

# Determinants of Loan Default by Savings and Credit Co-Operative Societies' Members in Baringo County, Kenya

Allan Mitei<sup>\*1</sup> Mary Bosire<sup>1</sup> Robert Kibet Kirui<sup>2</sup>

1.Faculty of Commerce, Egerton University

2.School of Business, Nairobi University

## Abstract

Loan delinquency in SACCOs is a major threat in the sustainability of granting loan to the loan applicants and the growth of the business. Gradual increase in delinquency rate implies that SACCOs are unable to recover what they have lent out to loan beneficiaries. This affects the SACCOs' financial obligations. SACCOs' financial growth is a critical issue and failure to maintain cash in circulation affects their core business. SACCOs in Baringo County has realized increasing loan default since the year 2010 which was ksh.76, 987,450 and rose gradually to ksh. 225,464,348 in the year 2013. Management in SACCOs impressed on proper loan appraisals, timely reminders on repayments by loan beneficiaries and escalating on timely follow-up on loan defaulters. Delinquency continuously increased despite the measures taken to mitigate the problem by SACCOs. The study sought to establish the social factors that affect loan repayment by the borrowers, to determine economic factors that affect loan repayment by the borrowers, and to establish terms of loan factors that affects both SACCOs and borrowers regarding loan repayment. The study covered the 39 SACCOs in Baringo County. The study employed descriptive survey design. A sample of 39 credit officers and 161 loan beneficiaries responded to the study. The primary data was collected using a questionnaire, and analyzed using both descriptive statistics and multiple regressions. The result of the study indicated that economic and terms of the loan factors significantly affect loan default however social factors does not significantly affect the loan default. The study recommends that a credit policy should be maintained that is in built in Sacco software. Also more training programs sponsored by Sacco's aiming at enhancing the members on economic and social factors.

**Keywords:** key words, determinant, loan default, and Sacco's

## 1. Introduction

Savings and Credit Co-operative Societies (SACCOs) are started locally and have solid bases of small saving accounts constituting a stable and relatively low-cost source of funding and low administrative costs. Sacco Societies constitute not only the fastest growing sub sector of the Cooperative Movement in Kenya, but also the most significant in impacting on the livelihoods of their member (Olando, Mbewa, & Jagongo, 2013). They are currently regulated through the Cooperative Act under SACCO Societies Regulatory Authority (SASRA) which is prudentially regulating FOSA operating SACCOs . The target market that SACCO's deals with is mostly the poor and neglected segment thus innovate products that suits their needs. It is of importance to understand the steep competition in the financial institutions that limit the stretch of one player to cover extra new market. The cost associated with such move may not be beneficial to such SACCOs thus renders their performance lower than expected. According to a report by Fin Access (2009) , SACCOs lost their market share in spite of their geographical spread in the country compared to other financial providers. This could be attributed to challenges that SACCOs faces due to the characteristics of the market segment it serves.

SACCOs advances loans at interest rates lower than those charged by other financial providers. In addition, SACCOs have the ability and opportunity to reach clients in areas that are unattractive to banks, such as rural or poor areas SACCO's loan delinquency is measured because it indicates an increased risk of loss, warnings of operational problems, and may help predicting how much of the portfolio will eventually be lost because it never gets repaid. Majority of the SACCOs are facing rising rate of loans default. Though SACCOs take necessary action to appraise loan and use methods like credit rationing, rate of default is still growing. SACCOs incur huge funds to monitor and make loan recovery which in turn will affect its efficiency providing finance (Olando et al., 2013).

Loan default is defined as the failure to pay back a loan when due which may occur if the debtor is either unwilling or unable to pay its debt. Sacco's societies grant loans on the basis of member's savings and guarantee from other members. The loan may be more or less than the savings of the borrower. Loans less than the member savings are secure and the repayment is assured. Loans in excess of the member's savings must be guaranteed by other members. Loans that are not recovered are considered to be delinquent and hence defaulted. Most SACCOs either have no loan policy and procedures or what exists is not very clear and comprehensive. There are cases where loan-aging analysis is hardly practiced, there are no provision for loan write offs and losses. No guidelines exist as to what to do in cases where a member defaults in loan repayment. Where they exist they are inadequate to serve the purpose as to why it is intended. Practice like risk analysis management is therefore made impossible. Failure to prevent loans default risk has implication with sustainability and

performance for rural SACCOS. If the SACCOS have large number of overdue loans implies that borrowers hold the capital of the SACCOS, hence this affect their operations failing to issue new loans (Magali, 2013).

