

Analysis of Saving Pattern of Co-Operative Farmers in Sardauna Local Government Area of Taraba State, Nigeria

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ABSTRACT

The study analyzed the savings pattern of cooperative farmers in Sardauna Local Government Area of Taraba State, Nigeria. Primary data were sourced through structured questionnaire administered to 110 respondents drawn using simple random Sampling technique. Data analysis was done using descriptive statistics and multiple regression analysis of Ordinary Least Square (OLS). The study found that 56% of the respondents were mostly men below the age of 40 years, majority (55%) had household size between 1-10 people, and farming was the predominant occupation (80.9%) of the respondents. Their land holdings were mainly small scale in nature between 0.5-4 hectares. Also, majority (93.6%) had an annual income ranging from ₦50, 000 to ₦150, 000, 60% of the respondents were literate with varying level of education ranging from primary to tertiary level. The multiple regression result on savings revealed that the coefficient of determination (R^2) for saving was 0.6465 (i.e. 65%). This means the variation in saving were accounted by 65% of the independent variables used for the analysis. The multiple regressions results on the socio-economic characteristics of the respondents influencing their savings shows that, household size (X_1), educational level (X_2), cooperative experience (X_6) and credit facilities (X_7) positively influenced the respondents saving pattern in the study area at 5 percent level of significance. The study also identified inadequate finance, high number of dependants, low income of farmers were some of the constraints on saving in the area. Recommendations were made that government should establish more community banks in rural areas as well as promote economic activities through disbursement of credit in the area in order to boost savings by the Cooperative farmers.

Keywords: Analysis, savings pattern, Cooperative farmers, Sardauna Local Government Area, Taraba State

1. INTRODUCTION

Agriculture in Nigeria as in most developing Countries of the world is characterized by several small scale farmers that are producing at subsistence level using crude implements in cultivating small hectares of land [1]. Poor people in developing countries are less privileged and lacked access to formal financial services, a situation that hinders them from contributing to the economic growth of their countries. [2]. Most farmers have limited resources, a factor that limits their productivity, investment, savings and income. In the midst of these, farmers have resulted to a number of options to enhance their farm production activities, increase household income and improve their well-being. One of these options includes pooling their individual limited resources in order to work together as members of a cooperative society. And cooperative is defined as a voluntary association of people with common goals, who have come together to do business for the good of all the members [3]. The idea of cooperation, where people work together on mutual benefits has been practiced since mans existence, but cooperative as a form of business organization began during the era of industrial revolution [4]. Cooperatives are of different types and purposes, but the most common type in rural areas of Nigeria appears to be farmer's cooperatives. These are association of farmers who voluntarily come together to achieve a common goal through a democratically controlled business organization. Members contribute equitably to the capital and personnel requirements of their cooperative and accept a fair share of the risks and benefits of their undertakings [5].

The most important economic obligation of members of a farmer cooperative society is savings. Farmers are expected to save a specific amount of money daily, weekly, monthly or quarterly as it is convenient for the group and the individuals. The savings is important for agricultural production of the cooperative farmers because it is used as credit for lending to needy members and the principal and interest are calculated to be repaid back either install mentally or otherwise. This arrangement allows members access to credit at the onset of the farming season which could boost farm production and income of the farmer. The amount of loan that a farmer could obtain however depends on the amount of saving he/she has in the society. The amount that individual farmers could save also depends on a number of factors such as income of the farmer, household size etc [6].

Household savings plays an important role in the economic development of both developed and developing nations, due to its significance influence on the circular flow of income in the economy [7]. Savings are important means of improving well-being, insuring against times of shocks and providing a buffer to help people cope in times of crisis [8]. Savings is normally considered in economics as disposable income minus personal consumption expenditure. It could also be regarded as income that is not consumed immediately by buying goods and services. Income in this concept includes earning from all sources during a year. While consumption is the total amount of goods and services consumed by the rural household during a year and this includes expenditure on food, clothing, housing, light, travel education, health care, social ceremonies, recreation and charity. According to [9,10] savings may be made in kind such as jewelry, land,

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livestock or dowry. It may still be in the form of currency notes deposited in banks or more often hoarded.

