



**FINANCIAL INCLUSION PRACTICES AND PERFORMANCE OF SELECTED AGRICULTURAL SACCO'S IN  
NYAMAGABE DISTRICT, RWANDA.**

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**ABSTRACT**

Governmental and banking sector initiatives on financial inclusiveness have had little effect, as new innovations that enable online wealth management, the digital revolution of financial intermediaries' developments, and group products and performers specializing in developing certain customer segments have all had a significant impact. The general objective of this study is to assess the relationship between financial inclusion practices and performance of selected agricultural SACCOs in Nyamagabe District. The study has the following specific objectives: to assess the effect of financial literacy practices on performance of selected agricultural SACCOs in Nyamagabe District; analyse the effect of contingency plan practices on performance of selected agricultural SACCOs in Nyamagabe District and evaluate the effect of access to credit practices on performance of selected agricultural SACCOs in Nyamagabe District. The population of the study was 2209 members and 6 staff of COOPEC Twizigamire in Nyamagabe District. The Solvin model, which gives a simple method to compute the number of respondents used to find the representative sample. A sample size of 339 is calculated using this equation. Purposive sampling used to choose participants for the research. Questionnaire and documentary review were used in the study. To analyze the gathered data, the researcher used the statistical method computed by Statistical Product and Service Solutions (SPSS). The researcher employed descriptive and correlation analysis in this method. The frequency, proportion, and percentage computed for each variable under study are used in descriptive analysis. Correlation analysis is created to investigate and quantify the statistical relationship that exists between two variables. The  $p$ -value  $< 0.05$  which is a significance correlation, and a Pearson correlation coefficient of 0.708. The value of  $R$  was 0.722,  $R$  square was 0.521, and an adjusted  $R$  square of 0.520 indicates that COOPEC Twizigamire's performance was 52.0% dependent on contingency plan practices. This indicates that there is a positive and strong relationship between financial literacy practices and the performance of COOPEC Twizigamire. The results of an analysis of variance across variables with  $F=290.937$ ,  $p$ -value  $< 0.05$ . This demonstrates that there is a significant association between credit procedures and performance. Saving and Credit Cooperative is recommended to teach their members how to handle loans responsibly, the number of loans that are not being paid back can go down and the chance of loan default can go down.

**Key words:** Financial inclusion practices, financial literacy practices, contingency plan practices, access to credit practices and performance

## INTRODUCTION

Banking firms were used by 21% of Rwandans over the age of 18 in 2008, according to FinScope 2008 and 2012. In 2012, this ratio rose to 42 percent. As a result, a huge sum of money stayed in the wallets of Rwandans, limiting their potential to develop income support as well as the potential of banking organizations to provide loans (Irma, 2012).

Even if access to financial services does not necessarily mean full-fledged financial intermediation, states around the world are concerned about the issue. Access to finance is a significant policy priority. A serious worldwide handle issues is that a large percentage of working-age persons do not have access to the official financial sector (Arun & Kamath, 2015).

Nevertheless, Studies have been conducted in Rwanda on financial inclusion and performance of SACCOs. Case in Rusizi District survey by Hitimana and Rusibana (2021) indicated that the financial performance of SACCOs in Rusizi District was significantly impacted by financial inclusion measures implemented by these organizations. Halerimana (2016) assessed how Clecam Ejoheza Kamonyi implemented financial inclusion in microfinance, this paper examines the relationship between financial inclusion and financial performance in Rwanda.

Researcher referenced above have studied financial inclusions and SACCOs in Rwanda but their studies was conducted in other districts not in Nyamagabe in additional none of the studies conducted exactly on agricultural SACCOs by indicating definitely how financial literacy practices, contingency plan practices and access to credit practices affect performance has assessed whether financial inclusion practices has contribute on performance of agricultural SACCOs. In this regard, the present study aimed to assess how each practice of financial inclusion affects performance of agricultural SACCOs in Nyamagabe District.

### Objectives of the Study

#### General Objectives

The general objective of this study is to assess the relationship between financial inclusion practices and performance of selected agricultural SACCOs in Nyamagabe District.

#### Specific Objectives

- i. To assess the effect of financial literacy practices on performance of selected agricultural SACCOs in Nyamagabe District.
- ii. To analyse the effect of contingency plan practices on performance of selected agricultural SACCOs in Nyamagabe District.
- iii. To evaluate the effect of access to credit practices on performance of selected agricultural SACCOs in Nyamagabe District.

