# CREDIT RISK EVALUATION SYSTEMS AND NON PERFORMING LOANS AMONG SACCO IN BOMET COUNTY, KENYA

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A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF FINANCE AND ACCOUNTING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (MBA), UNIVERSITY OF NAIROBI

**OCTOBER 2016** 

#### **DECLARATION**

This research project is my original work and has not been presented for examination in any other University

Signed.....

Date.....

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This research project has been submitted for examinations with my approval as the University Supervisor.

Signed.....

Date.....

Dr. Joshua Wanjare

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#### **DEDICATION**

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#### ABSTRACT

SACCOs provide a safe haven for the savings of their members. The establishment of comprehensive credit facilities is however one of the fundamental functions of all savings and credit co-operative societies. Credit formation is the main income generating bustle for the SACCOs. The credit risk evaluation utility expedites efficient supervision and management of the SACCO loan portfolio in order to ensure impartial dissemination of funds and to inspire liquidity planning. The objective of the study was to analyze the effects of credit risk evaluation systems and non-performing loans among SACCOs in Bomet County. The research strategy used in this study was a descriptive research design. The instruments used to collect data for this case included self-administered questionnaires which extracted valuable primary data from the SACCOs' management. This study used quantitative techniques to analyze the data and scrutinize the instantaneous impact of the independent variables on the dependent variable. Based on the findings the study concluded that credit risk evaluation systems have a constructive effect on the financial profitability of the SACCOs. The study revealed that administration of credit relationships that are centered upon all available client data and consistent all the way through the credit life cycle shall greatly reduce non-performance of loans and increase loan repayment.

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# LIST OF ABBREVIATIONS

FSD	Financial Sector Deepening
GDP	Gross domestic product
MPT	Modern Portfolio Theory
SACCO	Savings and Credit Cooperative Society
UN-HABITAT	United Nations Human Settlements Programme
WOCCU	World Council of Credit Unions
SASRA	Sacco Societies Regulatory Authority

#### **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background of the Study

Credit risk is the likelihood of loss from debtor's failing to remit payments on any type of debt. It is the most costly risk in financial institutions and its effect is more substantial as compared to other risks as it directly impends on the solvency of financial institutions Chijoriga (2007). Credit risk evaluation, therefore, is the process of mitigating losses by understanding the adequacy of both a financial institutions' capital and loan loss reserves at any given time. As a result, regulators have begun to demand more transparency. They want to make sure a financial institution has sufficient knowledge of customers and their associated credit risk.

Credit risk evaluation has become a major concern in many financial institutions including SACCOs and markets globally. Financial institutions' modern early warning models gained popularity, Sinkey, (1995). It utilizes discriminant analysis for identifying and distinguishing problem bans from sound financial institutions and Altman (1997) examined the savings and loans industry.

Recently, credit risk has gained crucial importance due to huge losses incurred by large international financial organizations, Nikolaidou & Vogiazas (2014). After the financial crisis, institutions offering financial services, especially banks employed distinct systems to alleviate impending financial losses initiated by mismanagement in loan apportionments and credit retrievals. Credit risk evaluation systems therefore offer a feasible resolution to such challenges. Today, credit risk evaluation makes up a critical

component of an all-inclusive approach to risk management in banking sector Arora & Kumar (2014).

Risk is intrinsic in every aspects of a money-making activities. However, for banks and other financial institutions such as SACCOs, credit risk is a vital aspect that needs to be managed. Credit risk is the likelihood that a borrower of counter party will fail to meet its compulsion in accordance with the set conditions. Credit risk, therefore occurs due to the financial institutions' lending to corporate, individuals, and other financial organisations.

Credit can be defined as the capacity of a customer to acquire goods or services before payment, based upon the trust that payment shall be made later, or it is the belief which enables a SACCO to provide money or resources to the member where that member does not pay back the SACCO immediately (therefore creating a debt), but rather promises to pay back at a later date. Credit is therefore a method of formalizing reciprocity, making it legally enforceable and extensible to large groups of unrelated populace.

A key prerequisite for effective credit evaluation is the ability to logically and proficiently manage customer credit lines. In order to reduce exposure to bad debts, and bankruptcies, companies must have greater awareness into customer's capability financially, history of credit and fluctuating payment patterns.

#### 1.1.1 Credit Risk

Credit risk is the probability that a bond issuer will not make the coupon reimbursements or initial repayment to its bondholders. It is the probability the issuer will default. While the meaning of credit risk may be straight forward, computing it is not. A number of factors may affect an institution's credit risk and in varying degrees. Some examples are growing interest rates (if the bonds are floating-rate notes, growing interest rates increase the requisite interest payments), poor or diminishing cash flow from operations (which is often required to make the interest and principal payments), or alterations in the nature of the marketplace that unfavorably affect the issuer (such as a change in technology, an increase in competitors, or regulatory changes). Credit risk increases due to the fact that borrowers intend to use future cash flows to repay current debts; this makes it almost impossible to ensure that borrowers will definitely have the funds to recompense their loans. Interest payments from the borrower or issuer of credit are reward of lender's or investor's for assuming debt obligation risk.

#### **1.1.2** Credit Risk Evaluation Systems

Credit risk evaluation is the ability to calculate the risk that a loanee will not service a loan as per the agreement. It is essential to the foundation of lending: extending credit, soliciting accounts, pricing (which involves setting the rate of interest or charges and other terms), and management of the credit accounts in existence. Systems which the decision on credit is made automatically based on a statistical model are usually referred to as *credit-scoring* systems. Credit-scoring systems normally look at individuals' experiences with credit in the past as depicted in the records of credit held and maintained by credit reporting agencies. Credit-scoring systems presume that experience of the past can be used to forecast future performance, though not with assurance: it is true that the best-rated loans may suffer default, whereas even the worst-rated loans might be repaid as per the conditions set. Rather, the aim of any credit-risk evaluation system is solely to distinguish loans that are more probable to be recompensed from those that are less probable to be repaid. Evaluation of credit risk has been conducted ever since

credit has been offered: Lenders gather information that they consider to be pertinent to the question of whether credit will be repaid, and the summary of that information is used to determine whether to make the loan. In such multi-million-shillings agreements, the specific characteristics of the loans and the situation of the borrowers tend to be distinct and often highly intricate and thus unsuitable for a consistent system. In assessing information, statistical systems depend on mechanical statistical procedures, not on the knowledge and conclusion of loan officers. The statistical procedures reflect on many factors related to credit simultaneously, statistically isolate the relative aptitude of these factors to measure risk, and allocate equivalent weights to each aspect. Contrasting judgmental systems, credit-scoring systems are constant in their dealing with information; different conclusions occur utterly from differences in the principal information and not from the unsystematic management of information from case to case. Credit scoring systems calculate a borrower's score primarily from data in the credit report. The systems also take information from credit applications into consideration, including the borrower's occupation, length of service, and home ownership. Financial institutions (FIs) regularly summarize the aspects affecting the ability and readiness of the loanee to service their loans into a single credit score.

