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Comparative Analysis of Savings Behaviour of Rural and Urban Farm Households in Umuahia Agricultural Zone of Abia State, Nigeria

*[1]S.I. Ogbonna and [2]C.K. Osondu
[1]Department of Agricultural Economics and Extension, Faculty of Agricultural Sciences,
National Open University of Nigeria Abuja, Kaduna Campus, Kaduna State.
[2]Department of Agricultural Economics and Extension, Abia State University, Umuahia Campus Abia State, Nigeria
*Correspondence E-mail: sogbonna@noun.edu.ng

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Abstract

This study comparatively analyzed savings behaviour of rural and urban farm households in Umuahia Agricultural Zone of Abia State, Nigeria. Purposive and multistage random sampling techniques were employed in selecting 120 rural farm households and 120 urban farm households from whom data were collected using structured questionnaire. Data were analyzed using descriptive statistics, z-test and probit regression model. Results showed that mean farm size of rural and urban farm households were 1.26 hectares and 0.65 hectares respectively. Mean annual farm income of rural and urban farm households were 230,566.47 Naira and 174,715.21 Naira respectively. However, rural farm households saved mean amount of 52,605.68 Naira per annum, while, urban farm households saved mean amount of 93,421.24 Naira per annum. About 31.67% of the rural farm households and 61.67% of the urban farm households saved cash in commercial banks. Z-test analysis revealed that urban farm households saved significantly higher amount annually. Results of probit regression analysis showed that age, number of dependents, education level, degree of farming and gross income were significant determinants of saving behaviour of both rural and urban farm households. Membership of farmer's association influenced only saving behaviour of rural farm households. Large proportions (68.33% and 60.00%) of rural and urban farm households respectively were constrained to save by inadequate income. Farm households in rural and urban areas should be encouraged and enlightened on the need and importance of savings to economic growth. Non-Governmental Organizations should organize awareness and capacity building oriented programmes at community level and enlighten farmers on the benefits of saving.

Keywords: Farm households, income, savings, rural, urban

Introduction

In developing countries of the world such as Nigeria, agriculture remains an integral source of livelihood to many households in both rural and urban areas. These households either depend solely on farming activities for survival and generation of income or depend on both farming and other non-farming activities for their livelihood [22]. Households are fragmented into farm and non-farm based on the degree of their involvement in farming and where large percentage of the household's income accrue from [4].

When farm households earn income from their farm and/or non-farm operations, it is important that they do not spend all but keep aside some part of this income as savings. Since it is very difficult to determine what will happen in the next second, money earned by farm households should be saved or turned into liquid assets to be able to cater for unanticipated events or emergencies such as illnesses, accident and natural disasters like flood. Savings is the fraction of income not spent on current expenditures but kept aside to take care of uncertainties in the future [35]. It is a means of accumulating assets that perform specific function for the saver [12]. According to [3] savings is the act of putting something aside for future use or what will be considered as deferred expenditure. In summary, savings is the difference between current earnings and consumption.

Farm households' savings play an important role in the economic development of both developed and developing nations, due to its significant influence on the circular flow of income in the economy [14]. The sustenance of farm household savings increases the possibility of future investment and risk management both at the micro and macro levels in the economy [26].

Savings is both a risk management strategy and determinant of magnitude of investment. The ability, willingness and opportunity of households to save and

invest over time can significantly influence the rate and sustainability of capital accumulation and economic growth in developing countries [23].

However, rural and urban farm households tend to exhibit different savings behaviour. Variations in saving pattern is mostly found in different societies, as there exists, a difference in environmental, social, economic and cultural contexts. More often than not farm households (rural and urban) are subject to different government policies and face different constraints, for example, urban farm households enjoy better social benefits such as closeness to formal financial institutions, good roads, health care and electricity. All these factors can potentially lead to differences in saving incentives and behaviour between rural and urban farm households. Again, there is significantly more income earning opportunities and income gap between rural and urban households. This substantial difference in income, combined with the nonlinear positive relationship between income and marginal propensity to save documented in [15], may also lead to different rural and urban saving rates. All these disparities are likely to result in a difference between the saving behaviour of rural farm households and urban farm households.