The primary objective of credit unions is to satisfy the depository and borrowing needs of the members and failure to meet solvency, result in inability to finance even its operations. Magali (2013) argues that the large size loan has higher risk of default than the small one. Hence the SACCOS should offer large size of loan to their members after deep analysis of credit risks mitigation techniques. Failure to prevent loans default risk has implication with sustainability and performance for rural SACCOS. If the SACCOS had large number of overdue loans implies that borrowers hold the capital of the SACCOS, hence this denied their operations. However, lending technology, risk management, and management information systems are not well developed in most SACCOS. This is a significant challenge for the SACCOS, given that large SACCOS have several thousand clients and a wide variety of products. New products such as microfinance loans and withdrawal savings products require regular cash flow and maturity management (Owen, 2007).

SACCOS plays a critical role in economic development by facilitating funds to segment of low income earners who cannot meet the required standards of commercial banks. Since commercial banks targets mostly salaried and performing businesses. However, there are escalating challenges of loan default by SACCO members. Karikari (2011) points out that low recovery rate of loans has been a great challenge, and lenders are criticized by the beneficiaries on loan terms. As in the case of Baringo County, there is escalating rate of loan default despite the improved measures taken like proper loan appraisals, timely reminders on repayments by loan beneficiaries and escalating on timely follow-up on loan defaulters has been taken by SACCOS to solve the problem. This paper established the effect of social factors on loan repayment, determined the effect of economic factors loan repayment, and established the effect of terms of loan factors on loan repayment.

## 2. Reviewed Literature

Loan default is a major issue of concern on the performance of financial institutions. Empirical evidence focuses on both individual and institutional factor contribute to loan repayments. According to Mekonnen (2015) argues that if the business plan of the creditor is profitable, it will contribute to timely repayment of the loan. Hence, this variable is expected to have a positive sign. Mekonnen (2015) argues that timeliness of loan release has a significant influence on loan repayment performance of the respondents. The time between loan application and disbursement has an impact on the loan repayment. This factor has a positive impact on the borrower's loan repayment performance. Timely disbursement of loan increases significantly the loan repayment performance (Pasha and Negese, 2014). The chances that the loan would be used for intended purpose is increased when loan is disbursed at the right time. Borrowers may become impatient if the loan is delayed; opportunity will be lost and therefore leads to misallocation of loan. This will eventually affect the borrower's repayment performance. The procedures followed to process loan determine the period when the loan would be released to the borrowers. When the procedures are long, it will extend the time taken to release the loan.

Tundui et al. (2013) examined how household income affects loan repayment and concluded that the higher the income, the lower the default rate. They attributed to the increase ability of earning more by venturing into diverse business opportunities which eventually enable the borrower to repay the loan when fall due. A low income household with above-average wealth is better off than a low income household without wealth. The existence of wealth is also one reason why income and consumption are not necessarily equal: for a given income, consumption can be raised by running down assets or by increasing debts and consumption can be reduced by saving and adding to assets. Further, the more dependent the borrower (owner) is on income from the enterprise supported by the loan fund the greater the commitment to business operations, and hence the greater the enterprise growth and repayment rate.

Arminger et al., (1997) noted that gender in addition to age is one of the most used socio-demographical variables to differentiate the predictive power of gender. Their findings suggest clear evidence that women default less frequently on loans possibly because they are more risk averse. According to Coval et al., (2000) gender is a fair discriminatory base on the statistical default rates of men versus women. Region means the area of the country that borrower lives. Godquin (2004) examined the microfinance repayment performance in Bangladesh. His result shows as the correlation between gender and repayment is positive but not significant after controlling for a number of MFI-specific effects. Goetz and Geotz and Gupta (1996) suggest that women may have a higher incentive than men for loan repayment since it allows them to retain access to village groups, whereas men have many more opportunities for social contact.

