The Relationship between Savings Mobilization Techniques and Livelihood Activities of Rural Women in Borno State, Nigeria

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Abstract

The study examined Rural Women Savings and their effect on livelihood in Borno State, Nigeria. The specific objectives of the study were to examine the socio-economic characteristics of the respondents in the study area, estimate the determinants of savings among respondents in the study area, determine the relationship between livelihood activities and types of savings mobilization techniques, Data for the study were obtained from both primary and secondary sources. Primary data for the study were obtained through the use of structured questionnaires from 600 respondents selected through multi-stage sampling procedure. The respondents were selected from 2,090 women with livelihood activities, spread over 23 communities in 6 local government areas of the state. A proportionate random sampling was employed at various stages of selection. Descriptive statistical techniques such as the frequency distribution, percentages and mean were used to examine the socio-economic characteristics of the respondents in the study area. Inferential statistical techniques namely; saving model and Multinomial Logit Model were used to estimate the determinants of savings among respondents in the study area, determine the relationship between livelihood activities and types of savings mobilization techniques. The findings of the study revealed that Age, income and education were the factors that determined saving in the study area. It was further revealed that farmers and artisans were more likely to engage in savings at home; wage earners were more likely to be saving in Banks while agro-processors were more likely to make savings in ROSCAs. It is recommended that Rural women should be properly mobilized and organised to join cooperative societies and self help groups and register in other formal financial institutions, so that the Government, NGOs and Micro-finance institutions can easily reach out to them as this will improve their level of personal development. The savings mobilization organizations should adopt demand

oriented approaches in designing savings programs by considering the socio-economic characteristics of rural women.

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1.0 Introduction

Saving is undeniably considered as a strategic variable in the theory of economic growth determining both individual and national well-being. However, saving level in some parts of Africa, particularly in rural areas, is very low and little is known empirically about its patterns and determinants (Girma *et al.,* 2013).Although research has shown that poor people in sub-Saharan Africa (SSA), including those living in rural areas save, little is known about the factors that influence saving and asset accumulation among this population. The development literature has increasingly acknowledged the importance of the role of savings in the livelihoods of households in rural sub-Saharan Africa (SSA). Savings are an important way of improving well-being, insuring against times of shocks, and providing a buffer to help people cope in times of crisis (Miracle, Miracle, & Cohen, 1980; Rutherford, 1999; Zeller & Sharma, 2000). Therefore, an understanding of factors that affect the savings performance of households is a necessary step toward theory building in social development research, which in turn leads to the formulation of more effective social development policy. Savings of an individual and households form a substantial part of capital accumulation in any given society. In any society, everyone at one point in time saves something of value (Bime and Mbanasor, 2011).

Savings can be defined as the part of income that is not immediately spent but is being kept for future consumption, investment and unforeseen contingencies. According to Fasoranti (2007) Savings and savings mobilization in any economy are undertaken by mostly formal and informal financial institutions. One of the basic features of a developing country is financial dualism, which refers to a situation where the formal and the informal financial sectors co-exist. In many of such countries, the informal financial sector is more common because of the ease of entry and financial benefit when required. Ogunrinola *et al*. (2005) reported that high level of illiteracy and the financial under-development of the economy also accounts for the rapid growth of the informal financial sector.

Financial services available to women micro entrepreneurs are diverse, ranging from formal banking system to easy accessible micro-credit provided by informal savings and credit systems. However, the formal banks are not popular in disseminating loans to women micro-entrepreneurs (Ogunrinola *et al.*, 2005; Oluwalana and Adegbite, 2005). Banks are reluctant in lending to this category of customers because of their observed low marginal propensity to save, thus low deposits in Banks (Aryeetey, 1996). In spite of this, poor women in developing countries use informal rather than formal financial system to meet their savings and credit needs (Sengupta, 1990). While women working in the wage sector have greater access to financial services from formal institutions (World Bank, 1991), many of them prefer the informal financial system because of its flexibility (Akingunola and Onayemi, 2010).