Farm households usually save in kind when prices are continually rising but the disadvantages of in-kind savings are that, they tend to be less portable, more difficult to store and less easily converted into cash [17]. According to [8] farm households also make savings in cash with the advantages that, cash is very portable, storable and exchanged for almost anything. However, saving in form of cash has the disadvantage of losing its value during high inflation [17]. According to [7] traditionally, rural households prefer saving through purchasing livestock, land and lending money to companions, while, urban households would prefer saving in demand deposits and invest in purchasing stocks and other financial assets.

One of the problems confronting the development of the agricultural sector in Nigeria could be attributed to inadequate savings, income and investment by farm households. Despite this problem, policy makers have not really drawn up adequate and comprehensive savings schemes that will motivate rural and urban farm households independently to save and invest their capital productively [22]. According to [33] investment is a major prerequisite of economic development and if the volumes of savings are inadequate to meet investment requirements, major bottlenecks are likely to develop in the process of capital formation and the drive for development.

Saving rates among rural and urban farm households in Nigeria have generally remained low both in absolute and relative terms compared to other developing countries [26]. A variety of reasons ranging from socio-cultural to pure economic have been advanced for this lackluster performance. The most frequent cited causes include high propensity for conspicuous consumption, increased availability of imported products, a production structure that has emphasized consumer goods production and negative real returns to financial savings.

According to [30] in spite of savings being an emerging issue in respect to the economic security of households, there are very few studies available globally which observed whether spatial differences in savings at the household level among rural and urban households exist. Currently, in Umuahia Agricultural Zone no such study had being conducted. Hence, this study intends to bridge the gap in literature and proffer insights into savings behaviour of farm households in rural and urban areas of the Zone.

An understanding of factors affecting rural and urban farm household's savings behaviour, will serve as an important input towards formulating policies aimed at strategizing and promoting domestic savings among farm households in order to fuel sustainable agricultural and economic growth. Since household saving behaviour is always changing and is determined by many factors like income, education, culture, inflation, occupation and awareness level and the influences of these factors entirely differ from rural to urban households. There is need for a study of this nature to comparatively analyse the saving behaviour of rural and urban farm households.

The broad objective of the study is to comparatively analyse savings behaviour of rural and urban farm households in Umuahia Agricultural Zone of Abia State, Also the study seeks to:(i) describe socio-economic characteristics of rural and urban farm households in Umuahia Agricultural Zone; (ii) assess patterns of savings among rural and urban farm households in the study area; (iii) compare cash savings of rural and urban farm households in the study area; (iv) determine factors that influence savings behaviour of rural and urban farm households in the study area; and (v) identify constraints that militate against savings by rural and urban farm households in the study area.

Material and Methods

Study area

The study was carried out in Umuahia Agricultural Zone of Abia State, Nigeria. The zone lies between latitudes $4^{0}27'$ and $5^{0}40'$ North of the Equator and longitudes $7^{0}14'$ and $7^{0}37'$ East of the Greenwich meridian. Umuahia Agricultural Zone is made up of five Local Government Areas (LGAs) namely: Ikwuano LGA, Isiala-Ngwa North LGA, Isiala-Ngwa South LGA, Umuahia North LGA and Umuahia South LGA. The total population of Umuahia Agricultural Zone stood at 789,647 people with land mass of about 1215 sq km [16]

Sampling

The population for this study consists of all the farmers residing in both urban and rural areas of Umuahia Agricultural Zone. Purposive and multi-stage random sampling techniques were adopted for this study. Purposively two LGAs (One predominantly urban and the other predominantly rural) were selected for the study. The selected LGAs were Umuahia South LGA and Isiala-Ngwa South LGA. Secondly, two extension blocks were randomly selected from each of the two LGAs, to give four extension blocks. Two extension circles were randomly selected from each of the two blocks to give eight extension circles. With the help of extension agents operating in the selected circles, lists of rural and urban farm households were formulated. Thirty farm households were randomly selected from each of the circles to give a sample of 240 farm households (120 rural farm households and 120 urban farm households).