Muruku (2015) argues that gender plays a critical role in loan repayment. This is because it defines the role played in the household, the seriousness in implementing the project and the protection functions. Studies conducted worldwide have shown that gender influences the success of loan servicing and that female borrowers outperform male borrowers in a consistent manner as far as loan repayment performance is concerned. Gibbons and Kasim (1991), on the other hand, reported that the number of women who had no debt repayment problems was more than men. Todd (1996) attested to better loan repayment performance in Bangladesh, arguing that

women were more conservative or cautious in their investment strategies. In support, Rahman (2001) and Goetz and Gupta (1996) argued that women are more easily influenced by peer-pressure and the involvement of the lender. Concerning reputation and honour, women are more sensitive to verbal hostility on the part of the lender, while men are able to default with a sense of impunity. Also, Goetz and Gupta (1996) argued that women have more motivation for loan repayment in order to continue remaining in village groups and to be allowed to borrow more next time, whereas men have many more opportunities for social contact that can lend them money.

Bassem (2008) examined the factors that affect the repayment performance of group lending in Tunisia. Results showed that the repayment is influenced positively by the internal rules of conduct, the same business, and the knowledge of the other members of the group before its formation, peer pressure, self-selection, gender, education and non-financial services. Todd (1996) attested to better loan repayment performance in Bangladesh, arguing that women were more conservative or cautious in their investment strategies. Rahman (2001) and Goetz and Gupta (1996) argued that women are more easily influenced by peer-pressure and the involvement of the lender. In addition, women have more motivation for loan repayment in order to continue remaining in village groups and to be allowed to borrow more next time, whereas men have many more opportunities for social contact that can lend them money.

Due to women tendency to stay closer to their homes rather than going out to work, women are easy to monitor and follow by the lender (Aghion and Morduch, 2005; Goetz and Gupta, 1996). As opposed to men, Aghion and Morduch (2005) posited that women have more at stake when enrolling in a credit programs because of the limited access to credit from other formal or informal channels. Therefore, women repay their loans to ensure continued access to credit. Ameen (2004) argues that women have more contact with the lender and group members. This is due to lower opportunity cost of time, which makes their time less valuable.

Duy (2013) concluded that loan size affects the repayment of the loan. Smaller loan are likely to be repaid on time on group based scheme while large loan are repaid on time by individual borrower. This could be because of the individual socio-economic position of the borrower in different schemes. Individual borrowers are relatively better endowed and have higher income levels. They assumed that individual borrower invest in expensive projects which boost their incomes. However, it is argued that larger loans are unlikely to be repaid than smaller loans. Larger loans may encourage unwise spending than small loans where caution is observed by the spender. Most of the farmers are unused to handling of large funds and once given such funds could easily be misapplied. Similarly, Tundui and Tundui (2013) suggest that loans size increases with the default rate. As the loan size increases, more problems of default reported. This implies that the burden of repayment increases when one borrows large loans.

According to Chacha, (2006), loan beneficiaries lack of knowledge in business management, the loan size, short loan repayment period and lending policies lead to poor repayment rate of Saccos. Olomola, (2000) suggest that factors like loan size and loan use affect the loan repayment. Arene (1992) similarly mentioned that the main factors that determine loan repayment performance are loan size, enterprise size, income, age, number of years of business experience, distance between home and source of loan, education, household size, adoption of innovations and credit need. Bekele *et al.* (2005), Chirwa (1997), and Mekonnen (2015) argues that providing borrowers with the required amount of finance can significantly reduce the possible repayment problems that may encountered due to under or over financing of the women. Muthoni (2016) comparatively assessed the business and borrowers characteristics that cause loan default, and interestingly both factors affect the loan repayment

Pasha and Negese (2014) argues that the loan usage on the intended purpose determine its repayment. When the loan is used for the intended purpose, it is likely to be repaid while misallocation could lead to repayment problems. The purpose of the loan is very vital to the borrower and the supplier of the loan and diversion of the intended fund to risky business opportunities may result to huge losses. The supplier of the funds make assessment of the loan based on stated business and award loan limit depending on the risk associated with that business. Previous studies have noted loan misapplications and its consequences which is attributed to several factors like delay in release of funds is seen as a critical factor in loan default (Karikari, 2011).

