



## Comparative Analysis of Savings Behaviour of Co-Operative and Non-Co-Operative Farmers in Bayelsa State, Nigeria

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### ABSTRACT

*The paper comparatively analyzed savings behavior of co-operative and non-co-operative farmer in Bayelsa State of Nigeria. The objectives of the paper were to compare the amount and frequency of savings of co-operative and non-co-operative farmers; to compare the determinants of savings among co-operative and non-co-operative farmers; and to determine the relationship between the co-operative membership and propensity to save among co-operative and non-co-operative farmers in the State. The population of the study comprised of 500 members of fifteen purposively selected registered farmers multipurpose co-operative societies in Bayelsa State. Descriptive survey research design was adopted. A total sample of 444 respondents (222 cooperative farmers and 222 non-cooperative farmers) was selected using multi stage sampling technique. Both primary and secondary data were used for the study. Data obtained were analyzed using descriptive statistical tools of mean, table, frequency distribution, mean percentages. Three hypotheses were formulated and tested using multiple regression models and The study revealed that cooperative membership stood out as a significant determinant of savings in the comparison of cooperative and non-cooperative farmers. Furthermore, there is a significant difference in both amount and frequency of savings of cooperative and non-cooperative farmers. Co-operative farmers saved more than non-co-operative farmers. The study concluded that cooperative membership have strong effect in the propensity to save. It was recommended that co-operative societies should be seen as critical partners in economic empowerment and be given a pride of place in different economic sectors in Bayelsa State.*

**KEYWORDS:** *Savings, co-operative farmers, non-co-operative farmers, Bayelsa State.*

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### I. INTRODUCTION

Mobilization of savings is necessary if any society can proceed into self –sustaining economic growth. Wodimu, (2011) postulated that most Farmers Multipurpose Cooperative Societies (FMCS) provide opportunities for savings mobilization as well as provision of access to many investment opportunities. Jalo, Onu, and Margwa (2015) observed that membership of some groups could wield a strong influence on the capacity and willingness to save. One of the basic objectives of organizing and expanding cooperative societies in the work place is to enhance the ability and propensity to save money (Daniel, 2007). According to Agu (1986) the only financial institution that can successfully be a channel for mobilizing savings in the rural areas are those that are completely rural based and not outpost of profit maximization. Along this thinking, international organizations recognized the need to involve Non-Governmental organizations as veritable and effective channels for providing financial services to the poor income farmers in rural areas in Nigeria (Oke,

Adeyernmo and Agbonlahor, 2007). To this end many credit based Non-Governmental Organizations undertaking lending and savings on the principle of self-help groups emerged. The most popular among them is cooperative societies (Mkpado, and Arene, 2007).

Cooperatives are formed by people who share common interests pooling their resources together to establish a business enterprise jointly owned by members. Low income households need financial institutions that will serve their needs conveniently. Rural areas are generally underserved by formal financial institutions owing to high cost and inherent risk of providing financial services to mostly small scale rural clients who generally lack collateral and must depend on unreliable incomes from agriculture.

Finance is of primary challenge to the growth of income in both agriculture and non agriculture sectors where most low income households find themselves. Low savings or near absence of it has resulted into inadequate financing of agricultural production as well as weak exploitation of economic opportunities. Low income households need financial services that assist them raise capital for investments, acquires lump sum of money and also increase their propensity to save money. In fact, low investment that characterized poor households is usually traced to weak financial sector that fails to recognize the needs of poor people.

Many investments designed to enhance industrial productivity are dependent on access to appropriate financial services (World Bank, 2006). At the farm level, lack of finance constrains the ability of farmer to clear land, introduce irrigation, purchase input such as fertilizers and seeds, pay for machinery services, undertake storage, bridge the pre-harvest income gap, smooth seasonal income flows and ensure against price of yield services.

It is believed that even though savings is a function of economic and social factors, lack of savings agencies contribute to Low savings capability of rural dwellers. According to (CBN, 2005) the size of the unserved market by the existing financial institutions is large. The average banking density in Nigeria is one financial institution to 32,700 inhabitants. In the rural areas it is one financial institution to 57,000 inhabitants, that is less than 2% of rural households have access to financial services (World Bank, 2006). This reveals the existence of huge gap in the provision of financial services to a large proportion of the active but poor and low income groups.