Credit-scoring systems are quantitative tools that use observed attributes of the member to obtain a "score" demonstrating the member's likelihood of default (versus repayment). Credit-scoring systems are generated using borrower characteristics (e.g., income, loan payment history). The credit-scoring system uses each of the characteristics to obtain a boundary number or range. If for example an earlier loannee had a greater overall credit score than the boundary number then they serviced their loan on time, else they defaulted if their score was below the boundary number. The boundary number or range is resultant from statistical analysis, such as discriminant analysis. If a new clientele behaves similarly to a past clientele, then credit-scoring system will be used to compute a score for the new clientele and categorize them in a default risk group either high or low. To be considered eligible for a loan the total score of applicants must meet the qualifications.

By selecting and combining different economic and financial characteristics, a financial institution's manager can differentiate high and low default risk customers based on the default characteristics of previous borrowers. A loan applicant's credit viability in credit-scoring system is given as one numeric value, and not a judgmental assessment of many different factors. This is advantageous for financial institutions that need to assess small borrowers quickly, at a cheaper cost consistently and who would otherwise have had to employ more credit analysts.

In evaluating credit risk, credit scoring systems use the five Cs of credit. These are character, capacity, capital, collateral and conditions. Character, also referred to as credit history, is the lonee's repute for recompensing debts. This data is available from the credit summaries of the borrower. Credit summaries enclose detailed information of a clientele. These summaries also have information on collection accounts, judgments, liens and bankruptcies, and they retain most information for several years.

Capacity, measures the loanee's capacity to service a loan by equating income to recurrent debts and evaluating the ratio of debt-to-income (DTI). It also examines income, lenders examine the duration of time the client has been at his current employment and job security.

Loaners again look at initial investment the loanee places toward a potential venture. A big initial investment by the borrower reduces the chance of non-repayment. For example, borrowers who place a down-payment find it easy to get a mortgage. Down payments are an indicator on the level of seriousness of a borrower, this can make a lender more comfortable in giving credit.

Collateral helps a borrower secure loans. This is something of equal or greater value offered by the borrower and which the lender may sell to recover the loan should the borrower default. Collateral is the guarantee to a lender that in the case a borrower fails to service the loan, the loanee can reclaim the collateral. Car loans can be secured using cars, and mortgages using homes.

The features of the loan, for example the rate of interest and principal amount, influence the lender's aspiration to finance the borrower. Conditions the aim for which the loan is being requested or how the monies will be used. For example, if the applicants intends to acquire an asset such as a car or home, which is quite specific, a lender would be compelled to approve the loan on those terms as opposed to a signature loan which the user does not define the intent.

#### **1.1.3** Non-Performing loans

This refers to non-repayment of loans given to members by their SACCOs. The SACCOs in Bomet County just like other SACCOs in the country give loans based on members' savings. The loans are guaranteed by other members of the SACCO and are supposed to be repaid in accordance with the SACCO's by-laws. The repayment period for most SACCOs is between 2-6 years for development loans. And one year for emergency and

school fees loans. Repayment or non-repayment for employed members depends on the members' salaries and the check-off system by the employers. For the non-employed members of the society, repayment is based on each member's commitment and loyalty to their SACCO. This study's objective is to establish the level of loan performance in terms of repayment or non-repayment of the members' loans.

This research study therefore seeks to establish whether the risk evaluation systems being used by SACCOs affect loan performance.

According to WOCCU, the financial persuasion of accounting for loss has not encompassed the SACCO development since SACCO's have depend on the check-off system for years. SACCOs therefore end up having enormously low disposable institutional capital and fail to meet the WOCCU sagacious standard of quality of a minimum of 10% net institutional capital. Institutional capital is an important second form of security after loan loss provisions from losses sustained by the credit union related to increasing defaults and delinquency.

In compliance with the more strict requirements and in order cushion the higher capital costs for credit risk, several institutions are revamping their methodologies towards credit risk. The credit management faculty enables efficient organization and management of the SACCO credit portfolio so as to ensure reasonable distribution of funds and to inspire liquidity planning. So as to achieve practicality and accept best practice, credit administration should always be guided by clearly stipulated procedures and policies, strategic planning, by-laws, the co-operatives act, the SACCO supervisory act and rules

and regulations. The SACCO management should formulate and continually review and amend the loan policy.

#### 1.1.4 Credit Risk Evaluation and Non-performing loans

Credit Risk Evaluation refers to the procedure financial institutions goes through when assessing a credit request. Approval of credit is dependent upon the readiness of the lender to lend money or other resource in the existing economy and also that the lender's evaluation of the capacity and preparedness of the loanee to repay the money or pay for the services or goods acquired—and interest accrued—in the stipulated manner. Naturally, smaller business ventures must pursue credit endorsement to acquire coffers from lenders, vendors, investors and, and also allow credit approval to their clients.

Generally, the approval of credit is dependent upon the assurance the lender has in the borrower's credit merit or ability to repay. This encompasses the borrower's capability and readiness to repay; it is one of the many factors describing a lender's credit policies. Financial institutions utilize a several financial systems to appraise the credit worth of a customer. When both creditor and debtor are business entities, much of the assessment depend on examining the debtor's cash flow statements, balance sheet, inventory turn-over rates, management performance, market conditions, and debt structure. Creditors prefer clients who create net earnings in surplus of debts commitments and any eventualities that may come up. Lenders consider a number factors when appraising a business or an individual that is looking for credit the factors may include but are not limited to; loan size, size of debt burden, credit worthiness, length of commitment, frequency of borrowing, and other social concerns.

#### **1.1.5** Saving and Credit cooperative Societies (SACCO)

A Savings and Credit Cooperative Society (SACCO) is a co-operative with the objective of pooling savings for members and hence make credit facilities available to them UN-HABITAT (2010). The SACCOs overall objective is to support general welfare and economic interests of the members. A Savings and Credit Cooperative Society (SACCO) can also be defined as a members owned financial co-operative whose principal objective is to mobilize investments from its member and give the members access to loans (provident and productive) on reasonable terms as a mode of enhancing the socio-economic status of the members. The members will in most cases have a mutual bond.

