

# EFFECT OF ROTATING SAVINGS AND CREDIT ASSOCIATIONS ON ECONOMIC WELLBEING OF RURAL WOMEN IN ANAMBRA STATE

<sup>1</sup>Anigbogu, Theresa Ukamaka (Ph.D), <sup>2</sup>Okoli, Ikechukwu Moses

<sup>1,2</sup>Department of Cooperative Economics and Mgt., NnamdiAzikiwe University (NAU), Awka, Nigeria  
Email - <sup>1</sup> tessyanigboguu@gmail.com, <sup>2</sup> ikemosesokoli@yahoo.com

**Abstract:** *This study examines the effect of rotating savings and credit associations on economic wellbeing of rural women, particularly in Anambra State, Nigeria using an econometric multiple regression model of the Ordinary Least Square (OLS). Findings revealed that credit/ loan services, training and advice on investment services and capital formation (savings) services through rotating savings and credit associations significantly influence the economic wellbeing of the rural women in Anambra state, Nigeria. Based on the findings, the study recommends that rotating savings and credit associations should be encouraged among rural women because of its ability and effectiveness in providing credit/ loan services, training and advice on investment services and capital formation (savings) services. The government should provide the rural areas with basic infrastructure to improve the business environment of rural women since they have devised a workable microfinance platform for providing themselves alternative financial services for improving their economic wellbeing.*

**Key Words:** *Rotating savings, Economic Wellbeing, Rural Women, Credit/loan services, Capital formation*

## 1. INTRODUCTION:

Rotating savings and credit associations are among the oldest and most prevalent savings institutions found in the world and they play an important role in savings mobilization in many developing economies (Gugerty, 2005). In the developing countries like Republic of Congo, Cameroon, Gambia, and villages of Liberia, Ivory Coast, Togo, and Nigeria, rotating savings and credit associations constitute one of the most commonly found informal financial institutions with exceptionally high participation rates in these associations with Average membership among adults ranging between 50 and 95 percent (Anderson & Baland, 2002). According to Gugerty (2005), rotating savings and credit associations are locally organized groups that meet at regular intervals; at each meeting members contribute funds that are given in turn to one or more of the members. Once every participant has received funds, the rotating savings and credit associations can disband or begin another round. In joining a rotating savings and credit association, an individual agrees to a schedule of periodic payments in return for which she receives a lump-sum payment at a future date. Rotating savings and credit associations often pay no interest and participants may have little or no control over when they receive the funds. Participants also bear the risk that other participants may not fulfill their obligations. Although in some areas defaulters are fined heavily so that nobody takes the association for granted. This form of savings group are mostly found in rural areas where the vast majority of the world's poor live and also find it difficult to access formal credit. They therefore resort to rotating savings and credit associations as means of accumulating capital for business development and also taking care of other socioeconomic activities. This study focuses on women because of the perceived limited access they have to formal credit facilities particularly in the rural areas. According to Nuhu, Donye, Bzugu and Ani (2015), in rural areas, rural financial programmes have been largely designed, crafted and implemented with the male heads of households as the intended clients and failed to recognize that women are active, productive and engaged in different livelihood activities with their own financial needs and constraints. 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; Nuhu, Donye, Bzugu & Ani, 2015; Diagne, Zeller & Sharma, 2000). The women therefore develop equity by finding an alternative source of credit access and capital formations to enable them survive economically.

## 1.2. STATEMENT OF PROBLEMS

This study was necessitated by the perceived poor formal savings mobilization by women in rural areas despite government effort in proving formal savings mobilization opportunities in attempt to make financial resources available to the people to actualize their livelihood activities that could lead to economic development. According to Nuhu, Donye, Bzugu and Ani (2015), examples of these formal savings mobilization opportunities include Rural Banking Scheme, Micro-Finance Banks and Community Banks with ease of accessing facilities by the people. Age, education, loan delay, guarantor, banks administrative bottleneck have been identified as some of the factors constraining the rural women from dealing with the formal financial institutions. These challenges make it crucial that