Olashore, (2012) in his contribution said economic indicators showed that 70% of the Nigeria population live and engage in economic activities in the rural areas. It means that the rural economy in Nigeria encompasses a substantial proportion of the countries human and natural resources and therefore requires financial services for development, yet they are financially excluded. Practically most people who are financially excluded struggle to save because they lack the motivation, discipline, mechanism and trust needed to save. According to Nwobi, (2014) With the non-existence of formal saving banks, farmers and other rural dwellers if they save at all, use traditional methods to save the little surplus left with them, this they do by storing money in pool, or rubber container and bury it. Others put theirs inside cracked wall or under beds. Some farmers may also try to save by building up some loose assets like livestock or tree crops. These types of savings hardly find their way into the national monetary system. These are the gaps that cooperative societies fill for most people who belong to them.

The objectives of the paper are to examine the determinants of saving behaviour and to compare the amount and frequency of savings of cooperative and non-cooperative farmers in the study area; and to determine the propensity to save among cooperative and non-cooperative farmers.

### **Hypotheses**

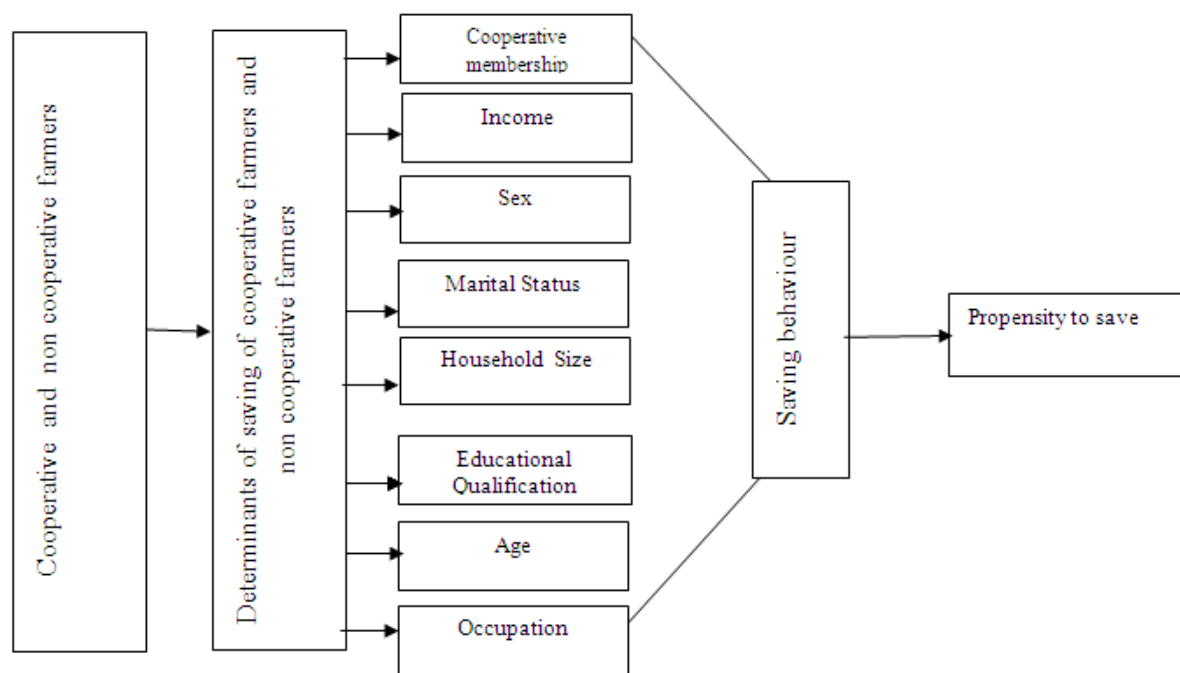
- i. **H<sub>0</sub>:** There are no significant difference in the amount and frequency of savings of both cooperative and non-cooperative farmers.
- ii. **H<sub>0</sub>:** There is no significant relationship between cooperative membership and propensity to save.