The ICA Statement on the Co-operatives Identity (1995) defined a cooperative as an independent association of people united willingly to meet their common social, cultural, and economic needs and ambitions by a means of cooperatively owned and legitimately controlled initiative.

SACCOs are founded on the ideals of self-responsibility, self-help, equity, democracy, solidarity and equality. Co-operative members hold a belief in the moral values of social responsibility, caring for others, honesty, and openness Bibby & Shaw (2005).

To gain larger understanding about credit risk, financial institutions progressively seek to supplement the asset by asset approach with a qualitative portfolio assessment using a credit model Mason and Roger (1998) explored the use of Modern Portfolio theory applied to a credit union's portfolio of assets in a study dubbed Portfolio optimization for Multiple Group Credit Unions.

SACCOs are the leading sources in Kenya currently of credit to co-operative for socioeconomic growth Alila & Obado (1990). Cooperatives in Kenya begun in the early 1900s and membership were restricted to white colonialists only. Kipkelion area was the first place to establish a cooperative. In 1944 colonial officers finally allowed Africans to join or form cooperatives Amba & Komo (2012).

The Co-operative association currently contributes over forty five percent (45%) of Kenya's Gross Domestic Product (GDP) and nearly fifty percent (50%) of the Kenyan populace directly or indirectly acquires their source of revenue from the co-operative movement. For a long time, the co-operatives remained for the most part agriculturally oriented. Nonetheless, recently, the co-operatives have experienced substantial divergence in interests and activities particularly savings and credit. A number of non-agriculturally oriented co-operatives have come up. These co-operatives have ventured into extents such as; transport, handicrafts, housing, and small scale industries among others Alila & Obado (1990).

SACCO's have increasingly become of the principal source of finance in many rural areas in the country. The local SACCO may be the only source of financial services in rural areas. Although it is very difficult to ascertain the exact number of SACCOs running in the country, estimations suggest between 4,000 and 5,000 SACCOs Financial Sector Deepening (FSD) (2010).

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Bomet County currently has a total of 29 registered SACCOs spread across Bomet, Konoin, Sotik and Chepalungu sub-counties. Quite a number of SACCOs in Bomet County have long lists of due loan from the members. According to Muchibo (2005) SACCOs face various challenges that hamper the maximum utilization of their potential. He noted concerns on the types of leaders who run SACCOs observing that since they are voluntary establishments, members may elect into management or leadership positions persons who may not have the knowhow to manage and let alone run a SACCO.

The review reveals that even though most organizations view credit risk as their largest risk, the practice of applying modern portfolio theory to credit risk has lagged Margrabe (2007). Mwisho (2001) concluded that in practice, credit risk measures focus on risk and return tradeoffs. This is the measure of existing risk in every activity or product and thereby charging it according to capital required to support it. This however, does not resolve the issue of non-performing loans which significantly pose challenges in SACCO management.

#### **1.2 Research Problem**

Conceptually, increasing profitability is a priority for all managers in financial institutions. Decisions pertaining to credit approvals are the utmost essential concerns in an everyday SACCO's procedure. Financial institutions may create the largest profits from well allocated credits. However, this kind of SACCO's activity comes with a high element of risk which if not properly managed may lead to bankruptcy. The major concern comes from differentiating good (that surely repay) from bad (that likely default) credit aspirants. Credit risk evaluation is an important and interesting management science problem in financial analysis. Largely, credit risk evaluation depends upon

investigating and classifying credit applications and setting rules that clearly categorize customers as being either good or bad.

Credit risk evaluation is equally very important for Sacco managers. In context, SACCO managers need to minimize the risk of default of loans as defaults weaken the financial stability through loss of principal and interest while also operating under their main objectives which entail the social role of making available affordable loans to their member helping them achieve their financial obligations and raising their standard of living. These social roles conflict with profitability of the SACCO when managers become less considerate to the credit risk of borrowers. There is therefore need to conduct more research on credit risk evaluation practices in SACCO. This study is therefore an effort to minimize this gap by providing further insights and information on the effect of credit risk evaluation practices on lending portfolios of SACCO.

Credit risk challenges are inherent in financial organizations undertakings since credit risk is typically uncertain Laurentis and Mattei (2009) Therefore as Nancy (2001) has cited an effective credit risk evaluation process may be required to help SACCO establish rules to curb operational losses caused by fraud, human error, technological malfunction, or employee carelessness. However, SACCO may structure and implement internal measures and processes as well as regular internal audit appraisals to ensure that employees observe the rules and regulations when performing their duties pertaining to credit management. Empirical studies have focused on the different challenges that affect the performance of SACCO's Achou & Tengoh (2008).

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These studies have however not highlighted the plight facing most SACCO, especially in dealing with non-performing loans and with an emphasis on Bomet County. This study aims at filling the research gap by answering the question; what are the effects of credit risk evaluation systems and non-performing loans in SACCOs within Bomet County?

#### **1.3 Research Objective**

This research aimed at determining the effects of Credit Risk Evaluation Systems on nonperforming loans in SACCOs in the County of Bomet.

#### **1.4 Value of the Study**

The researcher in carrying out this research, anticipates that the outcome of the study will give insight on the extent to which SACCO are exposed to credit risk and what managers should do in order to reduce the risk. Members of the SACCO will also benefit from improved credit risk practices which will impact positively on their shares in form of dividends.

To academicians and researchers, relevant information regarding Credit Evaluation Systems and non-performing loans in Savings and credit Co-operative Societies will suffice. It will also simulate other scholars to endeavor to look into credit management practices and portfolio allocation that are yet to be studied thus contribute to the overall form of knowledge and create a basis for additional research.

The study also aims at broadening the knowledge on credit risk evaluation practices and the practice of applying the same on non-performing loans in Bomet County.

The County Government could also use the study to come up with taxation policies for financial firms in relation to receivables and bad debts and also being the majority shareholders, they would like to account for their returns in earnings per share which is determined by the management of working capital.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### **2.1 Introduction**

The researcher in this chapter looked into previous literature relating to credit risk evaluation strategies amongst financial institutions. It specifically looks at theoretical literature, credit risk evaluation and empirical literature regarding credit risk evaluation strategies.

#### 2.2 Theoretical Review

This study will aim at determining the effects of Credit risk evaluation strategies on nonperforming loans in Bomet County. It will be based on the Modern Portfolio theory, Liquidity theory of credit, Credit risk theory and the C's of credit.

#### 2.2.1 The Modern Portfolio theory

The Modern Portfolio Theory (MPT) is a hypothesis published by Harry Markowitz in his thesis "Portfolio Selection," (published by the Journal of Finance in 1952). It is among the most significant and important economic philosophies that deals in investment and finance. The theory is based on the notion that investors who are disinclined or reluctant to take risks, create portfolios to maximize or optimize anticipated returns centered on an acceptable level of market risk, accentuating that risk is an intrinsic part of higher incentive.

