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TABLE OF CONTENTS

Effects of Umurenge Sacco services on financial inclusion in Rwanda

By:

Prof. Dr Jean Bosco HARELIMANA & Berna MUKARUKAKA

The effects of transport policy framework and maintenance cost on logistics management: a case of Bolloré Transport and Logistics Rwanda.

By: Dr Wilson Bashaija

Contribution of Cooperatives to Socio-Economic Development in Rwanda

By: Prof. Dr Jean Bosco HARELIMANA & Berna Mukarukaka

Effect of training and the performance of Micro Financial Institutions in Rwanda.

By: Wilson Bashaija

EDITORIAL

On behalf of the Scientific Editorial Board, I extend my deepest gratitude to the contribution made by lecturers and researchers that has made the compilation of this publication a success. The completion of this volume stemmed from their will, initiative and performance as lecturers and researchers. KIGALI INDEPENDENT UNIVERSITY ULK has always paid regards to promoting education and impacting the complete development of Rwanda through coupling teaching and research. In the same context, the 43rdVolume of ULK Scientific Journal is now out with four papers which tackle issues of national and regional concern. The authors of articles in this issue suggest scores of recommendations worthy of consideration to both policy makers and practitioners.

The first article by **Prof. Dr Jean Bosco HARELIMANA** and **Berna MUKARUKAKA** is entitled "**Effects of Umurenge Sacco Services on Financial Inclusion in Rwanda**" and it aimed at being a brief exploratory study of effects of Umurenge SACCOs on financial inclusion by using descriptive statistics. The findings of this study demonstrated positive effects of U-SACCOs on financial inclusion.

The paper by **Dr. Wilson Bashaija** is entitled "**The effects of Transport Policy Framework and Maintenance Cost on Logistics Management: A case of Bolloré Transport and Logistics Rwanda**". The study sought to determine the effect of Transport Policy Framework and Maintenance Cost on Logistics Management on Bolloré Transport and Logistics Rwanda. The findings indicate that there is a statistically

significant effect on the effects of Transport Policy Framework and Maintenance Cost on Logistics Management on Bolloré Transport and Logistics Rwanda since the p -value is actual 0.000 which is less than 5% level of significance.

The second article by **Prof. Dr Jean Bosco HARELIMANA** and **Berna MUKARUKAKA**, "Contribution of Cooperatives to Socio-economic Development in Rwanda". The purpose of the study was to examine the contribution of cooperatives to social-economic development of Rwanda and with the focus being on five (5) sustainable goals which include ending poverty, empower girls and women and achieve gender equality, provide quality education and lifelong learning, ensure healthy live, ensure food security and good nutrition, ensure stable and peaceful societies. The findings prove that there is a significant contribution of cooperatives towards social-economics development of Rwanda for all SDGs picked-up by this study.

The last paper which is the second by **Dr. Wilson Bashaija** is dubbed, "**Effect of Training and the Performance of Micro Financial Institutions in Rwanda.**" It aimed at determining theeffect of training and the performance of Micro Finance Institutions (MFI) in Rwanda. The results also showed that networking training and performance of MFI had a positive and significant relationship (r=0.043, p=0.052).

Prof. Dr. Sekibibi Ezechiel

Vice Chancellor of ULK

EFFECTS OF UMURENGE SACCO SERVICES ON FINANCIAL INCLUSION IN RWANDA

Prof. Dr Jean Bosco HARELIMANA & Berna MUKARUKAKA

Abstract

This study examines the effects of Umurenge SACCOs on

financial inclusion in Rwanda. This study is meant to be a

brief exploratory study of effects of Umurenge SACCOs on

financial inclusion by using descriptive statistics. Secondary

data which are time series were used with objectives to assess

whether U-SACCO have effects on financial inclusion basing on

three dimensions, which are Quality, accessibility and usage of

SACCO services. This study used descriptive analysis and both

excel and STATA were used to process data. The findings of this

study demonstrated positive effects of U-SACCOs on financial

inclusion. However, government should put more attention on

quality of financial service in SACCOs by automating of all

SACCOs.

Key words: Financial inclusion, Umurenge SACCO, Rwanda.

-8-

1. INTRODUCTION

For past decades financial inclusion has been vital in economic development and main foundation rising up all sectors globally. According to global financial inclusion (2010), the goal of financial inclusion is to ensure that every individual has access to quality, affordable financial services, and as a result every country has increased priority and possibility of access to finances worldwide. Financial inclusion attracted attention of the world and put strategies as well as different government programs to attract individuals to engage in formal financial services and ease access to finance, by setting up different financial institutions and microfinance nearer and mobilizing the population to join them. According to Triki and Faye (2013), financial inclusion in Africa has been lagging behind compared to other continents and Less than one adult out of four in Africa have access to an account at a formal financial institution.

A number of policy maker and investors started promoting financial inclusion both in Africa and globally, establishment of financial institution, Microfinance and Saving and Credit cooperatives (SACCOs) have largely increased across Africa for better financial inclusion. According to Allen & Sam (2009), SACCO's movement has been increasing across Sub-Saharan African and it estimated to be serving 8.81% of population in Sub-Sahara Africa and SACCOs manage to penetrate and reach out in rural areas where some commercial bank doesn't extend. SACCO movement known as Umurenge SACCO in

Rwanda was initiated by government in 2008 and according to MINICOFIN (2009), initiative of Umurenge SACCOs was primarily to address the issues of hindrance of development of financial sector and as well as financial exclusion which was highly alarming and 416 U-SACCOs were established at each administrative sector by mobilizing and collecting savings from community. Both Rwanda cooperative Agency and National Bank of Rwanda were given a mandate of regulating SACCOs. On that, **Table<1>** demonstrates details on RCA regulating SACCOs according to RCA (2019) financial year 2018-2019.

Table<1> SACCOs Inspected and audited in the fiscal year (2018-2019)

Province	U-SACCOs Inspected	U-SACCOs audited	NON U-SACCOs Inspected
West	96	14	6
East	95	12	2
North	89	13	5
South	101	8	4
Kigali	35	6	4
Total	416	53	21

Source:RCA (2019)

According to FinScope (2008) 52% of Rwanda adults population was living without any kind of financial product and as well more 86% of Rwandan adult used no banking product, financial inclusion was challenge in Rwanda for past years and not many financial institutions were established. Most (97%)

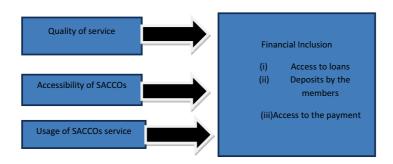
of "banked" adults in Rwanda had a product with Union des BanquesPopulaires du Rwanda (UBPR). The effects of Umurenge SACCOs have attracted attention of different researchers and this study is an added knowledge to previous studies. The main objective of this study is to find out theeffects of U-SACCOs on financial inclusion in Rwanda by analyzing accessibility, usage and quality of U-SACCOs to Rwandan population.

This paper is structured as follow: review of the related literature of SACCOs and financial inclusion, historical Development on U-SACCOs and financial institution in Rwanda. Then, the methodology is presented, results and discussion and finally conclusion and recommendation are also discussed.

2. THEORETICAL FRAMEWORK

The objective of this researchis to assesswhether U- SACCO contributed to financial inclusion in Rwanda and figure<1> demonstrate theoretical framework of impact of U-SACCO to financial inclusion.

