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INFORMAL SAVINGS STRATEGIES AMONG FARM HEADED HOUSEHOLDS IN OHAFIA LOCAL GOVERNMENT AREA OF ABIA STATE, NIGERIA: A GENDER SITUATION ANALYSES

Ogbonna, S.I.
Department of Agricultural Economics and Extension, Faculty of Agricultural Sciences, National Open University of Nigeria Abuja
Corresponding Authors' email: sogbonna@noun.edu.ng

ABSTRACT
This study comparatively analyzed informal saving strategies of male and female headed farm households in Ohafia Local Government Area of Abia State, Nigeria. Multistage random sampling technique was employed in selecting 54 male headed and 54 female headed farm households from whom data were collected using semi-structured questionnaire. Data collected were analyzed using descriptive statistics and Ordinary Least Square (OLS) multiple regression technique. Results showed that mean farm size of the male and female headed farm households were 1.63 hectares and 0.72 hectares respectively, while, mean farm income of the male and female headed farm households were N214,560 and N146,807 respectively. Results also showed that 66.67% and 46.30% of the male and female household heads respectively had access to credit, and saved a mean amount of N162,089 and N95,340 per annum respectively. Results further showed that 77.78% of the male headed households and 51.85% of the female headed households saved in form of cash at home. The OLS multiple regression results revealed that age, household size, distance to savings centre, income, farm size and amount of credit received were significant determinants of amount saved in informal forms by male headed farm households, while, age, educational level, income and distance to savings centre were significant determinants of amount saved in informal forms by female headed farm households. The study therefore calls for policies aimed at addressing these factors to help improve savings of farm households in the area.

Keywords: Farm households, household heads, and informal savings

Introduction

Most farm households (male and female headed) have limited resources and do not have ready access to financial services including savings facilities of banks and other formal financial institutions due to absence of formal financial institutions in rural areas and low literacy level of farmers (Oluwepo, 2010). CBN (2005) noted that the formal financial institutions in Nigeria provides services including savings facilities to about 35.0% of the economically active population while the remaining 65.0% are excluded access to formal financial services. Hence, most farm households save in informal forms. Nigeria is endowed with many informal savings units which through their informal and flexible mode of operation provide a savings forum for most farm households. Informal savings is considered to be more suitable to the needs of farm households and characterized by small-scale transactions and risk. Major attributes of informal savings organization include easy accessibility, mobilization of small savings, flexibility and adaptability, social cohesion and security for members (Nweze, 1990).

There are different informal saving strategies available to farm households in Nigeria. These include: keeping cash at home, keeping money with neighbours, friends or family members, saving money in rotating savings and credit association (ROSCAS), accumulating savings and credit association (ASCARS), credit and thrift cooperative societies and in-kind savings such as savings in the form of gold, silver and raw-materials (Hirschland, 2005). In general, informal savings involve small savings and deposit and short-term transactions operated without physical collateral and takes place close to the residence of its clients. Savings is a means of accumulating assets that perform specific function for the saver (Ike and Idoge, 2006). Savings refers to the part of income not immediately spent or consumed but reserved for future consumption, investment or unforeseen contingencies. According to Amu and

Amu (2012) savings is the act of putting something aside for future use or what will be considered deferred expenditure. Directly, savings could be used for investment. Indirectly, savings indicates repayment ability, increases credit rating and can serve as collateral in a credit market (Brata, 1999). 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 therefore significantly influence the rate and sustainability of capital accumulation and economic growth in developing countries (Oluwakemi, 2012).

According to Odoemenem *et al*. (2013) inadequate savings by farm households in Nigeria is one of the basic problems limiting the development of agricultural sector in Nigeria. Some problems inhibiting savings include poor banking service, attitude of banks to small savers, poor orientation, low income, corrupt taxation system, absence of banks in rural areas, instability in banking system and lack of trust to save in informal financial units (Onuoha, 2013). In Nigeria there is basically lack of incentives for farm households to save which had adversely affected savings. Despite these problems, policy makers have not drawn up adequate and comprehensive rural savings scheme that will motivate farmers to save and invest their capital productively (Odoemenem *et al*., 2013; Sunday *et al*., 2011). The obstacles faced by farm households in formal financial market have brought about a renewed interest in the operations of the informal financial market (Gandhimathi and Vanitha, 2010). Nigeria is endowed with many indigenous savings units which through their informal mode of operation provide participatory forum for both male headed and female headed farm households. However, when farm households are considered in terms of savings, it appears male headed farm households fare better, because female headed farm households are more constrained from making adequate savings as a result of relatively lower access to resources such as land, agricultural information and credit, as well as low income and cultural values. Understanding how farm households save informally and the factors that influence the amount saved in informal forms is important for the conduct of monetary policy.