The "portfolio theory" or "portfolio management theory," MPT proposes the possibility to create an "efficient frontier" of ideal portfolios, which offer the greatest expected return possible for a certain risk level. It proposes that looking at the anticipated risk and return of one specific stock is not enough. It suggests that through investing multiple stocks, the investor may acquire the profits of diversifying the stock; in particular it serves as a reduction in the level of risk of the portfolio. MPT analyzes the merits of diversifying stock, also referred to as do not invest all your money in one company.

MPT is a critical theory in investment, it looks at the blend of resources performing or functioning in the best possible manner with the least waste effort to capitalize on returns for a certain quantity of portfolio risk or regularly reduce risk for a certain level of return expected, by cautiously selecting the quantities of several assets. In theory, it clearly identifies this combination; this is only possible, when the particular assets movement and return are in opposing directions. An investor in this case needs to study the movement in value of the intended asset or investment and figure out the assets which have a movement in the opposite direction. However, risk diversification lowers the risk level even in cases where the returns of the assets' are not positively or negatively interrelated Omisore et al (2012).

Consequently, Markowitz proposed that it is all about selecting the best combination of assets or stock to invest in rather than just picking an arbitrary selection of stocks.

Technically in MPT, there exists five statistical measurements of risk used they include; the Sharpe ratio, standard deviation, beta, alpha, and R-squared. This are the indicators which are aimed at assisting investors calculate the risk-reward profile of a potential investment.

It can be deduced from this theory that the risk of each assets contributes to the risk level in a portfolio, quantities of resources apportioned on every asset and the way in which each of the assets making up the portfolio are related to each other. The main expectations of the modern portfolio theory in risk management is that the market is effective and seamless and that the financier is sensible Chijoriga (2007)

#### 2.2.2 Liquidity theory of credit

Emery (1984) proposes the Liquidity theory of credit and suggests that firms', whose credit is limited or controlled, will tend to utilize a larger trade credit as compared to firms with a standard access to financial institutions. The school of thought that proposes this is built on the fact that in a firm which is constrained financially, the trade offer makes up for credit offer reduction from financial institutions. With this in mind, firms with limited or controlled, credit will be financed by those whose liquidity is good, or those which have greater access to financial institutions and capital markets. A number of methodologies have been employed to try and deduce the empirical truth of this assumption. Nielsen (2002), used small and medium sized as a representation of firms that have limited credit deduces that if monetary reductions arise, the smaller firms respond with an upsurge in the amount of trade credit they accept. On the other hand, financially stable or unconstrained firms are not likely to ask for trade credit but are more likely to offer the same, this creates an undesirable relationship between a trade credit use and a buyer's access to other sources of financing. Pertersen and Rajan (1997) attained proof supporting this undesirable relationship.

#### 2.2.3 Credit Risk Theory

Credit risk has only been studied widely during the late 1970's, this is despite the fact individuals and firms in general have faced challenges associated with credit risk since early ages. Literature on credit before 1974 relies on actuarial techniques of credit risk evaluation where the major challenge is the complete reliance on historical data. To date, there exist three qualitative techniques of evaluating credit risk; incomplete information approach, reduced form appraisal and structural approach Crosbie et al (2003). Merton (1974) proposes the theory of credit risk or structural theory whereby it is the default events which derives from the fim's asset development demonstrated through a process of diffusion with constant parameters. Models such as these are generally referred to as "structural models" and they rely upon variables allied to a particular issuer.

#### 2.3 Determinant of Non-Performing loans among SACCO

The various determinants of non-performing loans of SACCO are; interest rates, credit criteria, management of loans and legal framework and information asymmetry.

#### 2.3.1 Information Asymmetry

This situation exhibits itself in a setting whereby the information which is pertinent is not availed or known to all the parties involved in the undertaking. For instance, in a situation whereby the managers or owners of a firm may withhold information which the lending institutions should be privy to. The information asymmetry has been used in explaining a concept of diversity especially where the market conditions are different Ahmed (2010). Auronen (2013) realized that sharing of credit information within the financial sector, not only benefits the banking institutions and the sector as a whole but also the credit takers and the larger economy.

#### 2.3.2 Interest Rates

This is the cost incurred by the borrower for being given access to credit by the lender or for using assets which have been borrowed for a period of time. According to Crowley (2007), Interest is also expressed as "rent of money". Interest rates are key to free market economy and are usually expressed as a percentage rate annually. Interest rate is an indicator on the market's purchasing power or future inflation. Financial institutions facilitates saving, diversification and pooling of risks and allocation of resources Bloem and Gorter (2012). Intermediaries like SACCO incur certain costs because the loans and deposit receipts are not harmonized.

#### 2.3.3 Management of Loans and Legal framework

Sound credit risk management involves analyzing the possible effects to individual credits and the overall credit portfolio incase there is change to the environment the loanees operates. The outcome of the analysis should then be factored into the evaluation of the adequacy of provisioning and capital of the institution. Such analysis can act as an early warnings and indicators of potential credit risk exposure in periods of crisis. Stress testing in banking institutions should consider possible scenarios including: significant economic or industry sector downturns; adverse market-risk events; and unfavorable liquidity conditions Crowley (2007). The increasing competition from internal and external constituents and slow economic growth together with poor credit-deposit ratio, the large volume of NPAs in financial statement position and inadequate autonomy and professionalism in the operation have been affecting the SACCO situation in the country.

#### 2.3.4 Credit Criteria

These are factors used to determine the capability of a loanee to service loan. These factors include income, other credit sources number of accounts, amount of existing personal debt and credit history. Collins and Wanjau (2011) suggested that the most pervasive risk area is excessive lendings. It is a risky practice to extend the loan period past useful life of its collateral. Giving loans also to already overloaded borrowers or

those having bad credit history can lead the SACCO to unnecessary risks. For the risks to be minimized, lending institution have to consider the various applicants' particulars including debt to business and credit, income ratio, history and record of performance and the length of time individual lonees have been on their job, Mullei (2013).

#### **2.4 Empirical Studies**

Bailwen (2009)'s study on loan delinquency control practices of primary Co-operatives in Nigeria, established that almost all of the Co-operatives had written policies which they implemented strictly to their members. Each Co-operative had a credit committee; however, only few staff engaged in loans. The requirements of the Co-operatives for borrowing loans were share capital, a business plan, collaterals, guarantors, and savings deposit. Many of the Co-operatives conducted credit investigation and monitored their borrower's projects to pay or return immediately their loans or they would be denied loans if the Co-operative found out that the loan was being misused and not for specified purpose.

