

**CREDIT MANAGEMENT AND SUSTAINABILITY OF SELECTED
SACCOs IN NYAMASHEKE DISTRICT, WESTERN PROVINCE OF
RWANDA.**

A Thesis

**Presented to the College of
Higher Degrees and Research
Kampala International University
Kampala, Uganda**



HG 1235
B86
2013

**In Partial Fulfillment of the Requirements for the Degree
Master of Business Administration: Banking and Finance**

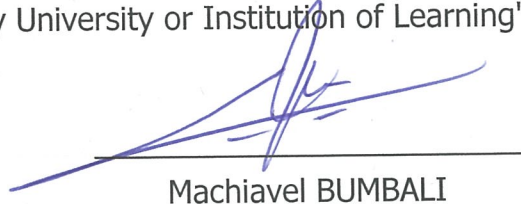
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January, 2013

DECLARATION A

"This thesis is my original work and has not been presented for a Degree or any other academic award in any University or Institution of Learning".



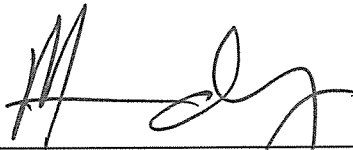
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DECLARATION B

"I confirm that the work reported in this thesis was carried out by the candidate under my/our supervision".



Dr. SENDAGI Muhamad



Date

DEDICATION

To my parents, I dedicate this book.

ACKNOWLEDGEMENT

The researcher wishes to thank the Deputy Vice Chancellor of College of Higher Degrees and Research, Kampala International University Dr. Novembrieta R. Sumil, for permitting me to carry out this study.

Sincere thanks, to the lectures and staff of College of Higher Degrees and Research, Kampala International University for their assistance as regards different educational issues as well as the administration issues.

He would like to thank the research thesis supervisor Dr. SENDAGI Muhamad, for his supervision whereby his insightful comments and advises brought this thesis from its rough initial stages up to this digestible version.

To the Viva Voce panel members namely Dr.Yahiya Ibrahim, Dr. Fred Ssemugenyi and Dr. Sendagi Muhamad for their scrutiny at the defense made this work look fair for academic purpose.

Sincere gratitude goes to my Mum Edith KABAHUNDE and my late father David KANYABAGENZI and my uncles, brothers and cousins for their constant encouragement.

Sincere thanks also go to KVS, SACCO-CYATO, KANJONGO SACCO, WRS and AMS; whose information and respondents 'views were very helpful in providing their perspectives on the matters at hand.

Finally, the researcher gratefully acknowledges the constant assistance and encouragement offered by my colleagues and classmates especially Jimmy NDABARAMIYE and MUHIRE RUBANGO.

May the almighty God reward them for the efforts put in.

ABBREVIATIONS AND ACRONYMS

AMS: Amizero Macuba Sacco

ASCAs: Accumulating Savings and Credit Associations

BNR: Banque Nationale du Rwanda

BoD: Board of Directors

CGAP: Consultative Group to Assist the Poor

CVI: Content Validity Index

EBS: Equity Building Society

HR: Human Resource

KVS: Karambi vision Sacco

MBA: Masters of Business Administration

MFIs: Microfinance Institutions

MINECOFIN: Ministry of Economy and Finance

RCA: Rwanda Cooperative Agency

PLCC: Pearson's Linear Correlation Coefficient

SACCOs: Saving and Credit Cooperatives

SPSS: Statistical Package for Social Studies

WOCCU: World Council of Credit Unions

WRS: Wisigara Rangiro Sacco

ABSTRACT

This thesis is entitled "credit management and sustainability". It was presented as result of research carried out within five selected SACCOs in Nyamasheke district, western province of Rwanda. It was carried out based on four specific objectives like determining the demographic profiles of respondents; to determine the degree of credit management; to determine the level of sustainability, and to find out if there is any significant relationship between the degree of credit management and the level of sustainability in the selected SACCOs. It was a descriptive correlation design, and then census was used as the entire population of 102 respondents equal to the sample, because it was considered in its entirety. Questionnaires were used in collecting primary data then financial reports were used in collecting secondary data. The collected data was analyzed using both qualitative and quantitative methods through statistical techniques such as mean, standard deviations and correlation by the use of SPSS software.

The findings revealed that credit management is at satisfactory degree with the overall mean of 2.67 as it was ensuring the better process of loan application, disbursement, recovery even if some item under loan repayment process were still low; then sustainability were still low with the overall mean of 2.40, even if some item under HR was ensuring sustainability but market and legal sustainability were still low; Findings revealed also that there was a positive significant relationship between the study variables at ($r=0.980$, R-Squared value 961; Mean Squares 160.066 and F value of 316.884E3 and $p<0.01$). Finally sustainability theory was affirmed but the null research hypothesis was rejected, then the researcher concluded that the rigidity of credit management is highly likely to compromise sustainability. The researcher recommends improving credit management so as to enhance sustainability of selected SACCOs.

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CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Background of the Study

The concept of sustainability of SACCOs is essential, Globally SACCOs through credit they intend to be fully sustainable. In Europe, the theorist Lysander Spooner (1800) was writing over the benefits of organizations in offering small credits to entrepreneurs and farmers as a way of achieving sustainability. Independently to Spooner, Friedrich Wilhelm Raiffeisen founded the first cooperative lending banks to support farmers in rural Germany. Both forms spread rapidly all over Europe, Ireland has a strong SACCOs or Credit unions movement, with 1.6 million people (44percent of the population) in membership (*Birchall, 2008*).

Today SACCO societies have significant role in sustaining themselves and empowering their members Socio-Economic Status all over the world. Institutions were known as People's Banks, Credit Unions, and Savings and Credit Co-operatives, because they providing financial services to customers who were traditionally neglected by commercial banks in order to improve their sustainability (*WOCCU, 2003*). The issue of sustainability in SACCOs is nothing new to Rwanda where diverse small SACCOs and "Banque Populaire du Rwanda" (BPR), the most important credit union in last years have operated in struggling for sustainability. To address this issue analyzed as a major factor hindering economic development, a recent National Dialogue Meeting held in December 2008 recommended the creation of at least one sustainable SACCO at the level of each Administrative Sector (*MINECOFIN, 2008*).

To improve the credit management; SACCOs in Mexico and Ecuador apply credit scoring tools for risk analysis and offer flexible lines of credit to find working capital needs.(CGAP, 2005). The cooperative movement quickly spread to East African countries whereby a number of local organizations in the Nyeri District of Kenya provide management services to group-based loan funds; The Accumulating Savings and Credit Associations (ASCAs) and its Management Agencies (AMAs) serves a wider client base than the mainstream donor funded SACCOs who tend to focus their attention on micro and small entrepreneurs (*Nthenya et al.2001*).

Equity Building Society (EBS) in Kenya has emerged as one of Kenya's leading microfinance institutions, with over 155,000 savings clients and 41,000 borrowers. Once insolvent, EBS transformed itself into a profitable financial-service provider though its strong management of the credits by rigorously focusing on the needs of its clients, in particular, by developing a wide range of market-based financial products and service (*CGAP.2005*).

According to BNR status of SACCOs' development in Rwanda, as at 30th June 2008 SACCOs and MFIs were 108, with 706.947 members for the whole country. Meanwhile, deposits and loans have increased, respectively by Rwf 28 670 million and Rwf 27 380 million as at 31st December 2007 compared to Rwf 39 857 million and Rwf 38 616 million as at 30th September 2008 which represents a percentage increase of 39% and 41% (BNR, 2008).

According to Adongo and Stork (2005); The Sustainability in simple terms refers to the long-term continuation of the organization programme after the project activities have been discontinued; It entails that appropriate systems and processes will enable the services to be available and also the programme would meet the

needs of the members through resources raised on their own strength, either from among themselves or from external sources (Adongo and Stork 2005).

In this study sustainability can refer to the sustainability of the SACCOs' human resource (HR), finance; the market of SACCO and its legal environment.

Credit management refers to the process of increasing the total amount of credit extended both in quantity and in quality by properly making sure that the period for which it is extended is consistent with the organization's financial policies by ensuring that it is granted on a consistent basis and its costs are understood, the repayment process is effectively administered, and a debt recovery policy is in place. <http://www.businessdictionary.com/definition/credit-management>.