Methodology

Area of Study

The study was carried out in Ohafia Local Government Area (LGA) of Abia State, Nigeria. Ohafia LGA was created on August 27, 1991 and is made up of eight autonomous communities with three major clans namely: Ohafia, Nkporo and Abiriba. The LGA lies between latitudes $5^0 30'$N and $5^0 45'$ North of the Equator and longitudes $7^0 45'$ E and $7^0 55'$ E of the Greenwich Meridian. Ohafia LGA occupies an area of about 438 square kilometres and is bounded by Cross River State at the western border, Arochukwu LGA at the north, Bende LGA at the east and Isuikwuato LGA at the south. According to NPC (2007) its population was 245,987 persons with a relatively high density of 580 persons per square kilometre. The inhabitants of this LGA are predominantly farmers and engage in cultivation of crops such as oil palm, cassava, vegetables, melon, maize and yam and rear livestock such as goats, sheep, pigs and domestic fowl.

Sampling Technique

The population of the study comprised of all the farm households (male and female headed) saving in informal forms in the study area. Multistage random sampling technique was used to select respondents for the study. First, three autonomous communities were randomly selected from the eight autonomous communities in the study area. In the second stage, there was a random selection of three villages from each of the selected three autonomous communities, to give nine villages. A list of informal savings mobilization units was obtained from secretaries of the selected villages. This list served as the sampling frame for informal savings mobilization units from which three informal savings mobilization units were randomly selected per village. A comprehensive list of male headed and female headed farm household informal savers was obtained with the help of secretaries of the informal savings units selected in each of the nine villages. Using the list, six male headed and six female headed farm households were randomly selected from each of the nine villages to give a sample size of one hundred and eight farm households. Data were collected from the respondents from April - June 2017.

Data Collection and Analysis

Data were elicited from respondents (heads of selected farm households) using pre-tested and semi structured questionnaire. The data collected include socio-economic characteristics of heads of farm households, frequency of savings, amount saved in informal forms, saving strategies and constraints to saving in informal forms. Descriptive statistics such as mean, frequencies and percentages and Ordinary Least Square (OLS) multiple regression technique was used for analyses.

Model Specification

The multiple regression model used is implicitly stated as follows:

$Y = f(x1, x2, x3, x4, x5, x6, x7, x8, x9) + e$

Where; Y= Amount Saved by male/female headed farm households (Naira saved/month); X_1= Age of

household head (years); X_2= Education level (number of years spent in school); X_3= Household size (number); X_4= gross income (Naira); X_5= Farm size (hectare); X_6= Purpose of saving (if for investment = 1, consumption = 0); X_7= Interest on savings (%); X_8= distance to savings centre (Kilometre); X_9= Access to credit (Naira); e = Error term.

Four functional forms of the model (Linear, exponential, double logarithmic and semi-logarithmic) were fitted with the data. The lead equation was selected based on statistical and econometric criteria including number of significant variables, magnitude of the F- ratio, R^2 and the conformity of the variables to *a priori* expectation.