### **Conceptual Framework**

Households' savings behavior is largely influenced by several variables like the perception of savings of individuals, their ability, willingness, motivation for savings and the opportunity to save. This deliberate decision on the part of the households to save in order to meet future needs depend on a number of factors. One of these was the ability to save which in turn depends on a household disposable income. The second was the propensity to save as influenced by socio-economic characteristics like co-operative membership, income, sex, marital status, household size, education, age, occupation and dependency ratio. The third was the opportunity cost to save and returns on savings. Determinants of savings can therefore be influenced by several variables such as socio-economic characteristics of the co-operative and non-co-operative farmers. These variables influenced savings behavior. Literature on savings behaviour is filled with empirical evidence about the role of co-operatives on savings. Non co-operative farmers are also influenced by some of these variables. Propensity to save is a function of socio-economic characteristics and other variables. For instance, households' obligation to train the children will affect the propensity to save. Again, membership of thrift and credit co-operative may

increase access to credit. Household size can have a positive effect on the propensity to save, when many of its members are working, otherwise, will have a negative effect on propensity to save when many of its members are dependents.

### Conceptual Framework



Source: Researchers' construct 2019.

## II. THEORETICAL FRAMEWORK

### Absolute Income Theory

This research work is anchored on The Absolute Income Theory that was propounded by Keynes in 1936 to explain the saving behaviour of economic agents. Keynes (1936) introduced the notion of marginal propensity to save (Keynes' Absolute Income Hypothesis). The theory examines the relationship between income and consumption, and asserts that the consumption level of a household depends on its absolute level (current level) of income. As income rises, the theory asserts, consumption will also rise but not necessarily at the same rate. The idea is that saving is only possible, if someone has more than enough to meet the basic needs. This means that someone can only save what is left over once essentials have been paid for (Friedman, 1957). When consumption is subtracted from income, the remainder is savings and therefore high consumption will result to low savings and low consumption will result to high savings. According to Chilokwu (2008), the policy implication of this theory is that households with high income have less propensity to consume (MPC) and more marginal propensity to save (MPS) than low income household for obvious reasons. Keynes (1936) defined savings as the excess of income over consumption. Meaning savings is that part of disposable income which has not passed into consumption. The high income households have already satisfied their basic consumption needs and have relatively large proportion of their income left, whereas to the low income households consumption is still on the lower ladder and as soon as their incomes rise, their consumption needs increase. Therefore, as households move up the income ladder, they save a larger fraction of their income and consume less.

### Empirical Studies

Adekunle and Henson (2007) analyzed the entrepreneurial level of micro entrepreneurs in Osun State using the basis of whether those who belong to groups where there is interdependence like the cooperative savings and credit societies have better personal agency belief than those who are not members. The results showed that entrepreneurial alertness was predicated upon being a member of cooperative thrift and credit society. The same result also prevailed, after taking into consideration pre-existing conditions like age, education and gender.

Echukwu (2009) conducted a study in Idah Local Government Area of Kogi State with data from 100 members of women credit cooperatives. The study reveals that the members were economically empowered through the activities of the cooperative, in terms of improvement in their savings behaviour and access to credit.

The result of the studies conducted by Hassan and Salim (2011) indicates that demographic variables such as age groups, birth rates, dependency ratio and financial variables such as interest rates, inflation rates, available financial instruments and initial wealth levels affected the decision of household savings significantly. Similarly models simulation results of Denizer, Wolf and Yine (2000) study revealed that income uncertainty has positive impact on household savings.

Malapit (2009) studied the determinants of household pooling within households in Thailand and found out that savings had a significant positive increase with age, but tended to decline when the age crosses a certain limit, a finding consistent with the life cycle hypothesis. Chhoedup (2013) examined the determinants of household savings and testing the life cycle hypothesis, where age was considered and found it to be significantly reduced. The result showed the coefficient of age to be significantly positive, as well as age square to be significantly negatively associated with household savings in Bhutan.