they are able to smooth consumption, to access credit and to employ strategies for coping with risk. The women therefore rely on networks, moneylenders and informal financial mechanisms, which exist in a myriad of forms of which rotating savings and credit associations are one them. Extant literature is replete with empirical reporting of rotating savings and credit associations as means of accumulating capital for business development and also taking care of other socioeconomic activities of rural households (Karlan, Savonitto, Thuysbaert&Udry, 2017; Ksoll, Lilleør, Lønborg& Rasmussen, 2016; Sibomana&Shukla, 2016; Kabuya, 2015; Ntamazeze, 2014; Flutschner& Kenney, 2011; Gugerty, 2005; Chiteji, 2002), thus warranting an empirical investigation into the effect of rotating savings and credit association on economic wellbeing of rural women particularly in Anambra State, Nigeria. The choice of Anambra State is significant because of its position as of the second largest economic hub and most densely populated state in the country after Lagos State. Again, most of the studies identified and also reviewed in this paper on rotating savings and credit associations were carried outside Nigeria. None of the studies investigated examined the effect of rotating savings and credit associations on the economic wellbeing of rural women. Related studies to this are the studies of Nuhu, Bzugu&Kwajaffa (2015); Nuhu, Donye, Bzugu&Ani (2015); Nuhu, Bzugu&Pur (2015) but the studies were carried out in northern Nigeria and Borno State in particular.

### **1.3. OBJECTIVES OF THE STUDY:**

The main objective of this study is to examine the effect of rotating savings and credit associations on economic wellbeing of rural women, particularly in Anambra State, Nigeria. The objectives are in line with the study of Sibomana and Shukla (2016). From this objective, the following specific objectives are derived: to determine the effect of credit/loan services through rotating savings on economic wellbeing of rural women in Anambra State; to ascertain the effect of training and advice on investment services through rotating savings on economic wellbeing of rural women in Anambra State and to examine the effect of capital formation (savings) services through rotating savings on economic wellbeing of rural women in Anambra State.

### **1.4. HYPOTHESES FORMULATION:**

**H<sub>01</sub>:**Credit/loan services through rotating savings and credit associations have no significant effect on economic wellbeing of rural women in Anambra State.

**H<sub>02</sub>:**Training and advice on investment services through rotating savings and credit Associations have no significant effect on economic wellbeing of rural women in Anambra State.

**H<sub>03</sub>:**Capital formation (savings) services through rotating savings and credit Associations have no significant effect on economic wellbeing of rural women in Anambra State.

### **1.5. JUSTIFICATION FOR THE STUDY:**

This study is significant in a number of ways. First, knowledge from Rotating Savings and Credit Associations will help foster the sustenance of other informal financial mechanisms as well as impact on the development of private entrepreneurship, improvement in household business outcomes and women's empowerment. The study will swell literature of Rotating Savings and Credit Associations and also add fresh voice to the Rotation Savings and Credit Associations literature in the underreported zone like Nigeria.

## **2. EMPIRICAL LITERATURE REVIEW:**

Related empirical literature on rotating savings and credit Associations have been reviewed in this section. Karlan, Savonitto, Thuysbaert&Udry (2017) examined savings-led microfinance programs operate in poor rural communities in developing countries to establish groups that save and then lend out the accumulated savings to each other. In a clustered randomized evaluation spanning three African countries (Ghana, Malawi, and Uganda), they found that the promotion of these community-based microfinance groups leads to an improvement in household business outcomes and women's empowerment. However, they do not find evidence of impacts on average consumption or other livelihoods. Using a cluster randomized trial, Ksoll, Lilleør, Lønborg& Rasmussen (2016) investigated the impact of Village Savings and Loan Associations (VSLAs) in Northern Malawi over a two year period. They found evidence of positive and significant intention-to treat effects on several outcomes, including the number of meals consumed per day, household expenditure as measured by the USAID Poverty Assessment Tool, and the number of rooms in the dwelling. This effect is linked to an increase in savings and credit obtained through the Village Savings and Loan Associations (VSLAs), which has increased agricultural investments and income from small businesses. Sibomana and Shukla (2016) examine the effects of Village Savings and Loan Associations on the growth of Small and medium enterprises in Rwanda. The study established that Kayonza district has got various credit/ loan services, Training and Advice on Investment services and Capital formation (savings) services and Village Savings and Loan Associations (VSLA) contribute to positive SME growth in Kayonza District. Kabuya (2015) provide a critical reflection on the use of Rotation Savings and Credit Associations in reducing poverty in local communities. It describes the different forms of informal and microfinance institutions, discusses the household poverty measure and, reviews the relationship between Rotation Savings and Credit Associations and poverty reduction. The paper argues that Rotation Savings and Credit Associations are likely to make a difference to local communities' welfare, measured as a change in the household consumption. Nuhu, Bzugu and Kwajaffa (2015) analysed the determinants of savings