The time given to borrower to pay back the entire loan significantly affects the loan repayment. The suitable period arranged with the supplier of funds reduces the loan default. When the period is adjusted to suit the borrower, then it minimizes the default but empirical evidence shows that there is a negative relationship between repayment and period of repayment (Pasha and Negese, 2014). Wongnaa and Awunyo-Vitor (2012) explains that the longer the period of repayment, the lower the rate of default. It prepares the borrower to earn substantial amount that can service the loan. But when the period of repayment is shorter, borrower may not get as much to repay the loan.

Oni, Oladele and Oyewole (2005) determined the effect of interest rate on the loan borrowed. They found out that it affect loan repayment but not significantly. Wongnaa and Awunyo-Vito (2013) posit that high repayment leads institutions to lower their interest rate and the cost of processing loan. Magali (2012) suggest that interest rate affect credit risk and profitability of micro-finance. Ayogyam , Goddana, Mohammed, and

Boateng (2013) contend that interest rate affect repayment of agricultural loans. Addisu (2006) points out that lack of collateral and smaller size of loan demanded has lowered interest rate in some formal financial intermediaries. In addition, better repayment performance is strongly and directly associated with educational level of the borrower. The higher interest rate charged by some informal money lenders made the financial problem more unreachable.

### 3. Methodology

The study employed descriptive survey in which the evidence was pinpointed on how the factors influence the loan repayment of SACCOs. Descriptive survey design was used, because it doesn't allow an attempt to control or manipulate the variables. The study targeted 39 SACCOs in Baringo County with 63,924 members (Baringo County Report 2013). The SACCOs are evenly distributed across the County and outside the County. They serve their members within and outside the County. Two of these SACCOs have many branches within and outside the County. They have expanded their operations to accommodate even banking services in line with their core functions. They provide loan and saving facilities to farmers in beekeeping, cotton, coffee, fishing, livestock and transport sector. Primary data was collected using questionnaires. The questionnaire was structured in a manner that it first collects the general information about the respondent followed by sections which addresses social, economic, Sacco based, and loan default factor respectively. The drop and pick method was used to administer questionnaires. The questions posed to the respondent were simple and easy to understand and respond. The collected primary data was processed into meaningful information. Pearson correlation was used to test the relationship between the variables. Also regression analysis was done test the relationship between loan default and social, economic and terms of the loan based factors. The multiple regression model is indicated below show the relationship between the variables. Their coefficient indicates the strength of their relationship between the dependent and the independent variables.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon.$$

Where; Y = Loan delinquency

B<sub>0</sub>= y-intercept or constant-this is autonomous default

B<sub>1</sub>- β<sub>3</sub>=Coefficients beta for each variable.

X<sub>1</sub>= Social factors, captured as Age, Marital status and Education level

X<sub>2</sub>= Economic factors, captured as income and interest rate

X<sub>3</sub>=SACCO related factor, captured as Grace Period, Loan Size, Loan Use and Repayment period

ε = is the error term or residual that can't be explained by the model.

### 4. Results and Discussion

The study established the association between determinants and loan default. The results indicate association between each variable and the loan default as shown below. The social factors consist of; gender of the respondent, age, and education level of the respondent. Economic factor of the members is indicated by the level of household income was obtained. The mean of the observed responses was calculated and correlated with the loan default mean. Terms of loan factors contain these variables namely; Grace Period, interest rate, Loan Size, Loan Use, and Repayment period.