#### Research hypotheses

- i. Ho1: There is no relationship between financial literacy practices and performance of selected agricultural SACCOs in Nyamagabe District.
- ii. Ho2: There is no relationship between contingency plan practices and performance of selected agricultural SACCOs in Nyamagabe District.
- iii. Ho3: There is no relationship between access to credit services practices and performance of selected agricultural SACCOs in Nyamagabe District.

## LITERATURE REVIEW

The theoretical and empirical literature as well as the critical evaluation, theoretical and conceptual frameworks as all covered in this section based on the topic under consideration.

### Empirical literature review

Various studies have discovered fundamental links on the effect of financial literacy practices on performance of SACCOs, the effect of credit practices on performance of SACCOs and the effect of contingency plan practices on performance. It based on methodologies used and research findings obtained in their studies.

### **Financial literacy practices and performance of SACCOs**

Mwaniki (2014) looked at the effect that financial education teaching has on the earnings of Kenyan women's self-help groups. The survey-based study collected both qualitative and quantitative information. Inferential and descriptive statistics were used to analyze the data. The primary finding revealed that the vast majority of individuals maintained a budget, borrowed for financial purposes, and the instruction on lending activities favorably benefited their loan repayment. As a result of the newfound knowledge, the study indicated that members of the self-help group would seek out alternate payment systems to acquire financial services. It meant that financial literacy training had expanded the self-help group's business opportunities.

Mutegi (2015) assessed financial literacy and its effect on loan repayment by Small and Medium Enterprises in Kenya. Thirty (30) out of three hundred (300) equity Bank-trained SMEs in Ngara, Nairobi County took part in the research on small and medium-sized enterprises (SMEs). The data gathering tool consisted of a self-administered drop-and-pick questionnaire. According to the results, the aforementioned four abilities have a significant impact on the ability of SMEs to repay loans. The survey's results indicate that small and medium-sized enterprises (SMEs) with limited or no financial literacy training should participate in programs to develop their competencies.

### **Contingency plan practices and performance of SACCOs**

Ndiege, Haule and Kazungu (2013) who revealed that in Tanzania, SACCOs do not preserve much, relying instead on external resources to supply loans. Savings culture in rural SACCOs can be developed if the SACCOs establish and stick to a policy requiring a minimum level of savings and deposits prior to loan disbursement. The survey revealed that the majority of SACCOs have this policy but did not adhere to its standards. Therefore, savings and deposits were insufficient to support the Non-Performing Loan Ratio. Also, it was revealed that certain SACCOS utilized the funds and deposits of their members to function.

Joseph (2013) studied the Loan Default Risks in Tanzania are influenced by SACCOS' Variables in Tanzania. While the overall assets, education of the management, and the number of customers enhance the default risk, savings and deposits minimize it. SACCO bad loan hazards are unaffected by the ages or educational qualifications of board chairpersons, managers, or lending office holders in rural SACCOs; these characteristics are independent of each other. SACCOS members should be encouraged to deposit and invest more in rural SACCOS, and lending restriction requirements and geographical distance should be taken into account when giving loans to SACCOS customers, according to this research.

### **Access to credit practices and performance of SACCOs**

Umejiaku (2020) examined female business owners in Jos, Nigeria's Plateau state, and the impact of financial support services on their success. To conduct the experimental evidence, the study used a descriptive research methodology and multiple linear regression approaches. Financial credit awareness has a substantial impact on the growth of female entrepreneurs in the Jos city, according to an investigation. Women entrepreneurs in Plateau state have benefited greatly from the banking sector's excellent business knowledge, which has had a favorable impact on the growth of their businesses.

Olawunmi, Oluseye and Sylvanus (2021) examined the positivist and impartial impact of access to financing on the performance and growth of micro, small, and medium-sized enterprises (MSMEs) in Nigeria's services industry. The research utilized a cross-sectional database from the 2014 World Bank Enterprise Surveys database. The study uses Ordinary Least Squares regression to examine the impact of access to credit on the capacity of MSMEs in Nigeria's services sector to reduce unemployment. This study discovered that MSMEs confront financing constraints, since the majority (77.56 percent) of the studied enterprises cited access to financing as the most significant barrier, albeit to differing extents (subjective effect). In addition, the analysis uncovered a negative and statistically significant correlation between limited access to capital and jobs opportunities.