Wambugu (2008) on credit management policies in SACCO offering front office services found that identification of risks is a key part in credit risk evaluation and should be used conclusively to determine the risks facing the institution, give the probability of the risks occurring and outline the extent of loss the risks may cause incase they occur. The establishment of a review system that provides timely and accurate relevant risk information in an easily understood manner is key to risk monitoring.

Mwisho (2001) on lending conditions and procedures indicated that credit risk evaluation starts with good selection of products, and this can only be attained if all staff in an

organization are aware of the risk in developing these financial products. These measures however focus on risk and return trade off. This however, does not resolve the issue of loan recovering. Repayments pose a thorn in the flesh due to the information asymmetry on the borrowers.

Viru (2008) looked at credit management practices at KPLC and found out that the institution was most affected by credit risk due to liquidity exposures.

#### 2.5 Literature Review Summary

Various studies have been conducted on credit management policies in SACCO offering front office services, lending conditions and procedures in SACCO and trade credit management and decisions to use factoring. These studies have however not highlighted the plight facing most SACCO, especially in dealing with Credit Risk Evaluation systems and non-performing loans and especially not with an emphasis on Bomet County.

From the empirical study; we can also deduce that extensive study has gone into the credit risk evaluation strategies by banks and other institutions. Emphasis has however been put into governance, regulation and supervision of SACCO and eluded the non-performing loans of SACCO. From the studies reviewed, we establish that the effect of credit risk evaluation systems on non-performing loans has not been adequately covered. This research study therefore seeks to fill that gap.

#### **CHAPTER THREE: RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the research methodology used. The study design and the population are described. In addition, the sampling design, the instruments used to collect data and the data analysis is also described.

#### 3.2 Research design

The design involved describing of the unit in details and holistically. This is the description of the state of affairs as it exists and an attempt to report on the findings. Kerlinger (1986) points out that this type of research design results in the formulation of important principles of knowledge and solutions to significant problems. The study involves classification, analysis, comparison and interpretation of data.

Descriptive design will enable the study to establish the effects of credit risk evaluation systems on non-performing loans in SACCO in Bomet County. This study will therefore be able to generalize the findings to all the SACCO in the County.

Descriptive research portrays an accurate profile of persons, events and situations Robinson, (2002).

#### **3.3 Population**

According to Mugenda and Mugenda (2003), a population is a group of objects, events or individuals having a common observable characteristic. Sekaran and Bougie (2013) referred to a population as a whole group of events, people or things that are of interest to the researcher.

Cooper and Schindler (2008) define target population as the total collection of elements about which we wish to make inferences. This definition ensures that target population of interest is homogeneous.

There being a total of 29 SACCO in Bomet County, according to the Ministry of Trade and Co-operatives in Bomet County, the researcher intends to target the entire population. According to Cooper and Schindler, a census is feasible in a small population and necessary when there are different element variables.

#### **3.4 Data Collection**

The study used data that was primarily collected by way of Questionnaire with both open ended and closed ended questions. Secondary data collected from the Ministry of Trade and Co-operatives in the County, SASRA publications and the respective SACCOs' credit policy documents and financial statements.

The data focused primarily on the techniques used by SACCO in evaluating credit risk. The questionnaire were administered both by drop and pick later basis and by use of the lime survey web based application.

The Linkert scale will be used in the closed ended questions as it is good for measuring perception, attitude, values and behavior. The Linkert scale has scales that assist in converting the qualitative responses into quantitative values Mugenda and Mugenda (2003), Upagade and Shende (2012), Zikmund, Babin, Carr and Griffin (2010) The questionnaires will be used to collect data from the head of credit risk evaluation function in the SACCO. A sample of the questionnaire to be used in this assessment is presented in the Appendix.

## 3.5 Data Analysis

Before processing the responses, the filled in questionnaire will be edited for completeness and consistency. The data will be descriptive in nature and hence descriptive statistics will be used in analysis of the results. The descriptive statistics includes tables, frequency distribution, variance, percentages, means, proportion, modes and standard deviation. Newton et al (2010), defined data analysis as systematically looking for patterns in the data collected and formulating ideas that account for those patterns.

#### **CHAPTER FOUR**

#### DATA ANALYSIS RESULTS AND DISCUSSION

#### 4.1 Introduction

Findings and analysis of collected data in this chapter relate to Credit Risk Evaluation Systems and Non-Performing Loans among SACCOs in Bomet County. The study used census survey on all 29 Saving and Credit Co-operative Society in Bomet County to collect data using the questionnaires as the main research instruments. The questionnaires were issued to the loans officers of the listed SACCOs.

#### 4.2 Response Rate

29 questionnaires were administered. The questionnaires were edited for consistency and completeness. After initial screening eight (8) questionnaires were rejected for being incomplete for analysis, therefore a sample of 21 questionnaires was used. This represents a 72.4% response rate which is deemed sufficient for inferential analysis and meaningful conclusions in any research.

#### 4.3 Demographic Survey

The demographic part of the study intends to identify the general aspects of the various SACCOs including their duration of existence, their membership and staffing population.

#### **4.3.1** Length of operation for the SACCOs

The researcher aimed at establishing the duration for which SACCOs had been in existence. Majority (43%) of SACCOs had been in existence for 7 - 10 years followed by those which had existed for 4 - 6 years (33%). (14%) of the SACCOs had existed for

between 1 to 3 years while with the least number of SACCOs had a length of operation greater than 10 years (10%). The responses were as shown in Table 4.1.

<b>Existence Duration (Years)</b>	Frequency	Percentage
1-3	3	14%
4-6	7	33%
7-10	9	43%
More than 10	2	10%
Total	21	100%

Table 4.1 Duration of SACCOs' Existence

#### 4.3.2 Respondents working experience

The research aimed at finding out the working experience of the respondent by the time in years the respondent had worked in the SACCO. It was established that most of the respondents had worked for their respective SACCOS for between one and three years at (33%) while a representation of (14%) had worked for over 8 years in their SACCOs.

Working Experience (Years)	Frequency	Percentage
1-3	7	33%
4-5	5	24%
5-8	6	29%
More than 8	3	14%
Total	21	100%

Table 4.2 Respondents working experience

#### 4.3.3 Staffing in the SACCO

The researcher sought to establish the number of members of staff represented by the SACCOs. It was established that (38%) of the SACCOS had between 21 and 40 members of staff, (10%) of the SACCOs had either 1 to 20 or 81 to 100 members of staff while none of the SACCOs had more than 100 members of staff.