**Table 1. Correlations Matrix**

		Social factors	Economic factors	Terms of loan	Loan repayment
Social factors	Pearson Correlation	1	-.129	-.003	-.118
	Sig. (2-tailed)		.104	.969	.135
	N	191	191	191	191
Economic factors	Pearson Correlation	-.129	1	.359**	.427**
	Sig. (2-tailed)	.104		.000	.000
	N	191	191	191	191
Terms of loan	Pearson Correlation	-.003	.359**	1	.515**
	Sig. (2-tailed)	.969	.000		.000
	N	191	191	191	191
Loan repayment	Pearson Correlation	-.118	.427**	.515**	1
	Sig. (2-tailed)	.135	.000	.000	
	N	191	191	191	191

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### Social factors and loan default.

According to the result in Table 1, the correlation coefficient of -0.118 (R=-0.118, P>0.05) exist between social factors and loan repayment. This implies that a unit increase on social factor leads to 0.118 unit decrease in loan repayment. Nimoh et al. (2012) confirm the study results that a factor like education has a negative relationship with loan default. Age of individual being one of the social factors has negative association with loan default



since members who are aged have experience thus default rate decreases with age (Pasha and Negese, 2014).

**Economic factors and loan Default.**

According to the results in Table 1, correlation coefficient of 0.427( $R=0.427, P<0.05$ ) exists between economic factors and loan repayment. This implies that a unit increase in economic factor leads to 0.427 unit increase in loan repayment. Therefore, economic factors have a positive significant effect on loan default. Tundui et al. (2013) confirm the study results that increase household income leads to low default rate. When the loan beneficiary earns additional income, Sacco's increases their loan eligibilities. In case of default, Sacco's register higher increase in total aggregate loan repayment amount. The prior indicates that if Sacco's were lending to its members a certain amount based on their current income, any further increase prompt Sacco's to adjust loan qualification upwards.

**Terms of loan and loan default.**

The results in Table 1, show that a correlation coefficient of 0.515( $R=0.515, P<0.05$ ) exists between terms of loan factors and loan repayment. This implies that a unit increase in terms of loan leads to an increase in loan repayment. Therefore terms of the loan have a positive significant effect on loan default. An increase in these factors like loan use, loan size and repayment period are increases the chances of loan default. Kinya et al. (2015) suggested that loan terms and conditions have significant influence on the loan volume granted by deposit taking Sacco's confirming the study findings. Duy (2013), confirm the study results that smaller loans are likely to be repaid than large loans. Similarly, Wongnaa and Vitor (2012) contend that longer period of repayment lowers default rate.

**Effects of Determinants on Loan Default**

The study determined the combine effect of social, economic and terms of the loan factors on loan default. For the regression purposes, mean representing each of the factors (social, economic, and terms of loan factors) was obtained and regressed against loan default mean as shown below.

**Table 2. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.582 <sup>a</sup>	.339	.327	2.17184

a. Predictors: (Constant), terms of the loan, social factors, economic factors

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error			
1	(Constant)	4.085	1.314		3.110	.002
	Social factors	-.107	.085	-.083	-1.265	.208
	Economic factors	.219	.058	.266	3.790	.000
	Terms of the loan	.221	.037	.419	6.028	.000

a. Dependent Variable: Loan repayment

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Table 2, shows that multiple correlation coefficient of 0.582( $R=0.582$ ) exist between the observed loan default and those predicted by the model. In terms of variability in observed loan default, the model account for 0.327(Adjusted  $R^2=0.327$ ) or 32.7% of the total variability in loan default. The estimated absolute deviation mean is 2.17 which is lower than the observed loan default that range from 1 to 5.

The multiple regression coefficient of -0.083( $\beta_1=-0.083, P>0.05$ ) exist between social factors and loan repayment. This implies that increase in social factors leads to reduction in loan repayment. The relationship is negative and not significant. Muruku (2015), Aghion and Morduch (2005), Arminger et al., (1997) states that social factors determine loan repayment. Factors like age, education and gender affects loan repayment performance.