In Nigeria, it is evident that rural women engage in multiple livelihood activities such as trading (marketing or adding value to commodities), small scale business enterprises and arts and crafts (weaving, mat and basket making) in order to supplement earnings from agriculture (Edna *et al*., 2007; Ekong, 2003). It should be noted that for any profitable investment, financial capacity and availability are necessary conditions for success (Todaro, 2004). As such, higher savings will lead to capital accumulation, which in turn will lead to

economic growth and development (Bime and Mbanasor, 2011). Rural women play a vital role in the economy and as such the importance of their savings cannot be over emphasized. As part of economic builder, women's savings is also part of the savings of the economy for the maintenance of strong and sustainable growth in the world economy, particularly in Nigeria.

Poverty data also support the fact that most women in the informal sector belong to poor households. For example, Nigerian women predominate in agriculture, food processing and sales activities in the informal sector (Okojie, 2006). About 12.2% of women in sales' occupation were poor in 1980, this increased to 60.4% by 1996 (Okojie, 2006). Similarly, the incidence of poverty among female in agricultural occupations increased from 29.0% in 1980 to 61.1% by 1996 (Okojie, 2003). Recent study shows that poverty levels are still high in these two occupations (44.2% among sales' workers and 67% among agricultural workers) (National Bureau of Statistics, 2006). Thus a significant proportion of self-employed women in Nigeria live in poor households.

In rural areas, rural financial programmes have been largely designed, crafted and implemented with the male heads of households as the intended client and failed to recognize that women are active, productive and engaged in different livelihood activities with their own financial needs and constraints (Diagne *et al.*, 2000). Women constitute approximately half of the rural labour force and, while not always counted, they are economically active in each sub-sector of the rural economy. Even though millions of women throughout the world contribute to national agricultural output and family food security, detailed studies from developing countries consistently indicate that rural women are more likely to be financially constrained than men of equivalent socio-economic status (Fletschner, 2009). Hence, the enormous importance of women's savings in the overall growth and development of the Nigerian economy and in Borno state in particular, cannot be over emphasised.

2.0 Objectives of the Study
The main objective of the study was to analyse Rural Women's Savings and their effect on livelihood in Borno State, Nigeria. The specific objectives were to:
  i.   examine the socio-economic characteristics of respondents.
  ii.   identify the types of savings mobilization techniques among women;
  iii. determine the relationship between livelihood activities and types of savings mobilization techniques.

3.0 Methodology
The study was conducted in Borno State, Nigeria. The State lies between latitudes 10^002^1N and 13^004^1N and longitudes 11^004^1 E and 14^0. The State is bordered by Adamawa State to the south, Yobe State to the west and Gombe State to the southwest. It also shares border with Cameroon Republic to the east, Chad Republic to the north east and Republic of Niger to the north (Borno State Diary, 2010). The state has a land mass of about 69,434 square kilometres and comprises of 27 Local Government Areas. The provisional census gives the population of the state as 2,653,015 for male and 2,446,985 for female, making a total of 4,998,033 (National Population Commission, 2006).

Women engage in a variety of economic activities essential to support development in Borno State. They are involved in agriculture (food crop and livestock production) and

micro-industries. They are also active in income generating activities such as agro-processing and marketing. Other income generating activities are hair plating, mat making, pottery and tailoring (Ministry of Women Affairs and Social Development, 2008).

The study used the three (3) Agricultural Development Programme (ADP) Zones in the state. Each zone comprised of nine (9) Local Government Areas (LGAs). A Multi-stage random sampling technique was employed in selecting the sample for the study. In the first stage, two (2) LGAs from each of the three (3) ADP Zones in the State were randomly selected; making a total of six (6) LGAs. These LGAs include: Kukawa, Mongono, Bama, Kaga, Gwoza, and Hawul. In the second stage, proportionate random sampling was used and twenty-three (23) villages were selected out of the six (6) LGAs selected. In the third stage, there was a proportionate random selection of six hundred (600) respondents from the twenty three (23) villages for the study. Lists of women involved in livelihood activities from the twenty three villages were obtained from extension agents working in these communities.