In this study credit management refers to the process of loan application analysis (appraisal), loan disbursement, and loan recovery and also loan repayment in compliance to the credit policy with the aim of proving sustainability of SACCO.

The issue of sustainability within SACCOs is vital because of bad reputation about previous financial institutions that have recently collapsed in large number due to mismanagement of credit portfolio as BNR reports revealed in 2008; so, the credit management is crucial to reach sustainability of SACCOs in Rwanda specifically the ones selected in this research, namely KARAMBI VISION SACCO "KVS", SACCO-CYATO, KANJONGO SACCO, WISIGARA RANGIRO SACCO "WRS" and AMIZERO MACUBA SACCO "AMS" which are struggling to clean up the bad reputation of previous mismanagement of the credit system.

Statement of the Problem

Most financial institutions fail due to the rigidity of the credit management whereby this situation leads to the lack of sustainability within the SACCO. According to Banque Nationale du Rwanda (BNR). (2008) Regarding the liquidation of 9 MFIs which went bankrupt in 2006 and the recovery of loans is still under process, The indicators of these problems the process loan recovery from previous bankrupted ones is ongoing, and it is very slow (as at 11th December 2008 the amount recovered was around Rwf 201 million, representing 10.7% of the total inventory of loans). Rwandese people in support with the government of Rwanda are struggling to strengthen the credit management of SACCOs.

Lack of sustainability within these selected SACCOs can due to the lack of government support (as the government of Rwanda is subsidizing SACCOs at every administrative sector through Rwanda Cooperative Agency"RCA"), fail to cut edge over competitors, failure to meet the cost of operations, lack of capital, Failure to mobilize savings. In this study we are going to concentrate on rigidity of the credit management which can be considered as the main cause of lack of sustainability within these SACCOs. Nobody knows how many of them will still functioning as usual as their credit system is still doubtful by some of the targeted population; This is because Rwandan population is not yet forget the catastrophic situation of MFIs like ONGERA, IGISUBIZO, ICYUZUZO... As we have already seen here above several papers have recently underlined the issue of credits in the context of SACCOs. Few analyses have been produced countrywide to look at their credit management and their sustainability.

Purpose of the Study

The purpose of this research was to test hypothesis of no significant relationship of the credit management and the sustainability of selected SACCOs namely KVS, SACCO-CYATO, KANJONGO SACCO, WRS and AMS; In addition it was also to approve or disprove the theory of sustainability; then to bridge gaps identified in the previous studies.

General Objectives

The objective of this study was to find out the relationship between credit management and sustainability of selected SACCOs namely KVS, SACCO-CYATO, KANJONGO SACCO, WRS and AMS.

Specific Objectives

1. To determine the demographic profiles of respondents in terms of their Gender, age, level of education and the working experience;
2. To determine the degree of credit management in terms of loan application analysis (appraisal), loan disbursement, loan recovery and loan repayment;
3. To determine the level of sustainability in terms of HR, market and legal environment.
4. To determine whether there is any significant relationship between the degree of credit management and the level of sustainability in the selected SACCOs

Research Questions

What are the demographic profiles of the respondents in terms of their gender, age, levels of education and their working experience?

To what extent is the degree of the credit management in terms of loan application analysis (appraisal), loan disbursement, loan recovery and loan repayment?

To what extent is the level of the sustainability in terms of HR, finance; market, legal, and also financial sustainability?

Is there any significant relationship between the degree of credit management and the level of sustainability according to the BoD, committees and employees of the selected SACCOs?

Hypothesis

There is no significant relationship between the credit management and the sustainability of the selected SACCOs.

Scope

Geographical scope

This study was conducted from the five administrative sectors of Karambi, Cyato, Kanjongo, Rangiro and Macuba in Nyamasheke District within Western Province of Rwanda.

Theoretical scope

This study was based on theory of sustainability Proposed by Pierce (1992) cited in Diane Rusell (1995), which states that sustainability is "Far from being a monolithic concept, sustainability is vary over space and time, depending upon the factors relating generally to the balance between demand and supply potential. ...The transition to a sustainable state is a process that requires the development of a value system."

Content scope

This study was about to determine the profile of the directors, the employees, and the members of selected SACCOs namely KVS, SACCO-CYATO, KANJONGO SACCO, WRS and AMS in terms of the gender, the age, the level of education and the working experience; It was also to determine the degree of the credit management in terms of loan application analysis, loan disbursement, loan recovery and loan repayment. It was finally to look at the level of sustainability in terms of HR, market and legal environment of the selected SACCOs.

By looking the study's time scope, it was focused only on the year of 2011 because the SACCO's industry is still young in Rwanda.

Significance of the Study

The findings of this study will benefit the followings:

The BoD, committees, the management, staff and also members of the selected SACCOs who will benefit from this research because it will highlight the strength and weaknesses in credit management and also to know the level the credit management and the sustainability of these selected SACCOs. This will help to better improve the governance and the management of credit operations within the selected SACCOs.

The Government of Rwanda and the local leaders because they will also know the level of sustainability of these SACCOs in order to better plan for the future and also identify the support which is really need from them.

The National Bank of Rwanda (BNR), the Rwanda Cooperative Agency (RCA) which will know from the findings the strength and weaknesses in credit

management policy and also to know the level of sustainability of these selected SACCOs; this will act as basis of better regulating, supervising and promoting SACCOs specifically the selected ones in this research.

Scholars in the area of business administration whereby it will serve as the source of scientific data for those interested in carrying out the research in the area of banking and finance.

Operational Definitions of Key Terms

Sustainability refers to the SACCO s' human resource (HR), finance, the market of SACCO and its legal environment.

Human resource sustainability refers to recruit, to train and maintain or retain well-qualified staffs that are capable of delivering the services as required.

Market sustainability refers to the SACCO's activities to deal with the whole gamut of issues that deal with demand and supply of SACCO with issues relating to the different types of the clientele, their differing types of needs, and designing products that suit the needs of its clientele.

Legal sustainability refers to the existence of a stable and friendly legal environment that will enable the proliferation of a large number of stakeholders involved in the delivery of SACCO services.

Credit management refers to the process of loan application analysis (appraisal), loan disbursement, and loan recovery and also loan repayment in compliance to the credit policy with the aim of providing sustainability of SACCO and its members.

Loan application analysis refers to the process of mobilizing members for loans, help them to conceptualize their micro projects and put them on the paper, analyze the profitability of these micro projects in order to finance them.

Loan disbursement means the action providing money to return it back with interest to different members in order to implement her/his micro projects of development.

Loan recovery is the process of recalling money disbursed with interest the time an installment of loan is due.

Loan repayment refers to the action of returning back the money with the applicable interest as you are running your micro projects.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Concepts, Opinions, Ideas from Authors/ Experts

Credit management

Credit management refers to process of increasing the total amount of credit extended both in quantity and in quality by properly make sure that the period for which it is extended are consistent with the organization's financial policies by ensuring that it is granted on a consistent basis and its costs are understood, the repayment process is effectively administered, and a debt recovery policy is in place.

<http://www.businessdictionary.com/definition/credit-management>.

According to Salomon Kagaba (2001), Credit management is the whole process and systems through which the MFI's lending operations strive to Offer services which meet the demands of the clients; to Operate as efficiently as possible by minimizing costs; to Charge interest rates and fees, which are sufficient to cover all costs, to Motivate clients to repay loans as per agreed terms in order to Achieve sustainability of operations through high degree of efficiency exercised.

Jyot Kumar Pandey (2006) argued that credit management include capital adequacy norms, risk management, exposure norms, pricing policy and credit risk rating, loan appraisal, credit decision making and loan review mechanism.

Loan application analysis is a process wherey the borrower is carefully examined particularly to the principal amount applied, interest rate to be paid, and date of repayment according to his financial situation, character, collateral such as the

reallocation of the subject asset(s) for a period of time, so as to better finance his/her project with a minimum risk. Signoriello,(1991).

Loan disbursement is generally the action of giving out the amount of money and it is provided by the borrower to his/ her lender at a cost, referred to as interest on the debt, which provides an incentive for the lender to engage in the loan, Each of them has the obligations and restrictions that are enforced by contract (Navajas(2000).