Independent variables Dependent variable



2.2 OVERVIEW OF SAVING AND CREDIT COOPERATIVES IN RWANDA

Saving and credit cooperatives in Rwanda were established on philosophy of mobilizing and collecting savings from community in 2010 by the end year, account holders were 471054 members with deposit of 632,2267,782 Frw and loan issued that year were 813,723,942 Frw. This demonstrates U-SACCO to be solid provision of financial service to Rwanda population by reaching out to all people even in remote areas where other financial institution couldn't. According AFI (2014), each U-SACCO is located in 5 KM radius of Rwandan population which eases access to formal financial services.

Umurenge SACCOs are cooperatives purposely for providing financial products to its members and U-SACCO in Rwanda are currently offeringthree (3) main products; savings, loans and deposits and other financial services. The 416 U-SACCOs are licensed by The National Bank of Rwanda; SACCOs are regulated by two main government institutions. The National cooperative policy (2018) clarifies the responsibilities of Rwanda cooperative Agency over SACCOs as to monitor the applicability and respect of Cooperative Principles, Laws and Regulations in SACCOs and the National Bank of Rwanda is responsible forsupervising the life of the SACCOs which includes governance, operations and finance, liquidity, loan portfolio management, compliance aspect to ensure sustainability of SACCOs. Figure <2>demonstrated the road map for establishment of U-SACCO.

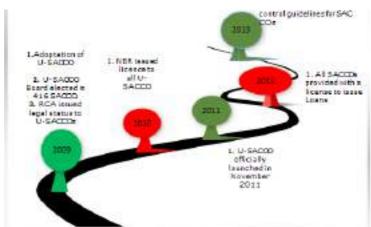


FIGURE2. Road map for main activities for U-SACCO establishment since 2009 at adoption of U-SACCO. IFA (2014)

According to RCA (June 2019), Population in Rwanda estimated to be account holders in SACCO were 3,006,629 members. The figure 3, below demonstrates the increase in the use of financial services since the start-up of U-SACCO.

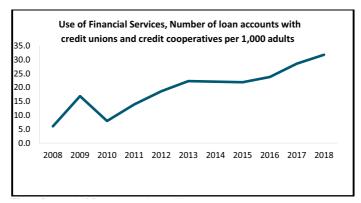


Figure3: Trend of financial use in SACCO since 2008-2019

Unlike other microfinance institutions, U-SACCOs had an increasing trend in financial services which implies both interested of provision of U-SACCOs' product to Rwanda population and effects to financial inclusion

2.3 FINANCIAL INCLUSION AND FINANCIAL INSTITIONS IN RWANDA

According to Sarma (2008), financial inclusion is "a procedure which guarantees that the financial services are easily accessible and used in the formal financial framework by all individuals in an economy and". Effective Financial inclusion system plays vital role in allocating productive resources and efficiently use of finance in daily life and this paper revealed three basic dimension of financial inclusion banking penetration (BP), availability of the banking services (BS) and usage of the banking system (BU).

According to Getachew (2016), parameter used to measure financial inclusion are three; namely, Accessibility of financial services making financial services available, affordable and convenient to users within the nearest possible point of services. Usage of financial services, making customers use financial services frequently and regularly, referred to as creating knowledge, confidence on offered financial services and incentivizes to use and Quality of financial service; making financial services appropriate and tailored to clients' needs. Efficiency of financial institutions supports the economic

development and control the monetary value of the nation. According to NBR annual report (2019) financial system under its mandate of Rwanda central bank supervisor are made of banks, microfinance, savings and credit cooperatives, non-deposit taking lending financial institutions, insurance companies and intermediaries and pension schemes. Banking sector was composed of 11 Commercial Banks, 1 Development Bank, 1 Cooperative Bank and 3 Microfinance Banks. Microfinance sector was composed of 19 Limited Liability MFIs, 438 Savings and Credit Cooperatives (SACCOs) of which 416 are Umurenge SACCOs and 22 other SACCOs end June2019, MFIs had 3,779,860 clients of which 3,006,629 are members of SACCOs and 54 % of adult population are financial including through SACCOs.

2.4. CONTIBUTION OF U- SACCOS IN FINANCIAL INCLUSION

Umurenge SACCOs have attracted attention of different researchers on impact and sustainability of SACCOs in Rwanda. According to Uzziel et al. (2019) recent study with objective of examining the extent to which UMURENGE SACCOs contribute to the achievement of accessibility, affordability and uptake of financial services in Rwanda and used secondary of financial reports data from 2015-2106 and as primary data, logistic regression analysis was used to analyse the contribution of UMURENGE SACCOs financial services to members' socio-economic welfare. The study revealed that U-SACCO

contributed to the achievement of financial inclusion, however urged on lesser members who request loans in U-SACCO compared to the savings.

According to Bigirimana &Hongyi (2018), the purpose of this research was to analyze the role played by commercial banks on financial inclusion in Rwanda and the research analyzed basing on three dimensions of accessibility, penetration and usage of financial services in Rwanda. The study tackled on the impact of SACCO as U-SACCO reach out in villages where commercial banks should not reach, it makes them have a high percentage of account ownership in general. This study is back up with previous studies which point out the distance from U-SACCOs is located in 5KM radius of the Rwandan population. However, the paper revealed challenges of U-SACCO as these are not computerized which hinders more financial inclusion of population due to lesser ATMs.

According to Finscope(2016), Umurenge SACCO is more accessible compared to locations of other financial institution average minutes to U-SACCO vary national wide. The City of Kigali is with least average minutes to adult to SACCO of 28 minutes and 38 second while western Province with more average minutes to U-SACCO of 49 minutes and 50 seconds. This research revealed that 57% of Rwandan adult population trust saving with U-SACCOs. However this research didn't declare the usage of credit from U-SACCO as separate.

3. METHODOLODY

This study examined effects of U-SACCOs on financial inclusion in Rwanda. The study used secondary data collected from RCA report from 2010- 2018. The descriptive data were analyzed with the baseline of three (3) dimensions; namely, financial; usage, accessibility and quality of U-SACCO and five (5) variables were selected and used. According to Getachew (2016), Usage, accessibility and quality to financial service are dimensions to financial inclusion. The table 2 demonstrates observation of 8 and 9 which implies eight years (2011-2018) for loan portfolio which is always declared to the following year of issuing loan and nine years (2010-2018). Summary of statistics demonstrate the adult members registered with mean of 5390040 people since and account holders decreased to mean of 1805683 people 2010-2018.

Table <2> Summary of Variables statistics from 2010-2018

VARIABLES	UNITS	OBS	MEAN	STD.DEV	MIN	MAX
Adult Registered	Number	9	5390040	183615	5049457	5670824
Account holder	Number	9	1805683	806010.7	471054	2826411
Deposits	FRW Million	9	42526.56	20404.41	6322	65001
Outstanding loans	FRW Million	9	24023.33	16136.44	813	47551
Portfolio at risk	FRW Million	8	2808.5	2031.119	352	5444

Source: RCA(2019)

4. RESULTS AND DISCUSSION

4.1 ACCESSIBILITY OF UMURENGE SACCO FROM 2010-2018

Increasing the accessibility of financial services is good for business and economic growth. When customers with low income are able to manage their money, economic vulnerability declines and overall economic health improves. The figure below demonstrates the progress made with Umurenge SACCO in Rwanda.