Shittu (2012) studied determinants of savings in Adamawa, Nigeria, and found that the age of the household head had a negative coefficient, which implied that the higher the age the smaller amount of savings in North Central Nigeria. He used descriptive statistics and quantitative data generated from 71 households in the study. The study made invaluable contribution as it confirmed the finding made in Rehman, et al (2011), which states that the age of household head has no significant effect on the amount of savings of the household.

Nwankwo, Ewuim & Asoya (2013) carried out a study on effect of cooperatives on the savings behaviour of members in Oyi Local Government Area of Anambra State using data of 195 randomly selected members of credit cooperatives. Analysis of data was with descriptive statistical tools such as mean, tables, and frequency counts and multiple regression models. The results of the findings show that cooperative membership impacted positively on savings behaviour of members, older members had more savings than newer members and that length of membership in cooperative was found to be important determinant of savings.

To analyze the determinants of the household saving rate in Kwara State, Nigeria, from 1995 to 2004, Obayelu (2012) used panel data in the analysis. The result showed that income growth rate, inflation rate, and real interest rate were found to be important determinants of saving rates in Kwara State over the period under consideration. These findings provide support for the life cycle hypothesis as well as the permanent income hypothesis.

Kudaisi (2013) studied the determinants of domestic savings in West Africa during 1980-2006 anchored on Hall hypothesis of consumption and found that the dependency ratio and interest rate had negative and insignificant effects on domestic savings, the GDP growth rate had positive and statistically insignificant effect, while the government budget surplus and inflation rate were statistically significant determinants of savings.

Epaphra (2014) examined the factors affecting savings in Tanzania over the 1970-2010 period using time series data and Granger causality test and found that real GDP growth rate, as well as the disposable income, life expectancy and population growth had positive impact on savings in Tanzania while inflation had a negative impact.

Wafure (2012) used co-integration and Error Correction Mechanism to determine the relationship between financial sector reforms and private savings in Nigeria. The estimated results showed that lagged value of private savings, consumer price index, savings deposit rate, Income per capita showed a significant and inverse impact on private savings while financial liberalization and income growth have direct and significant impact on private savings but wage rate and foreign savings were insignificant.

Odhiambo (2013) empirically assessed the impact of real interest rate on savings mobilization in Nigeria. The Vector-Auto Regression (VAR) was employed, using the time series data from 1980 to 2012. The author reported that real interest rate has negatively impacted on the level of savings mobilization in Nigeria. They concluded that there is need for government in Nigeria to bridge the existing gap between the lending and savings rates and increase per capita income level of the populace, to stimulate savings for investment and economic growth.

Imoughle and Ismaila (2014) evaluated the determinant of private savings in Nigeria from 1981 to 2012 using cointegration and Error Correction Mechanism. The results show that income per capita, inflation rate, term of trade and financial deepening are significant determinants of private savings in Nigeria. The study recommended that there is need for proper financial market development and government should retain tight monetary and fiscal policies in order to fight inflation in the Nigerian economy. Finally, Government expenditure should be tied to specific viable economic projects in the economy.

Elom-Obed, Odo, Uchude and Okonkwo (2016) examined the determinants of private domestic savings in Nigeria from 1980 to 2015, using data obtained from CBN and IMF-IPS. The econometric analytic tools used were cointegration test, vector error correction model, Granger causality test. The results showed a stable long run relationship between the variables. The study recommended conscious policy aimed at reducing the cost of living of the people, so that the part of disposable income spent on social services will reduce thereby increasing domestic private savings.

In the study to ascertain the determinants of private savings in Nigeria between 1970 and 2007, Nwachukwu and Odigie (2009) utilized Error correction technique and found that the saving rate rose together with both the growth rate of disposable income and the real interest rate on bank deposits. The study also found that public saving tends not to overcrowd private saving suggesting that government policies directed at increasing fiscal balance had the capacity to bring about a considerable increase in the national saving rate; while the degree of financial depth had a negative but insignificant impact on saving behavior in Nigeria.

Esmail (2014), analyzed macroeconomic determinants of savings in Egypt using multiple regression. The results indicate that national savings rate is positively related with real GDP growth rate. This indicates that saving is a positive function of income. The evidence suggests that national savings rate is negatively related with federal debt growth and inflation. Finally, negative association between savings rate and inflation implies that the consumer is rational and makes decisions based on his perceptions when it comes to allocating the lifetime resources over the period of his life. Increase in inflation dampens the incentive to save and people respond rationally which is made evident by the negative sign on inflation coefficient in the model.