Loan recovery is an process whereby the money disbursed is recalled by the borrower the time the lender fial to pey back at the time contracted between them. The borrower, however, is given security a lien on the title to the house until the mortgage is paid off in full. If the borrower defaults on the loan, the borrower would have the legal right to repossess the house and sell it, to recover sums owing to it (Nteziyaremye,2001).

Loan repayment is the action of converted back into cash or to the borrower 's account the principal amont with interests as it has been contracted between the borrower and lender (Nilsson.2001).

Sustainability

According to Adongo and Stork(2005); the Sustainability in simple terms refers to the long-term continuation of the organization programme after the project activities have been discontinued; It entails that appropriate systems and processes will enable the services to be available and also the programme would meet the needs of the members through resources raised on their own strength, either from among themselves or from external sources.

Norgaard R.B. (1992) also defined sustainability as "the achievement that meets the needs of the present generation while letting future generations meet their own needs." It is also defined as the development of products and delivery systems that meet client needs, at prices that cover all costs of providing these financial services (Rosengard, 2001).

Human resource sustainability is concerned with meeting the needs of workforce people today without compromising the ability of future generations to meet their own needs by recruiting and motivating and retaining people who are able to respond to and shape the challenges of the future. These are the individuals with the capacity to create competitive advantage from the opportunities presented by changing markets, with the desire to learn from customers, consumers, suppliers and colleagues, and who possess the ability to build and influence long-lasting and effective partnerships (Adongo, 2005).

Market sustainability is a process by which the marketing for companies may prove to be advantageous as it is not point of sale based, but rather offers consumers information they have previously never been exposed to by properly creating a basis for more long term conversational relationships; As a result of this conversational relationship between companies and consumers ideas about the importance of sustainability and how people relate to this through consumption can arise; By offering an open communication way of marketing to consumers, whereby companies may ultimately gain a competitive advantage based on trust and disclosure. Through use of sustainable products and services which will actually create a snowballing effect to other companies who will have to adopt new sustainability practices in order to remain on the market (Altman, 1983).

Legal sustainability refers to the process of involving organization systems to work in harmony under rules and procedures elaborated, by reviewing them at the appropriate time and also to make sure that all stakeholders internal as well as external to an organizational entity are satisfied in compliance to these rules and regulations so that the organization is sustained itself and also the system it exists within (Myers and Majluf, 1984).

Theoretical Perspectives

This study was based on theory of sustainability proposed that sustainability is "Far from being a monolithic concept, sustainability will vary over space and time, depending upon the factors relating generally to the balance between demand and supply potential. ...The transition to a sustainable state is a process that requires the development of a value system." Proposed by Pierce (1992) cited in Diane Russell (1995). In this study the researcher gets that sustainability varies over space and time, depending upon the factors such as credit management hence the relevance of this theory. The amount of loans disbursed is theoretically expected to be negatively (positively) related to financial unsustainability (sustainability) because it reduces per unit cost of the lending (Adongo and Stork, 2005); According to theory, group lending is expected to positively influence financial sustainability for microfinance institutions because the peer pressure that group members exert on each other should lead to lower default rates on the number of loans disbursed (Adongo and Stork, 2005). Robinson's criticism of the poverty-lending approach states as follows: "Institutions are not sustainable primarily because their interest rates on loans are too low for full cost recovery" Robinson M. (2001).

According to Nteziyaremye et al (2001), the flexibility of the repayment schedule is theoretically expected to influence financial sustainability to the extent that it affects the effective rate of interest, which in turn has an effect on the break-even interest rate. To the extent that a more frequent repayment schedule generates a higher effective interest rate, a weekly payment schedule should be negatively (positively) associated with financial unsustainability (sustainability). This theoretical expectation highlights the trade-off between aiming to provide more flexible credit products for customer satisfaction while reducing costs of frequent collection and reducing risk when designing credit products from an institutional perspective. It is argued that in the pursuit of lower cost for the institution through less frequent collection schedules and higher levels of customer satisfaction through more flexible repayment terms, institutions should not lose sight of the need for stronger loan delinquency control systems to prevent moral hazard from creeping in that may lead to the collapse of the institution.

In the case that when the client of the microfinance institution knows that he/she will not receive additional loan in the future they would have no incentive to borrowers to repay their loan (Navajas et al., 2000). Another theory of sustainability proposed that "Financial institutions must expand their missions from ones that prioritize profit maximization to a vision of socio-economic sustainability; the sustainability would require financial institutions to fully integrate the consideration of core business areas (including credit, investing, underwriting and advising), to put sustainability objectives on an equal footing to shareholder maximization and client satisfaction, and to actively strive to finance transactions that promote

sustainability”; by Jan Willem van Gelder (2006) cited in the do’s and don’ts of a sustainable banking, a bank track manual.

According to some Christen et al. 1995; Otero and Rhyne (1994), also cited in Meyer and Skinner (2002) about sustainability measures, they indicate that "Measuring financial sustainability requires that SACCOs maintain good financial accounts and follow recognized accounting practices that provide full transparency for income, expenses, loan recovery, and potential losses." In addition to these they argued that the number of clients increase SACCO enjoys economies of scale and hence reduce costs which help them to financial sustainable (Christen R. and Vogel R. 1995).

Paradis (2001) concluded that the failure of SACCOs indirectly determined by the corporate governance. He further concluded that a multiple ownership and no secondary market of equity exists (as in Rwanda) the conflicts between members and management causes failure to SACCOs (Paradis, 2001). The researcher also get that this conflicts may result to the rigidity of the credit management in SACCO.

According to Fernando N.A. (2006) companies in high risk categories of credit management are affected by weak solvency (liquidity ratios), highly leveraged conditions, and overcapitalization; weak efficiency shows that there is a substantially inadequate cash flow or working capital to sustain the company or reinvestment, and minimal or nil profitability(Fernando,2006). This theory ascertains that there are certain factors such as credit management that influence the sustainability of the organizations as well as SACCOs.

Related Studies

Adongo and Stork (2005) conduct a study on factors influencing the financial sustainability of selected microfinance institutions in Namibia. It was found that all the selected microfinance Institutions in Namibia are not yet financially sustainable. Their findings revealed that Loan disbursement within the selected institutions in Namibia, the value of loans disbursed in constant 1995 Namibian Dollar was quite substantial. It is important to note that the amounts presented were averages for each category, therefore the more institutions in the category were the lower the average real loans disbursed were, then the coefficient of the variable that captures the amount of loans disbursed confirmed the expected theoretical relationship. However based on the model adopted in this study; there were no evidence to suggest that this relationship is robust because this variable was not significant at the 5% or 10% level.

Findings also revealed that group lending positively (negatively) influences the financial unsustainability (sustainability) of microfinance institutions. In addition, there is evidence that this relationship is robust because the coefficient of the variable that captures group lending is significant at the 10% level. Therefore, in the attempt to test the relationship between the group lending methodology in microfinance service provision and financial sustainability, the model adopted in this study highlights the identity of microfinance institution as opposed to the theoretically posited relationship. The positive coefficient of the group lending variable could also suggest that group lending strategies can be complemented by the adoption of credit and risk management tools. As the flexibility of the repayment schedule is theoretically was expected to influence financial sustainability to the

extent that it affects the effective rate of interest, which in turn has an effect on the break-even interest rate. To the extent that a more frequent repayment schedule generates a higher effective interest rate, a weekly payment schedule should be negatively (positively) associated with financial unsustainability (sustainability).

These findings also revealed that the coefficient of the variable capturing the weekly repayment schedule has a negative sign, while that of the monthly and term repayment schedules have a positive sign. Although this conforms to the theoretical expectation based on the model adopted in this report, there is no evidence that these relationships are robust because none of the coefficients of the variables capturing the flexibility of the repayment schedule are significant at the 5% or 10% level (Adongo, 2005).

In addition another study of outreach and financial performance, analysis of microfinance institutions in Ethiopia by Beffeda B. Kereta (2007), findings revealed that financial sustainability examination, as component of sustainability measurement, revealed that MFIs as industry are operational sustainable when they were measured by return on asset and return on equity. It is identified also that the industry's profit performance is also improving over time. The reduction in dependency ratio over the years in the MFI industry is also another indication that MFIs can be self-sustainable, profitable, and meet their social missions.