Primary and secondary data were used for this research. The primary data were collected using Interview Schedule. Trained enumerators from ADP were engaged in data collection. The secondary information was obtained from published materials such as journals, government publications and project reports.

3.1 Analytical Techniques
Multinomial regression model

A Multinomial Logit Model (MNLM) was used to analyse the relationship between savings and livelihood activities. The model has been used in many studies including those of Dellien, 1997; Feulefack and Zeller (2005); Ojiako *et al*. (2009) and Liberda *et al*. (2011). MNLM deals with truly nominal and mutually exclusive categories of dependent variables. Suppose a dependent variable (DV), S, has M categories that is S=1, 2, …M with p1, p2, …pm as associated probabilities, such that p1+p2+…+pm=1. The usual thing is to designate one as the reference category. The probability of membership in other categories is then compared to the probability of membership in the reference category. Consequently, for a DV with M categories, this requires the calculation of M-1 equations, one for each category relative to the reference category, to describe the relationship between the DV and the independent variables (IVs). The choice of the reference category is arbitrary but should be theoretically motivated. The generalized form of probabilities for an outcome variable with M categories is:

$$\left(S_i = {}^m/_{x_i}\right) = P_m = \frac{\exp\left(x_1^i \beta_m\right)}{1+\sum_{m=2}^{m} \exp\left(x_1' \beta_m\right)} \quad \text{...........................6}$$

$$\left(S_i = {}^1/_{x_i}\right) = P_m = \frac{1}{1+\sum_{m=2}^{m} \exp\left(x_1' \beta_m\right)} \quad \text{...........................7}$$

for K covariates, a total of (K+1)*(M-1) parameters will be estimated. The odds and odds-ratios for a variable with M categories and baseline, M=1:

$$\frac{P_{im}}{P_{i1}} = \frac{\eta_{im}}{\eta_{i1}} = \exp(x_i'\beta_m) \Rightarrow \log\left[\frac{P_{im}}{P_{i1}}\right] = x_i'\beta m \text{................................8}$$

$$\log\begin{bmatrix} \dfrac{P_m/_{X_k=1}}{P_1/_{X_k=1}} \\[6pt] \dfrac{P_m/_{X_k=0}}{P_1/_{X_k=0}} \end{bmatrix} = \beta_{mk} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 9$$

specifically, the standard MNLM for a model with M=3 categories becomes:

$$pr(S_i = 1/ x_i) = P_{i1} = \frac{1}{1 + exp\left(x_i^1 \beta_2\right) + exp\left(x_i^1 \beta_3\right)} = \frac{\eta_{i1}}{\eta_{i1} + \eta_{i2} + \eta_{i3}} \quad \ldots\ldots\ldots\ldots\ldots 10$$

$$pr(S_i = 2/x_i) = P_{i2} = \frac{exp(x_i^1 \beta_2)}{1 + exp\left(x_i^1 \beta_2\right) + exp\left(x_i^1 \beta_3\right)} = \frac{\eta_{i2}}{\eta_{i1} + \eta_{i2} + \eta_{i3}} \quad \ldots\ldots\ldots\ldots\ldots 11$$

$$pr(S_i = 3/x_i) = P_{i3} \frac{exp(x_i^1 \beta_3)}{1 + exp(x_i^1 \beta_2) + exp(x_i^1 \beta_3)} = \frac{\eta_{i3}}{\eta_{i1} + \eta_{i2} + \eta_3} \quad \ldots\ldots\ldots\ldots\ldots 12$$

3.3 Empirical model specification

The empirical multinomial logit model for this study is specified as:

$P(S_i) = f(X_1, X_2, X_3, X_4, X_5)\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 13$

Where:

$P(S_i)$ = the dependent variable is the categories of holding four different types of assets

S_0 = cash at home; S_1= bank deposits; S_2 = roscas S_3 = daily contributions deposits.

