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Determinants of Savings and Investment Capacities of Farming Households in Udi Local Government Area of Enugu State, Nigeria

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Abstract
The determinants of savings and investment capacities of farming households in Udi Local Government Area of Enugu State, Nigeria was studied. A multi-stage random sampling technique was employed in the selection of 120 respondents. Data were collected using structured questionnaires and were analysed using descriptive and inferential statistics. Results showed that farming households save and invest mainly for the purchase of improved varieties and breeds, agrochemicals and feeds. Informal method of saving which involved saving through *isusu* and money lending were the most identified ways of saving among the farming households. Also, the knowledge of incentive for sufficient returns, advice received from friends and colleagues, risk of capital loss, and a place to retire were the influencing factors to savings and investment in the area. The results equally indicated that with the coefficient of determination (R^2) of 0.767 and F-ratio of 40.302, the socioeconomic attributes of the farming households showed significant effect on the overall savings and investment capacities at 1% level. However, lack of sufficient returns, heavy consumption, risk of capital loss, lack of agents for savings collection, inadequate bank branches, high administrative cost, inadequate information, low literacy level, poor market structure, and high perishable nature of agricultural produce were identified as the major constraints to savings and investments. Based on the findings, the study concluded that there was a high propensity to save and invest among farming households.
Key words: determinants, savings, investment, capacities, farming households, Enugu State

1. Introduction

The farming households is of utmost importance to Nigerian economy not only because of the income generated and the employment potentials of the sector, but also the limits set by the sector to the growth of other sectors. Savings among the farming households in a developing economy like Nigeria is of crucial importance as the degree of progress a farmer will attained depends largely upon what the farmer does with the additional incomes generated yearly from farm activities (Ayawale and Bamire, 2000). The growth rate in the farming economy largely depends on the stock of capital built by a farmer and the re-investment of such stock for further improvement of the farming households. Savings is normally considered in economics as disposable income minus personal consumption expenditure. In other words, it is regarded as income that is not consumed by immediately buying goods and services. This clearly indicates that savings is closely related to investment. By not using income generated to buy consumer goods and services, it is most likely for a resource to be invested so as to use it to produce tangible and intangible capitals.

Saving can therefore be vital in increasing the amount of capital available. Increase saving is necessary but not a sufficient condition for investment. Saving undeniably therefore, is a strategic variable the economy as posited by renowned economist like Adam Smith and David Ricardo. According to Bime (2008), savings go beyond capital formation to being a catalyst for capital formation and a major determinant of the cost of credits based on the law of scarcity which holds that "when the former is low and scarce, it becomes more costly to obtain" . The role of savings in economic development is very important and it can be described as a driving force necessary for economic growth and development. Savings habit of a person is measured by his or her marginal propensity to save which in turn is determined by a number of factors. According to a world bank report of 1995, households in developing countries save an average of 13% of the Gross National Product (GNP) and invest 6% of it thereby, leaving a savings surplus of 9% of the GNP. On the other hand, businesses save about 7% of GNP but invest more than 15% of the GNP. The report further concludes that households as a group, finances all their investment from savings while businesses finance 45% of their investment through borrowed funds.

In many developing economies particularly Africa, saving and investment are necessary engines for capital formation and economic growth. It has been argued that saving constitutes the basis for capital formation and capital formation constitutes a critical determinant of economic growth. Available statistics however indicate low saving mobilization base and investment in this part of the world. For instance, in Nigeria between the

period of 1980-2001, saving particularly from agricultural sector amounted to average of 21.6 percent (based on world bank data base). According to United Nations Organization of 2000, capital accumulation is a major prerequisite of economic development and if the volume of savings was inadequate to meet investment requirements, major bottlenecks were likely to develop in the process of capital formation and the drive for development. The volume of investment has been found to depend on income, cost procuring investible fund and entrepreneur's expectations on the trends of the business in future. Ayanwale and Bamire (2000) opined that the saving behaviour of farmers in developing countries are less dependent on the absolute level of aggregate income and more dependent on the relationship between current and expected income, the nature of business, household size, wealth and demographic variables like age.