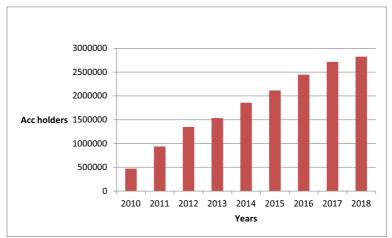


Figure 4. Trend of account holder in U-SACCO since 2010-2018, source; authors' computation

The findings demonstrate trend of account holders in U-SACCO since 2010-2018. Findings revealed that the Rwandan population kept on increasing in accessing financial services through U-SACCO. There is an increase in account holders since start-

up of Umurenge SACCO. This signifies easy access to financial service through Umurenge SACCO. These findings corroborate with the recent study by Bigirimana &Hongyi (2018), which noted that U-SACCO reach out more to the Rwandan population more especially in remote areas.

1.2 USAGE AND QUALITY OF FINANCIAL SERVICE FROM UMURENGE SACCO.

Financial services are limited to the activity of financial services firms and their professionals, while financial products are the actual goods, accounts, or investments they provide. Financial service organizations are constantly striving to improve intricate business processes such as: Managing lending transactions, Attracting/retaining customers, Information and financial risk-management. The figure below indicates the progress made in terms of usage and quality of financial services.

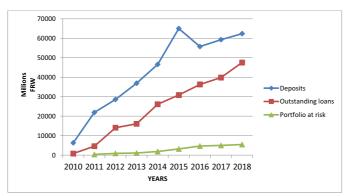


Figure 5. Trend of deposit, outstanding loans and portfolio at risk

The figure 5 exhibits deposits of members of U-SACCOs (2010-2018), outstanding loans issued to members of U-SACCO (2010-2018) and portfolio at risk (2011-2018). The graphs thereindemonstrate the average increasing of trend of deposits butthere was a decrease for one year 2015-2016 and then increase, trend outstand loans in U-SACCO since 2010-2018 is increasing. The trends for both deposit and outstanding loans imply positive usage of financial service and as well population is happy for quality of financial service. However, the trend portfolio at risk is increasing which implicate the number of loans which are being paid back is increase.

5. CONCLUSION AND RECOMMENDATION

The purpose of this study was to assess effects of the U-SACCO to financial inclusion in Rwanda. Findingsrevealed that Umurenge SACCOs have positive effects on financial inclusion in Rwanda. The access to financial service has increased since 2010, trend of account holders increased which implies population will keep on increasing in usage of formal financial services and deposits and outstanding loan which implies positive impact of U-SACCO. Umurenge SACCOs have enlarged the accessibity, usage and quality financial service. However, researcher cannot tell effect of unpaid loans (portfolio at risk) which keep on increasing in U-SACCO. Findings to this study suggest the following recommendations:

- The National Bank of Rwanda and the Government of Rwanda to assess the increment of portfolio at risk in SACCO.
- 2. The Government of Rwanda to put more efforts in automation as it may increase accessibility and usage as well quality to financial service.

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THE EFFECTS OF TRANSPORT POLICY FRAMEWORK AND MAINTENANCE COST ON LOGISTICS MANAGEMENT: A CASE OF BOLLORÉ T RANSPORT AND LOGISTICS RWANDA.

By: Dr Wilson Bashaija

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Abstract

The study sought to determine the effect of Transport Policy Framework and Maintenance Cost on Logistics Management on Bolloré Transport and Logistics Rwanda. Furthermore, the study used inventory theory. Moreover, Research Design, Population, Sampling Frame and Size, and Data Processing and analysis were used during the study. The targeted population was 200 while the sample size was 140 respondents. The study was essentially an explanatory research which integrated qualitative data. Data was collected from primary and secondary sources using both field methods and document analysis respectively. The study employed Analysis of variance (ANOVA) model for analyzing the data. The findings indicate that there is a statistically significant effect on the effects of Transport Policy Framework and Maintenance Cost on Logistics Management on Bolloré Transport and Logistics Rwanda since the p -value is actual 0.000 which is less than 5% level of significance. Therefore, implementation of transport policy and maintenance cost enhances operational effectiveness.

Keywords: The effects of Transport, logistics and Maintenance Cost, Logistics Management

1. General Introduction

Logistics is of vital importance for operation and without it, operations could not be carried out and sustained. Logistics can be seen as the bridge by which is necessary to ensure that operations are successful. As a result, Transport Policy Framework and Maintenance cost should be enhanced to achieve effectiveness of the Logistics management operations". The Bolloré made a lot of efforts to enhance Transport Policy Framework and Maintenance cost by improving efficiency in both supply chain and use of reactive maintenance cost and this has high labour turnover. The previous studies had tended to focus more on the developed world evidence, shows that each country did influence to link between Transport Policy Framework and Maintenance cost and Logistics Management. As a result, the desire is to focus on **Bolloré** core competency; the difficulty in maintaining and information technology that is up to date; the desire to improve system capabilities along the global supply chain; and the desire to build flexibility within available resources. The end results therefore, is to proffer strategies to strengthen Transport Policy Framework and Maintenance cost for Operational Effectiveness in the Bolloré.

Specific objective

To determine the effects of Transport Policy and Maintenance Cost on Logistics Management of **Bolloré**. Research Hypothesis H01: There are no effects of Transport Policy and Maintenance Cost on Logistics Management of **Bolloré**.

1.2. Statement of the Problem

Advanced economies remain the global leaders in the trade of logistics, across the board, most countries have pursued logistics-related reforms and investments to build infrastructure, facilitate transportation. Despite this progress, high-income countries score, on average, 48 percent higher than low-income countries when it comes to logistics performance {1}. The logistics support requirements for the future operations will be fundamentally different from the logistics support requirements of the current operation. Increased use of technology for systems diagnostics will ensure that maintenance activities are given clear direction and priority {2}, thus a positive impact on logistics Management.

Rwandan Vision 2030 emphasizes the need for an appropriate strategy for the efficient of proper Transport Policy and Maintenance Cost and sustainable practices as a way of improving Logistics Management and ensure that the country is globally competitive and a prosperous nation {3}. **Bolloré**, maintains high logistics budget—this transport and logistics cost remains high, considering that Rwanda is a land rocked, this is due to the fact that air and land transport makes cost very high. Most manufacturing firms in Rwanda operate at a technical efficiency of about 40 percent and thus negative

effect on Logistics Management. Whilst previous studies have, however, not examined how maintenance, logistics and reverse logistics affect the Operation resilience for transport and logistics companies.

2. Inventory Theory

Inventories occupy the most strategic position in the structure of working capital of most business enterprises {4}. It constitutes the largest component of current assets in business enterprises. Inventory means aggregate of those items which are held for sale in ordinary course of business. Therefore, it is absolutely imperative to manage inventories efficiently and effectively in order to avoid unnecessary investment in them. An undertaking of neglecting the management of inventories will be jeopardizing the firm's long run profitability {5} Inventory models are used in predicting the demands on inventories and are classified as either deterministic or stochastic.

Deterministic models are models where the demand for a time period is known, whereas in stochastic models the demand is a random variable having a known probability distribution. These models can also be classified by the way the inventory is reviewed, either continuously or periodic. In a continuous model, an order is placed as soon as the stock level falls below the prescribed reorder point. In a periodic review, the inventory level is checked at discrete intervals and ordering decisions are made only at these times even if inventory dips below the reorder

point between review times {6} Inventory models answer the questions: When should an order be placed for a product? How large should each order be? The answer to these questions is collectively called an inventory policy. Companies save money by formulating mathematical models describing the inventory system and then 10 proceeding to derive an optimal inventory policy. Keeping an inventory (stock of goods) for future sale or use is common in business. Inventories occupy the most strategic position in the structure of working capital of most business enterprises {7}.