among rural women in Borno State. Logit regression model was used to determine the effects of factors (socioeconomic, institutional and cultural) on the probability of savings of the respondents. Income, education, marital status, working experience and type of saving institution used by respondents was found to influence their likelihood of saving in Rotating Savings and Credit Association. Nuhu, Donye, Bzugu and Ani (2015) examined rural women savings and their effect on livelihood in Borno State, Nigeria using multi-stage sampling procedure, saving model and Multinomial Logit Model to estimate the determinants of savings among respondents in the study area and also 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 Rotation Savings and Credit Associations. Nuhu, Bzugu and Pur (2015) examined constraints affecting savings mobilization of rural women in Borno State. The study revealed that income was gotten from farming and non-farming livelihood activities. It was revealed by the study that most (41%) of the women in the study area were involved in Rotation Savings and Credit Associations (ROSCAs) as a financial saving tool. Lack of trust/fear of default was the pressing constraint encountered by the women in the study area. Ntamazeze (2014) investigated the relationship between trust and development, and generates knowledge about Rotation Savings and Credit Associations, as well as its presence and involvement in the development of Rwanda aftermath of Genocide in 1994. The study found that Rotation Savings and Credit Associations have facilitated in building trust among their members as well as their development. Fletschner and Kenney (2011) reviewed rural women's access to financial services, a key factor of successful rural development strategies. They argued that it is important that development strategies that aim to boost rural women's productive capacity must enhance women's direct access to financial services, i.e. not mediated through their husbands. A second benefit of improving women's direct access to and control over resources is that this leads to higher investments in human capital and have a stronger impact on children's health, nutrition and education with important long-term implications for families and societies. Gugerty (2005) examined how and why individuals develop and maintain local-level financial savings organizations known as rotating savings and credit organizations. The study found that rotating savings and credit organizations provide a collective mechanism for individual self-control in the presence of time-inconsistent preferences and in the absence of alternative commitment technologies. Chiteji (2002) examined the Rotation Savings and Credit Associations ability to enforce its terms of membership and the implications that this has for their existence in an economy. The study revealed that monitoring costs experienced in the bank sector contribute to the existence of rotation Savings and Credit Associations. The greater a bank sector's monitoring costs, the more entrepreneurs there are who are excluded and left to seek out Rotation Savings and Credit Associations financing. If the bank sector's monitoring costs can be reduced therefore, one would expect Rotation Savings and Credit Associations activity to decline as a result.

In the final analysis, this study is significant and fills a knowledge and literature gap many respects: Most of the studies reviewed on rotating savings and credit associations were carried outside Nigeria - Karlan, Savonitto, Thuysbaert&Udry (2017); Ksoll, Lilleør, Lønborg& Rasmussen (2016); Sibomana and Shukla (2016); Kabuya (2015); Ntamazeze (2014); Fletschner and Kenney (2011); Gugerty (2005) and Chiteji (2002); none of the studies investigated examined the effect of rotating savings and credit associations on the economic wellbeing of rural women. A more related studies to this are the studies of Nuhu, Bzugu&Kwajaffa (2015); Nuhu, Donye, Bzugu&Ani (2015); Nuhu, Bzugu&Pur (2015) but the study was carried out in northern Nigeria and Borno State in particular.

### **3. METHODOLOGY:**

#### **3.1. Research Design:**

This work is descriptive. It is concerned with the collection of data for the purpose of examining effect of rotating savings and credit associations on economic wellbeing of rural women particularly in Anambra State, Nigeria. It involved sampling by using structured questionnaire to generate data that were analyzed so as to gain insight into the topic under study.