### **Theoretical framework**

This study refers and uses the theories like Financial Intermediation Theory, Technology Acceptance Theory, Agency Theory, Goal setting, Attribution theory, theory of security and pecking order theory. In this section, the researcher explained how all the used theories are applied by consideration of main and specific objectives of the study.

### **Financial Intermediation Theory**

As a field of study, "financial intermediation theory" was developed by Gurley and Shaw (1960). So long as surplus units are deposited with accessible banking firms, they reasoned, those establishments would be willing to lend the equivalent quantities to surplus spending in the economy, which is a key feature of direct investment. According to Babiaz and Robb (2014), financial activities are further subdivided into four categories: the first group comprises fixed-term deposits, while the middle group comprises quick deposits relative to their comparable assets. The final group comprises assets and obligations that can't be transferred easily. Therefore, the primary function of financial mediators is to assure a consistent funding flow from shortfalls to surpluses.

For this study, financial intermediation theory assumes that financial inclusion applied to minimize transaction costs and inefficiencies in knowledge. As the general objective of this study is the relationship between financial inclusion practices and performance of selected agricultural SACCOs.

### **Technology Acceptance Theory**

The Technology Acceptance Theory was first proposed by Davis, Bagozzi and Warshaw (1989). The model's major objective is to provide a thorough understanding of the numerous aspects that influence the broad acceptability of computer application. Computing and information systems are used because of the behavior of those who are expected to use them. This is due to the fact that the participant's opinion towards the system is influenced by their conduct. The ease with which new technology is perceived by its intended users has a significant impact on how useful and positive it is (Chooprayoon, Fung & Depickere, 2013).

For this study, Customer attitudes are used to develop the Technology Acceptance Model, which attempts to assess how quickly new technology is being adopted in Saving and Credit Cooperatives through financial inclusion services.

### **Agency Theory**

The hypothesis was proposed by Jensen and Meckling (1976), who consider financial firms as the principal and the correspondence bank as the operator, with misunderstandings or inconsistencies in their respective interests causing problems. When a financial organization disregards the laws and regulation established by banks, agency theory develops. According to agency theory, financial firms (banking and associated agents) typically serve as intermediaries between money and the market or households. The distribution of resources (money) based on a flawless and comprehensive market is hampered by frictions such as transaction costs and information asymmetries (Aduda, Kiragu & Ndwiga, 2013).

This theory involved clients and policymakers of SACCOs. Market methods measure usefulness while controls are segregated. Though complications may arise from a lack of formal agreement, adopting and formulating laws is voluntary. Diverse agent transaction modes may prevent management from enforcing policies.

### **Goal Setting Theory**

Dating back to 1987, expectancy theory has been integrated with goal setting theory. The premise of goal setting theory is that conscious goals and intentions influence results. Locke (1986), Locke and Latham (1990) conclude, based on the goal setting theory of motivation, that an individuals personal goals are likely to determine how well they perform on related tasks. Specific, well defined, and more difficult objectives produce greater productivity than vague, easy, or "do your best" objectives.

For goal setting theory to be successful, it is assumed that individuals must be committed to the goal, seek input, and be able to complete the work. This indicates that money literacy programs should be more effective when they are driven by beliefs and concerns about future financial security.

This study employed goal setting theory, Goal-setting has a multiplicative effect on performance, leading not just to more output but also to higher-quality output by increasing output both in terms of quantity and intensity of effort.

### **Attribution Theory**

Despite the fact that Heider (1958) was the first to put forth a psychological theory of attribution, Weiner (e.g. Jones, Kannouse, Kelley, Nisbett, Valins & Weiner, 1972) created an analytical foundations that has become a prominent research model of social psychology. "Nave" or "common sense" psychology was a topic of discussion for Heider. After putting together facts, they came to the conclusion that the actions of others might be explained by a logical reason or causation.

For this study, the attribution theory applied in an effort to explain the difference in motivation that exists between great performers and those with lower levels of achievement based on perception of members of SACCOs

### **Theory of Security**

In 2002, Kurtus came up with this idea, which was later amended in 2012. The term "security" refers to the act of shielding oneself, one's possessions, or one's organization from harm. To be secure, you must understand the varieties of attacks that can be launched, as well as the intentions behind such assaults and your own role in them. Threatening responses and making anticipatory attacks on the source of the danger are the most effective forms of protection against such an adversary.