According to Haruna (2011), there has been contending issues regarding whether farming households can save or not. On this premise, two conflicting views have been aired: the traditional or old view and the new view. The traditional view posited that farming households cannot save because they have low productivity as they are confined to the traditional methods of farming. In furtherance, Adams and vonPischke (2008) also argued that rural households are too poor to save and even if they get some additional income through some windfall, they spend if on consumption or on ceremonies.

In contrary to the traditional postulations, the new view argued that rural households have the capacity and the desire to save and would respond appropriately to saving opportunities and incentives. The proponents of the new view cited a number of reasons to expect substantial for saving in rural areas. Firstly, they suggest that households save after harvests when they sell a portion of their crops to expand consumption and others for investment as well as pay off debts. Secondly, they contended that rural households are heterogeneous comprising both rich and poor households where the rich households can always save over short and long periods.

A lot of researches have been carried out on savings and investment potentials of rural and farming households in Nigeria, but despite the quantum of researches in this area of study, there seems to exist dearth of empirical knowledge of the study in Udi Local Government Area of Enugu State. Again, judging from the from the traditional view on the saving behaviour of rural households which posit that rural farmers do no save nor invest which seems unjustifiable in Udi L.G.A., the study based on that seek and determined the savings and investment capacity of farming households in Udi local government area of Enugu State. Specifically, the study described the socio-economic characteristics of farming households; determined the respondents' areas of investment, expenditures and savings; determined the difference between the amount saved and amount invested by the respondents; analyzed the factors that influenced savings and investments behaviour among farming households; determined the effects of socio-economic characteristics of the farming households on farming household's savings and investment capacity; and analyzed constraints to savings and investment capacity of the farming households.

2. Methodology

2.1. Study Area

The study area is Udi Local Government Area (L.G.A.) of Enugu State. The area is made up of 26 communities which comprised of Affa, Abor, Ogbu, Akpakwume, Awhum, Abia, Amokwe, Agbudu, Amokwe Affa, Nze, Umuoka, Umulumgbe, Egede, Okpata, Ukana, Ebe, Ngwo, Nsude, Obioma, Udi , Nachi, Obinagu, Umuabi, Umuavalu, Umuaga and Eke. It is geographically located within latitude 6^0 19^1 North, longitude 7^0 26^1 East and has an area of 897 km^2. The population of the area is comprised of 115, 579 males and 118,423 females giving a total of 234, 002 persons (NPC, 2006). The people of the area are mainly of *Ibo* extraction. The annual rainfall ranges from 1505mm to 2033mm with marked wet and dry seasons. The mean temperature is about 30^0c between the months of November to February. The soil is sandy loam which is very conducive for the growth of crops. Udi being an agrarian L.G.A. is the largest producer of groundnut and palm wine in eastern Nigeria. Other crops grown in the area are: cassava, yam, cocoyam and bambaranut, oil bean, orange, cashew, and mango. Meanwhile, in animal husbandry, the people rear mostly small ruminants and poultry.

2.2. Sampling Techniques and Data collection

A multi-stage random sampling technique was used in the selection of respondents. First, six (6) communities out of twenty-six (26) communities in the L.G.A. were randomly selected. The second stage involved the random selection of four (4) villages from the randomly selected communities to give a total of 24 (twenty-four villages). The last stage involved the random selection of five farming households each from the randomly selected twenty-four villages to give a total of 120 farming households. Data were collected primarily from the randomly selected farming households using structured questionnaires.

2.3. Data Analysis

Both descriptive and inferential statistics were employed in data analysis. Specifically, the description of the socio-economic characteristics of farming households; the determining of the respondents' areas of investment,

expenditures and savings; and determining of the difference between the amount saved and amount invested by the respondents were achieved using descriptive statistics of tables, frequencies, percentages, means, etc. Principal Component Factor analysis was used to realise both the factors that influenced savings and investments behaviour among farming households; and constraints to savings and investment capacity of the farming households.