Members of Staff (No.)	Frequency	Percentage
1-20	2	10%
21-40	8	38%
41-60	6	29%
61-80	3	14%
81-100	2	10%
More than 100	0	0%
Total	21	100%

Table 4.3 Staffing in the SACCOs.

#### **4.3.4** Membership of the SACCOs.

It was important for the researcher to find out the SACCOs membership and it was clear that the bulk of the SACCOs had between 401 and 500 members representing (29%) of the representation. (29%) of the SACCOs had between 201 and 300 members while only (5%) had more than 500 members as depicted in Table 4.4

Membership (No.)	Frequency	Percentage
1-100	2	10%
101-200	3	14%
201-300	5	24%
301-400	4	19%
401-500	6	29%
More than 500	1	5%
Total	21	100%

Table 4.4 Membership of SACCOs in Bomet County.

#### **4.3.5** Existence of a Credit Department in the SACCOs

The researcher sought to establish whether the SACCOs had a credit department to handle credit matters in their institutions. It was clear that most of the SACCOs had a credit department at (86%) while only three SACCOs representing (14%) of the population did not have a Credit Department

 Table 4.5 Credit Department in the SACCOs

Have Credit Department	Frequency	Percentage
Yes	18	86%
No	3	14%
Total	21	100%

#### 4.4 Credit Risk Evaluation

The study sought to find out the dynamics surrounding Credit Risk Evaluation within the SACCOs by answering some pertinent questions regarding Credit Risk Evaluation.

#### 4.4.1 Credit Risk Policy

The researcher sought to find out whether a Credit Policy was in place in the various SACCOs. The results revealed that (90%) of the SACCOs in Bomet County had a credit policy while only (10%) of the SACCOs did not have a clear cut Credit Policy. This is shown in figure 4.1 Below



#### Figure 4.1 Credit policy

Given that most of the SACCOs had a credit policy, the researcher also further wanted to know the extent to which the respondent viewed the various credit standards and collection efforts in the financial performance of the SACCO. This is depicted in table 4.6

Statement	Strongly		Nautual	A	Strongly	Maan	Standard
Statement	Disagree	Disagree	neutrai	Agree	Agree	Mean	Deviation
Provision of							
standardized loan	2	1	1	8	9	4.0	0.8
forms							
Regular assessment of							
borrower operating	1	2	3	9	6	3.8	0.7
conditions							
Maximum loan	0	0	3	12	6	<i>A</i> 1	1.0
repayment period	0	0	3	12	0	4.1	1.0
Credit committee goes							
through the loan	1	2	Q	7	2	2.4	06
applications before	1	2	0	1	3	5.4	0.0
they are approved							
Loans are verified by							
the internal auditor	2	3	5	6	5	3.4	0.3
before posting							
Processing period	2	3	6	6	1	2.2	0.4
takes two weeks	2	3	0	0	4	5.5	0.4
Loans have standard	3	5	2	7	Λ	3.2	0.4
interest rate	5	5	2	1	+	5.2	0.4

Table 4.6 Extent of credit standards and collection efforts

From the respondents it was clear that Maximum loan repayment period and provision of standard loan forms with a mean of 4.1 and 4.0 respectively indicating that this aspects were very crucial in the respondents view. The least Standard Deviation was observed on the statement Loans are verified by the internal auditor before posting (Mean 3.4, Standard Deviation 0.3)

# 4.4.2 Review of credit policy

The researcher sought to find out how often the credit policy was reviewed in the various SACCOs. The findings depict that a large number of the SACCOs (48%) review their credit policy annually, SACCOs that review their Policy Quarterly or when need arises were the least at (10%) each.

<b>Review Period</b>	Frequency	Percentage
Quarterly	2	10%
Semi-Annually	7	33%
Annually	10	48%
Other	2	10%
Total	21	100%

Table 4.7 Review of credit Policy



Figure 4.2 Review of credit policy

#### 4.4.3 Risk Mitigation Strategies

The respondents were asked to state the type of risk mitigation strategy used by their SACCOs in credit risk management. The results are show that Guarantor is the most popular risk mitigation strategy employed by the SACCOs at (43%). Should a default occur, the SACCO is assured of recovering the principal amount and interest from the person(s) who guaranteed the loan. Shareholding is also used in an important proportion in mitigating credit risk at (38%). Collateralization and other means of risk mitigation were not popularly used as risk mitigation strategies in the SACCOs.



Figure 4.3 Risk Mitigation Strategies

#### 4.4.4 Credit Risk and Internal Control Assessment

The researcher sought to establish how often the management or board of directors of the SACCOs assessed the Credit Risk and internal Control processes in their SACCOs. The results indicate that in most of the SACCOs managers assess their credit risk and internal

Controls semiannually (52%), (33%) conduct the assessment annually while (10%) conduct the assessment once every quarter.



Figure 4.4 Credit Risk and Internal Control Assessment

## 4.4.5 Effectiveness of credit Risk Policies and practices

The researcher sought to find out how often the SACCO management evaluate how effective the Credit Risk practices and policies for assessing loan quality in the SACCO are. The respondents indicated that the largest number of SACCOs conducted an evaluation of the effectiveness of the policies and practices once every quarter at (43%) while (29%) conducted the evaluation semiannually. It also came out that none of the SACCOs evaluated the effectiveness on a weekly basis.



Figure 4.5 Evaluation of Effectiveness of Credit Risk Policies and practices.

#### 4.5 Influence of management on Non-Performing loans

This segment sought to find out whether the SACCO management had any influence on the aspect of having non-performing loans in the SACCOs.

#### 4.5.1 Existence of non-performing loans

The researcher sought to find out whether the SACCOs in question had any non-

performing loans. It was clear from the respondents that non-performing loans affects

every SACCO (100%)

Table 4.8 Existence of non-performing loans

Have Non-Performing Loans	Frequency	Percentage
Yes	21	100%
No	0	0%
Total	21	100%

The researcher having found out that all SACCOs in Bomet County were affected by non-performing loans, further sought to find out the attributes to which the respondents felt having this non-performing loans in their SACCOs. From the respondents the researcher found out that deviation from the mean was 2.4 and 4.0 while the standard deviation was 0.3 and 0.8. This indicated smaller variations in responses that implied a greater degree of agreement. A minimal variation indicates more reliable results. The smallest standard deviation was on Change of pay point once the loan had been dispatched which posted a (mean of 2.6 and a standard deviation of 0.3). The highest standard deviation was recorded on Failure to submit data to the employer for deduction to be remitted which posted (mean and standard deviation of 4.0 and 0.8 respectively)

