kept monthly by members in their societies for future use. The result in Table 5 showed that majority (68.33%) of the co-operators saved amount which range from ₦500 – ₦5,000 per month. The average monthly saving was found to be ₦ 6,865.83. This implied a low saving, which could be due to high household

expenditure and low monthly income as well as the presence of other saving institutions in the communities. In addition to this, most of the respondents disclosed that the method of saving is by depositing fixed amount monthly, which in turn affect the volume of money being saved in the societies But in some other societies there was no monthly fixed deposit.

Table 5: Monthly savings by co-operators

Amount (₦)	Frequency	Percentage
500 – 5,000	82	68.33
5,100 – 9,600	16	13.33
9,700 – 14,200	14	11.67
14,300 – 18,800	5	4.17
18,900 – 23,400	3	2.50
Total	120	100.00

$\bar{X} = ₦ 6,865.83$ (Monthly savings)

Source: Field Survey, 2010

Factors Influencing Savings in the Cooperative Societies in the Study Area

Multiple regression model was employed to determine the factors influencing amount of money saved by members of cooperative societies. The coefficient of multiple determinations (R^2) was 0.460. This implies that 46% of the variation on monthly savings among the respondents in the study was accounted for by the explanatory variables included in the model. The result further indicated that the F-ratio of 8.32 was significant, showing the joint effects of the explanatory variables included in the model ($X_1 - X_{11}$) on monthly saving (Y). The result in Table 6 revealed that education had positive coefficient and highly significant ($P < 0.001$). This implies that

educational level of the co-operators may have a positive influence on savings in societies. This could be due to the fact that, increase in level of education, increases farmers awareness about the importance of saving for future use. Also household size had a negative coefficient but statistically significant at ($P < 0.01$). The larger the household the smaller the size of savings and this scenario might be attributed to higher expenditure requirements. This result is in conformity with the findings of Babatunde et al. (2007) which showed that the larger the household, the lower the savings. Similarly, household income and farm size were found to be positive and significant at $P < 0.001$ and $P < 0.01$ respectively. This implies that increase in the levels of the two variables results to a corresponding increase in the level of the

savings. This could be expected because increase in income, other thing being equal may lead to increase in savings by the farmers. This agrees with the finding of Adeyemo and Bamire (2005), which disclosed that income, had a positive influence on

saving. The result further revealed that the larger the farm size the higher the level of savings among the respondents and this might be attributed to increased incomes from higher outputs of the larger farm sizes.

Table 6: Regression estimates on determinants of savings in cooperative societies.

Variable	Co-efficient	t-values
Constant	7.224337	15.66***
Gender	0.1525146	1.20
Age	-0.0095318	-1.18
Education	0.026086	1.85***
Household size	-0.0905157	-2.97**
Years of co-operative membership	0.0252143	1.55
Household income	6.6906	3.84***
Household Expenditure	6.85-06	1.69
Amount of Money borrowed	1.4407	0.07
Interest rate	0.0446133	1.45
Occupation	0.0002485	1.21
Farm size	0.1090703	2.64**
R ²	0.460	
R ² (Adjusted)	0.405	
F-Statistic	8.32	

** = Significant at P<0.01

*** = Significant at P<0.001

Source: Field Survey, 2010.

Problems Associated to Cooperative Activities in the Study Area

The result in Table 7 showed the problems encountered by co-operators in various societies in the study area. The most serious problems as identified include loan repayment default (41.26%), low membership (25.56%) and inadequate fund by

members 24.22% to enable expansion of farm size and consequent increase savings. This result is in line with the findings of Okorie and Iheanacho (1992) who discovered that inadequate credit and low membership among other constraints were found to be contributors to inefficient rural savings.

Table 7: Problems associated to cooperative activities in the study area

Constraints	Frequency	Percentage (%)
Inadequate fund	54	24.22
High interest rate	6	2.69
Loan repayment default	92	41.26
Low membership	57	25.56
Low saving from members and/or	14	6.27
Total	223*	100.00

* Multiple responses

Source: Field Survey, 2010

Conclusion and Recommendation

It can be concluded from the study that majority (91.66%) of the members was literate. Further, the findings in Table 1, indicates that cumulatively, 83.17% of the respondents were between the ages of 21-50 years. Similarly, the result revealed that education, household income and farm size were found to be positively significant variables that influenced the amount of money been saved by cooperative farmers. The main findings of the study

in Table 5 indicated that majority (68.33%) of the co-operators, their monthly savings were between ₦500 – ₦5,000 and the average monthly savings was ₦ 6,865.83. This implied a low saving in the study area. More importantly, the result of the study revealed that the societies were confronted with constraints of loan default, low membership and inadequate fund. Thus, it is recommended that cooperative societies should seek means of assisting members to increase their savings and capital position by sourcing funds

through formal financing institutions; and co-operators should be advised to avoid loan diversion

in order to reduce loan default in their societies.

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