The dependency ratio measured by the ratio of donated equity to total capital decline, ratio of retained earnings to total capital is raising letting the industry to be financial self-sufficient. While dependency ratio reduces from 63 percent in 2001 to 31 percent in 2007, retained earnings to total capital ratio went up to 16.3 percent in 2007 from -2.5 percent in 2001. Similarly, financing loan through donated capital

has also shown reduction over the years from 42.5 percent in 2001 to 11.1 percent in 2007.

Non-performing loan (NPLs) to loan outstanding ratio can also be an alternative indicator for measuring profit quality, which has an effect on financial sustainability of MFIs. Using this indicator the study found out that MFI financial sustainability is in a comfort zone with average NPLs ratio of 3.2 percent from 2005 to 2007. Similarly, it is well articulated in literatures that less default rate is critical for financial sustainability. Concerning this matter, the study finds from the representative sample MFIs that the default rate is very low for most but it is showing steady growth. For instance, in one microfinance in period 2001 and 2002 it was 0% but in 2003, 2004 and 2005 it steadily grew to 6.9%, 3.2% and 7.6% respectively. Similarly, in another Microfinance the default rate has increased on average from 2001 (default rate of 2%) to 2005 (default rate of 5%) by 39%. For now, this low default rate is encouraging to support the financial sustainability of the institutions. Yet, the growth trend of the default rate might endanger their financial sustainability.

Simple correlation test between number of active client (NAC) and financial sustainability in terms of profit has shown strong positive correlation between them; which means that high number of clients with small loans can also lead to profit as well as the sustainability. Nevertheless, when they attempt to investigate the correlation among number of active clients, profit and average loan size the result is a bit different. MFIs with low loan size (which was taken as proxy for poverty level) tend to have low profit performance and vice versa. Yet, as the correlation is not

strong, it does not imply that MFIs should concentrate on high loan size to realize profit (Befekada B. Kereta, 2007).

As we have already seen here above there are different Concepts, Opinions, Ideas From Authors/ Experts, different theories and also various studies were done in relation to sustainability and credit management in different countries by various people and institutions. My study took place in Nyamasheke district within Western Province of Rwanda because there is no similar research that has been undertaken there as it is the case elsewhere because Rwandese SACCO sector is still in infant period. This study also was concentrated only on HR, financial, market and legal sustainability on one hand, on the other hand it was only concentrated on loan appraisal, disbursement, recovery and loan repayment as the key elements in the process of credit management in order to look at the validity of some theories stated here above, through the use of methodologies that we are going to specify here below in the following chapter.

CHAPTER THREE

METHODOLOGY

Research Design

The study utilized the descriptive correlational survey design. The said survey design is used because the principal rationale of the study was to figure out the problems and/or situations under such factors that mostly affect the selected SACCOs' credit management and sustainability.

Research Population

The target population included a total of 102 members of BoD, committees, managers and staff of the selected SACCOs. All of them have a greater role in credit as they are in charge of administration and management of these selected SACCOs.

Sample Size

The researcher used the census whereby everyone in the targeted population will be included in the sample size because it can be manageable and cost effective to the researcher; and it was provided fully information from every element of the whole population. It is presented in the Table 1 below.

Table 1: The Population Size and Sample size

N° of SACCOs	Names of SACCOs	Targeted population		Sample size	
		BoD and Committees	Managers and staff	BoD and Committees	Managers and staff
1	KARAMBI VISION SACCO	13	8	13	8
2	SACCO- CYATO	13	8	13	8
3	KANJONGO SACCO	13	8	13	8
4	WISIGARA RANGIRO SACCO	13	7	13	7
5	AMIZERO MACUBA SACCO	13	6	13	6
TOTAL		65	37	65	37
GRAND TOTAL		102		102	

Source: Primary data, 2012

Sampling Procedure

There were 102 respondents asked to indicate their appropriate rating for each indicator under factors of credit management and sustainability. The census will be used in this study, whereby everyone will be included as respondents.

Research Instrument

Instruments such as self administered questionnaire structured by the researcher was used in this research. Referring to the theories of this research factors such as loan appraisal or loan application analysis (3 items) , loan disbursement (3 items), loan recovery (3 items) , loan repayment(3 items) were asked in the questionnaire in order to know the level of credit management in these selected SACCOs; whereby the researcher used (12) close-ended questions whereby the scoring system of this instrument is as follows: Strongly agree (4), Agree (3), Disagree (2), Strongly disagree (1) on the one hand;

on the other hand factors such as Human resource (HR) sustainability (3), the market sustainability (3), and also the legal sustainability (3) which will be tackled by use of (9) close ended questions whereby the scoring system of this instrument is as follows: Strongly agree (4), Agree (3), Disagree (2), Strongly disagree (1). They were addressed to the BoD and committees members as well as managers and staff of these selected SACCOs; in order to know the level of sustainability in these selected SACCOs.

Validity and Reliability of the Instrument

Content validity ensured by subjecting the researcher by use of devised questionnaires on credit management and sustainability to the experts who were contended with objective related formulation of research instruments. Further adjustments were made on the items rated irrelevant. The summary on this is presented in Table 2 below.

Table 2: The determination of Validity of Instrument

	Relevant items	Not relevant items	Total
Rater 1	24	2	26
Rater 2	23	3	26
Total	47	5	52

Source: Primary data, 2012

Number of items rated as relevant

CVI= _____

Total number of items being judged / rated in the questionnaire

$$CVI = 47/52 = 0.90$$

As the CVI was 0.90, which is greater than 0.7, the research instruments were measured valid. Thus the questionnaire was considered valid because the items in the instruments were relevant and sufficient to cover the content validity index valid for the study.

The pre-test technique was used to determine the reliability (accuracy) of the researcher devised instruments to ten qualified respondents, five from BoD and committees and five from managers and staff of non selected SACCOS. In this pre-test technique, the questionnaires was administered twice to the same subjects; whereby the test was reliable and the trait measured was stable, then the results was consistent and essentially the same in both times.

Data Gathering Procedures

The flowing procedures were followed;

Before the Administration of the Questionnaire

An introduction letter was obtained from the School of Post Graduate Studies and Research for the researcher to solicit approval to conduct the study from the chairpersons of these selected SACCOs.

When approved, the researcher secured a list of the qualified respondents from these SACCOs.

The respondents were explained about the study and were requested to sign the Informed Consent Form (Appendix 3).

Enough questionnaires were reproduced for distribution.

A research assistant was selected who has to assist in the data collection; brief and orient them in order to be consistent in administering the questionnaires.

During the Administration of the Questionnaire

The respondents were requested to answer completely and not to leave any part of the questionnaires unanswered.

The researcher and assistants emphasized on retrieval of the questionnaires within five days from the date of distribution.

On retrieval, all returned questionnaires were checked and they were all answered.

After the Administration of the Questionnaire

The data gathered was collated, encoded into the computer and statistically treated by the use of SPSS software.

Data Analysis

The frequency and percentage distribution was used to determine the profile characteristics of the respondents. To determine the degree of credit management and the degree of sustainability, the researcher used primary data which were obtained from formulated, distributed and returned questionnaire forms from the

respondents, whereby data analysis was quantitative. With the help of tables, responses were analyzed quantitatively. One of the most useful thing researchers need to do is to compare different distributions of scores. One of the proprieties of a distribution of score is an average. One type of average or measures of central tendency is the Mean which is the sum of set of scores divided by the number of scores.

Measurement scale

To interpret the responses of respondents on the degree of credit management on one hand, the following means range and their interpretations were used as follows.

Mean range	Respondent mode	Interpretation
3.26-4.00	strongly agree	Very Satisfactory
2.51-3.25	Agree	Satisfactory
1.76-2.50	Disagree	Unsatisfactory
1.00-1.75	Strongly disagree	Very unsatisfactory

It was about ensuring strong credit management proportionally at very Satisfactory, Satisfactory, unsatisfactory or very unsatisfactory degree of credit management.

On the other hand, to interpret the responses of respondents on the level of sustainability, the following means range and their interpretations were used as follows.

Mean range	Respondent mode	Interpretation
3.26-4.00	strongly agree	Very high
2.51-3.25	Agree	High
1.76-2.50	Disagree	low
1.00-1.75	Strongly disagree	Very Low

It was about ensuring better and long-lasting sustainability proportionally at very high, high, lower or at very lower level of sustainability.