In recent times, there has been an upsurge of interest among developing economist, government and international donors to increase financial savings in developing countries, particularly in rural areas and among poor households [11], that are predominantly small holder farmers. This is because most of the farmers lack adequate resources (funds, inputs) to engage intensively on agriculture. However, in order to overcome their resources constraints, farmers have realized the importance of pooling their limited resources together by coming together to form cooperative societies for their mutual benefits. Various scholars such as [12, 13, 14] have studied the savings and investment pattern of cooperative farmers in different parts of Nigeria.

Therefore, this study considered it pertinent to investigate and report on the saving pattern of cooperative farmers in Sardauna Local Government Area (LGA) of Taraba State, Nigeria. This will also provide empirical information in the study area to policy makers, governments and other stakeholders aimed at improving the economic condition of rural farm household. Therefore, the broad objective of this study was to analyze the savings pattern of cooperative farmers in Sardauna Local Government Area of Taraba State, Nigeria. The specific objectives were to describe the socio-economic characteristics of the respondents, determine the influence of some socio-economic characteristics on the savings pattern of cooperative farmers in the study area and to determine the factors that militate against savings in the area.

2. METHODOLOGY

2.1 The Study Area

The study was conducted in Sardauna Local Government Area of Taraba State (Mambilla Plateau), Nigeria in July, 2013. The Local Government is sharing boundary with Cameroon Republic in the East and South West, South East with Kurmi Local Government and in the North with Gashaka Local Government Area. It is a mountainous area with an altitude of about 1830 meters above sea level around Nguroje [15].

The total area of the plateau under crop production is about 2000 hectares, it has temperate climate with constant rainfall/water-falls which has potentials of generating hydro-electric power. The major agricultural products found in the area are Coffee, Tea, Kola nut, Irish Potatoes. Also, livestock production is predominant in the area.

2.2 Method of Data Collection

The data for the study were collected from both primary and secondary sources. The primary data were obtained through a structured questionnaire while the secondary data were sourced from journals, textbooks, seminars, internet sources and conference papers.

2.3 Sampling Technique and Sample Size

Members of registered cooperative societies in the study area constituted the population of this study. A sampling frame of 563 members of five (5) thrift cooperative societies namely Magu (132), Kakara (87), Nguroje (81), and Gembu 'A' (111) and Gembu 'B' (152) were obtained and used for the selection of the respondents. Simple random selection of 20 percent of the respondents in each cooperative was done through lottery method to give a total sample size of 113 respondents for this study.

2.4 Method of Data Analysis

Data collected were analyzed using both descriptive statistics and multiple regression analysis. The descriptive statistics includes: frequency counts, percentages and means and were used to captive objectives 1 and 3 respectively while multiple regression was used to analyzed objective 2.

2.5 Model Specification

Multiple regression analysis was used to determine the influence of some socio-economic characteristics on the saving pattern of cooperative farmers. The implicit function is presented as follows:

$$Y = F (X_1, X_2, X_3, X_5, X_6, X_7, U_1)$$

Where:

- Y = Savings (Naira)
- X₁ = Household size (number)
- X₂ = Formal Schooling (years)
- X₃ = Age (years)
- X₅ = Sex (dummy: Male = 1, Female = 0)
- X₆ = Cooperative experience (years)
- X₇ = Total credit obtained by members (Naira)
- U₁ = Error term.

3 RESULTS AND DISCUSSION

3.1 Socio-economic Characteristics of the Respondents

Table 1 shows the socio-economic characteristics of the cooperative farmers. The findings revealed that about 56% of the respondents were male and young adult (55%) of below 41 years of age. This implies that male are predominant in cooperatives and are in their productive age who can work aggressively in farming in order to enhance their savings in the area. This is similar to [16] who reported that the mean age of farmers was 35 years which is a very strong age group and that majority of the farmers were men.

The study also showed that most (80.9%) of the respondents were married and 44% had a household size of between 6-10 people. This implies that cooperative farmers in the study area are likely to have more family labor on the farm. This is expected to reduce the amount of money spent on hired labor, thereby enhancing their savings. This result agreed with the findings of [17] who

identified labor as one of the variables that significantly influence output.