It constitutes the largest component of current assets in business enterprises. Inventory means aggregate of those items which are held for sale in ordinary course of business and places several demands on the firm in terms of time. In order to meet demand on time, companies must keep on hand a stock of goods that is awaiting sale. The demand for a product in inventory is the number of units that will need to be withdrawn from inventory for some use (e.g., sales) during a specific period. If the demand in future periods can be forecast with considerable precision, it is reasonable to use an inventory policy that assumes that all forecasts will always be completely accurate {8}This is the case of known demand where a deterministic inventory model would be used. However, when demand cannot be predicted very well like in the case of goods reversal, it becomes necessary to use a stochastic inventory model where the demand in any period is a random variable rather than a known constant {9} Reverse

supply chain means that the company now has to deal with more inventories that anticipated some of which can be reused, recycled or destroyed altogether. In this study, the inventory theory will provide insight into furniture importing organizations readiness for reverse inventories and their effect on the firm's procurement performance.

3. Methodology

3.1 Research Design and Philosophy

This study adopted descriptive cross sectional design. Research design is described as the arrangement of condition from collection and analysis of detain a manner that aims to combine relevance to the research purpose with economy in procedure {10}. Research design is the blueprint for the collection, measurement and analysis of data. It is a plan and structure of investment conceived so as to obtain answers to research questions {11}. This study adopted a descriptive cross sectional design to answer the research questions. Descriptive survey is a method of collecting data by interviewing or administering a questionnaire to a sample of individuals which can be used when collecting information about peoples' attitudes, opinions, habits or any other social issues.

Descriptive research is descriptions of the state of affairs as it exists {12} assert that descriptive study is undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation. Descriptive study has several

advantages such as; helps in understanding the characteristics of a group in a given situation, assists in systematic thinking about aspects in a given situation. It also offers idea for further probe and research and helps in making certain simple decisions. Research is to describe characteristics of objects, people, groups, organizations, or environments {13}

In other words, descriptive research tries to "paint a picture" of a given situation by addressing who, what, when, where, and how questions. Descriptive research design is appropriate for this study as it helped in understanding the relationship between Transport Policy and Maintenance Cost and Logistics Management of **Bolloré** and therefore answers the "what" question of the study. The researcher was use of longitudinal survey design since the nature of research relied on primary data.

3.2. Target population

The study targeted a population of 200 from **Bolloré** on departments directly related to Logistics. A population refers to an entire group of individuals, events or objects having a common observable characteristic. In other words, population is the aggregate of all that conforms to a given specification. a population as the entire group of people, events or things of interest that the researcher wishes to investigate {14}. The target population of this study was for departments directly related to logistics departments, the study targeted the Logistics department, Operations, Finance, Marketing and Human resource who had

professional information on logistics department.

Table 3.1: Targeted Population

Department	No of staff sampled	Total population
Logistics department	20	40
Operations	30	45
Finance	35	47
Marketing	30	43
Human resource	25	25
Total	140	200

Source: Research field survey, December 2021

3.3. Sampling Size

Random sampling was adopted within each stratum to select the number of respondents for the questionnaires. To calculate the proposed sample size of respondents, the web-based Raosoft sample size calculator was used. The calculated sample size of 140 was obtained, from a population of 200 staff.

4. Data Processing and Analysis

The study utilized correlation and multiple regression analysis to determine relationship between Transport Policy Framework and Maintenance Cost and Logistics Management in Bolloré logistics — Rwanda.Multivariate analysis which is the distributional properties of a variable was carried out first for each variable to describe that variable and as a preparation

for multivariate analysis. The study used F-Statistics to test dependence of Transport Policy Framework and Maintenance Cost.

4.1. Analysis of Variance Analysis of variance (ANOVA)

Analysis of Variance Analysis of variance (ANOVA) is a collection of statistical models and their associated procedures (such as "variation" among and between groups) used to analyze the differences among group means.

Table 4.1: ANOVAa

Model Sum of	Df	Mean square	F	Sig
Squares				
Regression	47.219	1 47.219	107.815	.000b
1Regression	90.659	207	.438	
Total	137.878 2	208		

a. Dependent Variable: Transport Policy Framework and Maintenance Cost

b. Predictors: (Constant), Logistics Management

a). Transport Policy Framework and Maintenance Cost Regression Coefficients

Coefficients Table 4.1 shows that all the internal factors contribute positively to Logistics Management. Moreover, all their contributions are statistically significant as none has a

p-value greater than .05.

a) Transport Policy Framework and Maintenance Cost: To establish the effects of Transport Policy Framework and Maintenance cost support for enhanced Logistics Management at Bolloré.

Table 4.2.Respondent's views on Transport Policy Framework and Maintenance cost

Transport	coefficient	Std Error	t	P> t
Transport	0.008	0.053	6.035	<0.05
management				
Constant	0.318	0.056	0.154	0.878

F(1, 206) = 36.427, P < 0.05, R2 = 0.150, R2 - Adjusted = 0.146

Source: Research field survey, December 2021

The value of variance R2 = 0.150, shows that 15% of the logistics management is explained by transport policy. The values of F (1, 206) = 36.427, P < 0.05, shows that transport policy statistically and significant predicts the logistics management (i.e., the regression model is a good fit of the data) and that transport policy significantly influence the logistics management in Rwanda. The value of transport policy is statistically significant (t=6.035, p< .05). The regression model explaining the results in Table 4.2 is given by: The model shows that transport policy positively affects the logistics management,

i.e. an increase in mean index of transport policy increases the logistics management of the company by a positive unit mean index value of 0.318. The study sought to establish the effect of transport policy as a function of logistics management on the performance of the Bolloré Transport and Logistics Rwanda. Numerous studies have posited that well managed transport policy lead to improvement of the performance of logistics. The multiple regression analysis results indicate that transport policy has a positive statistically significant predicts the logistics management; p < 0.05 99 (P=0.045) i.e. an increase in mean index of transport policy increases the logistics management of the company by a positive unit mean index value of 31.8 percent. Hence transportpolicy significantly influences the performance of the logistics management in Bolloré Transport.

Therefore, the null hypothesis "transport policy does not significantly influence firm performance" was rejected. This finding agrees with an empirical research done {17} that the transport policy is the key element in a logistics management, which joins the separated activities and it influences the performance of firms hugely. The findings also conforms to the study done in developed countries {18}, which defines transport policy as an important natural piece of logistics and therefore a vital factor in influencing firm performance. It supports the findings of {19} that transport policy was the most important economic activity among the components of business logistics system and do influence firm performance.

5. Recommendation

5.1. Transport Policy Framework and Maintenance cost on Operational Effectiveness

The study recommended that;

- a. Improve transportation through robust maintenance of existing resources as well as the boosting of new tools to augment the current systems on inventory and personnel mobility.
- b. Adopt warehouse automation to address inventory oversight inefficiencies within the warehouse management infrastructure system.
- c. Improve the driving force for automation and the use of modern technology in Logistics management to facilitate logistics operations.