Pearson 's coefficient of correlation was finally used to determine if there is no significant relationship between the degree of credit management and the level of sustainability in these selected SACCOs, at 0.05 level of significance. The regression analysis was computed to determine the influence of the independent variables on the dependent variable, as well as the ANOVA was used so that the degree based on the general regression models can statistically assess the relationship between credit management and sustainability.

Ethical Considerations

To ensure confidentiality of the information provided by the respondents and to ascertain the practice of ethics in this study, the following activities were implemented by the researcher:

1. Seek permission on SACCOs' administrators through a written communication;
2. Respondents were coded instead of reflecting the names;
3. Respondents were requested to sign in the *Informed Consent Form* (Appendix3);
4. Acknowledgement of the authors who have been quoted in this study through citations and referencing;
5. Findings were presented in a generalized manner.

Limitations of the Study

This study was to look at the credit management and sustainability for each of the selected SACCOs institution, rather than on their members as individuals.

In view of the following threats to validity, the researcher claimed an allowable 5% margin of error at 0.05 level of significance. Measures were also indicated in order to minimize if not to eradicate the threats to the validity of the findings of this study.

1. *Extraneous variables* which were beyond the researcher's control such as respondents' honesty, personal biases and uncontrolled setting of the study.

2. *Instrumentation*: The research instruments on credit management and sustainability are not standardized. Therefore a validity and reliability test was done to produce a credible measurement of the research variables.
3. *Testing*: The use of research assistants can bring about inconsistency in the administration of the questionnaires in terms of time of administration, understanding of the items in the questionnaires and explanations given to the respondents. To minimize this threat, the research assistants was oriented and briefed on the procedures to be done in data collection.
4. *Attrition/Mortality*: Sometimes some questionnaires may be returned neither completely answered nor even retrieved back due to circumstances on the part of the respondents such as travels, sickness, hospitalization and refusal/withdrawal to participate. In anticipation to this, the researcher reserved questionnaires for all respondents through census method. The respondents were reminded not to leave any item in the questionnaires unanswered and were closely followed up as to the date of retrieval.

The following were the procedures used to overcome the data collection problems; too narrow or too vague problems were avoided; surveying the available literature which was helping the researcher was well conversant with the relevant theories in the field, as well as reports and records.

CHAPTER IV

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

The Demographic profile of respondents

To answer the first research question; the summary on this is presented in the Table below.

Table 3: The Profile of Respondents (n= 102)

Statistical factors		
Demographic profile	Frequency	Percent
Gender		
Male	54	52.94
Female	48	47.06
Total	102	100.00
Age group		
21-35	58	56.86
36-65	43	42.16
66 and above	1	0.98
Total	102	100.00
Education Level		
Primary level	18	17.65
Secondary level	75	73.53
University level	9	8.82
Total	102	100.00
Working Experience(Number of years spent in SACCOS)		
Below One Year	13	12.75
1-2 Years	52	50.98
3 Years and above	37	36.27
Total	102	100.00

Source: Primary data, 2012

To answer the first research question which was to determine the profile of respondents as regards to; gender, age, education level and the working experience that the respondents have spent with SACCOS.

The first group of items was explored on this issue, whereby the gender of respondents was to be explored by the second item. In the selected SACCOs there are men and women either in administrators and employees; most of the respondents were men since there were 54 (52.94%) of the respondents while women were 48 (47.06%) of the respondents. And so, this helps the researcher to collect information for the research variables from both men and women from their perspective point of view; either it regards to men as well as woman without any discrimination.

Apart from the gender, the age interval of the respondents was determined by the researcher. Then, It was revealed that most of the respondents were 58 at the age of 21 to 35 (56.86%), followed by 43 respondents with the age group of 36 to 65 (42.16%), lastly 1 respondent with the age of 66 and above (0.98%); In reference to this information the majority of SACCOs' members in the BoD, committees as administrators and their managers and staff as employees, they are youth where as the big number of respondent is very young especially for employees who has to be retained for enough period of time as experienced workers. However, differences in age interval were helpful in that it enabled different point of views and opinions among elders and youth about the levels of credit management and sustainability in the selected SACCOs of KVS, SACCO-CYATO, KANJONGO SACCO, WRS and AMS. In addition to these there was a very small percentage in the last section of 66 age and above, which means that the selected SACCOs does not much more involve old persons either in administration or appoint old ones as employees because they are considered to be retired persons to better perform such responsibilities.

Educational level of respondents was also investigated under demographic characteristic of respondents such as primary level, secondary level and university level. As it shown in the table below the respondents have different education level whereby they were those who were attained primary level 18(17.65%); this was followed by the majority which is constituted by those with secondary level 75 (73.53%); and lastly, those with university level who were only 9 (8.82%); As it can

be seen, the majority of the respondents whose qualification is at the secondary education level to understand and improve SACCOs' credit management and sustainability especially the selected SACCOs' administrators. In addition they were also a certain number of selected SACCOs' respondents who were highly educated to understand and improve SACCO's credit management and sustainability in support to their neighbors who are fairly educated because they were non negligible number of respondents whose qualification is at the primary education level .

The last aspect investigated under the respondents profile was the respondents' working experience. Here the minority of the respondents whose number is 13(12.75%) had spent below one year of experience in SACCOs' industry because the SACCO sector in Rwanda is still very young, findings also revealed that the majority is constituted by 52 respondents, means (50.98%) whose years of experience is between 1 to 2 years. They were followed by that ones whose years of experience is 3 years and above at the number of 37 respondents, means (36.27%).

One of the general interpretation to the demographic profile of the selected SACCOs' respondents, it is that they constituted by both men and women, which means that data for research were collected without any gender discrimination. Apart from the gender profile, age grouping in three different interval was also used among respondents, findings revealed that very fewer were retired persons, where as big number of respondents were young people and so, the majority were very young people as it is shown in the table below but educated as it is shown by their education level which was also explored by the researcher, because findings revealed that ones with secondary education level where majority, in support with ones who are highly educated, even if they are other ones with primary education level among their qualification but whose working experience is considerable, These ones had probably work in the SACCO in the previous time when the SACCO sector was not regulated enough; and lastly, those who had less than one year of experience. One of the interpretations from this study is that the majority of the respondents had some experience (that is to say from 2 to 3 years) hence able to give authentic information needed for the study and also use their experience to

better analyze these issue as it required their objectivity in providing their critical point of views. Additionally, it can also be noted that fewer administrators and employees has enough experience, though there were very fewer respondents who has the working experience below or at least one year. Note that this was done because most of the issues investigated under credit management and sustainability are based on both education level and the working experience among others to better know respondents' demographic profile and analyze their various capacities to contribute in the selected SACCOs' credit management and sustainability.

The degree of Credit management

To answer the second question which was to determine the degree of the credit management in terms of loan application analysis (appraisal), loan disbursement, loan recovery and loan repayment. The second group of items was explored on this issue by twelve items, whereby loan application analysis (appraisal), loan disbursement, loan recovery and loan repayment were to be explored by three items each in order to compile them and know the degree of the credit management in the selected SACCOs by use of Mean values.

Basing on the mean ranges and interpretations proposed in the data analysis of this study (refer to chapter three), the mean value from 3.26-4.00 meant that respondents strongly agreed with the statement and thus the credit management were very satisfactory; mean ranges from 2.51-3.25 showed that respondents agreed with the statement thus it is satisfactory; then mean ranges from 1.76-2.50 indicates that majority of respondents disagreed with the statement hence the credit management were unsatisfactory; and lastly; mean ranges from 1.00-1.75 stipulated that majority of respondents strongly disagreed with the statement thus the credit management were very unsatisfactory. Here below it is the Table 4 which shows the degree of credit management.