Any combination of assets that includes bank deposits is considered in the category of bank deposits. Any combination of assets that includes roscas, but excluding bank deposits, is considered in the category of roscas. Daily deposits exclude bank and roscas. Finally, the category of cash at home only excludes the previous three categories. The reason for this classification of the DV is the assumption of mutually exclusive states of multinomial model.

X_i = the included explanatory variables. The X_i, for i = 1,2,3 are defined as various livelihood activities. For each economic activity, dummy is used where D= 1 if yes, and 0 if otherwise.

X_1= Agriculture

X_2=Processing and Marketing

X_3=Artisan

X_4=Trader

X_5=Wage earners

Results and Discussions

Socio-economic Characteristics of Respondents

Socio-economic characteristics of rural women vary among them significantly. Such difference plays important roles in influencing their saving behaviour. The socio-economic characteristics considered for this study include the following:

Age: The result in table 1 present's data on socio-economic characteristics of respondents, revealed that about 90% of the respondents fell within the age range of 20- 50 years. This age bracket could be considered as the productive and energetic age bracket. Approximately 90%

of the respondents were 50 years old or younger. The average age of the respondents was 36 years. This by implication means that the study area has large number of productive, energetic and active women that are involved in different forms of livelihood activities that can make them to engage in savings mobilization to generate funds t finance their livelihood activities. Young people are believed to save. The proposition of respondents above the labour force was 6% and below was 3.8%. This finding supports that by Bime and Mbanasor, (2011) who observed that younger people have a higher capacity of saving than older people. This finding also agrees to the findings of a Study by Bzugu and Hayatu (2007), where it was showed that most small scale farmers in Mubi region were in their active ages and can engage in activities that generates funds for their livelihood activities.

Marital status: The study revealed that majority (88%) were married, 4% were single, 2.8% were divorced and 5.2% were widowed (Table 1). Married people have enormous responsibility by virtue of their status, which could make them engage in savings mobilization to generate funds especially to cater for their wards. Hence this will make them work harder in order to utilize savings mobilisation to better the life of their family especially their children. This finding is in agreement with that of Adams and Fitchett (1992), who revealed that in social clubs and ROSACAS formed, substantial numbers of these clubs are formed by married women, especially those with independent sources of income.

Household size: Result from the study (Table 1) shows that household size with the highest frequency was between four to eight persons consisting a total of 64.2%. The least was household with 20 and above persons. The mean of household size was 6 indicating a large household size which is typical of a developing country like Nigeria. Large household saves less since the needs of other members of the family have to be met. This conclusion is in line with the result of studies carried out in India by Loayza and Shankar (2000) on private savings, and in the Philippines by Orbeta (2006) on children and household savings in the Philippines, who indicated that larger family size and larger number of children in the family reduces savings. This could be because money will be channelled through children's feeding and up keep.

Table 1 Distribution of respondents based on socio-economic characteristics   (n=600)

Socio-economic variable	Frequency	Percentage (%)	Mean
Age			36
<20	23	3.8	
20-30	182	30.3	
31-40	214	35.7	
41-50	145	24.2	
51-60	29	4.8	
>60	7	1.2	
Marital status			
Married	528	88	
Single	24	4	
Divorced	17	2.8	
Widow	31	5.2	
Household size			6
<4	107	17.8	
4-8	385	64.2	
8-12	98	16.3	