Statement	Strongly		Neutral	Neutral	Agree	Strongly	Mean	Standard
	Disagree	Disagree		8	Agree		Deviation	
Loanees are generally bad	5	7	5	3	1	2.4	0.5	
people	U	·	U	U	-		0.0	
Change of pay point once the	6	5	4	3	3	26	03	
loan had been dispatched	0	5	·	5	5	2.0	0.5	
Failure to submit data to the								
employer for deduction to be	1	1	2	10	7	4.0	0.8	
remitted								
Loan reconciliation not being	1	2	8	7	3	34	0.6	
done by the officer	1	2	0	,	5	5.1	0.0	
Management decisions	2	3	8	5	4	34	0.5	
regarding loan repayment	2	5	0	5	т	Э.т	0.5	
Failure to verify the security	2	3	4	5	7	3.6	0.4	
issued	2	5	+	5	7	5.0	0.4	

Table 4.9 Factors attributed to non-performing loans

Failure to insure the loans	1	2	2	7	9	4.0	0.7
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#### 4.5.2 Dealing with non-performing loans

The researcher sought to find out how the management of various SACCOs dealt with the non-performing loans when they occur. From the respondents it was possible to deduce that most SACCOs (43%) attach the guarantors' shares when a default occurs, and also take legal action on the defaulter at (38%) notifying the members and allowing longer repayment periods scored lowest at only (5%).

#### Table 4.10 Dealing with non-performing loans

Dealing with non-performing loans	Frequency	Percentage
Members are notified	1	5%
Guarantors' shares are attached	9	43%
Borrowers assets are attached	2	10%
Legal action is taken	8	38%
Longer periods are given for loan repayment	1	5%
Total	21	100%

#### 4.5.3 Adverse effects of non-performing loans

When asked about the adverse effects the respondents would attribute to non-performing loans in their respective SACCOs, a number of issues were pointed out. They included that: -

- Non-performing loans are a significant variable that explains the variance in the profitability of SACCOs.
- Non-performing loans and operational expenses have a significant impact than loan repayment rate achieved by the SACCOs

#### **4.6 Interpration of the Findings**

The study recommends from the findings that in order for SACCOs to assess the rate of non-performance of loans, they need to put in place stringent Credit Risk Evaluation systems. Credit monitoring and approval measures should focus on the cash flow of the borrower and ability to repay in an effort to improve the SACCOs loan assets quality and alleviate future allowances for losses from loans.

The findings have some policy implications. Given the adverse effects of Nonperforming loans on the SACCO financial performance and overall macroeconomic health, there is merit to reinforce supervision to prevent a severe increase in Nonperforming loans in the future. This can be enforced by ensuring SACCOs avoid excess lending, maintain high standards of credit, and limit lending to un-hedged borrowers. Further, high levels of Non-performing loans pose a problem on the economy and calls for the need for a rapid, but calculated, clean-up of management of lending. Most of the SACCOs do not have the efficient risk management mechanisms to help eliminate or filter out serial dodgers, in order to effectively lock out these serial dodgers, SACCOs require a referencing solution that will enable them to submit and share data whilst handling their customers' credit application. This will help prevent borrowers with substandard credit ratings from accessing further credit from other gullible lending institutions.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **5.1 Introduction**

This chapter provides a summary of the findings; the conclusion and the recommendations of the study and suggestions for further research.

#### **5.2 Summary findings**

Based on the findings, the study concluded that credit risk evaluation systems have a positive impact on the financial profitability of the SACCOs. The study concluded that credit relationships management based upon all available customer information and consistency in the credit life cycle will greatly reduce non-performance of loans and reduces surprises.

#### **5.3 Conclusion**

The study aimed at determining the effects of Credit Risk Evaluation Systems on nonperforming loans in Savings and Credit Co-operative Societies in the County of Bomet in Kenya. It was therefore evident that SACCOs need to manage credit relationships and put in place Credit Risk policies which should be strictly adhered to and regularly reviewed. Since the study was also able to bring out some of the factors that were highly attributed to the non-performing loans, including Failure to submit data to the employer for deduction to be remitted, and failure to insure loans, the SACCOS ought to put measures in place to curb these factors.

#### **5.4 Recommendations**

The researcher would recommend that the SACCOs in Bomet County should put in place a credit policy; this would help in assessing the probability of non-repayment of loans before the loans are disbursed. This policies which are in place should also be reviewed more often say monthly so as to curb any eventualities before they occur and also to be able to take care of any previously unforeseen events.

The other area of concern was the lack of insuring the loans by the SACCOs, there is need to insure the loans and as such stringent measures will need to be placed on the approval of the loans for them to be insurable. The SACCOs should also have a mechanism of communicating to employers of the loanees to ensure that the employers are aware of such loans and also the terms of repayment. They should also ensure that the employers do not allow changes in pay points after the loans have been dispatched as this was also cited as an area leading to the no-performance of the loans.

#### 5.5 Limitations of the study

The main limitation of the study was time, and limited financial resources. The distance covered in the study being the larger Bomet County made the exercise very tedious and time consuming.

Further, the study findings may be only applicable to the SACCOs in Kenya as they might not map to SACCOs with different structures directly. It is also worth noting that the duration for which the information collected is limited to the timelines within which this study was conducted.

#### **5.6 Suggestions for Further Research**

With the integration of ICT into the SACCO industry, and the dynamism of the business environment, new challenges and opportunities are bound to arise. It would therefore be prudent to carry out a effects of risk evaluation systems with a bias on ICT and upcoming technologies.

Further research should also consider utilizing both quantitative and qualitative techniques that can be used to determine the effects of credit risk evaluation systems. Consequently, researchers can carry out the study to include larger geographic areas to improve on the results of this research.

A research also could be conducted to find the relationship between credit risk evaluation systems and non-performing loans in SACCOs in Kenya. This will help SACCO management when coming up with policies to guide the SACCO sector on improving their loan performance.

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#### **APPENDICES**

#### **Appendix i: Introduction Letter**



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Ref: CHSS-SOB D61/75762/2014

P.O. Box 19134-40123 Kisumu, Kenya 0202659307 / 0720348080

September 22, 2016

# TO WHOM IT MAY CONCERN

The bearer of this letter Jane Chepkemoi Bosek

#### REGISTRATION NO: D61/75762/2014

The above named student is in the Master of Business Administration Degree Program. As part of requirements for the course, she is expected to carry out a study on "**Credit risk evaluation systems and non performing loans among SACCO in Bomet County, Kenya**". She has identified your organization for that purpose. This is to kindly request your assistance to enable her complete the study.

The exercise is strictly for academic purposes and a copy of the final paper will be availed to your organization on request.