2.4. Model Specification

2.4.1. Multiple Regression Model

Y= f (AG, GEN, MST, EDU, FS, HHS, FEX, HAI, MFO) ……. Implicit form

$Y= \beta_o + \beta_1 AG + \beta_2 GEN + \beta_3 MST + \beta_4 EDU + \beta_5 FS + \beta_6 HHS + \beta_7 FEX + \beta_8 HAI + \beta_9 MFO + \mu$ ….. Explicit form

Where:

β_0 = Constant

β_8 - β_9 = Coefficients of regression

Y= Rural Household Savings and Investment (Naira)

AG = Age (years)

GEN = Gender (Dummy)

MST = Marital status (Dummy)

EDU = Education level (No of years spent in formal school)

FS = Farm size (Hectares)

HHS = Household size (In number)

FEX = Farming Experience (Years)

HAI = Household Annual Income (Naira)

MFO = Membership of farmers organization (Dummy)

μ = Stochastic error term

2.4.2. Difference in mean model (N = 120)

$$Z = \frac{\ddot{x}_1 - \ddot{x}_2}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}}$$

Where;

$\ddot{x}_1$= Mean of amount saved

$\ddot{x}_2$= Mean of amount invested

σ_1^2 = Standard deviation of amount saved in Naira

σ_2^2= Standard deviation of amount invested in Naira

n_1 and n_2 = Sample sizes of the amount saved and invested

Decision rule: If $Z_{Cal} > Z_{tab}$, reject the null hypothesis, otherwise accept..

2.4.3. F-test model

$$\text{F-cal} = \frac{R_2(N-K)}{(1-R^2)(K-1)}$$

Where R^2 = coefficient of multiple determination

N= Sample Size

K= Number of Variables

Decision Rule: If f-cal> f-tab reject the null hypothesis (Ho) otherwise accept the alternative hypothesis (HA).

3. Results and Discussion

This section presents the results of the analysis in line with specific objectives. These objectives are, to; describe the socio-economic characteristics of farming households; determine the respondents' areas of investment, expenditures and savings; determine the difference between the amount saved and amount invested by the respondents; analyse the factors that influenced savings and investments behaviour among farming households; determine the effects of socio-economic characteristics of the farming households on farming household's savings and investment capacity; and analyze constraints to savings and investment capacity of the farming households.

3.1. Socio-economic characteristics of the farming households

The result of the socio-economic characteristics of the farming households were analysed as presented by the head of the households (Table 1). The result of the analysis showed that majority (66.7%) of the farmers was males while 33.3% were females. This implied that males in the farming communities of Udi are more inclined to farming activities than the females who preferred petty trading to farming. Again, 50% of the farmers fell

within the active age bracket of 41-60 years and who has a mean household size of 8 persons. This implied that most of the farmers are still within their active economic productive age. This is important considering the tedious nature of agricultural activities in the area, utilizing crude hand tools technology that is driven by human power and since a household size of 8 persons can be regarded as being large, its adequacy can be very useful in farming activities such as land cultivation and other agribusiness activities.

The result equally showed that 61.7% of the farmers were married with about 82.5% of them having one form of formal education to the other. The breakdown indicated that majority (33.3%) of the respondents had completed primary education, while 20.8% of the respondents had completed their secondary school education and a few (2.3%) had attained tertiary education. This means that the educational level of the respondents was very low since majority could not attained tertiary education and hence, an indication that the rate of adoption of agriculture innovations will be low. Again, the result indicated that majority of the farmers (52.5%) cultivated between 1.1-2 hectares which was an indication that the farm size of the respondents was relatively low and cannot support commercialization and large scale agriculture production. Thus, most of them are still at subsistence level of agriculture. In view of this, nearly half of the farmers earn a monthly income of between ₦21,000-N40,000 which on the average amounted to N38, 600 per annum. This finding signified a low income generation level of the households in the area. Thus, the result ran contrary to the finding of Nwibo and Egwu (2012) who reported that the farming households of Abakaliki Local Government Area of Ebonyi State, Nigeria earn an average of ₦140,000. Though, Abakaliki L.G.A. is more agrarian than Udi L.G.A.

3.2. Households' Investment Areas

The analysis of the investment behaviour of the farming households as shown in Table 2 showed that about 50% and 54.17% of the farmers invested most of their saved income in purchase of improved varieties and breeds respectively. Meanwhile, 24.17%, 25.00% and 27.50% invested in medication, agrochemical and farm machineries respectively. This finding implied that despite the earlier finding that the households do not posses adequate higher degrees, the farmers are innovative, capable adopting new technologies hence their savings and investment of their recourses on improved varieties and breeds that will aid in increasing their productivity and general wellbeing.