>12	10	1.7
Child dependency ratio		
<0.2	8	1.3
0.2-0.4	56	9.3
0.41-0.6	149	24.8
0.61-0.8	214	35.7
>0.8	133	22.2
Primary occupation		
Farming	389	64.8
Trading	48	8.0
Agro-processing & Marketing	38	6.3
Artisans	75	12.5
Wage earners	50	8.4
Years of working experience		
<10	245	40.8
10-20	213	35.5
21-30	100	16.7
31-40	35	5.8
>40	7	1.2
Educational level		
No education	349	58.2
Primary education	70	11.7
Secondary education	109	18.2
Tertiary education	72	12
Annual farm income		
<50,000	37	6.2
50,000-100,000	123	20.5
100,001-150,000	210	35
150,001-200,000	24	4
>200000	31	5.2
Annual nonfarm income		
<50,000	126	21
50,000-100,000	278	46.3
100,001-150,000	26	4.3
150,001-200,000	9	1.5
>200,000	70	11.7
Total annual savings		
<₦10,000	98	20.6
₦10,000- ₦20,000	100	21.0
₦21,000- ₦30,000	210	44.1
₦31,000- ₦40,000	60	12.6
>₦40,000	08	1.7

Source: Field survey, 2012

Primary Occupation: Table 1 shows that 64% of the respondents were engaged in Agriculture as their primary occupation. Of the respondents, 8% were traders, 6.3% of them were engaged in Agro-processing, 12.5% of them were Artisans, while 8.4% of them were civil

servants. This implies that the major occupation of most of the women in the study area was agriculture. Due to the nature of agricultural activities which is mostly during raining season, respondents had to engage themselves in non-farm activities in order to supplement farm income. Non- farm income for those respondents that have farming as their main occupation could serve as alternative source of income so that they will be able to utilize savings mobilization techniques efficiently.

Years of Experience: Table 1 depicts that 40.8% had working experience of less than 10 years, 7% had working experience of 31 years and above, while majority (52%) had 10-30 years working experience. The number of years one spends in a particular livelihood activity could improve the enterprise in which one is involved in which one can subsequently increase savings. The longer a respondent stays on an occupation the more the stability and regularity of income which can in-turn determine savings. Respondents with longer working experience in the study area are likely going to utilize savings mobilization techniques more efficiently.

Educational Level: Results on level of Education (Table 1) shows that majority (52%) of the respondents had no formal education, 11.7% had gone through primary education, and 18% had completed secondary education, only 12% completed tertiary education. The major implication of this result could be that lliteracy level in connection with western education among the women is low. Education which is considered as an important capital asset, could affect the savings and investment behaviour of rural women. With low level of literacy the women may not be able to utilize formal savings mobilization techniques due to the complex procedures and formalities involved in banking.

Annual Farm Income: The result on table 1 revealed that 35% earned less than ₦50,000 from farming activities, 20.5% earned between ₦50,000- ₦100,000, 6.2% earned between ₦100,001- ₦150,000, 4.0% earned between ₦150,001- ₦200,000, while 5.2% earned above ₦200,000. About 65% of the women in the study area depend on farming as their primary occupation, and the annual farm income is very low, only 5.2% are able to get an income of ₦200,000 and above. This implies that farm productivity is low due to lack of inputs and credit that can help these women to achieve maximum output to be able to increase their income which can improve their savings.

Non Farm Income: According to table 1, results on non-farm income revealed that 11.7% of the respondents that earned above ₦200,000, while those that earned between ₦50,000-₦100,000 were 21.0%. Due to the nature of farming activities which is done mostly during raining season, respondents that engage in farming as their primary occupation had to engage themselves in non-farm activities especially during off-farming periods, in order to supplement farm income since farm income is low. Most of the respondents were involved in more than one livelihood activity. This implies that there could be increase in income and they could be able to save more. This concurs with the classical Keynesian savings theory where an increase in income is bound to lead to an increase in savings.