Table 4: The degree of Credit management

Indicators	Mean	Rank	Interpretation
Loan application(Appraisal)	Mean		
The training on credit issues is regularly provided to the members.	3.04	6	satisfactory
The SACCO is using tools like its credit policy in loan application analysis.	2.88	7	satisfactory
The approval of the credit applied from this SACCO is being done in respect of loan application procedures.	2.78	8	satisfactory
Average mean	2.90		
Loan disbursement	Mean		
We often diversify the credits products according to our members' needs.	2.74	9	satisfactory
We provide loans to individuals.	2.73	10	satisfactory
We provide loans to group members.	2.71	11	satisfactory
Average mean	2.72		
Loan recovery	Mean		
We are often conceiving recovering policies.	2.70	12	satisfactory
We make a continuous monitoring of our recovering policies.	2.64	13	satisfactory
We often review the inefficiency recovery policies of this SACCO.	2.59	14	satisfactory
Average mean	2.64		
Loan repayment	Mean		
We never tolerate loan portfolio in arrears.	2.52	15	satisfactory
We respect the follow-up measures of loan repayment.	2.50	16	Unsatisfactory
We ever have taken into court the defaulters members.	2.31	17	Unsatisfactory
Average mean	2.44		
Overall Mean Average	2.67		Satisfactory

Source: Primary data, 2012

To interpret data from the Respondents point of view, the credit management is high in the selected SACCOs because the Loan application analysis (appraisal) is being done by with trained members on credit issues as this was rated at the mean of 3.04, tools like credit policy are also used and was rated at the mean of 2.88; then the approval is being done in respect of loan application procedure as it was also rated at the mean of 2.78; then the process of loan application was satisfactory

as it was rated at the average mean of (2.90), then the process of loan disbursement was also satisfactory as it was supported at the average mean of (2.72), as it was also done within diversified credits products as this was supported by the mean value of 2.74; the loans are also disbursed to individuals as well as to group lenders as they were proportionally rated at the mean value of 2.73 and 2.71; then the loan Recovering was also satisfactory as it was also rated at the average mean of (2.64). It was also done following conceived recovering policies and this was verified by the mean value of 2.70; then recovering policies are being monitoring for better review inefficiency recovering policies as this was supported by the proportional mean values of 2.64 and 2.59; and lastly, then loan repayment as the last critical process in the credit management was unsatisfactory as it was rated at the average mean of (2.44) because it was also being done with zero tolerance of loan in arrears as it was evidenced by mean value of 2.52 which was satisfactory; But under this issue of loan repayment is unsatisfactory because follow up measures of loan repayment are not respected as well as failure of taking defaulters into court as they were evidenced by the proportional mean values of 2.50 and 2.31.

The cumulative outcomes of the above 4 average means from the above table 4 were added, and then divided by 4; the result obtained under this process was 2.67 as the overall mean which shows the degree of the credit management; and this has the implication that the credit management is satisfactory even if some item under this variable was measured to be unsatisfactory following the respondents points of view from the rating scale set by the researcher.

The level of sustainability

To answer the third question which was to determine the level of sustainability in terms of HR, market and legal environment; the third group of items was explored on this issue by nine items, whereby HR, market and legal environment were to be explored by three items each in order to compile them and know the level of the sustainability in the selected SACCOs from primary data; Basing on the mean ranges and interpretations proposed in the data analysis of this study (refer to chapter three), the mean value from 3.26-4.00 meant that respondents strongly agreed with the statement and thus the sustainability in terms of HR, market and legal environment was very high; mean ranges from 2.51-3.25 showed that respondents agreed with the statement thus it is high; then mean ranges from 1.76-2.50 indicates that majority of respondents disagreed with the statement hence sustainability in terms of HR, market and legal environment were low; and lastly; mean ranges from 1.00-1.75 stipulated that majority of respondents strongly disagreed with the statement thus it was very low. Here below it is the Table 5 which shows the degree of sustainability in terms of HR, market and legal environment.

Table 5: The degree of Sustainability in terms of HR, market and legal sustainability.

Indicators	Mean	Rank	Interpretation
Human Resource sustainability	Mean		
We recruit employees basing on labor law and SACCO's recruiting policies.	2.79	1	High
We provide training to our employees on timely basis.	2.66	2	High
We apply effective and efficient incentives to retain our employees.	2.60	3	High
Average mean	2.68		
Market sustainability	Mean		
We offer various products for market sustainability.	2.37	1	Low
We provide products that are responding our members' needs.	2.35	2	Low
We advertise all SACCO s' products in order to make their awareness.	2.29	3	Low
Average mean	2.33		
Legal sustainability	Mean		
We have Cooperative law and BNR rules and regulations.	2.21	1	Low
We comply with SACCO internal rules, RCA and BNR rules.	2.18	2	Low
We make regularly audit on regulation and supervision on this compliance.	2.16	3	Low
Average mean	2.18		
Overall Mean Average	2.40		Low

Source: Primary data, 2012

To interpret data, the researcher used the same method as it is here above for the credit management; from the Respondents point of view, the level of sustainability is low in the selected SACCOs even if the items on HR sustainability is high as it was rated at the average mean of (2.68) in such a way the HR is being recruited basing on labor law and SACCO's recruiting policies as this was evidenced at the mean of 2.79, then it is trained on timely basis and this was rated at the mean of 2.66; and the effective and efficient incentives are being provided for their

retention as it was also supported at the mean of 2.60. For the market sustainability, it was unsatisfactory as this was evidenced at the average mean of (2.33) as various products were being offered inefficiently at lower level as this was rated by the mean value of 2.37; then most products were not responding well to the members' needs as this was rated at the mean value of 2.35, in addition they were not better marketed of their products for their awareness to the members as this was verified by the mean value of 2.29; A part from these items, the legal sustainability is low as this was supported at the average mean of (2.18) as the Cooperative law and BNR rules and regulations are not fully respected as this was evidenced by the mean values of 2.21, the compliance with SACCO internal rules, RCA and BNR rules is also low as this was rated by mean value of 2.18; lastly regularly audit on regulation and supervision on this compliance is also low and as it was supported the mean values of 2.16.

The cumulative outcomes of the above 3 average means from the above table 5 were added, and then divided by 3; the result obtained under this process was 2.40 as the overall mean which shows the level of sustainability in terms of HR, market and legal environment; and this has the implication that the sustainability in terms of HR, market and legal environment is low even if some item under this variable was measured to be high following the respondents points of view from the rating scale set by the researcher.

Relationship between credit management and sustainability

In this study, the fourth research question focused on looking whether there is a significant relationship between the level of credit management and the level of

sustainability according to the BoD, committees and employees of the selected SACCOs. This research question was also very useful in sense that it helped in the confirmation or denial of the study hypothesis which stated that there is no significant relationship between the level of credit management and the level of sustainability according to the BoD, committees and employees of the selected SACCOs.

The process of answering this research question by confirming or denying the research hypothesis required the correlation of the overall mean values of the independent variable and that of dependent variable. The correlation was done by the use of Pearson's Linear Correlation Coefficient (PLCC) whereby the results are indicated in table below as follows.

Table 6: Pearson's Correlations of Credit Management and Sustainability

Correlated Variables		CREDIT MANAGEMENT	SUSTAINABILITY	Interpretation	Decision on Ho
Credit management	Pearson Correlation		.980**	Significant relationship	Rejected Ho
	Sig. (2-tailed)		0.01		
	N	12	9		
Sustainability	Pearson Correlation	.980**		Significant relationship	
	Sig. (2-tailed)	0.01			
	N	9	12		

Source: Primary data, 2012

To interpret data, findings revealed a positive significant relationship between the credit management and sustainability as it is justified by the r-value of 0.980 and the sig. value of 0.01 from the table 7 here above. Then the findings on the relationship helped the researcher to know that the null research hypothesis that stated "There is no significant relationship between credit management and

sustainability” is rejected; which means that there is a positive significant relationship between these two research variables. So, the interpretation here is that the better is the credit management the better is the sustainability of the selected SACCOs.

The Regression Analysis on the Relationship between Credit Management and Sustainability

Regression analysis helps to test appropriately the research hypothesis; and find out the degree of relationship between the two research variables, here in the table 8 below are the findings on this matter.