3.3. Pattern of Saving by Farming Households

Analysis of the saving pattern of the farming households in Udi L.G.A. as shown in Table 3 revealed that informal method of saving was the most of prevalent way of saving among the farming households (66.7%). The identified informal ways of saving among the households were: *isusu* (rotational contribution), money lending, religious groups, friends and relatives, and occupational groups. However, the result showed that among the informal credit institutions, rotational monthly contribution known as *isusu* in southeast Nigeria and money lending were the major ways through which the farmers save their money. The policy of *isusu* is based on the monthly collection of fixed amount of money from member contributors and loaning out the money to members on low interest rate (mostly 5%) and higher interest rate to non-members (mostly 10%). At the end of the financial year, both the accrued interest paid and the principal contributions will be shared among members. This finding was in consonance Odoemenem, *et al*. (2005), Schrooten (2003) that farmers make use of informal financial sectors to mobilize savings and develop their rural communities because it gives them access to loans that they cannot get from formal financial institutions due to lack of collateral.

Meanwhile, farming households that save through formal credit institutions, preferably save through micro-finance banks. This finding is justified on the ground that most farmers fear to save in formal financial institutions because of the bureaucracy involved in withdrawing the money back, and the higher interest rates charged by banks.

3.4. Measuring the Amount Saved and Invested by Farming Households

This section examined the amount of capital invested and saved in relation to the average total income of the households. From the analysis as presented in Table 4, it was observed that out of the average total income of N463,200 earned, the farming households were able to save N238,990.83 and at the same time N224,209.17 was invested in various investment areas. Based on the analysis, a difference between the amount saved and the amount invested was N14,781.66. To further confirm the result, a test of difference in mean (Z test) was conducted at 5% level of significance and the result showed that Z^{tab} was 1.68 and Z^{cal} was 2.71 and since Z-calculated value was greater than the Z-tabulated value, it was concluded that there was a significant difference between the amount saved and invested by farming households in Udi L.G.A. of Enugu State, Nigeria.

3.5. Factors Influencing Saving and Investment Behaviour of Rural Households

Households' saving and investment behaviour is largely influenced by several variables factors. Using Varimax Principal Component analysis with Kaiser's rule of thumb of 0.4 as a minimum point a factor will load before it can be accepted as having effect, the study identified incentive for sufficient returns, advice received, lack/absence of risk of capital loss, and a place to retire (Table 5) as the influencing factors to saving and investment in Udi Local Government Area of Enugu State, Nigeria.

Incentive for sufficient returns has been identified as being one of the influencing factors to savings and investment in the area. This finding justified the fact that farming households are becoming enterprising, thus diversifying to areas that will bring about increased income for the household and improve their wellbeing.

The study further observed that advice people receive from colleagues positively affect the saving behaviours of farming households. Advices such as potential investment areas, benefits derivable from investment, inherent dangers of not saving and investing can influence farming households to save and invest. Savings can be for immediate or future benefits.

Having a place where one can retire to after years of service has been identified by the study as one the strong catalysts that influence savings and investment among farming households in the area. This finding was justified as retirement is believed to be the last stage of live and as such a farmer will be pleased to save and invest so as to maintain the already established standard of living.

Risk of capital loss can positively or negatively influence savings and investment behaviour among farming households. This study on this note has identified that lack or absence of investment capital loss as one the factors that influenced farming households to investment.

3.6. Effects of Socio-Economic Characteristics of the Farmers on the Savings and Investment Capacity of Farming Households

Multiple regression analysis was used to determine the effects of socio-economic characteristics of the farming households on their savings and investment capacity in the study area. The dependent variable was based on the amount money saved and invested by the farming households. The output of the regression was presented in Table 6.

The result of multiple regression analysis as shown in Table 6 indicated that the coefficient determination (R^2) was 0.767 which signified that about 76.7% of total variation observed in the dependent variable was explained by the explanatory variables (β_1-β_9) included in the model. The fitness of the model was further confirmed by the low value of the standard error of the estimate (Std Error = 0.384). Again, the overall significance of the model was depicted by the F-statistics which was significant at 1% level of significance. The significance of F-ratio shows that the regression result was statistically reliable. This finding justified the report of Bamire (2008) that the saving behaviour of farmers in developing countries is less dependent on the absolute level of aggregate income and more dependent among other factors on the relationship between current and expected income, the nature of business, household size, wealth and demographic variables like age, gender, etc.