#### **3.2. POPULATION OF THE STUDY AND SAMPLE SIZE:**

The population of the study is made up all the members of Rotation Savings and Credit Associations. The exact number of Rotation Savings and Credit Associations in Anambra State was unknown to the researchers. However, for the purpose of this study, multi-staged sampling technique was used to determine the sample size of the study. This was carried in four stages. According to Chukwumeka (2002), multi-stage sampling is somewhat the combination of the other sampling techniques. At least, it combines two methods. The first stage was the division of the state into three zones using judgmental sampling. Judgmental sampling is a non probability sampling that makes use of typical cases among the population to be studied, which the researcher believes will provide him or her with the necessary data needed (Micheal et al, 2012). The zones were selected from the three senatorial zones of the states. The second stage was a sub-sampling also called a two-stage sampling. This was a random selection of selecting two local governments each (Orumba South L.G.A; Ekwusigo L.G.A; Awka North; Idemili South L.G.A; Anambra West L.G.A

and Ogbaru L.G.A) from the zones. In the third stage otherwise called the three-stage sampling, the simple random sampling technique was also used to select two towns each from each of the three selected local governments in the zones. In the fourth stage, simple random sampling technique was again used to select two contact Rotation Savings and Credit Associations from each of the two towns. The table below shows the Rotation Savings and Credit Associations Selected, Towns and their membership strength. The membership of ten allows the participant to complete the before the end of the year and begin another round by January or February as the case may be.

**Table 1: Rotation Savings and Credit Associations**

Rotation Savings and Credit Associations	Local Gov't	Towns	Membership
Umunze Rotation Savings and Credit Associations	Umunze	Umunze	10
Ogbunka Rotation Savings and Credit Associations	Ogbunka	Ogbunka	10
Ozubulu Rotation Savings and Credit Associations	Ozubulu	Ozubulu	10
Oraifite Rotation Savings and Credit Associations	Oraifite	Oraifite	10
Achalla Rotation Savings and Credit Associations	Achalla	Achalla	10
Ugbenu Rotation Savings and Credit Associations	Ugbenu	Ugbenu	10
Akwukwu Rotation Savings and Credit Associations	Akwukwu	Akwukwu	10
Oba Rotation Savings and Credit Associations	Oba	Oba	10
Nzam Rotation Savings and Credit Associations	Nzam	Nzam	10
Ukwalla Rotation Savings and Credit Associations	Ukwalla	Ukwalla	10
Ogbaru Rotation Savings and Credit Associations	Ogbaru	Ogbaru	10
Odekpe Rotation Savings and Credit Associations	Odekpe	Odekpe	10
<b>Total</b>			<b>120</b>

Source: Field survey January, 2018

**3.3. AREA OF STUDY:**

This study was carried out in Anambra state. Anambra State is a state in south-eastern Nigeria. Its name is an anglicized version of the original 'OmaMbala', the native name of the Anambra River which is a tributary of the famous River Niger. The Capital and the Seat of Government is Awka. Onitsha and Nnewi are the biggest commercial and industrial cities. The state's theme is "Light of the Nation". The boundaries are formed by Delta State to the west, Imo State and Rivers State to the south, Enugu State to the east and Kogi State to the north.

**3.4. QUESTIONNAIRE DESIGN AND DISTRIBUTION:**

The researchers developed a structured questionnaire that was administered to members of the selected Rotation Savings and Credit Associations. The questionnaire has two sections; section A and section B. Section A sought information on socio-economic background of respondents while section B was on items relating to effect of rotating savings and credit associations on economic wellbeing of rural women particularly in Anambra State, Nigeria. Data collected for this study were analyzed using linear regression model of the ordinary least square (OLS) approach and descriptive statistics such as frequencies and percentages. The use of (OLS) is informed by the fact that under normality assumption for  $e_i$ , the OLS estimator is normally distributed and are said to be best, unbiased linear estimator (Gujarati & Porter, 2008).

**Model for the Study**

The model is implicitly specified as follows; the model is implicitly specified as follows;

$$Y = f(x_1, x_2, x_3 + e_i) \dots\dots\dots eq(1)$$

The model is explicitly specified as follows;

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \varepsilon \dots\dots\dots eq(2)$$

Where:

$\alpha$  = intercept

Y = Economic Wellbeing of Rural Women (proxied as a measure of change in the household consumption).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots 4$$

The included variables  $X_1$ - $X_3$  represent credit/ loan services, Training and Advice on Investment services and capital formation (savings) services,  $\beta_1 - \beta_3$  are the slope coefficients of the regressors,  $\alpha$  represents the vertical intercept and  $\varepsilon$  the stochastic residual term designed to capture the effects of unspecified variables in the model, which is normally distributed with a mean value of zero.