Total annual savings: With regards to total annual savings, table 1 showed that a good portion (44.1%) of the respondents had their annual savings between ₦21,000- ₦30,000, followed by ₦10,000-20,000 (21%) then 20.6% saved less than ₦10,000 annually. Those who saved above ₦30,000 were 14.3%. Based on these results, it suggests that there are great potentials for saving among women in the study area. Since more than half (58.4%) could save between ₦21,000- ₦40,000 and above per annum this means that with improvement in livelihood activities in terms of income, chances of increased savings could be high among women.

Types of savings mobilizations techniques engaged in by respondents
Figure 1 revealed that 41% of the respondents save by engaging in Rotation Savings and Credit Associations (ROSCAs), 24% involved in Daily contribution scheme, 20% of the respondent keep their cash at home, while 15% save in Banks. Inferring from figure 1, it is clear that rural women are more into informal than formal savings mobilization technique.

The use of formal saving products was not common. Those involved with Banks were fewer, as less than a quarter of the respondents were using formal savings mobilization techniques; and they were those working in public service. The major reason for having bank accounts was because salaries were paid through their accounts in the banks and also for the security. Distant location of the banks, high-level of bank formalities, lack of education and excessive minimum balance requirement may have also been the hindrance in the formal financial access to women, specifically to the illiterate ones since the study shows high (58.2%) percentage of illiterate women in the study area.

ROSCAs seem to have more women. For those who saved with ROSCAs, security might not be a major factor. The major reason could be the lump sum to be obtained at the end of the month, the easy access to credit, and the fact that small sums were accepted without fuss by members. Another important reason for savings with ROSCAs could also be that the operation takes place over a short time. It is obvious that direct returns on savings are overshadowed by other factors in the choice of informal savings' facilities

Type of saving mobilization
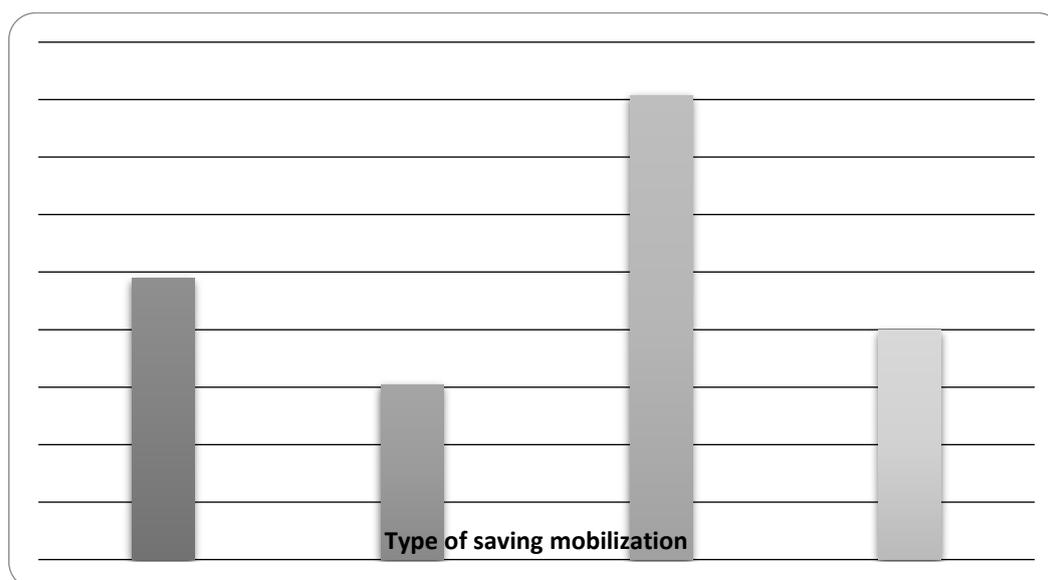
Source: Field Survey, 2012
Fig.1 Major Types of Savings Mobilizations Techniques Engaged in by

Respondents
. ROSCAs also offer low transaction costs and the pressure to save this low income regularly. This is in line with the finding of Goodland (1999), who also observed that in Senegal, ROSCAs assisted in equitable distribution and utilization of local resources most especially income and raw materials because credits taken are used to finance income generating activities with returns in excess of the loan, thus reducing the level of poverty of the people.