Data collection and analysis

The study employed primary data for its analysis. Primary data were elicited from respondents (heads of selected farm households) using pre-tested and structured questionnaire. The data collected include socio-economic characteristics of respondents, frequency of saving, amounts saved in various forms, saving behaviour and constraints to saving.

Descriptive statistics were used to describe socio-economic characteristics of rural and urban farm households (objective i), assess patterns of savings behaviour among rural and urban farm households (objective ii), Objective (iii) was realized with aid of Z-test analysis. and identify constraints that militate against savings by rural and urban farm households (objective vi).

Z-test was used to compare annual cash savings of rural and urban farm households in the study area as follows:

$$z = \frac{\dot{x}_1 - \dot{x}_2}{\sqrt{\frac{S1^2}{n1} + \frac{S2^2}{n2}}} \qquad (1)$$

z = z-test statistic

$\dot{x}_1$= Sample mean of annual savings of urban farm households

$\dot{x}_2$ = Sample mean of annual savings of rural farm households

S_1^2 = Sample variance of annual savings of urban farm households

S_2^2 = Sample variance of annual savings of rural farm households

n_r = Sample size of urban farm households

n_2 = Sample size of rural farm households

The z-test was tested at 1% alpha level of probability with critical value of 2.57 and

Factors that influence savings behaviour of rural and urban farm households (objective iv) was analyzed using probit model. The probit model used is specified as follows:

Pi [y=1] =[Fzi] (2)

Where

$Zi = \beta 0 + \beta_1 X_1 + e$

$Y_i = \beta_1 + \beta_2 X_{2i} + \ldots\ldots\ldots + \beta_k X_{ki} + \mu$ (3)

Yi* is unobserved but Yi = 0 if $y_i^* < 0$,1 if $Y_i^* \geq 0$

P (Yi = 1) = P (Yi* $\geq$0)

$P (\mu i \geq -\beta_1 + \beta_2 X_{2i} \ldots -B_k X_{kL}$ (4)

Where i = 1,2, …… ,120

Where Y_i = saving behaviour of rural/urban farm households (if a farm household saved money for investment= 1; otherwise = 0)

β_1 = Unknown coefficients value of factors

X_1 = Age (years); X_2 = Farming experience (years);X_3 = Number of household dependents (total number of unemployed household members); X_4 = Medium of saving (if saved with formal institution = 1; otherwise = 0); X_5 = Education level (Years); X_6 = Degree of farming (full time =1, part time = 0); X_7 = Distance from saving centre (Kilometre); X_8 = Gross income (Income earned from all sources in Naira); X_9 = Membership to farmers association (1 =member; 0 = otherwise); e = Error term.

Results and Discussion

Socio-economic characteristics of rural and urban farm households

Distribution of the rural and urban farm households according to socio-economic characteristics is shown in Table 1. Table 1 shows that mean household size of the rural farm households was 7 persons, while mean household size of the urban farm households was 5 persons. This indicates that relatively, the rural farm households had larger household size than urban farm households. Household size has major implication in the provision of family labour and is the most important input for unpaid labour [2], but according to [33], all things equal, household consumption expenditure tends to rise with increase in household size and this negatively affects savings and investment. The larger the size of a household the more the mouths that consume, thereby leading to lesser savings [29].Mean farm size and mean annual farm income of the rural farm households were 1.26 hectares and 230,566.47 Naira respectively, while, mean farm size and mean annual farm income of the urban farm households were 0.65 hectare and 174,715.21 Naira respectively. This indicates that the rural farm households operated on relatively larger farms and earned greater farm income than their urban counterparts. The smaller farm size of the urban farm households could be a result of the higher population pressure on land in urban areas and higher cost of accessing land for agricultural production. Rural farm households earning higher annual farm income than urban farm households could have resulted from their larger farm size and the higher number of rural households indulging in full time farming (Table 1). However, as further