For this study, This theory applied as in financial institutions sometimes loss of confidentiality occurs when information is accessed or copied by an unauthorized third party. Confidentiality is critical when dealing with private information. Sensitive information includes but is not limited to account details and passwords.

### **Pecking Order Theory**

Donaldson first presented the Pecking order idea in 1961, and Stewart elaborated on it subsequently (1984). A company's sources of funding are prioritized based on the cost of borrowing, according to theory. When all other sources of revenue have been explored, increasing equities is the only option. To help a company pick its cash position, this idea has been applied.

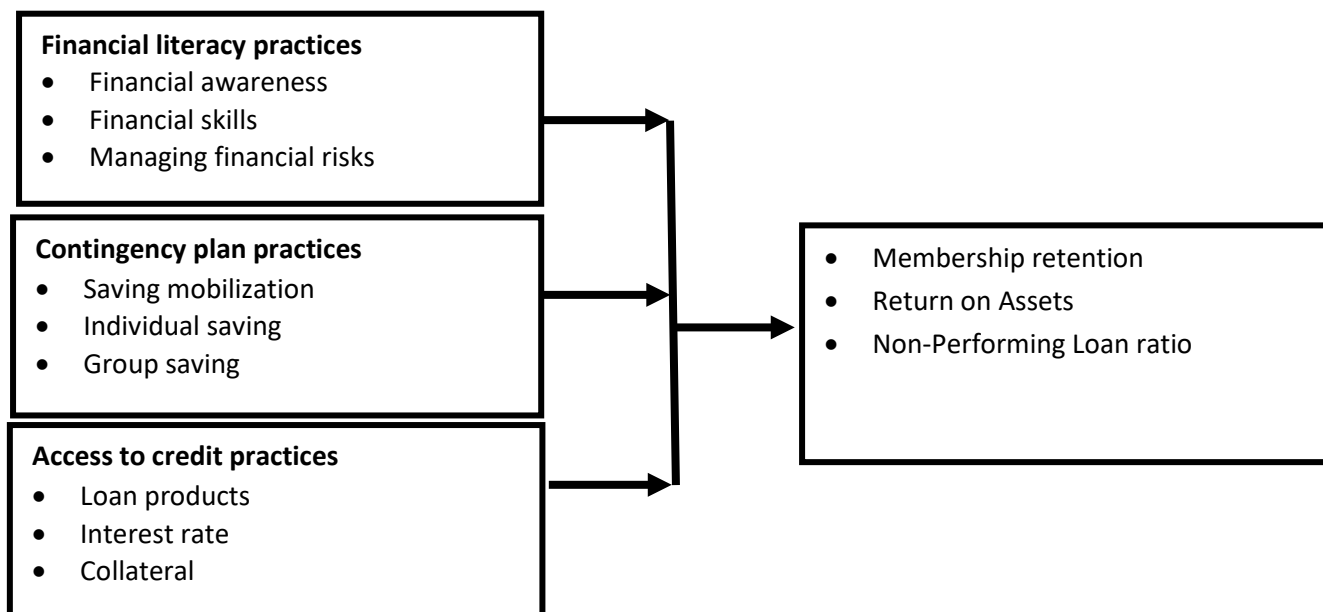
In this study, The pecking order described how SACCOs finance themselves. This hypothesis says SACCOs preferred source of funding is retained earnings. If this is not enough, the SACCOs borrowed from other financial institution and central bank. If debt is not enough, it will issue new equity.

### **Conceptual framework**

A conceptual framework is employed in this study to describe the key ideas or variables that need to be explored, as well as the relationships that may occur between them. A conceptual framework is the way ideas are structured to achieve a research study's purpose, and explanation is the most common method for accomplish this goal.

**Independent Variable**  
**Financial inclusion practices**

**Dependent Variable**  
**Performance of SACCOs**



**Figure 1: Conceptual framework**

Methods for extending access to financial services may vary by factors like financial literacy, contingency plan and access to credit services; a direct effect on the predictor variables (SACCO performance) via its constituent parts; membership retention, return on assets and Non-Performing Loan Ratio.