**4. ANALYSIS AND FINDINGS:**

*Analysis*

**Table 2: Distribution according to demographic profile of respondents**

Items	Frequency	Percentage (%)	Cumulative (%)
<b>Age</b>			
18-30	8	6.7	6.7



31-40	19	15.8	22.5
41-50	45	37.5	60.0
51-60	41	34.2	94.2
61-70	5	4.2	98.4
71 and above	2	1.6	100.0
Total	120	100.0	
<b>Marital status</b>			
Married	61	50.8	50.8
Single	42	35.0	85.8
Divorced	6	5.0	90.8
Widow/Widower	11	9.2	100.0
Total	120	100.0	
<b>Educational Qualification</b>			
Primary	16	13.3	13.3
Secondary	92	76.7	90.0
Tertiary	12	10.0	100.0
Total	120	100.0	
<b>Occupation</b>			
Civil servant	21	17.5	17.5
Farmers	20	16.7	34.2
Business/Trading	68	56.6	90.8
Craft	11	9.2	96.5
Total	120	100.0	
<b>Income of customers (monthly)</b>			
1000-20000	31	25.8	25.8
21000-40000	21	17.5	43.3
41000-80000	31	25.8	69.1
81000-100000	16	13.3	82.4
101000 and above	21	17.6	100.0
Total	120	100.0	

Source: Field survey January, 2018.

The demographic profile of the respondents was presented in table 2. The table revealed the age differentials of the members of Rotation Savings and Credit Associations. The age of the respondents revealed that majority of the people who participate in Rotation Savings and Credit Associations fall within the age bracket of 41-50years. This constitutes 37.5% of the respondents. 50.8% of them are married. With respect to educational exposure, majority of the customers 76.7% had tertiary education. The occupation of majority 56.6% of the respondents is business/trading. 25.8% of the respondents who responded to the questionnaire earn incomes ₦1000 - ₦20000 and above ₦100,000.00 per month respectively.

#### Regression Result

Table 3: The effect of rotating savings and credit association on economic on wellbeing of rural women.

Model	B	Std. error	T	Sig.
(Constant)	-.162	.043	-3.071	0.003
CREDIT/ LOAN SERVICES	.276	.054	4.325	0.000
TRAINING AND ADVICE ON INVESTMENT SERVICES	.210	.068	9.282	0.000
CAPITAL FORMATION (SAVINGS) SERVICES	.032	.052	4.208	0.000
<b>R</b>	0.976			
<b>R<sup>2</sup></b>	0.952			
<b>Adj. R<sup>2</sup></b>	0.951			
<b>F-statistic</b>	201			0.000

Source: Field Survey January, 2018

#### 4.1. DEPENDENT VARIABLE: ECONOMIC WELLBEING OF RURAL WOMEN:

Table 3 shows the regression results of the effect of rotating savings and credit association on economic on wellbeing of rural women. This was analysed using economic a priori criteria and statistical criteria. Using the economic a priori criteria (i.e., theoretical) expectations, the sign and magnitude of each variable coefficient is evaluated against theoretical expectations. From table 3, it is observed that the regression line has a negative intercept as presented by the constant (c) = -.162. This means that if all the variables are held constant or fixed (zero), the

economic wellbeing of rural women will be valued at  $-0.162$ . Thus, the a-priori expectation is that the intercept could be positive or negative, so it conforms to the theoretical expectation.

It is observed in Table 3 that credit/ loan services, Training and Advice on Investment services and capital formation (savings) services have positive effect on the economic wellbeing of rural women. This means that if credit/ loan services, Training and Advice on Investment services and capital formation (savings) services are developed and improved, it will bring about more increase in the economic wellbeing of rural women. Here we apply the  $R^2$ , adjusted  $R^2$  and the f-test to determine the statistical reliability of the estimated parameters. These tests are performed as follows: From our regression result, the coefficient of determination ( $R^2$ ) is given as  $0.952$ , which shows that the explanatory power of the variables is extremely high and/or strong. This implies that  $95.2\%$  of the variations in the economic wellbeing of the rural women are being accounted for or explained by the variations in the development of credit/ loan services, Training and Advice on Investment services and capital formation (savings) services. While other independent variables not captured in the model explain just  $4.8\%$  of the variations in the social development of the host communities. The adjusted  $R^2$  supports the claim of the  $R^2$  with a value of  $0.951$  indicating that  $95.1\%$  of the total variation in the dependent variable (wellbeing of the rural women is explained by the independent variables (the regressors). Thus, this supports the statement that the explanatory power of the variables that is extremely high and strong.