Table 7: The Regression Analysis on the Variables to Test Research Hypothesis

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.980 ^a	.961	.961	.16493		
a. Predictors: (Constant), credit management						
ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	160.066	1	160.066	316.884E3	0.01 ^a
	Residual	6.529	240	2.027		
	Total	166.595	241			
a. Predictors: (Constant), credit management						
b. Dependent Variable: sustainability						

Source: Primary data, 2012

Regression Analysis on the Variables to Test Research Hypothesis was used to test the strength of relationship between these two research variables, whereby the degree of credit management accounts for 96.1 percent of the total variation in the level of sustainability. And this is indicated in the value of R. Square value that is .961. The validity of the findings in R. Square is determined by Adjusted R. Square

that remains the same as the R. Square, this means that R. Square value that justifies the percentage variation of the relationship between these two variables is very authentic. ANOVA is used so that the degree based on the general regression models can be statistically assessed the relationship between the two research variables, it was positively significant as the F ratio is 316.884E3 hence, highly significant at the 0.01 level as we all know that higher F. ratio is an indication of more variance in the dependent variable explained by the independent variable. So, the general regression model is statistically significant (F ratio=316.884E3 probability level 0.01). The probability level 0.01 means that the chances are almost zero that the results of regression model are due to random events instead of a true relationship. The research hypothesis of no significant relationship between credit management and sustainability is rejected which means that there is a positively significant relationship between credit management and sustainability in the selected SACCOs.

CHAPTER FIVE

FINDINGS, CONCLUSIONS, RECOMMENDATIONS

This last chapter articulates the summary of major findings of this study in line with research objectives and hypotheses. In addition, the chapter also provides conclusions in light with the purpose of the study. Lastly, some recommendations and areas for further research are also suggested towards the last part of the chapter.

FINDINGS

The main issue attempted in this study was to establish whether credit management significantly influences the level of sustainability in the selected SACCOs of KVS, SACCO-CYATO, KANJONGO SACCO, WRS and AMS. To fulfill this study purpose, four study objectives were formed and the first research objective determined the profile of respondents as regards to their gender, age group, education level and lastly, the number of year the respondents had taken or spent in SACCO; the next one determined the level of credit management in these selected SACCOs; then, third objective determined the level of sustainability in these selected SACCOs; and the last objective established whether there was a significant relationship between the level of credit management and level of sustainability in the selected SACCOs.

In reference to the respondents profile, as regards their gender most of them were men since there were 54 (52.94%) of the respondents while women were 48 (47.06%) of the respondents. So, the respondents' points of view were collected from both male and female as far as respondent gender is concerned. The following respondents profile was their age interval which was also determined by the findings. It was revealed that most of the respondents were at the age of 21 to 35 because there were 58(56.86%), followed by the age group of 36 to 65 whereby there were 43 (42.16%), lastly the age interval of 66 and above where as they were 1 (0.98%). This diversity was very important in sharing experiences on the research variables. Another respondents profile, it was their education level whereby the

majority of the respondents were those with secondary level whose respondents number is 75 (73.53%); this was followed by those who were attained primary level 18(17.65%) and lastly, those with university level who were only 9 (8.82%). This means that respondents were capable of understanding the concepts under credit management and sustainability easily based on the level of their literacy. Lastly the working experience was also the respondents profile investigated in this study; findings revealed that the majority of the respondents was 52(50.98%) who had spent from 2 to 3 years because the SACCO sector in Rwanda is still young , they were followed by those who had 3 years and above whose number is 37 respondents, means (36.27%); these ones had probably work in the SACCO in the previous time when the SACCO sector was not regulated enough, but they must have a clear record on matter of not leading or managing the collapsed ones; and lastly, those who had less than one year of experience 13(12.75%). This has the implication of revealing relevant information about the study variables based on their level of experience in the selected SACCOs as administrators and employees.

As regards to the degree of credit management in the selected SACCOs, from the group of twelve items explored under loan application analysis (appraisal), loan disbursement, loan recovery and loan repayment, they were explored by three items each; By use of the mean. They were compiled then findings revealed that the degree of the credit management in the selected SACCOs as it has been undertaken through use of mean, whereas it was 2.67. In relation with this research finding on the degree of credit management with those analyzed in the literature, it can be noted that the findings are in agreement with those of Beffeda B. K. (2007), Kagaba S. (2010) , Pandey J.K. (2006), Nteziyaremye et al. (2001), Fernando (2006), Otero and Rhyne (1994) ; who in their various studies ascertain that Credit management is the whole process and systems through which the lending operations strive to Offer services which meet the demands; to Operate as efficiently as possible by minimizing costs; to Charge interest rates and fees, which are sufficient to cover all costs, to Motivate clients to repay loans as per agreed terms in order to Achieve sustainability of operations through high degree of efficiency exercised; and so more frequent repayment schedule generates a higher effective interest rate, a weekly

payment schedule should be negatively (positively) associated with financial unsustainability (sustainability).

As far as the degree of sustainability of selected SACCOs is concerned from the group of nine items explored under HR, market and legal environment were explored by three items each in order to compile them and know the degree of the sustainability in the selected SACCOs on one hand from primary data here by the use of the mean findings revealed that it was 2.40; on the other hand secondary data were used to determine the degree of sustainability in terms of financial sustainability from the compiled financial statements of the year 2011 (balance sheets and income statement) of the selected SACCOs; so the findings revealed that financial sustainability of the selected SACCOs through the use of Altman Z_score it was 0.093. Relating this research finding on the degree of sustainability in the selected SACCOs with those analyzed in the literature, it can be noted that the findings were in line with those of Rosengard (2001), Adongo and Stork (2005), Robinson M. (2001), Norgaard (2001) who cited in that the development of products and delivery systems that meet client needs, at prices that cover all costs providing financial services which is determined by the amount of loans disbursed which in turn is theoretically expected to be negatively (positively) related to financial unsustainability (sustainability) because it reduces per unit cost of the lending; and so the institutions are not sustainable primarily because their interest rates on loans are too low for full cost recovery; and then Using the indicator of financial sustainability, the study could find out whether the institution is in a comfort zone or not.

Regarding the correlation between credit management and sustainability in the selected SACCOs, findings revealed that there was a positive significant

relationship between the degree of credit management and the degree of sustainability. This was also ascertained by the r-value of 0.90, R-Square value of 961; Mean Squares 160.066; F value of 316.884E3, and a very small sig. value of 0.01. And so the null hypothesis for this study was rejected as the findings revealed a positive significant relationship between the degree of credit management and the degree of sustainability. In this case, it can be said that this study findings in agreement with those of Pierce (1992) , Diane Rusell (1995) whereby sustainability will vary over space and time, depending upon the factors such as credit management relating generally to the balance between demand and supply potential; and it requires the development of a value system so as to enhance the credit management and to achieve sustainability in the selected SACCOs.

CONCLUSIONS

To conclude the researcher carefully stood on the research problem after following up the purpose of the study; which was to test hypothesis aimed to find out the relationship between the credit management and the sustainability of selected SACCOs namely KVS, SACCO-CYATO, KANJONGO SACCO, WRS and AMS; In addition it was also to approve or disprove the theory of sustainability.

So, in conclusion there was no new information generated since all the findings were in agreement with other researchers articulated in the literature review. The finding on the credit management was in agreement with some of the findings of Beffeda B. K. (2007), Nteziyaremye et al. (2001) among others; the findings on the level of sustainability was in agreement with those of Adongo and Stork (2005), Norgaard (2001) among others. Lastly, the findings on the significant relationship between credit management and sustainability were in agreement with those of Pierce (1992), Diane Rusell (1995) among others;

As far as the issue of testing the null hypothesis of no positive significant relationship between credit management and sustainability is concerned, it can be concluded that there is a positive significant relationship between the credit management and sustainability; thus, the null hypothesis is rejected. About the issue of approving or disproving the theory of sustainability by Pierce (1992), it can be concluded that these theory has been agreement in this study since the findings ascertained that sustainability of the selected SACCOs have been met over the lifetime of the selected SACCOs' credit management.

Finally, concerning the influence of credit management on the sustainability, it can also be asserted that the two aspects are inseparable. This means that the better is the credit management; the better it is the sustainability even if other factors may also be considered on this matter.

RECOMMENDATIONS

To ensure the better credit management match with the high sustainability, the following series of recommendations must be focused on, followed and implemented within the organizations as well as SACCOs:

The SACCOs should regularly provide training to the members on credit issues, and use tools like their credit policy and make members' assessment based on 5C's technique in loan application analysis, then diversify the credits products according to the members' needs as individuals and also to the group of individuals because the peer pressure that group members exert on each other should lead to lower default rates on the number of loans disbursed;

They should conceive appropriate recovering policies and make the continuous monitoring of inefficiency recovery policies by properly elaborating the loan categorization report basing on time of payment; then penalize delinquent loans and make sure that there is zero tolerance for members with loan in arrears

whereby they should be effective follow-up measures of loan repayment; They should write off non repaid loans according to the regulators' rules and regulations if necessary take the defaulter members into court.