This shows that financial literacy practices focused on financial awareness, financial skills and managing financial risks affected performance of SACCO. Contingency plan practices concentrated on saving mobilization, individual saving and group saving affected performance of SACCO. Access to credit practices focused loan products, interest rate and collateral affected performance of SACCO.

**RESEARCH METHODOLOGY**

It details the survey's methodology and the procedures for selecting and collecting samples. It continues by detailing the steps that taken to gather data, transform it, and examine it to draw conclusions.

**Research Design**

The data obtained from descriptive survey research designs can be used to provide a causal explanation for phenomena. Usually, descriptive studies are the most efficient way to collect data that demonstrates linkages and describes the current state of the world. For the purpose of explicating the relationship between independent and dependent variables, an interpretive study design was employed.

**Target Population**

The population of this study was 2209 members and 6 staff of Agricultural SACCOs in Nyamagabe District.

**Sample Size and sampling technique**

The sample size calculated using the Solvin equation, which gives a simple method for calculating number of respondents.

The total sample was determined using the following formula.

$$n = \frac{N}{1 + N(e)^2}$$

In this formula, n represents the size of the sample, N the number of participants, and e the margin of error (0.05).

$$n = \frac{2209}{1 + 2209(0.05)^2} = \frac{2209}{1 + 2209(0.0025)} = \frac{2209}{1 + 5.5225} = \frac{2209}{6.5225} = 339$$

This calculation compared to the previous equation yields a representative sample of 339 for the study. The study used the purposive sampling. Researcher acquire data using the approach of purposive sampling, choosing people with a common set of features and data.

### Data Collection Instruments

To guarantee the proper completion of the research, each target explored using precise questions. The following instruments utilized to gather data for the research: a questionnaire interview and a documentation research.

### Data Analysis

To analyze the gathered data, the researcher used the statistical method computed by Statistical Product and Service Solutions (SPSS). Descriptive and correlational analysis used in this approach by the researcher. Descriptive analysis made use of the frequency, percentage, mean and standard deviation calculated for each factor under investigation. The quantitative link between two variables studied and quantified using Pearson correlation.

In order to draw conclusions from the survey, the research made use of linear regression analysis. The following regression analysis model was used;

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

Y is Performance of agricultural SACCOs,

$\beta_0$  is constant coefficient

$\beta_1$ ,  $\beta_2$  and  $\beta_3$  are Regression Coefficients

$X_1$  is financial literacy practices,

$X_2$  is contingency plan practices,

$X_3$  is access to credit practices,

$\epsilon$  = error term



## FINDINGS AND DISCUSSIONS

### Financial literacy practices and performance of COOPEC Twizigamire

The first objective of the study was to assess the effect of financial literacy practices on performance of selected agricultural SACCOs in Nyamagabe District.

**Table 1: Financial literacy practices in COOPEC Twizigamire**

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Deviation
Financial literacy help members to understand how much to earn and spend.	169 (49.9%)	120 (35.4%)	21 (6.2%)	9 (2.7%)	20 (5.9%)	4.21	1.076
Financial literacy improved repayment ability and to avoid debt.	143 (42.2%)	139 (41.0%)	32 (9.4%)	15 (4.4%)	10 (2.9%)	4.15	.969
Financial literacy protect member from being bankrupt.	155 (45.7%)	94 (27.7%)	57 (16.8%)	20 (5.9%)	13 (3.8%)	4.06	1.099
Financial literacy work toward benefits of secure retirement.	83 (24.5%)	158 (46.6%)	48 (14.2%)	24 (7.1%)	26 (7.7%)	3.73	1.137
Financial literacy starts by building basic knowledge of money matters.	140 (41.3%)	131 (38.6%)	43 (38.6%)	14 (4.1%)	11 (3.2%)	4.11	.994
Financial literacy established a feeling of control over finances	90 (26.5%)	137 (40.4%)	53 (15.6%)	41 (12.1%)	18 (5.3%)	3.71	1.141
Through financial literacy member understand how to allocate income	71 (20.9%)	146 (43.1%)	62 (18.3%)	33 (9.7%)	27 (8.0%)	3.59	1.156
Financial literacy help member to know how to make developments.	146 (43.1%)	117 (34.5%)	53 (15.6%)	15 (4.4%)	8 (2.4%)	4.12	.983