## 5. CONCLUSION AND RECOMMENDATION:

Granted that the three hypotheses show differences in the respondents position regarding credit/ loan services, training and advice on investment services and capital formation (savings) services; however, the t-test statistics revealed that all the three construct are significant determinants of economic wellbeing of the rural women. On the strength of the foregoing discussion, it can be concluded that credit/ loan services, training and advice on investment services and capital formation (savings) services can eloquently influence the economic wellbeing of the rural women in the state.

Based on the findings from the analysis of this study, the study recommends that rotating savings and credit association should be encouraged among rural women because of its ability and effectiveness in providing credit/ loan services, training and advice on investment services and capital formation (savings) services. The government should provide the rural areas with basic infrastructure to improve the business environment of rural women since they have devised a workable microfinance platform for providing themselves alternative financial services for improving their economic wellbeing.

## REFERENCES:

1. Anderson, S. & Baland, J.M (2002). The Economics of Roscas and Intrahousehold Resource Allocation. The Quarterly Journal of Economics, August 2002.
2. Chiteji, N.S. (2002). Promises kept: enforcement and the role of rotating savings and credit associations in an economy. Journal of International Development, 14, 393–411.
3. Diagne, A., Zeller, M. & Sharma, M. (2000). Empirical measurements of household's access to credit and credit constraints in developing countries. FCND Discussion Paper No. 90, Washington, D.C: International Food Policy Research Institute.
4. Fletschner, D. (2009). Rural women's access to credit: Market imperfections and Intra household dynamics. World Development, Vol. 37(3):618–631.
5. Fletschner, D. & Kenney, L. (2011). Rural women's access to financial services: credit, savings and insurance. Background paper to The State of Food and Agriculture 2010-2011, "Women in agriculture: closing the gender gap in development" was funded by FAO.
6. Gugerty, M.K. (2005). You Can't Save Alone: Commitment in Rotating Savings and Credit Associations in Kenya. Daniel J. Evans School of Public Affairs, University of Washington.
7. Kabuya, F.I. (2015). The Rotating Savings and Credit Associations (ROSCAs): Unregistered Sources of Credit in Local Communities. Journal Of Humanities And Social Science, 20(8), 95-98.
8. Karlan, D., Savonitto, B., Thuysbaert, B. & Udry, C. (2017). Impact of savings groups on the lives of the poor. PNAS, 114 (12), 3079–3084.
9. Ksoll, C., Lilleør, H.B., Lønborg, J.H., & Rasmussen, O.D. (2016). Impact of Village Savings and Loan Associations: Evidence from a cluster randomized trial. Journal of Development Economics, 120, 70–85.
10. Ntamazeze, J. (2014). Trust and development: rotating savings and credit associations in Rwanda. 5th European Conference on African Studies, African Dynamics in a Multipolar World.
11. Nuhu, H.S., Donye, A.O., Bzugu, P.M. & Ani, A.O. (2015). The Relationship between Savings Mobilization Techniques and Livelihood Activities of Rural Women in Borno State, Nigeria. International Journal of Academic Research in Business and Social Sciences, 5(3), 479-496.

12. Nuhu, H. S., Bzugu, P. M. &Kwajaffa, A. P. (2015). Determinants of Savings among Rural Women in Borno State, Nigeria. *Asian Journal of Agricultural Extension, Economics & Sociology*, 5(4): 202-214.
13. Nuhu, H. S., Bzugu, P. M., &Pur, J. T. (2015). Constraints to Savings Mobilization among Rural Women in Borno State, Nigeria. *Journal of Agricultural Economics, Environment and Social Sciences* 1(1):115–123.
14. Sibomana, J.P &Shukla, J. (2016). Effect of village savings and loan associations on Small and Medium Enterprise (SME) growth in Rwanda: survey of Kayonza District. *International Journal of Business and Management Review*, 4 (3), 57-79.