The individual assessment of the explanatory variables showed that age (β_1) of the farming households exerted negative influence on the savings and investment of farming household but was statistically significant at 1%. This finding was in deviation with *a priori* as savings and investments tend to increase with age. This parallel increase should be based on the fact that as farmers advance in age they tend to save and invest for retirement. The finding of this study again was not consistent with finding of Nwibo and Alimba (2013) who reported that age has a positive relationship with agribusiness investors' decision to invest. However, the finding was in conformity with the finding of Bime (2010) who found that age to be inversely related to the probability of one investing in honey agribusiness because as one advances in age they become risk averse and thus tend to avoid new ventures, on whose performance they are not certain.

Educational level (β_4) of the rural farming households was found to be positively related to savings and investment capacity at 1% level of significance. This signified that an educated farmer can save and invest better than an illiterate farmer. This finding corroborated Burney and Khan (1992) who posited that educated farmers tend to save more than uneducated farmers as his savings can be used for the good education of their children.

The result further showed that household size (β_6) was negatively signed and statistically significant at 1% level which signified an inverse relationship with saving and investment capacity. This finding was justified as an increase in household size of a farmer will result to an increase in the household spending hence, resulting to a decline in saving and investment. This is because farmers with large family size spend more money for their up keep and hence, cannot save much amount of money for investment. This was in consonance with the finding of Rehaman *et al.* (2010) who studied the demographic and other influences on long term saving behaviour in India came up with finding that large family size had a depressing effect on long term household saving rate. Similarly, Kibet, *et al.* (2009) posited that an increase in household will bring about increase in dependency ratio and as such is bound to cause a decline in saving, while a decline in dependency ratio will result in an increase in saving.

Farming experience (β_7) bore a positive coefficient and was statistically significant at 1%. This implied that farmers with long experience in farming tend to have wider experience and are more inclined to saving and investment in agricultural activities that whose rate of returns are higher. Similarly, the household income (β_8) was positively signed and statistically at 1% level. This was justified as increase in the income level of a household will bring about increase in the saving and investment capacity as increasing income will result to surplus that will be saved and invested after consumption expenditure has been made. This finding justified the

Keynesian theory of consumption which posits a positive relationship between income and saving; and that household savings is directly and significantly affected by the income level. The result again ran concurrently to the finding of Samroyina (2004) who studied saving behaviour among households in Russia and found that the marginal propensity to save out of income was positive. This concurred with economic theory where an increase in income is bound to lead to an increase in saving.

The result further showed that gender, marital status, farm size, membership of farmers' organisations were found not have significantly affected the savings and investment capacities of farming households in Udi L.G.A. of Enugu State, Nigeria.

The final regression equation is shown below.

$$Y = 0.277 - 0.005\beta_1 + 0.014\beta_2 - 1.005\beta_3 + 0.476\beta_4 + 4.700E\text{-}8\beta_5 - 0.020\beta_6 + 0.073\beta_7 + 0.488\beta_8 + 0.007\beta_9$$
$$(0.401)^* \quad (0.008)^* \quad (0.011)^{**} \quad (0.007) \quad (0.005)^* \quad (0.000) \quad (0.012)^* \quad (0.119)^* \quad (0.088)^* \quad (0.009)$$

3.7. Constraints to Savings and Investment Capacity of Farming Households

Because of the necessity to determine constraints to savings and investment capacity of farming households on Udi L.G.A. of Enugu State, this section undertakes to identify these factors using factor analysis. Those variables that loaded high and above at 15% over lapping varimax (Ashley and Anthony 2006) were used in naming each of the extracted factors. Kaiser (1950) developed as simple thumb that variable with coefficient of (0.40) or more have a high loading and may be used in naming a factor. This rule has general application in all cases regarding the factor analysis.

From the result obtained in Table 7, it was observed that the major factors that affect the savings and investment capacities of the rural farming households can be extracted and categorised into four (4) components. The components are: financial, administrative, social, and infrastructural components.