Results and Discussion

Socio-economic Characteristics of the Farm Households

The distribution of the male and female headed farm households according to socio-economic characteristics is shown in Table 1. The table shows that mean age and mean farming experience of male and female heads of the farm households were 46 and 51 years respectively, and 20 years and 18 years. This implies that the male and female heads of the farm households in the study area were mainly middle aged, still active and well versed in farming. According to Olomola (2009) farmer's years of experience impacted positively on their productivity and efficiency due to prudent allocation of resources overtime arising from acquired practical knowledge through trial and error over time. Table 1 further shows that mean household size of the male and female headed farm households were 8 persons and 7 persons respectively. Household size has major implication on the provision of family labour and is the most important input for unpaid labour (Akpa, 2007). However, according to Shitu (2012) all things being equal household consumption expenditure rises with increase in household size and this negatively affects savings and investment. Table 1 also shows that mean farm size of the male and female headed farm households were 1.63 and 0.72 hectares respectively, indicating that the female headed farm households had relatively less access to land which is an important factor of production. This could have been a result of the type of land tenure in the area and women exclusion from land ownership. The mean annual farm income of the male and female headed farm households were 214,560 Naira and 146,807 Naira respectively. This income level may not be adequate in the face of the prevailing economic crunch. The income farm households earn from farming have implications on the number of improved technologies they can access and adopt. The higher their incomes, the more likely they can save and invest on improved technologies (Osondu and Ibezim, 2015). About 66.67% and 46.30% of the male and female household heads respectively had access to informal credit. This indicates that male headed farm households had relatively better access to credit in comparism to female headed farm households. This could had been as a result of their larger farm size. It is well known that land is an important asset that enhances access to credit. Without access to credit farmers may not be able to increase scale of production, farm income, savings and investment. Nwaru *et al*. (2006) observed that credit facilitates adoption of innovations, leading to increased farm productivity and income, and encourages capital formation. This result supports Ijioma and Osondu (2015) assertion that males generally had better access to credit facilities in Nigeria. About 55.56% and 33.33% of the male and female heads of farm household attained secondary level of education respectively, while 12.96% and 25.93% of the male and female head of farm households respectively had no formal education. This indicates that the male farm household heads were more literate than the female farm household heads. Literate farm household heads would better understand the importance of savings especially as an investment and precautionary measure.

Savings and Amount Saved by the Male and Female Headed Farm Households

Frequency of Savings by the Male and Female Headed Farm Households

The distribution of the male and female headed farm households according to their frequency of savings is shown in Table 2. Table 2 shows that 35.19% and 38.89% of the male and female headed farm households respectively saved sporadically. These farm households save when they have an excess income and do not have any specific pattern or interval for saving. Also, 24.07% and 20.37% of the male and female headed farm households respectively saved monthly. These farm households are likely to consist of households who earn additional income on monthly basis (civil servants) and also of some households who make it a deliberate habit to save within specific intervals.

Amount Saved by Male and Female Headed Farm Households

The distribution of the male and female headed farm households according to the amount of cash saved annually in informal forms is shown in Table 3. Table 3 shows that 33.33% and 5.56% of the male and female headed farm households respectively saved between N151,000 and 200,000 per annum, while 20.37% and 37.04% saved between N101,000 and N150,000 Naira per annum. The male-headed and female headed farm households saved mean amount

of 162,089 Naira and 95,340 Naira per annum respectively. This implies that the female headed farm households in the study area were small savers probably because they are low income earners. Flora and Seguino (2002) opined that savings at the household level are important for the welfare of family members as a means to increase investment and income and address other financial needs.

Informal Saving Strategies of the Male and Female Headed Farm Households

The distribution of the male and female headed farm households according to savings strategies is shown in Table 4. The table shows that 77.78% of the male headed farm households and 51.85% of the female headed farm households saved cash at home. Obayelu (2012) found that the most popular form of rural household savings in Nigeria was keeping money at home as it was convenient for any emergency situation. Also, 50.00% of the male headed and 59.26% of the female headed farm households saved cash in mobile banks (akawo), while, 48.15% of the male headed and 53.70% of the female headed farm households saved in kind by storing crop produce after harvest. About 31.48% and 33.33% of male and female farm headed households saved by using livestock as a safety net. This result agrees with Hirschland (2005) who noted that households adopt various informal saving strategies according to preference and ease of saving. It is evident from the result that the households in the study area saved mainly in monetary form. This may be because of the relative ease of meeting immediate financial need of the family using savings made in cash. However, this result is contrary to Ike and Umuedafe (2013) finding that majority of rural farmers save in non-monetary forms.