**Source: Field data, September 2022**

The findings in Table 1 show the respondents' views on financial literacy practices in COOPEC Twizigamire whereby 49.9% of respondents strongly agree with 35.4% agree that financial literacy helps members understand how much to earn and spend, the mean of 4.21 and standard deviation of 1.076 which indicate very high mean and strong existence of the factor with heterogeneity of responses. The majority of respondents 42.2% of respondents strongly agree with 41.0% agree that relevant financial literacy improves repayment ability and to avoid debt. The mean of 4.15 and standard deviation of 0.969 indicate a high mean as the existence of the factor with heterogeneity of responses. A large number of respondents 45.7% of respondents strongly agree with 27.7% agree that financial literacy protects members from bankrupt. The mean of 4.06 and standard deviation of 1.099 indicate the high mean as the existence of the factor with heterogeneity of responses. The significant number 24.5% of respondents strongly agree with 46.6% agreeing that financial literacy contributes to the benefits of a secure retirement, and the mean of 3.73 and standard deviation of 1.137 indicate the presence of the factor with heterogeneity of responses.

Most respondents 41.3% of respondents strongly agree with 38.6% agree that financial literacy starts by building basic knowledge of money matters, the mean of 4.11 and standard deviation of 0.994 indicate the high mean as the existence of the factor with heterogeneity of responses. A significant number of respondents 26.5% strongly agree and 40.4% agree that financial literacy establishes a feeling of control over finances, the mean of 3.71 and standard deviation of 1.141 indicate the high mean as well as the existence of the factor with heterogeneity of responses.

Members understand how to allocate income through financial literacy, according to 20.9% who strongly agree and 43.1% who agree, the mean of 3.59 and standard deviation of 1.156 indicate a high mean as the existence of the factor with heterogeneity of responses.

One of interviewed staff stated that *“Nearly everyone need a loan at some point in their lives. Learning about interest rates, compound interest, the time value of money, payment schedules, and loan structures help to borrow money wisely. A better understanding of the listed requirements leads to a higher level of financial literacy. This makes the best use of resources and borrowing rules and*



*reduces long-term financial stress*". The majority of respondents, with a mean of 4.12 and a standard deviation of 0.983 indicate the presence of the factor with heterogeneity of responses, with 43.1% strongly agreeing and 34.5% agreeing that financial literacy helps members know how to make developments.

The results are in line with Hütten (2018) who stated that financial literacy is key for assisting individuals in recognizing crucial financial challenges and behaviors that promote the efficient use of monetary backing. It enables one to understand essential financial ideas, such as forms of earnings, financial factors and returns, and economics of scale, and many others

### Contingency plan practices and performance of COOPEC Twizigamire

The second objective of the study was to analyse the effect of contingency plan practices on performance of selected agricultural SACCOs in Nyamagabe District.

**Table 4.2: Contingency plan practices in COOPEC Twizigamire**

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Deviation
Saving enabling a member to access to funds for unexpected life events	85 (25.1%)	148 (43.7%)	36 (10.6%)	29 (8.6%)	41 (12.1%)	3.61	1.281
Saving in SACCOs reduce pressures on free cash	78 (23.0%)	119 (35.1%)	50 (14.7%)	32 (9.4%)	60 (17.7%)	3.36	1.396
Saving in SACCOs increasing the strength of social networks	84 (24.8%)	134 (39.5%)	42 (12.4%)	36 (10.6%)	43 (12.7%)	3.53	1.313
Saving in SACCOs help member to have clear objectives	68 (20.1%)	190 (56.0%)	34 (10.0%)	38 (11.2%)	9 (2.7%)	3.80	.974
Policies on saving account are widely established	66 (19.5%)	179 (52.8%)	49 (14.5%)	33 (9.7%)	12 (3.5%)	3.75	.994
Saving funds are available whenever needs	75 (22.1%)	154 (45.4%)	48 (14.2%)	28 (8.3%)	34 (10.0%)	3.61	1.205
Members get reasonable interest on their saving	88 (26.0%)	139 (41.0%)	34 (10.0%)	44 (13.0%)	34 (10.0%)	3.60	1.275
Saving in SACCOs allows members to focus on their priorities	97 (28.6%)	78 (23.0%)	68 (20.1%)	47 (13.9%)	49 (14.5%)	3.37	1.399