The second factor is the economic factor that have standardized beta coefficient of -0.266 ( $\beta_2=-0.266, P<0.05$ ). It suggests that a unit increase in economic factors leads to 0.266 units increase in loan repayment. The effect is significant and implies that economic factors determine loan default. Nkuru (2015) suggest that income level affects loan repayment.

In addition, the multiple regression results indicates that terms of loan factors standardized beta coefficient is 0.419( $\beta_3=0.419, P<0.05$ ). This implies that a unit increase in terms of the loan factors leads to 0.419 units increase in loan repayment. The effect is positive and significant. This suggests that an improvement in Sacco based factors significantly lowers rate of default. Kinya et al. (2015) suggest that loan terms significantly affect loan repayment.

**Conclusion**

The study concludes that social factors have a weak relationship with loan default. The relationship between social factors and loan default shows that social factors do not have a significant effect on loan default. It cannot be used an indicator to tell whether someone is likely to default based on age, gender or education level.

Secondly, economic factor have moderate positive significant association with loan default. The economic factor influence loan repayment and any additional level leads to increase in loan repayment. Tundui et al. (2013) confirm the study results that economic factors affect the loan repayment. In addition, terms of the loan has a significant positive effect on loan default. Kinya et al. (2015) conclude that loan terms significantly affect loan repayment. Therefore, both economic and terms of the loan have a significant effect on loan default, however, social factors do not have a significant effect.

## References

- Aghion B. A. D. and Morduch J. (2005). Microfinance beyond group lending. *Economics of Transition*, 8:401-420.
- Arene. A. (1992). Loan repayment and technical assistance among small holder maize farmers in Nigeria, *African review of money, Finance and Banking*.
- Armingier, G., Enache, D. and Bonne, T. (1997). "Analyzing Credit Risk Data: A Comparison of Logistic Discrimination, Classification Tree Analysis, and Feed forward Network". *Computational Statistics*, 12(2). 293-310.
- Bassem B. S. (2008). Determinants of successful group loan repayment: An application to Tunisia. *Journal of Sustainable Development in Africa*, 10, (2).
- Bekele Hundie, Belay Kassa and Mulat Demeke. (2005). Factors Influencing Repayment of Agricultural Input Loan in Ethiopia. *Journal of Agricultural Economics*, (1):117-120
- Chacha, C. (2006) Repayment performance of Bank loan Beneficiaries under credit guarantee scheme in Tanzania. *The case of CRDB Bank P/C. M Dissertation University of Dares salaam*
- Chirwa E. Wadonda. (1997). Econometric Analysis of the Determinants of Agricultural Credit Repayment in Malawi. *African Review of Money, Finance and Banking*, 1-2 :107-123.
- Coval, J. D., Jurek, J. W., & Stafford, E. (1992). Economic catastrophe bonds. *The American Economic Review*, 628-666.
- Duy, V.Q. (2013). Is The Repayment Performance of Farmers Better Than That of Non-Farmers? A Case Study of Borrowers of Formal Bank Credit in the Mekong Delta, Vietnam. CAS Discussion Paper No 88. Retrieved on October 2014 from [www.researchgate.net/.../239891252](http://www.researchgate.net/.../239891252).
- Financial Access (2009). *Measuring Access to Financial Services around the World*. Washington, D.C.: CGAP. Retrieved on December 2014 from [www.gsma.com/.../wp-content/uploads/.../fa2009\\_6](http://www.gsma.com/.../wp-content/uploads/.../fa2009_6).
- Financial Access (2013). *Profiling developments in financial access and usage in Kenya*. Retrieved on 2<sup>nd</sup> October 2015 from [www.kenyacic.org/sites/default/.../131031\\_FinAccess\\_2013](http://www.kenyacic.org/sites/default/.../131031_FinAccess_2013)
- Godquin, M. (2004). Microfinance Repayment Performance in Bangladesh: How to Improve the Allocation of Loans by MFIs. *World Development*, 32 (11): 1909–1926.
- Godquin, M. (2004). Microfinance Repayment Performance in Bangladesh: How to Improve the Allocation of Loans by MFIs. *World Development*, 32 (11): 1909-1926
- Goetz, A. M. and Gupta R. S. (1996). Who takes credit? Gender, power and control over loan use in rural credit programmes in Bangladesh *World Development*, 24(1) 45 -63.
- Karikari, H. O. (2012). Poverty reduction efforts in Ghana: A study of the social investment fund microfinance programme in the Mfantseman Municipality.
- Kinya, D.N., Shavulimo, P. M. Chepkoech, L., Langat, P. C. (2015). Effect of Loan Terms and Conditions on Loan Volume Granted by Selected Deposit Taking Saccos in Nyeri County, Kenya. *Journal of Business and Management Vol. 17(2): 81-94*.
- Magali, J. J. (2013). The Impacts of Credits Risk Management on Profitability of Rural Savings and Credits Cooperative Societies (SACCOS): The Case Study of Tanzania. *International Journal of Management Sciences and Business Research*, 2 (12):62-75.
- Mekonnen, M. (2015). *Determinants of loan repayment performance of rural women based saving and credit cooperatives' members: the case of Dire Dawa administration*
- Monitoring Loan Repayment among Farmers in Techiman, Ghana: Investigating the Effect of Cooperative Farming System. *Journal of Emerging Trends in Economics and Management Sciences*, 5(1) 32-37
- Muthoni, P. M. (2016). Assessing Borrower's and Business' Factors Causing Microcredit Default in Kenya: A Comparative Analysis of Microfinance Institutions and Financial Intermediaries. *Journal of Education and Practice*. 17 (12):97-118
- Nimoh, F., Agyekum E.K., Ayisu T.S. (2012). Factors Influencing Credit Default: A Case Study of Maize Farmers in the Asante Akim North District of Ashanti Region. *International Journal of Agriculture and Forestry*, 2(2): 24-28
- Nkuru, F.N.(2015). Factors affecting growth of Saccos within the Agricultural sector in Kenya. *Global journal of commerce & management perspective*. 4(1):34-45
- Olando, C. O., Mbewa, O. M., Jagongo, A.(2013). Financial Practice as a Determinant of Growth of Savings and