shown in Table 1, rural farm households saved mean amount of 52,605.68 Naira per annum, while, urban farm households saved mean amount of 93,421.24 Naira per annum.

As presented in Table 1, 56.67% of rural farm household heads and 75.83% of urban farm household heads were males. Meanwhile, 45.00% and 8.33% of the rural farm household heads had secondary school education and tertiary school education respectively, while 51.67% and 18.33% of the urban farm household heads had secondary school education and tertiary school education respectively. This shows that comparatively the heads of urban farm households had higher level of education. In general, however, the result indicates that most of the household heads are literate, an advantage which according to [19], could enhance improved technology adoption, increased income and savings. With respect to degree of farming, it is seen that 70.00% of the rural farm households and 38.33% of the urban farm households indulged in full time farming. This indicates that more of the rural farm households were into full time farming than their urban counterparts. This is not surprising given the fact that there is more income generating opportunities in urban areas through which households can earn income. According to [15] presence of multiple income sources to a household has positive implication on total household savings. With respect to credit access, 65.00% and 56.67% of the rural and urban farm households respectively had no access to credit. This indicates that both groups of households did not have adequate access to credit facilities. Without access to credit, farmers may not be able to increase scale of production, farm income, savings and investment.

Table 1: Distribution of rural and urban households according to socio-economic characteristics

Households	**Rural Households**	**Urban Households**
Variables	**Mean**	**Mean**
Household size (number)	7.28	5.43
Farm size (hectare)	1.26	0.65
Annual farm income (Naira)	230,566.47	174,715.21
Amount saved (Naira)	52,605.68	93,421.24
Gender of household head	**Percentage (%)**	**Percentage (%)**
Male	56.67	75.83
Female	43.33	24.17
Level of education attained	**Percentage (%)**	**Percentage (%)**
No formal education	15.00	6.67
Primary school education	31.67	23.33
Secondary school education	45.00	51.67
Tertiary school education	8.33	18.33
Degree of farming	**Percentage (%)**	**Percentage (%)**
Part time	30.00	61.67
Full time	70.00	38.33
Credit Access	**Percentage (%)**	**Percentage (%)**
Yes	35.00	43.33
No	65.00	56.67

Savings pattern of rural and urban farm households

The distribution of the rural and urban farm households according to savings pattern is shown in Table 2. The table shows that the rural and urban farm households saved both in cash and in kind, and utilized both formal and informal saving forms. More than half (51.67%) of the rural farm households and 65.00% of the urban farm households saved cash at home. This supports finding by [18] that the most popular form of farm households' savings in Nigeria was keeping cash at home as it was convenient for any emergency situation. Meanwhile, 31.67% and5.00% of the rural farm households saved cash in commercial banks and microfinance banks respectively, while, 61.67% and 16.67% of the urban farm households saved cash in commercial banks and microfinance banks respectively. This suggests that urban farm household utilized the savings facilities of formal financial institutions more than rural farm households. This could be a result of the further distance of commercial banks and micro finance banks to rural farm households. Table 2 further shows that 60.83% and 35.00% of the rural farm households saved in kind by storing crop produce after harvest and through their livestock respectively, while 13.33% and 10.00% of the urban farm households also saved in kind by storing crop produce and through livestock keeping respectively. This result is in agreement with [11] finding that large proportion of rural farmers save in non-monetary forms (kind). These findings agree with [10] assertion that households adopt various saving patterns and forms according to preference and ease of saving. It is evident from the result that the rural farm households in the study area saved predominantly in informal forms, while the urban farm households saved more in formal forms.