### III. METHODOLOGY

The research design used is descriptive survey. The area of study is Bayelsa State. Bayelsa is one of the States in South-South region of Nigeria; in the core Niger Delta region, between Delta State and Rivers State. The capital is Yenagoa. The State has 611 Farmers Multipurpose Cooperative Societies (Bayelsa State Department of Cooperative, Yenagoa, 2018). The State was created in 1996 from part Rivers State. Its name was derived from the first few letters of the names of the major local government areas from which it was formed – Brass LGA (BA), Yenagoa LGA (YEL) and Sagbama LGA (SA). Bayelsa has one of the largest crude oil and natural gas deposits in Nigeria. The State is made up of 8 Local Government Areas: Brass, Ekeremor, Kolokuma, Nembe, Ogbia, Sagbama, Southern Ijaw and Yenagoa. Fishing and farming are major sources of livelihood for the inhabitants. Majority of them belong to co-operative societies as a means of mitigating and improving their economic conditions. Trading and processing of agricultural products are among the occupation of the people.

#### 3.4 Population, Sampling Technique and Sample Size Determination

The population of the study consist of fifteen (15) registered Farmers’ Multipurpose Cooperatives Societies with a membership size of 500 purposively selected from the three agrarian Local Government Areas in the state that are into thrift and credit. Therefore the population of the study is 500. Multistage sampling technique was used in this study. In stage one, three Local Government Areas that are agrarian were purposively selected from the eight Local Government Areas in the State. In stage two, using simple random technique fifteen (15) Farmers Multipurpose cooperatives that are into thrift and savings were randomly selected from the three (five from each) Agrarian Local Government Areas. In stage three, to determine the sample size, Taro Yamani’s method was used to determine the sample size of 222. Due to the fact that the study was comparative in nature, 222 non cooperative farmers who live in the same Local government areas and share similar characteristics were randomly selected for comparison purpose. Therefore the total sample size is 444 (222 for cooperative Famers and 222 for non-cooperative Farmers). This figure is proportionately distributed into the three selected local government areas in the area of study as seen below.

#### Sampling Distribution

LGA	No of Famers thrift and credit cooperatives selected	No of cooperative Farmers selected	No. of non-cooperative Farmers selected (Control group)
Ekeremor	5	74	74
Southern Ijaw	5	74	74
Ogbia	5	74	74
<b>Total</b>	<b>15</b>	<b>222</b>	<b>222</b>

Source: Researchers’ computation, 2019.

A total of 444 (222 for cooperative Famers and 222 for non-cooperative Farmers) questionnaires were prepared and distributed, and only 310 (155 from cooperative Famers and 155 for non-cooperative Farmers) of them were returned and assessed usable for appropriate analyses. The return rate of the questionnaire was more than 70%.

#### Model Specification

The Multiple regression analysis using the ordinary least square (OLS) approach was used to estimate the effect of cooperative membership on the propensity to save in Bayelsa State, Nigeria. The model is implicitly specified as follows:

$$Y = a + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \epsilon_i$$



Where Y = propensity to save

a = Constant Term

$\beta_1, \beta_8$  = parameters of estimate

X<sub>1</sub> = Sex

X<sub>2</sub> = Marital Status

X<sub>3</sub> = Household Size

X<sub>4</sub> = Education Level

X<sub>5</sub> = age

X<sub>6</sub> = Cooperative Membership

X<sub>7</sub> = Income

X<sub>8</sub> = Occupation

$\epsilon_i$  = Error term designed to capture the effect of unspecified variables in the model.