Credit Co-Operative Societies' Wealth A Pointer to Overcoming Poverty Challenges in Kenya and the Region

- Olomola A.S., (2000), Determinants of small holder loan repayment performance, PhD Associated Research Professor NISER, Ibadan
- Oni O.A., Oladele O.I. and Oyewole I.K. (2005). Analyses of factors influencing loan default among poultry farmers in Ogun State Nigeria, *J. Central. Europe Agric*, 6(4):619-624.
- Owen, G. (2007). Rural outreach and financial cooperatives: Saccos in Kenya. *The International Bank for Reconstruction and Development / The World Bank*.
- Pasha, S.M. A., Negese T. (2014). Performance of Loan Repayment Determinants in Ethiopian Micro Finance - An Analysis. *Eurasian Journal of Business and Economics*, 7 (13):29-49
- Rahman, A. (1999). Micro-Credit Initiatives for Equitable and Sustainable Development: Who Pays? *World Development*. 27 (1): 67-82.
- Tundui, C., and Tundui, H. (2013). Microcredit, Micro Enterprising and Repayment Myth: The Case of Micro and Small Women Business Entrepreneurs in Tanzania. *American Journal of Business and Management*, 2(1): 20-30.
- Wongnaa, C.A., Vitor, D. A. (2013). Factors affecting Loan repayment Performance among Yam Farmers in the Sene District, Ghana. *Agris on-line Papers in Economics and Informatics*, 5(2): 111-122.
- Ameen, F. (2004). Loan Repayment in the Grameen Bank: The importance of borrower opportunity cost and gender. In *Research in Banking and Finance 5: Bank and Financial Market Efficiency: Global Perspectives*, 109-136
- Ayogyam,A., Goddana,M.D., Mohammed, H., and Boateng, E.(2013). Monitoring Loan Repayment among Farmers in Techiman, Ghana: Investigating the Effect of Cooperative Farming System. *Journal of Emerging Trends in Economics and Management Sciences*, 5(1) 32-37