Based on the factor loading, the following financial components were extracted: lack of sufficient returns (0.429), heavy consumption (0.417) and risk of capital loss (0.547). This finding justified the fact that farming was still not viewed as a business in the area as any farm that is operated as business should be capable of generating sufficient revenue for both the farm and farming family. However, the finding justified the results of Thingan (2001) and Adewunmi (1996) who observed that due to the peasantry nature of the rural farmers of the southern Nigeria, the returns to farming was low thus, contributing to the low savings habit. Again, Yarron *et al.* (2007) corroborated the findings as the posited that low income of farmers is as a result of their high marginal propensity to consume and low marginal propensity to save. However, the polygamous nature of most farming communities in Udi L.G.A. with its attendant high household size attested to their heavy consumption as observed from the analysis.

The result equally revealed that the administrative constraints to the saving and investment capacities of farming households based on the Kaiser's loading were lack of agents for collection (0.892), lack of bank branches (0.947), high administrative cost (0.618) and lack of information (0.711). The lack of agents for the collection of saving cash from farmers who resides in the rural areas has greatly been a bane for savings and investments as it will be difficult for the travel to far distances to save the money in organised financial institutions.

Socially, the savings and investment capacities of the farming households were constrained by low literacy level (0.454), poor market structure (0.617), and activities of middlemen (0.458). The low literacy level of the farmers as justified from this and the earlier findings on their socioeconomic status indicated that this education has negatively shaped the saving and investment habit of the farming households.

Infrastructural facilities that are available in an area have been identified to have significant influence on the saving and investment habit of farming households. Some of the infrastructures that influence saving and investment among farming households include good access roads, storage facilities, effective power supply, etc. Based on this premise, the study identified high perishable nature of agricultural produce (0.461) as one of the banes to savings and investments among farming households. This was justified on the ground that a farmer who lacks appropriate storage facilities will encounter post harvest (perishablity) losses of products and this will have deter them from saving and investing. This findings further justified Bime (2008) who reported that poor market structure, inaccessible roads, activities of middle men and the perishable nature of the produce serve as co-factors affecting savings among vegetable farmers in the North West region of Nigeria.

4. Conclusion and Recommendations

Based on the findings, the study concluded that there was a high propensity to save and invest among farming households and that age, educational level, household size, farming experience, and household income showed significant effect on the capacity to save and invest. The following recommendations were made for both farming households and policy markers: proper enlightenments programme geared towards the education of the farmers should be given to rural farmers as way of educating them on the importance of savings and investment; and the extension of micro credit to farmers on time as a way of helping them to boost production which invariably will make farmers to have surplus for savings and investment.

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Table 1: Percentage Distribution of the Socio-Economic Characteristics of the Respondents

Socio-economic characteristics	Frequency (n=120)	Percentage	Mean
Sex			
Male	80	66.7	
Female	40	33.3	
Age			
< 20	15	12.5	38
21-40	40	33.3	
41-60	60	50.0	
61 and above	5	4.2	
Religion			
Christianity	85	70.9	
Traditionalism	35	29.2	
Education Attained			
No formal Education	21	17.5	
Adult Literacy Training	30	25.0	
Primary School	40	33.3	
Secondary School	25	20.8	
Tertiary Education	04	2.3	
Household size			
1-5	34	28.8	8
6-10	62	51.7	
11-15	10	8.3	
16-20	10	8.3	
Above 21	4	3.4	
Occupation			
Farming	70	58.3	
Trading	10	8.3	
Civil service	20	16.7	
Self employed	20	16	
Farm size (Ha)			
< 1	42	35.0	1.4
1.1-2	63	52.5	
2.1-3	10	8.33	
3.1-4	5	4.17	
Monthly income (Naira)			
< ₦20,000	20	16.66	38,600
₦21,000 - ₦40,000	59	49.17	
₦41,000 - ₦60,000	22	18.33	
₦61,000 - ₦80,000	10	8.33	
₦81,000 - ₦100,000	9	7.50	
Farming Experience			
1-10	1.8	15.00	22
11-20	26	21.67	
21-30	51	42.50	
31-40	19	15.83	
41 and above	06	05	
Membership of cooperative society			
Members	50	41.67	
Non-members	70	58.33	

Source: Field Survey, 2012

Table 2: Percentage Distribution of the Respondents According to Areas of Investment in Agriculture in the study area.