Table 2: Distribution of rural and urban farm households according to savings pattern

	Rural Farm Households		Urban Farm Households	
Savings Pattern	***Frequency**	**Percentage**	**Frequency**	**Percentage**
Cash savings				
Saving cash at home	62	51.67	78	65.00
Saving cash in commercial banks	38	31.67	74	61.67
Saving cash in microfinance banks	6	5.00	20	16.67
Saving cash in mobile banks (*Akawo*)	20	16.67	16	13.33
Saving cash in fixed savings and credit associations	28	23.33	20	16.67
Saving cash in cooperative thrift and credit societies	26	21.67	26	21.67
Saving cash in rotating savings and credit associations (*Isusu*)	36	30.00	12	10.00
In-kind Savings				
Saving in kind by storing crop produce	73	60.83	12	10.00
Saving in form of durable assets (e.g land)	36	30.00	40	33.33
Using livestock as means of saving in kind/safety net	42	35.00	16	13.33

** Multiple responses recorded*

Test of sign in annual cash savings of rural and urban farm households

The result of z-test analysis of difference between annual cash savings of rural farm households and urban farm households is shown in Table 3. The table shows that the mean annual cash savings of urban farm households was ₦ 93,421.24, while the mean annual cash savings of rural farm households was ₦ 52,605.68. The mean difference between annual cash savings of both group was ₦40,815.56. The result of the z-test for mean difference revealed it as statistically significant at $p<0.01$, indicating significant difference in mean annual cash savings of urban farm households and rural farm households. This implies that urban farm households saved significantly more cash annually than rural farm households and suggests that the urban farm households probably earned higher gross income than the rural farm households. This result lends credence to [32] and [28] assertions that urban households saved significantly higher than rural households annually. Similar result was obtained by [1] in Nigeria, who computed and compared average savings of rural and urban households.

Table 3: Z-test statistics of difference in annual cash savings of rural and urban farm households

Variable	Individual mean	Mean difference	Standard deviation	z-value	Critical Z-value
urban farm households (Naira)	93421.24		60564.11		
		40815.56		6.208***	2.57
Rural farm households (Naira)	52605.68		38564.12		

**** Significant at 1% alpha level*

Factors influencing saving behaviour of rural and urban farm households

The estimate of the probit regression model which was used to determine factors that influenced saving behaviour of the rural and urban farm households is presented in Table 4. The model posted log likelihood values of-9.723141 for rural farm households and -7.399164 for urban farm households, and goodness of fit LR statistic values of 35.90545 for rural farm households and 40.55341for urban farm households which were statistically significant at 1.0% alpha level.

The coefficients of age (-0.103183 for rural farm households) and (0.114302 for urban farm households) were significant at 10.0% alpha level. Age had negative impact on rural farm households saving behaviour, while the reverse was the case among the urban farm households. An increase in age of the rural farm household heads stirred up decrease in probability of saving for investment, on the other hand increase in age increased probability of urban farm households saving for investment. Rural farm household heads saving less for investment as they age agrees with the life cycle hypothesis of savings, which posits that a person's savings would increase up to a point and then start decreasing as he/she grows old. The ability to work large farms with crude implements declines with age, so as age increases, income shrinks, which automatically reduces probability of rural farm household heads to save and invest. Also, the responsibilities of household heads increase as they get older. There would be more consumption expenses such as payment of children school fees and feeding of household members which tend to reduce their chance of saving for investment. This result is in agreement with [14] and [24] assertion that at the early stage of life, earnings rise before gradually declining in later years. [24] noted that this is usually the case for households who are mainly into energy sapping occupations like farming and other occupations that have a fixed retirement age. Although, the finding with respect to urban farm households is at variance with economic theory, it consolidates the findings of [5] that savings capacity is enhanced as people grow older and that old people tend to be more frugal and thriftier.