Daily contribution is also a common method engaged by women, especially women that are traders. This finding supports that by Aryeetey and Gockel (1991), who found that despite the fact that the system of rotating saving is old in Ghana, their study showed that the single collector type (daily contributions) is much more popular as a saving facility. The finding is also in agreement with that by Oloyede (2008) who in his study in Ekiti State also revealed that majority (51.36%) of the respondents who were mostly women engaged themselves in daily contributions scheme. Those who saved at home were also more than those who saved through banking. For those that saved at home, the reason for doing so could be for easier access.

Multinomial Logit Estimates of Relationship between Saving Type and Livelihood Activities

Signs of coefficients between non-reference and reference groups for the same explanatory variable at different levels of the dependent variable were being compared. The dependent variables were categories of savings types. The reference group has a coefficient equal to zero. Negative values mean that the probability of belonging to a reference category is higher than that of belonging to a given category.

Table 4.7 shows the relationship between saving types and livelihood activities. In the first level of dependent variable which is Bank, when compared to the reference category (cash at home), the coefficients of farmers (X_1) and artisan (X_4) were negative (-1.920 and -1.258, respectively) and significant at 1%. This implies that those with the livelihood activities of farming and artisanship were likely to save at home than in the bank. For farmers this could be due to the fact that savings are seasonal and irregular and because the income is low they prefer to keep at home in form of agricultural produce, to be selling when the need for money arises. This result concurs with that of Dellien (1997) who found the variable; agriculture as a sector of economic activity has a negative and significant relationship on the probability of saving in bank over cash at home. This result suggests that farmers prefer keeping their resources in kind or simply under their pillows at home rather than in the bank. This is because most farmers have low savings and due to the inadequacy of appropriate savings opportunities and products they prefer to keep savings at home. Being a farmer may therefore, reduce the probability of saving in the bank. The coefficient of X_2 (Agro-processors) and X_5 (Wage earners) was positive (1.921 and 0.821, respectively) and significant at 1% (Table 4.7). This suggests that those with livelihood activities of agro-processing and wage earning would likely keep their savings in the bank rather than at home. Wage earners could keep cash in banks because mostly their salaries are paid through their accounts monthly.

Table 2.
Multinomial Logit Estimates of Relationship between Saving Type and Livelihood Activities

P	Coef.	Std. Err.	Z	P>|z|	[95% Conf. Interval]	
0(Cashat home)	(base outcome)					
1(Bank)						
X1	-1.920669	.3259857	-5.89	0.000	-2.281749	1.55959
X2	1.921123	.3893887	4.93	0.000	1.684311	2.957936
X4	-1.258262	.3529301	-3.57	0.000	-1.949992	-.5665314
X3	-.1349376	1.159569	-0.12	0.907	-2.407651	2.137776
X5	.8211603	.28205	2.91	0.004	.2683524	1.373968
_cons	1.632077	.3513309	4.65	0.000	.9434807	2.320672
2(ROSCAs)						
X1	-1.722671	.4281185	-4.02	0.000	-2.561768	-.8835746
X2	.8180656	.247018	3.31	0.001	.3339193	1.302212
X4	1.479596	.3269492	4.53	0.000	.8387872	2.120404
X3	1.267468	1.072817	1.18	0.237	-.8352152	3.370152 -
X5	15.51906	876.2623	0.02	0.986	1701.924	1732.962
_cons	1.068931	.335703	3.18	0.001	.4109653	1.726897
3(Daily Contributions)						
X1	.2461049	.3988139	0.61	0.534	.014444	1.627766
X2	-2.070166	.3703502	-5.59	0.000	-2.796039	-1.344293
X4	-1.517438	.3584949	-4.23	0.000	-2.220075	-.814801
X3	1.098202	.3236466	3.39	0.001	1.028789	2.476082
X5	1.057601	.493208	2.14	0.032	.024271	2.0909307
_cons	1.703323	.3507955	4.86	0.000	1.015777	2.39087