6.Conclusion

This research work examined Transport Policy Frame work and Maintenance cost and its effect on Logistics Management in **Bolloré** logistic Rwanda from 2020 to 2021. The study set out to establish the relationship between Transport Policy Frame work and Maintenance cost and Logistics Management, identify the challenges against Logistics Management in Bollorélogistic Rwanda and articulate strategies to mitigate the challenges to enhance Transport Policy Frame work and Maintenance cost and promote Logistics Management. The study is anchored on the theoretical framework of systems theory which identifies components of systems all working together to improve on the output of Transport Policy Frame Work and Maintenance Cost for the attainment of Logistics Management. **Bolloré** operations involvement in Africa was a critical to success on the beverage transport and logistics industry. To remain a vital contributor to success, logistics must adapt continuously so that it bridges old systems and capabilities while embracing new technologies and concepts. Bolloré has a strategy to keep on improving transportation means as one way of enhancing the Logistics Management.

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CONTRIBUTION OF COOPERATIVES TO SOCIO-ECONOMIC DEVELOPMENT IN RWANDA

By Prof. Dr Jean Bosco Harelimana & Berna Mukarukaka

Abstract

Rwanda has put strategies in place for social-economic transformation of Rwandans basing on Sustainable Development Goals (SDGs). This paper is purposely to examine the contribution of cooperatives to social-economic development of Rwanda and to achieve that objective, contributions were revealed basing on five (5) sustainable goals which include ending poverty, empower girls and women and achieve gender equality, provide quality education and lifelong learning, ensure healthy live, ensure food security and good nutrition, ensure stable and peaceful societies. The study used descriptive analysis from different Rwanda Cooperative Agency (RCA) reports and literature review of different published papers. The findings prove that there is a significant contribution of cooperatives towards social-economics development of Rwanda for all SDGs picked-up by this study. Howeverfindings also reveals existence of some limitations to growth of some cooperatives and this study recommends further research on the role on cooperatives in Rwanda using econometric model, since this paper used descriptive analysis.

Key words: Cooperatives, Socio economic development, Sustainable Development Goals.

INTRODUCTION

Over 200 years cooperatives¹ movement is increasing the importance to the economies and societies to the world and as well United Nations acknowledged cooperatives as effective strategy to improve their lives while contributing to the economic, social, cultural and political advancement of their community and nation(Morris Altman, 2009). According to Carrell, (2007), Grigore, & Alina Aurelia (2013), earliest cooperative movement started on 14th march 1716 in Scotland with 15 men signed to be "honest and Faithfull to one another...and to make good & sufficient work and exact neither higher nor lower prices than are accustomed", as time passes cooperatives are spread in the whole world which is consider as backbone for social-economic development and according to ICA(2019), 12% of world population are cooperative members and it reports on analysis of contribution of 300 largest cooperatives and mutual organization to UN Sustainable Development Goals and finding revealed that by 2019 300 top cooperatives generated 2034.98 billion USD turnover and as well currently cooperatives employs 280 million people across the global which estimated to 10% of people employed in cooperatives and this demonstrates the vital role of cooperatives in contribution to social-economic developments of nations.

¹ A cooperative is an autonomous association of persons united voluntarily to meet their common, social, and cultural needs and aspirations through a joint-owned and democratically-controlled enterprise, according to internationally recognized cooperatives values and principles

Cooperatives in Africa have been recognized as tool for poverty reduction and trend of cooperatives registration in Africa is upward (Develtere&Pollet, 2008). Ignace pollet, (2009), suggests that over seven per cent of the African population affiliated to primary cooperatives have been confirmed and most countries have hundreds of new cooperatives registered every year. Cooperatives approach in Africa was revealed as contributing much in achieving Millennium Development Goals and the promotion of decent work in Africa by promoting selfhelp initiatives, mutual assistance in communities. According to Ortmann& King (2007), Mhembweand Dube, (2017), Cooperatives play a significant role in improving the livelihoods of communities in the world, of which are agents of sustainable development of most developing countries and according to previous studies, Schwettmann(2004), Mhembwe& Dube, (2017), revealed that 40% of household in Africa are members of cooperatives. Cooperatives' members are beneficial from each other socially and economically as well as country's economy boost through business oriented cooperatives.

It is believed that cooperatives managed to pull together all the people with small resources who manage to come with needed business for economic development and better standards of living. This has led to the creation of employment for members and non-member and agriculture is the largest sector in terms of cooperatives creation in most of African countries. According to ILO (2015), in Ethiopia, 900,000 people in the agricultural sector

are estimated to generate most of their income through their cooperatives. This paper is purposely focusing on cooperative movement in Rwanda and more specifically on contribution of cooperatives to socio-economic development.

Cooperative movement in Rwanda started in 1949, since then cooperatives remained controlled under political interest until the policy of promotion for cooperatives amended by 1988 and in 2018 the policy was revised again and entitled as National policy cooperative in Rwanda (MINICOM, 2018). Most of Rwandans are doing businesses through cooperatives; currently the number of cooperatives registered is estimated to be 10,025 and members estimated to be 4,872,729. People with share capital estimated as 49,797,022,184 Frw and cooperatives are categorized basing on ten main economic sectors in additional to saving and credit cooperatives (SACCOs) (RCA report, 2019).

Rwandan Cooperatives are private entities with legal personality which are regulated by government institutions. Rwanda cooperative Agency (RCA) has mandate of developing cooperatives sector with back up of other government institution as enshrined in the National policy on cooperatives in Rwanda (2018). Rwandan cooperatives are structured into primary cooperatives, union, federation and confederation at national level.

Rwanda's cooperative sector has grown rapidly over the last ten years. This has been achieved through the support of Government of Rwanda, which has always given emphasis to the development and promotion of cooperatives to facilitate their activities and enhanced the structure of the cooperative movement in Rwanda. The government established Rwanda cooperative Agency to accelerate cooperative development in Rwanda. Precisely, RCA has three main mandates namely: promotion, registration and regulation of cooperatives. Since 2005, the Government of Rwanda has heavily invested in the Cooperative sector and 43.5 % of populations are engaged in cooperatives. Cooperatives are regarded as good mechanisms for pooling together people's meager resources with a view to helping them have enough capital for easy business operations and transactions. It is important to note that cooperatives are central to the approach of poverty alleviation and are therefore regarded as the basic pillar for economic empowerment. However, some cooperatives are still encountering challenges both external and internal challenges which are caused by poor financial management of some cooperatives.

1.1 Structure of cooperatives movement in Rwanda

The cooperative organizations are currently under hierarchical structure from ²primary cooperatives, ³unions cooperatives, federations cooperatives⁴ and confederation cooperatives. ⁵In addition cooperatives are formed complying with both national cooperative policy and cooperative law. According to ICA (1995), cooperatives are built on seven principles of which all Rwandan cooperatives comply with and these are: Voluntary and Open Membership, Democratic Member Control, Member Economic Participation, Autonomy and Independence, Education, Training and Information Cooperation among Cooperatives and Concern for Community. These have been also adopted under Rwandan cooperative law.

² **Primary cooperatives:** This is a primary basic type of a cooperative where members voluntarily decide to gather their thoughts, strengths and assets with the common purpose of maximizing profit through providing same activity

³ Unions: Three (3) or more primary cooperatives are joined together to form a cooperative Union. Primary Cooperative Organizations are members of a cooperative union and primary cooperatives benefit secondary activities from union

⁴ Federation: Three or more cooperative unions which are joined together to form a cooperative Federation at national level. Such a cooperative federation shall be referred to as a tertiary cooperative organization.