The coefficients of number of dependents (-0.106902 for rural farm households) and (-0.341499 for urban farm households) were negative and significant at 10.0% alpha level, indicating that increase in number of dependents in rural farm households decreased the household's chances to save for investment. Increasing number of dependents imposes additional responsibility and expenses on the household head and as such decreases the probability of saving. All things equal, it is expected that farm households with large number of dependents would channel more of their income to consumption expenditure rather than saving for investment. These findings support [34] assertion that increase in number of dependents decreases the probability of a household saving for investment and lends credence to findings of [25] and [27] that large household size and increasing number of dependents reduces savings.

Education level posted positive coefficients (0.195666 for rural farm households) and (0.429481 for urban farm households) that were significant at 10.0% and 5% alpha levels respectively, implying that probability of a rural or urban farm household saving for investment increased directly with education level of household head. This could probably have resulted from the higher income earning opportunities available to educated people. With increase in education level, household heads are able to get employed in higher pay jobs and also appreciate better the need to save and invest. Furthermore, education improves farmers ability to adopt income enhancing farm technologies and utilize effectively and efficiently whatever resources exist in an area. This result is consistent with finding of [13] and [20] which obtained a positive coefficient for education in a related study on saving behaviour in Ghana and Nigeria respectively.

Degree of farming posted negative coefficients (-0.302456 for rural farm households) and (-0.501640 for urban farm households) that were significant at 5% alpha level, implying that probability that rural and urban farm households which engaged in part time farming tend to have increased chance of saving for investment. [6] noted that households who take to farming on part time basis usually diversified into non-farm or off-farm enterprises and had multiple income stream which enhance their earning capacity and propel their propensity to save for investment.

Gross income posted positive coefficients (0. 459357 for rural farm households) and (0.201083 for urban farm households) that were significant at 5% alpha level. This implies that as gross income of both the rural and urban farm household's increase, tendency to save for investment also increases. This result was expected, all things equal increase in household's gross income increases household probability of saving. Farm households with low gross income tend to spend almost everything on consumption. This makes it difficult for them to save thereby decreasing their willingness and ability to save. According to [34] households with increased income regardless the source, are more likely to save and invest. [31] obtained a similar result among rural farm households in Ghana.

The coefficient (0.181222) of membership to farmers association was positive and significant at 10.0% alpha level

for only the rural farm households, implying that rural farm households whose heads belonged to cooperative societies had higher probability of saving and investing more than their counterparts whose heads are not members of cooperatives. Membership of cooperative society affords farmers opportunity of saving money, sharing information on agricultural production innovations, purchasing inputs in bulk as well as exchanging labour. Cooperative societies often offer saving facilities to members which motivate rural farm households to save more. According to [9] membership of cooperatives helps farmers to have easy access to saving facilities, information and project a collective endeavor.

Table 4: Probit regression estimates of factors influencing saving behaviour of rural and urban farm households

	Rural Farm Households				Urban Farm Households			
Variables	**Coefficient**	**Standard error**	**Z-Statistic**	**Prob.**	**Coefficient**	**Standard error**	**Z-Statistic**	**Prob.**
Constant	1.360968	2.449198	0.555679	0.5784	3.798256	3.121442	1.216827	0.2237
Age	-0.103183*	0.052838	-1.952818	0.0508	0.114302*	0.066214	1.726256	0.0843
Farming exp.	0.245605	0.229919	1.068223	0.2854	0.247123	0.247941	-0.996700	0.3189
Household dep.	-0.106902*	0.056742	-1.884002	0.0767	-0.341499*	0.193497	-1.764883	0.0776
Saving medium	0.032677	0.258996	0.126167	0.8996	0.150172	0.297476	0.504818	0.6137
Education level	0.195666*	0.113994	1.716464	0.0861	0.429481**	0.217316	1.976299	0.0481
Farming degree	-0.302456**	0.140264	-2.156343	0.0311	-0.501640**	0.233071	-2.152303	0.0314
Distance	5.97E-05	3.83E-05	1.558996	0.1190	-0.044816	0.130755	-0.342744	0.7318
Gross income	0.459357 **	0.187214	2.453645	0.0149	0.201083**	0.0094959	2.117568	0.0342
Member of asso.	0.181222*	0.093246	1.943474	0.0520	1.075422	0.714972	1.504145	0.6185
Log likelihood	-9.723141	-	-	-	-7.399164	-	-	-
LR statistic	35.90545	-	-	-	40.55341	-	-	
Prob.	0.000041				0.000006			
PseudoR^2	0.648678				0.732649			