Table 1: Socio-Economic Characteristics of Respondents (n = 110)

Variable	Frequency	Percentage (%)
Gender		
Male	61	56
Female	49	44
Age (Years)		
20-30	24	22
31-40	36	33
41 and above	50	45
Household size		
1-5	46	42
6-10	48	44
11 and above	16	14
Marital status		
Married	89	80.9
Single	11	10
Widow/widower	10	9.1
Educational level		
Non formal education	44	40
Primary education	19	18
Secondary education	25	22
Tertiary education	22	20
Annual income (₦)		
50, 000	59	53.7
100, 000	23	20.9
150, 000	21	19.0
151, 000 and above	07	6.4
Occupation		
Farming	60	54
Business	18	17
Civil servant	22	20
Trading	10	9
Farm size		
<1	31	28
1-2	49	44
3-4	26	24
5 and above	04	4

Source: Field Survey, 2013

Table 1 also revealed that most (60%) of the respondents were literate and may be capable of employing savings technique that will enhance their livelihood. Also, 54% of the respondents were fully engaged in farming as their main occupation and majority (96%) cultivated between 1-4 hectares of farmland. This implies that, cooperative farmers in the study area were predominantly small scale farmers. This is the characteristics of agriculture in most rural areas in Nigeria, where farmers produce for family consumption, thus this leads to low income and low savings of the farmers in the rural areas. This agreed with the findings of [12] who found out that the higher the farm size of a household, the higher the propensity to save. He further stressed that, savings performance among rural

households might vary considerably depending on the farm size. The findings in Table 1 also revealed that, most (53.7%) of the respondents had an annual income of ₦50, 000. This implies that majority of the cooperative farmers had low income which could affect their savings.

3.2 Savings Pattern of Cooperative Farmers

The results on the estimated savings of the respondent in table 2 show that majority (78.2%) of the respondents saved between ₦1000-₦5000 per month. This implies that majority (78.2%) of the cooperative farmers have lower savings rate. The findings on reasons for saving in Table 2 shows that 43% of the respondents save their money for family use, 27% for emergency cases, and 11% save for future use and paying of school fees and 8% save for building houses. The result shows

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that most 43% of the respondents save to take care of their family. This finding agreed with [17] who explained that farming household saves for the following reasons: to prepare for their retirement, for future needs such as children education or providing a new home. They also save to prepare for emergency such as loss of job or unexpected medical bills and purchase of a new car. Also, the results reveal that majority (51%) of the respondents save in the bank, 28% at home, 12% in local banks (Adashi) while 9% save in club/society. Majority of the

respondents save in Bank for safety or security reasons and also for any emergency. This conformed to the result of [11] who identified emergency reasons and loans as the major reason for saving in Banks. This shows that, poor household need different types of deposits to deal with different needs. Voluntary savings account allows withdrawals at any time for emergencies and also enable household to accumulate money for expected expenses.

Table 2: Savings Pattern of Cooperative Farmers (n = 110)

Variable	Frequency	Percentage (%)
Estimated Monthly Saving (₦)		
1, 000-5, 000	86	78.2
6, 000-10, 000	10	9.0
11, 000 and above	14	12.8
Major reason for saving		
Care for family	47	43
Build houses	9	8
Buy goods in the future	12	11
Pay school fees	12	11
Emergency	20	27
Major Place of saving		
Bank	57	51
Home	30	28
Club/Society	10	9
Local Bank	13	12
Frequency of Savings		
Regularly	57	51.9
Occasionally	53	48.1
Source of Training on Savings		
Extension agents	69	62.7
Local Organization	25	22.7
Club/Society	14	12.8
NGO's	02	1.8

Source: Field Survey, 2013

Table 2 also revealed the result on frequency of savings that 51% of the respondents save regularly while 48.1% of the respondents occasionally save. The result shows that the respondents appreciate the need for savings and therefore save part of their income on regular basis. The analysis also revealed that 22.7% of the respondents received training on savings through local organizations, 62.7% received training through extension agents, and 12.8% from clubs/societies while only 1.8% of the respondents through NGO's.

3.3 Socio-economic Characteristics of Cooperative Farmers Influencing Savings

Table 3 shows that 65% of the variations in cooperative farmers savings were explained by the independent variables included in the model. The F-Statistics (11.75) confirms the suitability of the regression equation. It indicated that household size (X_1) has positive coefficient and significant with saving at 5% level. This contradicts the a priori expectation, the higher the number of a household size the less they save.