Propensity to save (y) = f (sex, marital status, Household Size, educational level, age, coopmemb, Income, occupation.

where;

Propensity to save	=	(proportion of income saved)
Sex	=	(sex of the respondent male or female)
Marital status	=	(single, married, Divorced or widow)
Household Size	=	(Composition or Number of family members of the Respondents)
Educational level	=	(highest educational qualification attained by the respondent)
Age	=	(age of the respondent)
Coopmemb	=	(measured by whether the respondent belong to cooperative as well as years spent in cooperative)
Income Respondents)	=	(measured by monetary value of income received by the Respondents)
Occupation	=	(occupation of the respondents)

$$Y = a + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \epsilon \text{ (Linear)}$$

The regression analysis were done using version 22 of the SPSS package. The t-tests were performed to test the significance of each of the explanatory variables at the alpha levels of 5%. Additionally, the joint effect of all the specified variables were measured through the application of F ratio to indicate the strength of these effects.

### **Data Presentation**

Results of the analysis are shown below:

<b>Table showing propensity to save among cooperative and non cooperative farmers</b>						
		Sum of Squares	Df	Mean Square	F	Sig.
Education level	Between Groups	1.752	5	.350	1.436	.209
	Within Groups	144.873	305	.244		
	Total	146.625	310			
Dependency ratio	Between Groups	35.108	5	7.022	1.088	.366
	Within Groups	3832.611	305	6.452		
	Total	3867.718	310			
Family size	Between Groups	44.960	5	8.992	2.699	.210
	Within Groups	693.734	305	1.168		
	Total	738.693	310			
Income level	Between Groups	7.382	5	1.476	3.082	.109
	Within Groups	284.511	305	.479		
	Total	291.893	310			
Sex	Between Groups	15.624	5	3.125	3.257	.061
	Within Groups	436.001	305	.734		
	Total	451.625	310			
Age	Between Groups	28.195	5	5.639	5.985	0.021
	Within Groups	372.803	305	.628		
	Total	400.998	310			
Family lifecycle	Between Groups	13.888	5	2.778	1.254	.041
	Within Groups	1315.710	305	2.215		
	Total	1329.598	310			
Personal habit	Between Groups	16.030	5	3.206	1.569	.027
	Within Groups	1213.803	305	2.043		
	Total	1229.833	402			
Religious belief	Between Groups	195.541	5	39.108	1.490	.100
	Within Groups	911.332	305	1.534		
	Total	1106.873	310			
Location of residence	Between Groups	1.398	5	.280	1.229	.094
	Within Groups	135.076	305	.227		
	Total	136.473	310			
Availability of savings outlet	Between Groups	4.035	5	.807	2.025	.087
	Within Groups	200.950	305	.338		
	Total	204.985	310			

**Source: Field survey, 2019**

The table revealed that these determinants were not significant at 5% level of significance. Therefore the null hypothesis was accepted. So we conclude that there was no significant difference in savings determinant of cooperative and non-cooperative Farmers.

**Distribution on the amount and frequency of savings of cooperative and non-cooperative farmers**

<b>Amount</b>	<b>Cooperative Farmers</b>		<b>Non Cooperative Farmers</b>	
	Frequency	Percentage	Frequency	Percentage
Less than 50,000	21 13	13	94	30
50,001 – 100,000	43	27	136	44
100,001 – 250,000	57	35	53	17
250,001 – 500,000	22	18	20	7
Above 500,001	12	7	7	2
<b>Total</b>	155	100	155	100
<b>Frequency of savings</b>				
Weekly	26	17	38	25
Monthly	129	79	62	40
Quarterly	6	4	45	29

Yearly	0	0	10	6
Total	155	100	155	100

**Source: Field survey, 2019**

The above table compared the amount and frequency of savings of cooperative farmers against that of non-cooperative Farmers. Whereas 13% of non-cooperative Farmers save less than 50,000, the figure was higher for non-cooperative Farmers (30%). Twenty-five percent of cooperative Farmers save over 250,000 while only 9% of non-cooperative Farmers save such amount. Majority of cooperative Farmers save 100,000 – 250,000 while majority of non-cooperative Farmers save between 50,000 and 100,000. In terms of frequency of savings, 79% of cooperatives farmers save monthly while only 40% of non-cooperative farmers save monthly. Cooperative farmers do not save yearly unlike 35% of non-cooperative Farmers who save quarterly and yearly. Findings revealed that cooperative Farmers are more stable and predictable in their frequency of savings while non-cooperative Farmers appeared to be random in their frequency of savings.