Factors influencing Amount Saved Informally by Male Headed Farm Households

The estimates of the factors influencing amount saved in informal forms by male headed farm households are presented in Table 5. The Exponential functional form gave the best fit to the data with highest R^2 value of 0.738, F-value of 13.794 that is significant at 1.0% alpha level and produced highest number of significant variables that conformed to *a priori* expectations. The coefficient of multiple determination (R^2) of 0.738 implies that 73.8% of the variation in amount saved in informal forms among the male headed farm households was explained by the independent variables included in the model. The significant F-value of 13.794 confirms the overall equation of the regression to be statistically significant. The significant variables that explained variation in amount saved informally by male headed farm households are age, household size, income, farm size, distance to savings centre and amount of credit received. The coefficient of age (-9.34E-006) was negative and significant at 10.0% alpha level, implying that the amount saved by male headed farm households decreases with increasing age of household head. It is expected that saving by the male household head would be diminishing with age as they grow towards and beyond retirement age. This 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 grows old. This result is in agreement with findings of Kifle (2012) and Omonona (2009) who opined that at the early stage of life, earnings rise before gradually declining in later years. He further noted that this is usually the case for households who are into energy sapping occupations like farming and other occupations that have a fixed retirement age. The ability to work large farms with crude implements declines with age. So as age increases, income shrinks, which automatically reduces per capita expenditure. However, this finding is not in agreement with the findings of Attanasio and Szekely (2000), Adeyemo and Bamire (2005), Orbeta (2006) and Oluwakemi (2012) that savings capacity is enhanced as age tends to rise.

The coefficient of household size (-0.095) was negative and significant at 1.0% alpha level. This implies that, the higher the household size, the less the amount saved in informal financial sector by male headed farm households. This is in line with *a priori* expectation. It is expected that households with large family size will likely channel more of their incomes to food consumption expenditure rather than to savings. On the other hand, individuals with a smaller family size will have higher tendency to save. This finding lends credence to findings of Orebiyi (2000); Oliveira *et al*. (2003); Rehman *et al*. (2010) that large household size reduces amount saved. The coefficient of gross income (0.354) was positive and significant at 1.0% alpha level. This implies that, the larger the income, the greater the amount saved in informal forms by male headed farm households. This is in agreement with Keynesian postulates that relate income positively to savings. The result indicates that, a Naira increase in monthly income of the household heads will result to 0.354 Naira increase in savings. Similar result has also been obtained by Adeyemo and Bamire (2005); Ayanwale and Bamire (2000) and Osondu *et al*. (2015) in Nigeria; Harris *et al*. (1999) in Australia; Horioka and Junmin (2007) in China; Abdelkhalek *et al*. (2009) in Morocco and Kibet *et al*.(2009) in Kenya. The coefficient of farm size (0.126) was positive and significant at 5.0% alpha level. This implies that the larger the farm size, the more the amount saved in informal forms by male headed farm households. This is plausible because at

some level, the larger the farm size, the higher is the possibility of increased farm output and farm income of the farm household concerned. Thus, all things being equal, male headed farm households cultivating large farms earn relatively more income in comparism with households cultivating smaller farms. They would thus have capacity to save more. This result is in agreement with *a priori* expectations and compares favourably with findings of Sebhatu (2012); and Osundare (2013) among farm households in Ethiopia and Nigeria respectively.

Distance to savings centre had a negative coefficient (-0.056) that was significant at 1.0% alpha level. This implies that the farther the distance to informal savings unit, the less the amount saved in informal forms by male headed farm households. The result is in line with *a priori* expectation. Given the predominance of informal savings in rural areas which are meant to accumulate a target amount for mostly consumption purposes, as observed by Aryeetey and Udry (1997) proximity to the saving location is a widely preferred option for ease of access to the saved fund when the need arises. This result compares favourably with finding of Sebhatu (2012) that closer informal savings unit help members to save resources (time, labour). Amount of credit received had a positive coefficient (0.042) that was significant at 5.0% alpha level. This implies that the larger the amount of credit received by male headed households larger the amount saved in informal forms. This finding is in line with *a priori* expectation**.** According to DBSA (2005) credit is regarded as one of the key elements in raising productivity and income which in-turn enhances savings. This result supports earlier finding of Adeyemo and Bamire (2005), that amount of credit received exerted significant positive influence on savings.