⁵ **Confederation:** Three or more cooperative federations joined together to form a cooperative confederation at the national level. Cooperative confederation shall be referred to as the APEX cooperative

Figure<1>Represents trend of primary cooperatives since 2010. It is increasing trend. It can be observed that in 2010, only 2588 cooperatives were registered and by December 2019, active cooperatives increased to 9427, which demonstrates how cooperatives are vital in Rwandan economy.

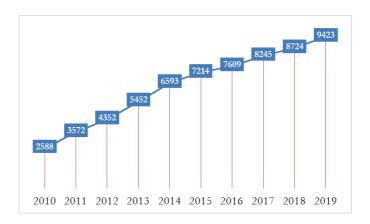


Figure 1.Cooperative distribution since 2010-2019

Among the primary cooperative, majority of cooperatives are from agricultural sector which counts 27.1% (see figure 2 below) and least percentage are fishery cooperative with 0.9%. Union cooperatives counts 1.5%, federations cooperative 0.1% and saving and credit cooperatives (SACCOs) represents 4.4% of cooperative registered in Rwanda.

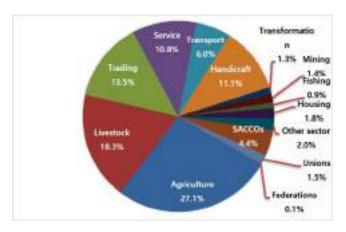


Figure 2. Secondary data, RCA, 2019

1. CONTRIBUTION OF COOPERATIVES TO SDGs

This paper focused on both social and economic benefits of cooperative gained by members of cooperatives, entire community and benefit to Rwandan government as well. According to ILO (2015), cooperative are highly relevant and important in contributing to achievement of twelve Sustainable Development Goals (SDGs). This section, briefly, demonstrates contribution of Rwandan cooperatives to SDGs goal but this paper focused on five goals which include:

- i. End poverty
- ii. Empower girls and women and achieve gender equality
- iii. Provide quality education and lifelong learning
- iv. Ensure food security and good nutrition.
- v. Ensure stable and peaceful societies

2.1. Poverty reduction

Cooperatives played big role in poverty reduction and it has been good approach to end poverty of all forms and everywhere. Rwanda was marked as fast growing economy country on continent with strong enforcement of strategies of poverty alleviation, and where cooperatives helped to bring people with shared capital and start-up business of which every member has equally gain from. Table 2 demonstrates the increase of both participants and share capital since 2010-2019, from 238,353 members with share capital of 5,178,550,576 Frw in 2010 to 1,839,956 members with 31,881,597,219 Frw in 2019. This reveals the cooperatives contribute to poverty reduction as there is increment of investments made in cooperative which implies that members are gaining from this investment which helps them to upgrade to better standard of life. It is clear that cooperatives contributed to financial security through job creation and access to finance through loan to both members and to the community in general. Most cooperatives are solution to unemployment rate. Umurenge SACCOs are sources of permanent job creation as well as sources for start-up of owned businesses through access to finance (credit).

All 437 SACCOs in the country have employed managers, accountants, cashiers, loans officers, loan recoveries, fichiers, security guards and other employees basing on each need of SACCOs, and 416 U-SACCO have employed many fulltime employees. Currently each U-SACCO is estimated to have 8

fulltime employees and it is estimated that 3328 persons are employed across the country. This implies that cooperative contributed a lot to job creation and to financial security as well as well-being of Rwandans.

Table <2>Cooperatives status (2010-2019) in Rwanda

Year	No. of	Membership			Share capital
rear	Coops.	Male	Female	Total	(Frw)
2010	2,588	-	-	238,353	5,178,550,576
2011	3,572	-	-	314,389	7,955,941,854
2012	4,352	205,970	172,963	378,933	10,366,647,014
2013	5,452	239,226	167,108	406,334	14,590,563,660
2014	6,593	312,849	217,405	530,254	20,395,158,375
2015	7,214	256,647	200,562	457,209	23,315,988,600
2016	7,609	310,528	216,631	527,159	27,181,872,888
2017	8,245	329,232	228,543	557,775	28,850,436,779
2018	8,724	341,405	238,054	579,459	30,621,460,663
2019	9,423	961,398	878,558	1,839,956	31,881,597,219

Source: Cooperative status since 2010-2019 in Rwanda(2019)

Table<3> demonstrates gross loan issued assets of SACCOs, deposits and profit made by September 2019 in each province. This implies members of SACCOs either invested loan or loan issued helped resolve issues for better standards of living. As Quach (2005) notes there is a positive significant between credit borrowing and household welfare though credit borrowing. This is not only a tool for poverty reduction, but also requires a plan of investing credit for profit making.

Table<3> Financial status of SACCOs

Province	SACCO Category	Gross Loans/ Frw	Assets/Frw	Deposits/Frw	Profit/Frw
KIGALI CITY	U- SACCO	5,599,745,879	17,044,874,975	10,590,803,246	601,524,810
	Other SACCO	64,484,872,072	82,057,682,755	33,329,996,278	3,690,247,388
EASTERN	U-SACCO	11,370,707,971	34,702,852,111	19,550,062,908	1,370,564,209
	Other SACCO	386,498,674	579,467,936	455,907,515	12,966,943
WESTERN	U- SACCO	11,625,667,769	27,596,408,329	13,290,225,826	751,025,896
	Other SACCO	1,078,722,706	1,927,754,583	1,124,259,108	114,858,189
SOUTHERN	U-SACCO	10,094,345,775	31,640,829,951	15,447,333,951	766,725,978
	Other SACCO	1,316,643,325	2,370,678,495	1,304,021,867	82,689,976
NORTHERN	U-SACCO	10,099,426,483	25,635,193,769	12,853,017,836	910,084,870
	Other SACCO	1,259,859,176	2,296,267,024	1,536,418,395	119,460,083
TOTAL		117,316,489,830	225,852,009,928	109,482,046,930	8,420,148,342

Source: RCA, (2019).

Figure<3> shows the trend of saving in Umurenge SACCOs in Rwanda since 2010-2019. It demonstrates dramatic increasing of saving of members. This means that Rwandans are included in the financial system with more savings of which SACCOs

contributed a lot. According to FinScope in 2008 only 48% of populations were financially included and in 2016 report revealed that 89% of adult Rwandans are financially included and a large portion of the increase can be assigned to the Umurenge SACCO program. This implies that viability of savings through cooperatives contributed to poverty reduction in Rwanda.

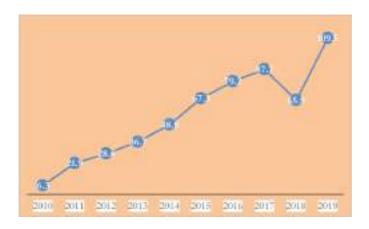


Figure 3. Trend of savings in SACCOs in billion (Frw), (2019)

2.2 Empower women and gender equality through Cooperatives

Rwanda has been role model in empowering women. In additionwomen have been empowered through cooperatives. Table<4> demonstrates that by February, 2020 female registered were 2,327,172 which are estimated to 44.7%. In Rwanda, cooperative movements have empowered women to work together. There are many women cooperatives and through Rwanda cooperative Agency and other stakeholders,

women have been empowered by educating them to be fearless to business and managing cooperative with intent of profit making. According cooperatives law, election of cooperative must consider gender equality. Through empowering women, Rwanda cooperative Agency, together with other stakeholder, trained 30 women cooperatives in Kigali city and 58 cross border women cooperatives on financial management, marketing and negotiation (RCA, March 2020).