**Source: Field data, September 2022**

The findings in Table 2 show the respondents' views on contingency plan practices in COOPEC Twizigamire whereby 25.1% of respondents strongly agree with 43.7% agree that saving enables a member to access funds for unexpected life events, the mean of 3.61 and standard deviation of 1.281 which indicate the high mean and existence of the factor with heterogeneity of responses. The majority of respondents 23.0% of respondents strongly agree, and 35.1% agree that saving in SACCOs reduces pressures on free cash, The mean of 3.36 and standard deviation of 1.396 indicate a neutral mean as there is some truth in the heterogeneity of responses. A large number of respondents 24.8% of respondents strongly agree with 39.5% agree that saving in SACCOs increases the strength of social networks, the mean of 3.53 and standard deviation of 1.313 indicate the high mean as the existence of the factor with heterogeneity of responses.

The significant number of 20.1% respondents strongly agree with 56.0% agreeing that saving in SACCOs helps members to have clear objectives, and the mean of 3.80 and standard deviation of 0.974 indicate the presence of the factor with heterogeneity of responses. Most respondents 19.5% of respondents strongly agree with 52.8% agree that policies on saving accounts are widely established, the mean of 3.75 and standard deviation of 0.994 indicate the high mean as the existence of the factor with heterogeneity of responses. A significant number of respondents 22.1% strongly agree and 45.4% agree that saving funds are available whenever needs, the mean of 3.61 and standard deviation of 1.205 indicate the high mean as well as the existence of the factor with heterogeneity of responses. Members get reasonable interest on their savings, according to 26.0% who strongly agree and 41.0% who agree, The mean of 3.60 and standard deviation of 1.275 indicate a high mean as the existence of the factor with heterogeneity of responses.

A mean of 3.37 and a standard deviation of 1.399 indicate the neutrality and heterogeneity of responses, with 28.6% strongly agreeing and 23.0% agreeing that saving in SACCOs allows members to focus on their priorities. The outcomes of the study are supported by Luthans (2011) who mentioned that the concept of contingency planning evokes ideas of natural disasters such as hurricanes, tornadoes, earthquakes, and floods, as well as man-made crises including such riots, wildfires, and terrorists.

### Access to credit practices and performance of COOPEC Twizigamire

The third objective of the study was to evaluate the effect of access to credit practices on performance of selected agricultural SACCOs in Nyamagabe District.

**Table 3: Access to credit practices in COOPEC Twizigamire**

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean	Std. Deviation
Requirements to for credit are easy to fulfill.	84 (24.8%)	76 (22.4%)	66 (19.5%)	51 (15.0%)	62 (18.3%)	3.20	1.436
SACCOs provides credits on favorable interest rate.	74 (21.8%)	123 (36.3%)	71 (20.9%)	40 (11.8%)	31 (9.1%)	3.50	1.215
Collateral required by SACCOs is affordable.	58 (17.1%)	129 (38.1%)	76 (22.4%)	34 (10.0%)	42 (12.4%)	3.37	1.235
SACCOs provides credits anytime a member for reasonable issue.	98 (28.9%)	139 (41.0%)	50 (14.7%)	41 (12.1%)	11 (3.2%)	3.80	1.085
Payment method and time are appropriate for members.	67 (19.8%)	134 (39.5%)	58 (17.1%)	40 (11.8%)	40 (11.8%)	3.44	1.261
Penalty for late payment enhances members commitment to credit repayment	82 (24.2%)	156 (46.0%)	44 (13.0%)	28 (8.3%)	29 (8.6%)	3.69	1.175
Credit terms and conditions are clear and in writing	75 (22.1%)	143 (42.2%)	44 (13.0%)	40 (11.8%)	37 (10.9%)	3.53	1.260
There is a regular remind before repayments dates and deadlines	78 (23.0%)	123 (36.3%)	44 (13.0%)	34 (10.0%)	60 (17.7%)	3.37	1.400

**Source: Field data, September 2022**

The findings in Table 3 show the respondents' views on access to credit practices in COOPEC Twizigamire whereby 24.8% of respondents strongly agree and 22.4% agree that requirements for credit are easy to fulfill, the mean of 3.20 and standard deviation of 1.436 which indicate the neutral mean and the existence of some truth with heterogeneity of responses.