Factors influencing Amount Saved Informally by Female Headed Farm Households

The estimate of the factors influencing amount saved informally by female headed farm households is presented in Table 6. The double-log functional form gave the best fit to the data having produced an R^2 value of 0.735, F-value of 24.224 and highest number of significant variables that conformed to *apriori* expectations. The coefficient of multiple determination (R^2) of 0.735 implies that 73.5% of the variation in amount saved in informal forms among the female headed farm households was explained by the joint action of the independent variables included in the model. The significant F-value of 24.224 confirms the overall equation of the regression to be statistically significant. Table 4.14 shows that 4 out of the nine variables fitted into the OLS model significantly determined the amount saved in informal forms by female headed households at varied alpha levels and signs. The coefficient of age was positive (0.261) and significant at 5.0% alpha level, implying that savings of the female-headed farm households in informal forms increase with increasing age. Although this finding is not in agreement with *a priori* expectation, it is likely that the older female heads of the farm households in the study are still economically active with high income earning opportunities and have made several incomes generating investments which could have accounted for this result. Also, farming experience could increase as age increases leading to increased productivity, income and savings. This result consolidates the findings of Attanasio and Szekely (2000) who found that savings capacity is enhanced as people grow older and that aged people tend to be more frugal and thrifty. The coefficient of educational level (0.503) was positive and significant at 1.0% alpha level. This implies that the more educated female household heads saved larger amounts in informal forms. This result is in tandem with *a priori* expectation and could probably result from the higher income earning opportunities available to educated people. With increase in educational status of household heads, they are able to get employed in better jobs and also appreciate the need to save at least towards retirement. Also, education improves one's ability to adopt income enhancing farming technologies and better utilize effectively and efficiently whatever resources exist in an area. Yazeed *et al*. (2013) obtained a similar result among farm households in Ghana however; this finding disagrees with the finding of Rehman *et al*. (2010) in Pakistan.

The coefficient of income (0.558) was positive and significant at 1.0% alpha level. This implies that, the larger the income, the more the amount saved in informal forms by female headed farm households. This is in agreement with Keynesian postulates that relate income positively to savings. The result indicates that, a Naira increase in monthly income of the household heads will result to 0.558 Naira increase in savings. Similar result has also been obtained by Adeyemo and Bamire, (2005); Ayanwale and Bamire, (2000) and Osondu *et al*. (2015). Distance to savings centre had a negative coefficient (-0.357) that was significant at 1.0% alpha level. This implies that the farther the distance to informal savings unit, the less the amount saved in informal forms by male headed farm households. The result is in line with *a priori* expectation. Given the predominance of informal savings in rural areas which are meant to accumulate a target amount for mostly consumption purposes, as observed by Aryeetey and Udry (1997) proximity to the saving location is a widely preferred option for ease of access to the saved fund when the need arises.

This result compares favourably with finding of Sebhatu (2012) that closer informal savings unit help members to save resources (time, labour).

Constraints Militating against Male and Female Headed Farm Households from Informal Savings

The distribution of the male and female headed farm households according to problems constraining them from saving informally is shown in Table 7. The farm households identified several constraints that limited their ability to save part of what they earned for use in the future. The major constraint to both groups inability to save in informal savings form is inadequate income which was attested by 66.67% and 85.19% of the male and female headed farm households respectively. According to them, their incomes were not adequate to meet their needs let alone putting some aside as savings. Meanwhile, 59.26% and 70.37% of the male headed and female headed farm households respectively reported fear of people absconding with their savings or thieves entering their homes and making away with their savings as reason for saving limited amount in informal forms. Pressure from the family members as well as members of the society at large were also identified by 64.81% and 57.41% of the male and female headed farm households respectively as constraining their ability to save money. These findings compare favourably with findings obtained by Osondu *et al*. (2015) on constraints to savings among farmers in Umuahia Capital Territory of Abia State.