Table 3: Regression Results on Socio-economic Characteristics of Cooperative farmers Influencing Savings

Variable	Coefficients	Standard error	T-Value
Household Size (X_1)	0.106876	0.028138	3.798***
Educational Level (X_2)	0.026331	0.013056	2.017**
Age (X_3)	0.001482	0.009315	-0.159
Farm income (X_4)	9.72E-06	1.41E-06	6.894***

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Sex (X_5)	-0.313106	0.150785	-2.077**
Cooperative experience (X_6)	-0.117997	0.042749	-2.766***
Credit (X_7)	3.50E-06	5.29E-06	0.661
	R ²	0.6465***	
	F-Value	11.75221	
	Constant	7.427***	

Source: Field Survey, 2013

*** = Significant at 5% level

** = Significant at 1% level

The results shows that educational level (X_2) and the income (X_4) were positive and statistically significant with saving at 1% and 5% level respectively and agreed with the popular believe that educational level of farmers is a strong determinant of savings. This means the higher the level of education of the farmers, the more will be their enlightenment in savings. This conformed to the findings of Akpan et al. (2011), who reported a significant positive relationship between educational level of the farmers and their participation in savings. Similarly, household income is believed to be a strong determinant of saving, this is because the more the income of the farmers, the higher the propensity to save.

Age has a positive coefficient and not significant with savings, this is in agreement with a priori expectation. This suggests that saving pattern is higher among the young farmers. The reason is obvious, aged farmers do not save more, probably due to their inability to engage in productive enterprises which could be as a result of declining productivity. Gender variable also has negative coefficient but significant at 1% level which contradicted the a priori expectation. The negative relationship between gender and saving is that irrespective of one's gender one can either save or not.

Cooperative experience (X_6) had negative coefficient but significant at 5% level. This is contrary to the a priori expectation. This variable could not have influence on the respondents' savings probably due to lack of their commitment in cooperative activities. Credit (X_7) as shown in Table 3 has a positive coefficient but was not significant. This however is contrary with the a priori expectations. This may be attributed to lack of credit access to boost the farmer's economic activities for savings.

3.4 Problems of Savings

Table 4 shows that 100% of the respondents had problem of inadequate finance for saving. This means they will not engaged in more productive ventures to raise their income to save. Adesimi (1983) suggested that, the larger the income the greater the propensity to save. Income is expected to increase access to more productive resources. Majority (91.8%) of the respondents had the problem of high dependants/relations. This finding agreed with [14] who pointed out that one of the factors negatively influencing the saving pattern of the cooperative farmers is household size. The larger the households size, the more will be the expenditure on family needs with less to save.

Table 4: Problems of Saving by Cooperative Farmers (n = 110)

Problems	Frequency*	Percentage (%)
Inadequate finance	110	100
High number of dependants/relations	101	91.8
Lack of Education on Saving	74	67.2
Inadequate saving sources	101	91.8

Source: Field Survey, 2013

*Multiple responses

Lack of savings culture by cooperative farmers was reported as another problem to 67.2% of the respondents. This indicates the respondents were ignorant of saving and lacked saving culture and therefore probably spent all their income on consumption. The result also revealed that 91.8% of the respondents lacked adequate formal sources of saving. These findings agreed with Adeyemo and Banire (2005) who identified farmers

numerous problems that hinder their attaining to full potential in food production and saving as high input price, low access to saving, inadequate funds, unstable policies and general poverty.

4. CONCLUSION AND RECOMMENDATIONS

This study analyzed the saving pattern of cooperative farmers in Sardauna Local Government Area of Taraba state Nigeria. The results confirmed that an average cooperative farmer in the study area is a small scale holder cultivating between 1 to 4 hectares of farmland. Their annual income levels were observed on the average to be low (N50,000), which results into their low savings, mostly to meet family needs. The study further shows that a higher percentage of the respondents (about 51%) regularly save in banks with training on savings received from extension agents. Also, the study revealed that socio-economic characteristics such as household size, educational level, and farm income positively influenced the respondents saving pattern in the study area. However, it identified inadequate finances, high number of dependants, inadequate education on savings and sources of saving as major problems militating against effective saving culture in the study area.

Considering this scenario, policies that would encourage the formation and development of farmer's cooperative society should be put in place by government.

Awareness Programme on birth control should be directed at cooperative farmers to control the household's size which is one of the significant factor that affected saving. The societies should also be financially equipped by government and other financial institutions so that they would have enough funds to give as credit for on-lending to the farmers through the societies. Policies that would increase market access and maintain a stable market price should be pursued. This would particularly allow them to earn more, save more and invest in more productive economic ventures. Also, more community banks should be established in rural areas in order to provide safe/modern sources of saving for the cooperative farmers in the area.

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