Table showing whether difference exist in the amount of savings of cooperative and non-cooperative farmers

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.846	1	3.756	6.588	.022
Within Groups	37.418	309	.672		
Total	41.264	310			

**Decision:** The results of the analysis above showed an F-ratio value of 6.588 which was very significant at the conventional 5% level. As a result of this, the null hypothesis as stated was rejected, and we conclude that there is a significant difference in the amount of savings of cooperative and non-cooperative farmers.

Table showing whether difference exist in the frequency of savings of cooperative and non-cooperative farmers

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4.456	1	3.026	8.078	.034
Within Groups	36.918	309	.772		
Total	41.374	310			

**Decision:** The results of the table above showed an F-ratio value of 8.078 which was very significant at the conventional 5% level. As a result of this, the null hypothesis as stated was rejected, and we concluded that there is a significant difference in the frequency of savings of cooperative and non-cooperative farmers.

**Relationship of cooperative membership on the propensity to save**

	Mean	Standard deviation	Remark
Encourage thrift	4.8	1.81	Accept
Financial discipline	4.2	2.42	Accept
Convenient and easy avenue to save	3.4	1.48	Accept
Minimize expenses	2.2	0.31	Reject
Use of group pressure	2.6	0.90	Reject
Financial education	4.1	1.58	Accept
Increase in general income	5.1	1.64	Accept
Earning interest on savings	4.2	1.92	Accept
Increased opportunity to borrow	4.8	0.77	Accept

**Source: Field survey, 2019**

Co-operative societies influence the members’ propensity to save by encouraging thrift, inculcating financial discipline, providing convenient and easy avenue to save, imparting financial education, increasing income, payment of dividend and access to loans. However, co-operative membership did not contribute to minimizing expense and application of group pressure towards savings.



**Regression estimates on Relationship of co-operative membership on propensity to save**

Model	Coefficient Estimates	t-Value	Significance
(CONSTANT)	1.187	5.023	0.030
Sex	2.184	1.904	0.053
Marital Status	0.206	1.860	0.078
Household Size	2.167	2.961	0.043
Education Level	2.099	3.763	0.038
Age	1.605	2.871	0.026
Coopmemb	1.567	6.194	0.023
Income	2.541	4.621	0.039
Occupation	0.651	2.587	0.066
R <sup>2</sup>	0.774		
Adj R <sup>2</sup>	0.769		
F	8.104 (Sig. @ 0.05)		

*Dependent Variable: Propensity to save*

The estimates of R<sup>2</sup> and Adj. R<sup>2</sup> suggest that all the variables in the model collectively accounted for more than 77% of the variation in the propensity to save. The F-ratio value of 8.104 was significant at 5% level. Co-operative membership was significant at 5% level of significance with a t-ratio of 5.023 Therefore, the null hypothesis was rejected. So we concluded that co-operative membership has significant relationship with propensity to save.

**IV. DISCUSSION OF RESULTS**

The target of this study was to examine the significance of cooperative membership in influencing savings behaviour of farmers. Savings behaviour of cooperative farmers were compared against savings behaviour of non-cooperative farmers. The study revealed that although socio-economic characteristics of the respondents were similar, membership of cooperative societies, including other factors account for differences in their savings behaviour.

The amount of savings of cooperative farmers was significantly higher than that of non-cooperative farmers. This result was also similar in terms of frequency of savings. Cooperative farmers had more stable and predictable frequency of savings compared to non-Cooperative Farmers too. This finding confirms the assertion made in Nwankwo, Ewuim and Asoya (2013) that cooperative societies play significant role in savings mobilization. Indeed, cooperative inculcate financial discipline and literacy into their members as well as provide convenient and easy avenue for savings. Gadaway and O'Donnel (2006) observed that cooperatives do not only provide easy outlet for savings but also influence attitude towards thrift and budgeting.