Source: Regression Extract, 2012
a, *= significant at 1%, **= significant at 5%**
b, X1=Farming; X2 =Agro- processing; X4 =Artisans; X3 = Traders ; X5= Wage Earners

They save in order to smooth monthly consumption. Those into agro-processing might possibly have cash in their hands at all time to deposit in banks because of the nature of their business. They sell their products on daily basis and so they could be able to save in banks. Whereas for artisans, cash comes in to hand when services are needed only, so that might be the reason for home deposits.

The second level of dependent variable is Rotation Savings and Credit Association (ROSCAs), compared with the reference category (cash at home). The coefficient of farming (X_1) was negative (-1.723) and significant at 5% (Table 4.7). This implies that, farmers are likely to save at home just as in the first level. While, coefficients of X_2 (Agro- processors) and X_4 (Artisans) were positive and significant at 1%. Agro- processors and Artisans are also likely to be save in ROSCAs as compared to saving at home.

In the third level of dependent variable which is Daily contributions, when compared with the reference category (cash at home), coefficients of X_2(Agro-processors) and X_4(Artisan) were negative (-2.070 and -1.517, respectively) and significant at 1% (Table 4.6). This implies that agro-processors and artisans are likely to save at home than in Daily contribution scheme. Coefficients of X_3 (Trader) was positive (0.324) and significant at 5% level implies that traders are likely to save in Daily contributions. Traders engage in frequent transactions, this could make them demand less precautionary savings than farmers; they may have demands for their transaction balances. This could increase their demand for the daily contributions scheme. Traders also save to accumulate their working capital and expand their business; they need to hold savings for speculative motives. Daily contributions allow them flexibility which could help them take advantage of unexpected opportunities. This suggests that traders demand for daily contributions scheme more often because it is more useful for their businesses. This study concurs with that of Aryeetey and Gockel (1991) on their study on rural households savings in Ghana. They reported that majority (76.4%) traders prefer to save with Daily contribution than in the Bank (IPC, 1988).

The multinomial logit estimates show that most savings by women are done in the informal saving institutions, only wage earners and agro-processors were likely to save in banks. This shows that the use of formal saving institutions in the rural areas for women is less.

Conclusion and Recommendations

The findings revealed that farmers and artisan were more likely to save at home. Wage earners were more likely to save in the bank. Traders were more likely to save in daily contribution schemes, while agro-processors were more likely to save at ROSCAs. The result suggests that wage earners were more integrated to formal financial saving type and were more likely to keep their savings there. While those in other livelihood activities were more likely to save in other informal saving mobilization type.

Age, marital status, physical assets and dependency ratio influenced savings among the respondents. While Income, education and household size were very important determinants of savings. It is recommended therefore that;

1. There is need to educate women on saving institutions and enlighten them on the need of savings. Saving institutions such as micro-finance institution could be located at accessible locations. These will enhance saving mobilization and capital accumulation.
2. Policy makers should establish and strengthen links between formal and informal financial institutions in order to increase saving mobilization and make more funds available to produce high yield investments in the informal sector.
3. Provision of education by government is important in improving savings. The government should increase funding of education sector not only to secondary and tertiary institutions but also to the adult education program. NGOs should also be encouraged to participate in the provision of education.
4. Rural women should be properly mobilized and organised to join cooperative societies and self help groups and register in other formal financial institution, so that the Government, NGOs and Micro-finance institutions can easily reach out to them as this will improve their level of personal development. The saving mobilization organizations should adopt demand oriented approach in designing savings programs by considering the socio-economic characteristics of rural women.

5. To improve on saving, there is great need for the government to increase employment among women in rural areas. This will take care of the effect of the dependency ratio observed in the study.

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