Conclusion

From findings of the study it is concluded that male headed farm households had better access to land and credit facilities which made them to save more in informal forms than female headed farm households. Various socio-economic factors (age, household size, distance to savings center, income, farm size and amount of credit received) influenced amount saved in informal forms by male headed farm households, While, amount saved in informal forms by the female headed households is significantly influenced by age, educational level, income and distance to savings center at varied signs and alpha levels. The study shows that reducing household size can help beef-up savings and protect families from income shortfall. Policies that reduce household size will improve savings of farm households in the area. Thus, reproductive health policies should be tailored to emphasize birth control among the rural farm households. The local government should make credit or loan available to rural farm households by empowering informal financial institutions to meet the credit needs of rural dwellers. Farm households should be encouraged and enlightened by relevant government agencies on the need and importance of savings to economic growth. Informal savings mobilization organizations should adopt demand oriented approach in designing savings programs by considering the age, educational level, gross income and farm size of farmers. Policies should be made on the need to facilitate rural farm household investment climate in order to boost the level of productivity and consequently, the level of income which translates to a higher level of savings rate and investment. Personal efforts of the male and female headed farm households to better their lives should be commended in the face of harsh economic situation, especially to the female headed households because of low possession of productive asset (land) by these women.

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Table 1: Distribution of male and female headed farm households according to socio-economic characteristics

	Male headed	**Female headed**
Continuous Variables	**Mean**	**Mean**
Age (years)	45.61	50.67
Household size	7.74	7.29
Farm size	1.63	0.72
Farming experience (years)	19.98	17.46
Annual farm income (₦)	214,560	146,807
Categorical Variables		
Informal Credit Access	**Percentage**	**Percentage**
Yes	66.67	46.30
No	33.33	53.70
Level of Education Attained	**Percentage**	**Percentage**
No formal education	12.96	25.93
Primary school education	20.37	37.04
Secondary school education	55.56	33.33
Tertiary school education	11.11	3.70

Source: Field Survey, 2018

Table 2: Distribution of the male and female headed farm households according to frequency of savings in informal forms

	Male headed		**Female headed**	
Frequency of Savings	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Weekly	9	16.67	11	20.37
Fortnightly	5	9.26	7	12.96
Monthly	13	24.07	11	20.37
Bi-monthly	6	11.11	1	1.85
Quarterly	2	3.70	3	5.56
Sporadically	19	35.19	21	38.89
Total	54	100.00	54	100.00

Source: Field Survey, 2018

Table 3: Distribution of the male and female headed farm households according to amount saved annually in informal forms

	Male headed		Female headed	
Amount Saved	**Frequency**	**Percentage**	**Frequency**	**Percentage**
1,000-50,000	5	9.26	9	16.67
51,000-100,000	9	16.67	11	20.37
101,000-150,000	11	20.37	20	37.04
151,000-200,000	18	33.33	3	5.56
201,000-300,000	4	7.41	6	11.11
Above 300,000	7	12.96	5	9.26
Total	54	100.0	54	100.0
Mean	162,089		95,340	

Source: Field Survey, 2018

Table 4: Distribution of the male and female headed farm households according to informal saving strategies

	Male headed		Female headed	
Saving Strategies	**Frequency***	**Percentage**	**Frequency***	**Percentage**
Saving cash at home	42	77.78	28	51.85
Saving cash in mobile banks (Akawo)	27	50.00	32	59.26
Saving cash in rotating savings and credit association (ROSCA)	24	44.44	33	61.11
Saving cash in cooperative thrift and credit society	15	27.78	12	22.22
Saving cash in fixed savings and credit association	14	25.93	17	31.48
Saving in kind by storing crop produce	26	48.15	29	53.70
Using livestock as means of saving	17	31.48	18	33.33
Saving through fixed assets (land and building	16	29.63	7	12.96
Converting cash to jewelries	12	22.22	16	29.63
Wrapper	-		3	5.56

Source: Field Survey, 2018. * Multiple responses recorded

Table 5: OLS estimates of factors that influenced amount saved in informal forms by male headed farm households