They should continue to recruit competent employees basing on labor law and SACCO's recruiting policies; then provide training, seminars and conferences on timely basis by properly applying effective and efficient incentives to retain them as they will be satisfied with their jobs in SACCOs.

They should provide various products which respond to their members' needs and make their awareness to all members by use of different intelligence means for market sustainability through monitoring and evaluation of their products on timely basis.

They should have Cooperative law, BNR rules and regulations and also strong internal rules, policies and procedures, then comply with them by properly making the supervision on compliance issue whereby report on this matter should be regularly submitted to the regulators in order to achieve sustainability.

Area of Future Research

To encourage the future research on the matter of SACCOs' sustainability the following topics have been proposed for further researches:

1. Outreach and SACCOs' sustainability;
2. Government support and SACCOs' sustainability;
3. Savings mobilization and SACCOs' sustainability.

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APPENDIX 1A

TRANSMITTAL LETTER



**KAMPALA
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UNIVERSITY**

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**OFFICE OF THE HEAD OF DEPARTMENT, ECONOMICS AND
MANAGEMENT SCIENCES
COLLEGE OF HIGHER DEGREES AND RESEARCH (CHDR)**

Date: 11th, September, 2012

**RE: REQUEST OF BUMBALI MACHIAVEL MBA/34199/111/DF
TO CONDUCT RESEARCH IN YOUR ORGANIZATION**

The above mentioned is a bonafide student of Kampala International University pursuing Masters of Business Administration (Banking and Finance).

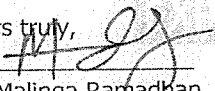
He is currently conducting research entitled **"Credit Management and Sustainability of Selected SACCO's in Nyamasheke District, Western Province, Rwanda"**.

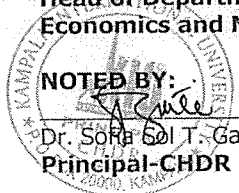

Your organization has been identified as a valuable source of information pertaining to his research project. The purpose of this letter is to request you to avail him with pertinent information he may need.

Any information shared with him from your organization shall be treated with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.

Yours truly,


For Mr. Malinga Ramadhan
**Head of Department,
Economics and Management Sciences, (CHDR)**


NOTED BY:

Dr. Sofia Sol T. Gaite
Principal-CHDR

"Exploring the Heights"

APPENDIX 1B

TRANSMITTAL LETTER FOR THE RESPONDENTS

Dear Sir/ Madam,

I am **Machiavel BUMBALI**, a student pursuing a Master program in Business Administration at Kampala International University. To fulfill the requirements for the degree of MBA, I am required to conduct a research in the field of Finance and Banking as my area of specialization. This research study is entitled: **“Credit management and sustainability in the selected SACCOs in Nyamasheke district, Western province of RWANDA”**.

I am appealing for your assistance as regards access to the BoD and committees' members as well as manager and staff for collecting data to this questionnaire. Kindly do not leave any option unanswered. I assure you that any data you will provide, it will remain absolutely confidential and it will be used only for academic purposes.

Thank you in advance for your cooperation and assistance.

Yours faithfully,

Mr. Machiavel BUMBALI

APPENDIX II
CLEARANCE FROM ETHICS COMMITTEE

Date_____

Candidate's data

Name: Machiavel BUMBALI

Reg N°: MBA/34199/111/DF

Course: MBA-FINANCE and BANKING

Title of Study: Credit management and Sustainability in the selected SACCOs in Nyamasheke district within Western Province of RWANDA.

Ethical Review Checklist

The study reviewed considered the following:

Physical safety of human subjects

Psychological safety

Emotional safety

Privacy

Coding of questionnaire/ Anonymity/Confidentiality

Permission to conduct the study

Informed consent

Citations/ Authors recognition

Results of Ethical Review

___ Approved

___ Conditional (to provide the Ethics Committee with corrections)

___ Disapproved/ Resubmit Proposal

Ethics Committee (Name and Signature)

Chairperson _____

Members_____

APPENDIX III
INFORMED CONSENT

I am giving my consent to be part of the research study of Mr. Machiavel BUMBALI that will focus on **credit management and sustainability in the selected SACCOs in Nyamasheke District, Western Province of Rwanda.**

I shall be assured of privacy, anonymity and confidentiality and that I will be given the option to refuse participation and right to withdraw my participation anytime.

I have been informed that the research is voluntary and that the results will be given to me if I ask for it.

Initials: _____

Date _____

APPENDIX IV A

RESEARCH INSTRUMENT

In the following passage is the research instrument used to determine the demographic profiles of the respondents, the level of credit management and also the level of sustainability.

Part 1) PERSONAL INFORMATION DETERMINING THE DEMOGRAPHIC PROFILES OF THE RESPONDENTS

Please tick (√) the appropriate answer.

1. Gender; Male ☐ Female ☐

2. Age
21-39 ☐ 40-65 ☐ 66 and above ☐

3. Level of education
Primary level ☐ Secondary level ☐ university level ☐

4. Working experience
Below or equal to 1 year ☐ 2years-3years ☐ 4years and above ☐

Part 2) QUESTIONNAIRE TO DETERMINE CREDIT MANAGEMENT (For the BoD, the Committees and Staff)

Please write your rating on the space before each option which corresponds to your best choice in terms of credit management in your SACCO. Kindly use the scoring system below: Strongly Agree (4), Agree (3), Disagree (2), Strongly disagree (1).

Item	Strongly Agree	Agree	Disagree	Strongly disagree
<i>Loan application analysis (appraisal)</i>				
1. The training on credit issues is regularly provided to the members.				
2. We provide training to our employees on timely basis.				
3. The approval of the credit applied from this SACCO is being done in respect of loan application procedures.				
<i>Loan disbursement</i>				
4. We often diversify the credits products according to our members' needs.				
5. We provide loans to individuals.				
6. We provide loans to group members.				
<i>Loan recovery</i>				
7. We often conceive recovering policies for this SACCO.				
8. We make a continuous monitoring of our recovering policies.				
9. We often review the inefficiency recovery policies of this SACCO.				

<i>Loan repayment</i>				
10. We never tolerate loan portfolio in arrears.				
11. We respect the follow-up measures of loan repayment.				
12. We ever taken into court the defaulters members.				

Part 3) QUESTIONNAIRE TO DETERMINE SUSTAINABILITY
(For the BoD, the Committees and staff)

Please write your rating on the space before each option which corresponds to your best choice in terms of credit management in your SACCO. Kindly use the scoring system below: Strongly agree (4), Agree (3), Disagree (2), Strongly disagree (1).

Item	Strongly agree	Agree	Disagree	Strongly disagree
<i>Human resource sustainability</i>				
1. We recruit employees basing on labor law and SACCO's recruiting policies.				
2. We provide training on our employees on timely basis.				
3. We apply effective and efficient incentives to retain our employees.				
<i>Market sustainability</i>				
4. We offer various products for market				

sustainability.				
5. We provide products that are responding our members' needs.				
6. We advertise all SACCO s' products in order to make their awareness.				
<i>Legal sustainability</i>				
7. We have Cooperative law and BNR rules and regulations.				
8. We comply with SACCO internal rules, RCA and BNR rules.				
9. We make regularly audit on regulation and supervision on this compliance.				

RESEARCHER'S CURRICULUM VITAE

Personal Profile

Name : BUMBALI
Surname : Machiavel
Age : 28 years old
Gender : Male
Civil status: Single
Nationality: Rwandese

Educational Background

MBA Student- Finance and Banking (2013)
Bachelor in Business Administration- MIS (2009)
National certificate in Commerce and Accountancy (2002/2003)

Work Experience

2 Years as Manager of KARAMBI VISION SACCO
1 Year as Cashier in Banque populaire du Rwanda (BPR).

Other Relevant Data

Language skills: English, Kinyarwanda, French, Swahili and Kirundi.

Certificates of training on Organization and Management of SACCOs; Savings

Mobilization and management; Accounting and Financial Reporting; Preparation of
Financial statements; Financial and Delinquency Management; Internal Controls; The
audits of SACCOs.

Certificate of training in elaborating Business plan.