Cooperative membership stood out as a significant determinant of savings both for cooperative and non-cooperative farmers. As Schultz (2004) observed, co-operative influence savings behaviour of members. Also, it influences the people in the neighborhood where they exist, with financial literacy and discipline. The study made reasonable contribution in exposing the relationship between the propensity to save and cooperative membership. Findings from the study revealed that cooperative membership have significant effect on the propensity to save. Cooperative societies owing to its nature and method of operation enable people who were unable to save to have savings. As Degu (2007) observed, groups like cooperatives propel people who would ordinarily be unable to save to develop savings habit. Movimbela (2010) confirmed this assertion in their study and asserted that even among people with reasonable propensity to save, cooperative members tend to save higher and also more stable in their savings frequency.

The study has made an inroad in itemizing determinants of savings by bringing cooperative membership to the fore. Chhoedup (2013) observed that only age, dependency ratio and income level had significant effect on savings but this present study in line with Robinson (2004) has reiterated the critical contributions of cooperative as determinant of savings. It also highlighted the increasing importance of location and personal habit in savings behaviour.

**V. CONCLUSION AND RECOMMENDATIONS**

Cooperative societies have the potential to influence savings behaviour of members positively. Their influence in increasing the amount of savings of members, inculcating financial discipline, imparting financial knowledge, providing avenue to earn dividend and provision of savings outlet that are affordable, convenient and simple cannot be ignored. People who joined cooperative have more stable savings habit compared to non-cooperative Farmers. Cooperative membership is therefore a significant determinant of saving and occupies a critical position in influencing people's savings culture. Reliance on social capital, fraternity and resilience to market pressure made cooperative attractive especially for families with larger dependents. Indeed, this increasing role of cooperative in savings mobilization needs to be acknowledged and maximized.

There is no significant difference in the determinants of savings of cooperative and non-cooperative Farmers. Significant determinants of savings discovered among the respondents include educational level, dependency ratio, family size, income level, membership of savings group, personal habit, location of residence, availability of savings outlets and personal habit.

There is a significant difference in both amount and frequency of savings of cooperative and non-cooperative Farmers. Cooperative members tend to save higher amount than non-cooperative Farmers. Majority of cooperative Farmers save between 100,000 – 250,000, while majority of non-cooperative Farmers save between 50,000–100,000. Also, majority of cooperative members save monthly and were more stable in their frequency of savings unlike non cooperative members who save yearly and in their frequency of savings was random.

Cooperative membership had strong effect on the propensity to save. Cooperative societies influence thrift, inculcating financial discipline, providing convenient and simple means of accumulating lump sum, imparting financial education and increasing members' income through payment of dividend and providing opportunity to borrow in the future.

Cooperative societies have the potential to influence savings behaviour of members positively. Their influence in increasing the amount of savings of members, inculcating financial discipline, imparting financial knowledge, providing avenue to earn dividend and provision of savings outlet that are affordable, convenient and simple cannot be ignored. People who joined cooperative have more stable savings habit compared to non-cooperative Farmers. Cooperative membership is therefore a significant determinant of saving and occupies a critical position in influencing people's savings culture. Reliance on social capital, fraternity and resilience to market pressure made cooperative attractive especially for families with larger dependents. Indeed, this increasing role of cooperative in savings mobilization needs to be acknowledged and maximized.

The study confirmed that there is a significant difference in savings behaviour of cooperative and non-cooperative Farmers. Cooperative members save frequently as well as higher amount compared to non-cooperative Farmers. Despite that determinants of savings of cooperative and non-cooperative Farmers are the same. The study confirmed that cooperative membership have strong effect in the propensity to save. Since cooperative societies play significant role in influencing savings behaviour of people both in rural and urban areas, it was recommended that there is the need for continuous and more awareness about the benefits of cooperatives, as well as encourage workers especially in rural areas to join cooperatives so that they will benefit from improved financial discipline, financial education, ability to thrift and opportunity to earn dividend; and there is the need to strengthen cooperatives on trainings in order to play effective role in mobilizing savings and in influencing savings behavior of people. Co-operative apexes should take up the responsibility of increasing more awareness and capacities of cooperatives that operate in their jurisdiction. Cooperative societies should be seen as critical partners in economic empowerment and be given a pride of place in different economic sectors. It was also recommended that stronger collaboration between conventional financial institutions and cooperatives should be explored so that synergistic relationship can be established.

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