According to RCA (2019), out of 552 assessed cooperatives membership(figure<4>) showed an increase of 36% of membership in cooperatives since 2005. The figure indicates that 52% of increase was female and 25% of that increase is male. This proves how Rwanda cooperatives contribute much in empowering women with respect to gender.

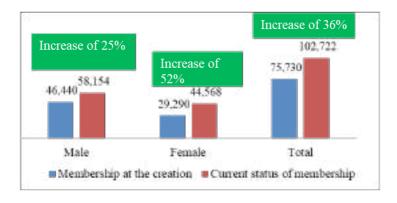


Figure 4. Membership status of assessed cooperatives.

1.3 Food security in Cooperatives

Agricultural cooperatives contribute to food security by providing either law material or inputs like fertilizer and pest side to farmers. This has help much in increasing productivity as well as paving way to market channels for supplying of produce and helped members to easily access finances. Previous study (MATHAI et al, 2011) revealed that cooperatives contributed much to food security in Rwanda by comparing the output of members and non-member, there is facilitation to members of COIRWA cooperative to access to inputs which led to significant increase in output compare to non-members.

2.4 Provide quality education and lifelong learning in Cooperatives

Through cooperatives government empowered members to acquire knowledge with respect to what is needed. According to MINCOFIN (2018), literacy rate is estimated to be 72% of Rwanda population adult, Rwanda cooperative in collaboration with other stakeholders educate, coach and follow-up the implementation of knowledge acquired members of cooperatives. In collaboration with PASP⁶ 201 members from 34 cooperatives were coached on Governance and leadership of a cooperative organization, Cooperative law, Cooperative policy, Financial management, Internal control and Marketing (RCA, March 2020). This demonstrates how cooperative sector contributes to

⁶ PASP is short term of Post-harvest and Agribusiness Support (project under ministry of Agriculture)

ease the way of providing quality education and lifelong learning to Rwandan.

2.5 Ensure stable and peaceful country in Cooperatives

Rwandan cooperatives have been also vital platform for moral aspects and with guideline to resolve issues through either general meetings or other special meetings in line with cooperative law. According to Claudia (2019) cooperatives in Rwanda were among the vehicle for peace building after 1994 genocide against Tutsi. In addition, cooperatives restored interpersonal relationship among its members in post conflicts (Setamamu, 2009). Furthermore, cooperatives built a path towards agency, engage in advocacy, build and reconstruct social capital since people come together with one goal. As cooperatives are categorized basing economic activities are also great channel through which people are easily connected to government programs of moral empowering people in their respective specialization.

Table<4> Cooperatives economics activity

	No. of	Membership		Shawa Camital	
	coops.	Male	Female	Total	Share Capital
Agriculture	2,712	462,530	392,358	854,888	5,311,572,128
Livestock	1,833	95,793	94,139	189,932	4,328,287,503
Trading	1,354	141,539	136,302	277,841	9,170,577,008
Service	1,085	133,565	121,659	255,224	2,451,552,380
Transport	597	24,073	3,043	27,116	1,923,115,800
Handicraft	1,111	60,966	63,865	124,831	2,018,592,080
Transforma-					
tion	126	13,441	11,466	24,907	770,481,100
Mining	137	48,517	46,804	95,321	664,086,100
Fishing	93	9,758	11,624	21,382	162,422,000
Housing	177	27,022	18,546	45,568	5,271,556,338
Other sector	198	51,361	49,312	100,673	498,431,800
SubTotal	9,423	1,068,565	949,118	2,017,683	32,570,674,237
SACCOs	437	1,815,549	1,378,054	3,193,603	16,953,611,272
Unions	150	-	-	-	211,716,675
Federations	15	-	-	-	61,020,000
Grand Total	10,025	2,884,114	2,327,172	5,211,286	49,797,022,184

Source: RCA, February (2020)

Table <4>displays the distribution of cooperatives by categories, basing on economics activity nationwide. Rwandan cooperatives are distributed into 11 economic sectors in additional to saving and credit cooperative (SACCOs). In Rwanda majority

of cooperatives are under agricultural, livestock, artisanal cooperatives, savings and credit (437 Co-operatives), trading cooperatives, service cooperatives, transformation cooperatives, mining cooperatives, housing cooperatives and fishery cooperatives. With reference to figures in Table 4, cooperatives are great linksthat connect many Rwandans which currently are **5,211,286** million active people. These people with different ideas through cooperatives were able and felt free to resolve conflicts and reconcile quickly among them in cooperatives.

2. CHALLENGES TO COOPERATIVES MOVEMENTS

Some cooperatives face challenges in either start-up or during the growth and some general challenges are due to mismanagement due some greedy members or misallocation of resources due to lack of knowledge. Assessment done by RCA (2019) on CIP cooperative, **table<5>** demonstrates that out of 552 sampled cooperatives, 141 are ghost cooperatives. This implies that members of those ghost cooperatives lost their investments

Table<5> Existence of CIP cooperatives in Rwanda

Status of sampled coops	Number of coops	Percent
Active cooperatives	411	74.5
Ghost cooperatives	141	25.5
Total	552	100

Source: RCA (2019)

3. CONCLUSION

Cooperatives play big role in contribution to social-economic development. Findings of this paper revealed that cooperatives have contributed to poverty reduction, and more specifically to job creation and financially security. Both individual members of cooperatives and country at large benefited from cooperative movement in tangible way. As Rwanda cooperatives are categorized in economic activity in the way to boost the economy of the country and contributed to all sectors of the economy.Cooperatives are strong backbone for socio-economic development as well as to SDGs as clear shown in the findings. Throughout the country SACCOs contributed to job creation of 3328 full time jobs. In addition cooperatives contributed to peace and reconciliation in Rwanda among the members leading to stable communities. However, this paper revealed some limitations to sustainable cooperatives which lead to ghost cooperatives; hence this paper recommended the following.

- 1. Government should tract and investigate the cause of ghost cooperatives
 - 2. Rwanda cooperative Agency should put strong requirements for legal personality and track if that organization has really fulfilled the requirements guiding cooperatives.
 - 3. Rwanda cooperative Agency should ensure quick training, coaching and promotion of cooperatives immediately

- after issuing legal personality to new cooperatives as one of the measures to prevent mismanagement.
- 4. Government should enforce ICT usage and automation in cooperatives to ease financial reporting and establish archives.
- 5. Government of Rwanda should keep on empowering women to engage in cooperatives since study demonstrates female is 44.7% and yet cooperative are revealed as poverty reduction.
- 6. This study recommends further study on role cooperatives in Rwanda with baseline of all seventeen SDGs.

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EFFECT OF TRAINING AND THE PERFORMANCE OF MICRO FINANCIAL INSTITUTIONS IN RWANDA.