Your assistance will be greatly appreciated.

Thanking you in advance.

Sincerely,

DR. NIXON OMORO ASST. COORDINATOR, SOB, KISUMU CAMPUS

Cc. File Copy

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22 SEP 2016

SCHOOL OF BUSINESS

CO-ORDINATOR

KISUMU CAMPUS UNIVERSITY OF NAIROBI

# Appendix II: Questionnaire INTRODUCTION

This study has the objective of determining effects of Credit risk evaluation systems on non-performing loans in SACCO in Bomet County. Kindly complete the questions by marking in the appropriate boxes or by filling out the spaces provided as briefly and precisely as possible.

## SECTION A: DEMOGRAPHIC SURVEY

Name of the SACCO (Optional)

.....

Please tick () the options that corresponds to your answer in each of the following.

1. For what duration has the SACCO been in existence?

1 – 3 years	[	]
4 – 6 years	[	]
7 – 10 years	[	]
More than 10 years	[	]

2. For what period have you worked with your current SACCO?

Less than one year	[	]
1 – 3 years	[	]
4 -5 years	[	]
5 – 8 years	[	]
More than 8 years	[	]

3. What is the number of staff in the SACCO?

1 – 20		[	]
21 – 40	[]		
41 – 60	[]		
61 – 80	[]		
81-100		ſ	1

 More than 100
 []

 4. What is the number of members in the SACCO?

 1 – 100
 []

 101 – 200
 []

 201- 300
 []

 301- 400
 []

 401 – 500
 []

More than 500 [ ]

### 5. Which of the following types of loan products do you offer?

Normal Loan	[]
Instant loans	[]
Emergency loans	[]
Development loans	[]
School fees loan	[]
Other (Specify)	

6. Do you have a credit risk department in the SACCO?

Yes	[]	
No	[]	

#### SECTION B: CREDIT RISK EVALUATION

7. Does the SACCO have a credit policy?

Yes [ ] No [ ]

If yes, to what extent do you agree with the credit standards and collection effort in financial performance of the Sacco?

(Key: Strongly Disagree -1, Disagree - 2, Neutral -3, Agree - 4, Strongly agree - 5)

Statement	Response (1-5)
Provision of standardized loan forms	
Regular assessment of borrower operating conditions	
Maximum loan repayment period	
Credit committee goes through the loan applications before	
they are approved	
Loans are verified by the internal auditor before posting	
Processing period takes two weeks	
Loans have standard interest rate	

8. How often is the credit policy reviewed?

Quarterly	[]
Semiannually	[]
Annually	[]
Other (Specify)	

9. What combinations of the following Risk mitigation strategies does your SACCO

use in Credit risk evaluation	[]	
Collateralization	[]	
Guarantors	[]	
Insurance	[]	
Shareholding	[]	
Other (Specify)		

10. How often does the Board of Directors and senior management assess the Credit

Risk and internal control process

Monthly	[]
Quarterly	[]
Semiannually	[]
Annually	[]
Other (Specify)	

11. How often does the SACCO management evaluate the effectiveness of the Credit Risk practices and policies for assessing loan quality in the SACCO?

Weekly	[]
Monthly	[]
Quarterly	[]
Semiannually	[]
Annually	[]
Other (Specify)	

# SECTION C: INFLUENCE OF MANAGEMENT OF NON-PERFORMING LOANS

12. Do you have non-performing loans in your SACCO?

Yes	[]
No	[]

If Yes, which factors tabulated below would you attribute this to and to what extent do you agree with the statement below?

(Key: Strongly Disagree -1, Disagree - 2, Neutral -3, Agree - 4, Strongly agree - 5)

Statement	Response (1-5)
Loanees are generally bad people	
Change of pay point once the loan had been dispatched	
Failure to submit data to the employer for deduction to be	
remitted	
Loan reconciliation not being done by the officer	
Management decisions regarding loan repayment	
Failure to verify the security issued	
Failure to insure the loans	

13. What is the percentage of non-performing loans of total loans in your SACCO?

Below 20%	[]
20 - 40%	[]
41 - 60%	[]
Over 60%	[]

14. How does the SACCO management deal with the non-performing loans?

Members are notified	[]		
Guarantors' shares are attached	[]		
Borrowers assets are attached		[]	
Legal action is taken	[]		
Longer periods are given for loan repayment		[]	

15. What adverse effects would you attribute to non-performing loans in your SACCO?

## THANK YOU FOR YOUR RESPONSES

#### **Appendix II: SACCOs in Bomet County**

- 1. Bomet Central Dairies
- 2. Sugutek Dairy
- 3. Balek Central Dairy
- 4. Chepwostuiyet Multi-Purpose
- 5. Survivor Youth Sacco
- 6. Bomet Central Youth Sacco
- 7. Labotiet Dairy Co-operative
- 8. Sot Dairy Farmers
- 9. Dairy Land Service
- 10. Twefa Sacco
- 11. Tobentai Sacco
- 12. Konoin Women Sacco
- 13. Konoin Greenland Youth Sacco
- 14. Boito FCS
- 15. Set FCS
- 16. Konoin Housing Co-operative Society
- 17. Kipsonoi Multi-purpose Co-op. Society
- 18. Set kobor Sacco
- 19. Walutik Sacco
- 20. Marinyin Dairy
- 21. Ngosop Youth
- 22. Solyot Farmers
- 23. Isei Farmers
- 24. KoitabBai Women Housing
- 25. Set Sacco
- 26. Kapletundo Horticultural
- 27. Sotik Logistic Bodaboda Sacco
- 28. Josmeno Quarry Sacco
- 29. Criscathy Sacco

# Appendix iii: Map Of Bomet County Administrative Boundaries



# **Appendix iv: Originality Report**

Fin	al project				
	NALITY REPORT				
% SIMIL	14 ARITY INDEX	%10 INTERNET SOURCES	% <b>1</b> PUBLICATIONS	% <b>11</b> Student	PAPERS
PRIMA	RYSOURCES				
1	chss.uon	bi.ac.ke	ά.		%1
2	ereposito	ory.uonbi.ac.ke	5.	, ,	% <b>1</b>
3	eujourna Internet Source	l.org	al 4		%1
4	www.slide	eshare.net			<%1
5	Submitte Student Paper	d to University o	of Nairobi		<%1
6	Submitte Student Paper	d to Africa Naza	arene University	/	<%1
7	Submitted to University of Southern <%1 Queensland Student Paper			<%1	
8	Submitte Student Paper	d to Taylor's Ed	ucation Group		<%1
9	econjourr	nals.com	Ð	hun - and Svpt	Avison Avopollo