Areas of investment	Frequency (n=120)*	Percentage
Investment in farm building	40	33.33
Investment in livestock medication	29	24.17
Investment in purchase of improved varieties	60	50.00
Investment in purchase of improved breeds	65	54.17
Investment labour	42	35.00
Investment machinery	33	27.50
Investment Agricultural Land	50	41.67
Investment Fertilizers	55	45.83
Investment in feeds	49	40.83
Investment in non agricultural sector	7	5.83

Source: Field Survey 2012.
*Multiple Responses

Table 3: Percentage distribution of the respondents according to pattern of savings of the rural farmers in the study area

Saving institutions	Frequency (n=120)*	Pattern of saving	Frequency (n=120)*	Percentage
Formal	50(45.8)	Conventional banks	08	6.7
		Microfinance Banks	40	33.3
		NACRDB	19	15.8
		Mobile bankers	33	27.5
		Registered cooperative society	20	16.7
Informal	80(66.7)	*Isusu* (Rotational contribution)	75	62.5
		Money lending	42	35.0
		Religious groups	11	9.2
		Friends and relatives	18	15.0
		Occupational groups	14	11.7

Source: Field Survey, 2012
*Multiple responses

Table 4: Mean Difference in Amount Saved and Amount Invested

Annual income (N)	Amount saved (N)	Amount invested (N)	Difference
463,200	238,990.83	224,209.17	14,781.66

Source: Field Survey, 2012

Table 5: Factors Influencing Saving and Investment Behaviour of Farming Households

Variable Code	Variable Names	Factor Loading
VO_1	Incentive of sufficient returns	0.636
VO_2	Risk of capital loss	0.416
VO_3	A place to retire	0.520
VO_4	Establish diversified venture	0.217
VO_5	Availability of accessible roads	0.152
VO_6	Advice received	0.617

Source: Field Survey, 2012

Table 6: Multiple Regression Effects of Socio-Economic Characteristics of the Farmers on the Savings and Investment Capacity of Farming Household in the Study area

Variables Code	Variable names	Regression coefficient	Standard error	Z - value
β_o	Constant	0.277	0.401	5.673*
β_1	Age	-0.005	0.008	0.642*
β_2	Gender	0.014	0.011	1.277**
β_3	Marital status	-1.005	0.007	0.695
β_4	Educational level	0.476	0.005	8.974*
β_5	Farm size	4.759E-8	0.000	-1.620
β_6	Household Size	-0.020	0.012	1.673*
β_7	Farming experience	0.073	0.119	0.610*
β_8	Household income	0.488	0.088	5.545*
β_9	Membership of farmers organizations	0.007	0.009	-0.759

Source: Field survey, 2012; * and ** Indicates significance at 1% and 5% respectively
$R^2 = 0.767 = 76.7\%$
Adjusted $R^2 = 0.748 = 74.8\%$
Std Error (Standard Error of Estimates) = 0.384
Durbin Watson constant (DW) = 2.1.88
F- ratio = 40.302

Table 7: Varimax Rotated Factor Matrix on Constraints to Savings and Investment Capacity of Farming Households in Udi L.G.A. of Enugu State

Variable Code	Variable Names	Factor I Financial constraint	Factor II Administrative constraint	Factor III Social constraint	Factor IV Infrastructural constraint
VO_1	Lack of sufficient returns	0.529	0.034	0.009	0.021
VO_2	Risk of capital loss	0.547	-0.310	0.083	-0.252
VO_3	Lack of agents for collection	0.126	0.892	0.301	0.005
VO_4	Lack of bank branches	-0.594	0.947	-0.004	0.079
VO_5	Heavy consumption expenditure	0.417	0.33	0.898	0.006
VO_6	Seasonality of Agricultural operations	0.152	0.234	-0.453	0.004
VO_7	Too much expenditure on social obligation	0.003	0.066	0.138	0.116
VO_8	Lack of information	0.138	-0.711	0.294	0.214
VO_9	Low literacy level	0.221	-0.045	0.454	-0.509
VO_{10}	Poor market structure	0.008	-0.124	0.617	0.270
VO_{11}	Activities of middlemen	0.107	0.069	0.458	-0.024
Vo_{12}	Perishable nature of agricultural produce	-0.091	0.099	0.011	0.461

Source: Field Survey, 2012