The majority of respondents 21.8% of respondents strongly agree, and 36.3% agree that SACCOs provide credits at favorable interest rate, the mean of 3.50 and standard deviation of 1.215 indicate a high mean and the existence of the fact in the heterogeneity of responses. A large number of

respondents 17.1% of respondents strongly agree with 38.1% agree that collateral required by SACCOs is affordable, the mean of 3.37 and standard deviation of 1.235 indicate the neutral mean as the existence of some truth with heterogeneity of responses. The significant number of 28.9% respondents strongly agree with 41.0% agreeing that SACCOs provide credits anytime a member has a reasonable issue, and the mean of 3.80 and standard deviation of 1.085 indicate the presence of the factor with heterogeneity of responses.

Staff member said that *“We, like other banks and financial institutions, profited from the interest paid by our borrowers. Therefore, it is to the benefit of our SAACOs that our members learn how to responsibly use loans and how to repay them so that they can take out loans in the future”*. Most respondents 19.8% of respondents strongly agree with 39.5% agree that Payment method and time are appropriate for members, the mean of 3.44 and standard deviation of 1.261 indicate the high mean as the existence of the factor with heterogeneity of responses.

The significant number of respondents 24.2% strongly agree and 46.0% agree that a penalty for late payment enhances members' commitment to credit repayment, the mean of 3.69 and standard deviation of 1.175 indicate the high mean as well as the existence of the factor with heterogeneity of responses. Credit terms and conditions are clear and in writing, according to 22.1% who strongly agree and 42.2% who agree, the mean of 3.53 and standard deviation of 1.260 indicate a high mean as the existence of the factor with heterogeneity of responses. A mean of 3.37 and a standard deviation of 1.400 indicate the neutrality and heterogeneity of responses, with 23.0% strongly agreeing and 36.3% agreeing that there is a regular reminder before repayment dates and deadlines. The results are in line with Maity (2019) who mentioned that access to finance boosts the efficiency of businesses, facilitates access to markets, expansion, and risk mitigation, and encourages innovation and entrepreneurship.

**Table 4: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
	(Constant)	-4.615	2.087	-2.211	.028
1	Financial literacy practices	1.432	.190	.347	.000
	Contingency plan practices	1.025	.167	.318	.000
	Access to credit practices	.792	.162	.239	.000

a. Dependent Variable: Performance

**Source: Field data, September 2022**

In order to draw conclusions from the survey, the following linear regression analysis model was used;

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

Y is Performance of agricultural SACCOs,  $\beta_0$  is constant coefficient,  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  are Regression Coefficients,  $X_1$  is financial literacy,  $X_2$  is contingency plan,  $X_3$  is access to credit services and  $\epsilon$  = error term

Table 4 on regression equation shows that Performance of agricultural SACCOs depended on a constant factor of -4.615 regardless of the existence of other determinants. The other variables explain that; financial literacy practices ( $\beta = 1.432$ ,  $p < 0.05$ ) every unit increase in financial literacy practices increased performance of COOPEC Twizigamire by a factor of 1.432. Contingency plan practices ( $\beta = 1.025$ ,  $p < 0.05$ ) every unit increase in contingency plan practices increased performance of COOPEC Twizigamire by a factor of 1.432. Access to credit practices ( $\beta = 1.432$ ,  $p < 0.05$ ) every unit increase in access to credit practices increased performance of COOPEC Twizigamire by a factor of 0.792.

### Conclusion

Results showed that the objectives of the study had been achieved and the researcher rejected the null hypothesis and stated that there is a relationship between financial literacy practices and the performance of selected agricultural SACCOs in Nyamagabe District. The researcher rejected the null hypothesis that there is no relationship between contingency plan practices and the performance of

selected agricultural SACCOs in Nyamagabe District. Based on the results, the null hypothesis stated that there is no relationship between access to credit practices and the performance of selected agricultural SACCOs in Nyamagabe District was rejected.

### **Recommendations**

SACCO should improve their financial inclusion service by listening to what their members have to suggest. This would help them make better services that fit member's needs.

SACCO members should keep in mind that their cooperative is a business that must turn a profit in order to continue providing the services they offer. So, they have to follow the terms of the agreement and pay back their loans before helping other members with money again.

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