	Functional Forms			
Variables	**Linear**	**Exponential+**	**Semi-log**	**Double-log**
Constant	41508.204**	10.746***	78577.283	10.605***
	(2.227)	(20.674)	(1.290)	(6.482)
Age	-0.501**	-9.34E-006*	-498.331	-0.008
	(-2.539)	(-1.698)	(-0.311)	(-0.180)
Educational level	-1830.358	0.100	-5811.231	0.166
	(-0.633)	(1.242)	(-0.750)	(0.799)
Household size	-1231.541	-0.095***	-804.087	-0.515**
	(-1.277)	(-3.547)	(-1.076)	(-2.564)
Gross income	0.460***	2.154***	8148.920**	0.335***
	(3.456)	(3.110)	(2.119)	(3.249)
Farm size	6287.126***	0.126**	11806.421***	0.272**
	(3.490)	(2.503)	(2.739)	(2.347)
Purpose of saving	245.389	-0.070	4956.035	-0.013
	(0.042)	(-0.434)	(0.509)	(-0.051)
Interest on savings	-655.988	-0.014	293.295	0.017
	(-0.706)	(-0.525)	(0.044)	(0.096)
Distance to savings centre	-1594.084**	-0.056***	-18833.273***	-0.527***
	(-2.386)	(-3.032)	(-3.527)	(-3.675)
Amount of credit received	0.019	0.042**	6794.866*	0.182***
	(1.651)	(2.062)	(1.824)	(1.819)
R^2	0.665	0.738	0.523	0.653
Adjusted R^2	0.597	0.685	0.423	0.580
F-ratio	9.726***	13.794***	5.238***	8.976***

Source: Computation from field survey data, 2018.
+ indicates lead equation; ***, **, *: indicates variable that are statistically significant at 1.0%, 5.0% and 10% alpha levels respectively; Figures in parenthesis are t-ratios.

Table 6: OLS estimates of factors that influenced amount saved in informal forms by female headed farm households

	Functional Forms			
Variables	**Linear**	**Exponential**	**Semi-log**	**Double-log+**
Constant	-16169.609	9.533***	-88935.021	5.773***
	(-0.994)	(26.530)	(-1.083)	(4.442)
Age	2409.816**	0.041*	12901.169	0.261**
	(2.425)	(1.890)	(1.652)	(2.114)
Educational level	11295.105***	0.310***	26199.076***	0.503***
	(3.411)	(4.243)	(2.909)	(3.531)
Household size	-581.214	-0.057**	4231.083	-0.059
	(-0.582)	(-2.594)	(0.495)	(-0.438)
Gross income	0.562***	1.072E-005***	15008.212***	0.558***
	(4.896)	(4.223)	(2.740)	(6.431)
Farm size	1486.792	0.034	4905.118	0.041
	(0.769)	(0.786)	(0.933)	(0.498)
Purpose of saving	5500.799	0.032	9065.536	0.192
	(0.895)	(0.239)	(0.787)	(1.050)
Interest on savings	0.335	5.762E-006	-228.825	0.014
	(1.570)	(1.222)	(-0.19)	(0.451)
Distance to savings centre	-635.369	-0.021	-9963.659	-0.357***
	(-0.933)	(-1.368)	(-1.631)	(-3.690)
Amount of credit received	-0.018	-3.519E-007	-4493.896	-0.104
	(-1.469)	(-1.320)	(-1.066)	(-1.561)
R^2	0.686	0.712	0.536	0.735
Adjusted R^2	0.642	0.674	0.460	0.701
F-ratio	17.951***	21.140***	8.358***	24.224***

Source: Computation from field survey data, 2018.
+ indicates lead equation; ***, **, *: indicates variable that are statistically significant at 1.0%, 5.0% and 10% alpha levels respectively; Figures in parenthesis are t-ratios.

Table 7: Problems constraining male and female headed farm households from saving informally

	Male headed		Female headed	
Problems	**Frequency***	**Percentage**	**Frequency***	**Percentage**
Misuse of money	29	53.70	23	42.59
Family and societal demand	35	64.81	31	57.41
Inadequate income	36	66.67	46	85.19
Remoteness of savings outlets	14	25.93	19	35.19
Sickness	18	33.33	22	40.74
Fear of safety of money	32	59.26	38	70.37

Source: Field Survey, 2018.
*Multiple responses recorded