***, **, * Significant at 1%, 5% and 10% alpha levels respectively

Constraints to savings by rural and urban farm households

The distribution of the rural and urban farm households according to problems constraining them from saving is shown in Table 5. The farm households identified several constraints that limit their ability to keep aside part of what they earn for future use. The main problem constraining both groups from saving is inadequate income which constrained 68.33% of the rural farm households and 60.00% of the urban farm households. Other constraints to savings among the rural farm households include family and societal demand (58.33%), distance to savings outlets (51.67%) and fear of safety of money (40.00%), while 51.67%, 28.33% and 18.33% of the urban farm households were constrained from saving by family and societal demand, misuse of money and fear of safety of money respectively. The farm household heads asserted that pressure to meet immediate needs of household members constrained them from saving more. The result compares favourably with findings of [26] among farm households in Umuahia Capital Territory of Abia State.

Table 5: Distribution of rural and urban farm households according to constraints to savings

	Rural Farm Households		Urban Farm Households	
Savings Pattern	***Frequency**	**Percentage**	**Frequency**	**Percentage**
Family and societal demand	70	58.33	62	51.67
Inadequate income	82	68.33	72	60.00
Fear of safety of money	48	40.00	22	18.33
Sickness	24	20.00	18	15.00
Misuse of money	30	25.00	34	28.33
Distance to savings outlets	62	51.67	16	13.33

** Multiple responses recorded*

Conclusion

The study revealed that many of the rural farm households were into full time farming, while urban farm households mainly farmed on part time basis. Although rural farm households had larger farms and earned higher farm income annually than urban farm households, the latter saved significantly more annually. Again, more urban farm households than rural farm households saved cash in formal financial institutions such as commercial banks and micro-finance banks. Factors such as age, number of dependents, education level, degree of farming and gross income influenced savings behaviour of both rural and urban farm households while Membership of farmers

association influenced only saving behaviour of rural farm households.

The study showed that household size depressed incentive to save and amount saved by both rural and urban farm households. Therefore, reducing household size can help beef-up savings and protect farm households against income shortfall. Policies that reduce household size will improve savings of farm households in the zone. Practice of part time farming was found to increase savings among the rural and urban farm households. Therefore, farm households, especially rural farm households should be encouraged to diversify into other income generating activities available in rural economy in other to increase household's gross income and savings.

Farm households in rural and urban areas should be encouraged and enlightened on the need and importance of savings to economic growth. Non-Governmental Organizations should organize awareness and capacity building oriented programs at community level and enlighten farmers on the benefits of saving.

The state government should encourage commercial banks and micro-finance banks to establish branches in the rural areas in order to reduce the distance problem faced by rural farm households and help improve savings among rural farm households. Also, rural and farm households should be encouraged to form and belong to social groups. This will enhance their saving behaviour.

There is need for the state government to make policies that will facilitate rural investment climate and create enabling environment to boost rural income diversification and savings.
Lastly, policies aimed at promoting farm households belonging to cooperative societies should be targeted at rural farm households as this will go a long way in enhancing their saving behaviour.

Declaration of conflicting interests
The authors declared no potential conflicts of interest

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