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Abstract

The study sought to determine effect of training and the performance of Micro Finance Institutions (MFI) in Rwanda. The study used Technical Training Theory, the study adopted descriptive research design and stratified random sampling technique which aimed at selecting the subjects for the study in such a way that their attributes represented the larger group from which they were drawn. The targeted population was 76 while the sample size was 45 respondents. Data was collected from primary and secondary sources using both field methods and document analysis respectively. Statistical tool was adopted for data analysis. The findings indicated that there is a descriptive analysis of the collected data, interpretation and discussion of the findings. The findings indicated that majority of the respondents agreed with a well-trained workforce as critical in the growth of MFI in Rwanda. The study showed the extent to which training had helped respondents in controlling their business. The results also agree that networking relationship with different types of supporting institutions and business associations significantly improves the business performance of MFI in Rwanda. The results revealed that technical training and performance of MFIs in Rwanda had a positive and significant relationship (r=0.072, p=0.000). The results also revealed that financial training and performance of MFI had a positive and significant relationship (r=0.551, p=0.043). The results also showed that networking training and performance of MFI had a positive and significant

relationship (r=0.043, p=0.052). The study recommended that managerial business trainings are organized for MFI. This will enable them to acquire managerial skills regarding business planning, organizing, directing and quality control of assets and human resources. It is recommended that there is need for all stakeholders including government and other participants. It is further recommended that MFI strengthen their networking ability with well-established corporations.

Keywords: Training, Performance, Micro Finance Institutions, Rwanda

1. Introduction

This study focused on training and the performance of Micro Finance Institutions (MFI) in Rwanda. One important factor that reduced the exposure of Japanese financial institutions to the risks realized in the global financial crisis was 2 Japan's (micro) prudential regulation regime that had been significantly improved following Japan's own financial crisis in the 1990s[1]. Financial and nonfinancial measures of performance includes but not limited to: profitability, total assets, return on investment, sales volume, employment size, capital employed, market share, customer satisfaction, productivity, turnover, delivery time, employees turnover among others. The global perspective, China's increasing participation in global business networks through both inward and outward foreign direct investment is

impacting upon the country's human resource management, itself a relatively recent feature of Chinese managerial control [2] asserted that the secret behind successful business venture largely depends on entrepreneurial skills. They noted that there is need for government and other relevant stakeholders to put in efforts in training artisanal engineers in business. Monitoring financial performance therefore creates more certainty and confidence in making both short and long term decisions[3]. This in turn leads to a healthier business and faster growth rate. It also allows you to outperform and outmaneuver competitors who fail in this regard.

The human capital of the firm refers to the knowledge, skills and abilities that employees possess and use in their work. Studies of employee human capital have found its direct positive effects on firm performance[4]. A company's financial statements provide financial information that investors, creditors and analysts use to evaluate a company's financial performance. In regional perspective, Kenyan microfinance has shown resiliency despite local droughts and high inflation rates that afflicted the economy in 2008 and 2009. With the Kenyan government and the Central Bank of Kenya [5] emphasizing financial access as a key to modernizing the economy, the sector has been strengthened by progressive policies and innovative approaches to delivering financial services. In national perspective, the National Bank of Rwanda is mandated to regulate and supervise Microfinance institutions. Microfinance institutions include Savings and Credit

Cooperatives (SACCOs) and some limited companies that operate microfinance, Critics of Micro Finance Institution argue that despite the much resources the country has spent in training MFIs, the gains have not been commensurate with the huge sums of money spent during the training process. Indicated that there is no or little consensus on how to measure performance of MFIs, which best suited for particular business organization[6]. Thus, performances are variously measured and the perspective are tied together and consistently monitored from the organization's context.

Specific objective

The study aimed to assess the effect of training and the performance of MFI in Rwanda.

Research Hypothesis

Ho1 there is no effect of training on the performance of MFIs in Rwanda

1.2. Statement of the Problem

Training plays a significant role in contributing to Micro Finance Institution in Rwanda (MFI). The lack of banking culture in the rural areas, peri-urban and among the urban poor is another factor militating against the growth of MFIs. Traditionally, these people borrow money from friends and relatives and repay the same amount of money borrowed no matter the tenure of such

loans. They therefore find it difficult to understand the payment of interest on bank loans, coupled with the fact that the rate of interest charged by MFIs leaves a lot to be desired. The need for an affordable refinancing/funding facility has been one of the main challenges from MFIs for over a decade in Rwanda. This had been amplified by the recent COVID-19 lockdown, where clients of the MFIs were withdrawing their savings to sustain their livelihoods and meeting fixed costs of their business with no revenue inflow. This also led to clients, who are mostly MFIs clients not meeting their loan repayment obligations to the MFIs (some are taking advantage of the situation too). Withdrawal of savings and non-payment of loan repayments has put a huge stress on the liquidity positions of the microfinance sector and on the morale of the management and staff of the sector. The lack of common benchmarks, methods for measuring and information sharing further inhibits the performance of the sub-sector. Thus, lack of adequate and reliable information on outreach in terms of its depth and breadth remains one of the most daunting in the subsector. This lack of information has affected targeting of clients and ultimate poverty reduction.

Most of the microfinance banks and limited liability microfinance institutions reported emergency need for liquidity in the next three months. Decreasing revenue, mounting losses, specialized capacity needs and supporting the clients in the changing environment are cited as the most important concerns among sector actors. This may further put the microfinance

sector as going concern for a long time, if proper interventions are not provided to the microfinance sector and needs to be addressed on war footing. Decreasing revenue, mounting losses, specialized capacity needs and supporting the clients in the changing environment are cited as the most important concerns among sector actors. It has faced a number of challenges such as lack of adequate business skills. This is mainly attributed to low levels of education. The MFIs in Rwanda suffer from constraints that lower their resilience to risk and prevent them from growing and attaining economies of scale. Challenges associated with access to financial resources are constrained by both internal and external factor. One of the most fundamental external challenge MFIs in Rwanda has is the near absence of basic infrastructure. This lack of basic infrastructure compounds the operational difficulties of these banks, which ordinarily are faced by high operational costs because of their nature of business[7].

Observed that in spite of their diversity and relative abundance of studies conducted so far little efforts have been devoted to fully analyze the determinants of training process before assessing its impact. These studies have not taken governance into consideration and yet this is a major characteristic that MIs need to be trained on; given that most of them are either form four dropouts or college dropouts whose managerial skills are wanting. It was therefore necessary to conduct a study to determine the relationship between training and the performance

of MIs in Rwanda

2. Technical Training Theory

Human capital theory is based in education and economic fields and claims that the higher the education, the higher the economic returns to society [8]. Most of human capital research is focused on attending post-secondary educational options and examining returns. Maintained in his study that training and skills affect an individual's personal income both formally and informally[9]. He analyzed formal education, work experience, and number of weeks worked in determining human capital. Furthered the human capital theory through research on human capabilities that increase investments which appealed to economists by analyzing these elements: Health facilities and services, broadly conceived to include all expenditures that affect life expectancy, strength and stamina, and the vigor and vitality of people; on the job training, including old-style apprenticeship organized by firms; formally organized education at the elementary, secondary, and higher levels; studies of adults that are not organized by firms, including extension programmes notably in agriculture; migration of individuals and families to admit to hanging job opportunities.

Applications of human capital theories opened the door for many advancements of the human capital theory in the economic field and have advanced research in many specialized areas such as labour economics, public sectors economics, and growth theory

and welfare economic [10]. Human capital theory has been important for scholars for decades and its analytical framework supports economic approaches used to inform and support education policy makers [11] This advancement is critical in the current study to show the impact of human capital in a new growth economy.

3. Research Methodology

Research Design

A research design is a plan or a framework for guiding a study. The design connects the questions or objectives of the study to the gathered data. A research design as the scheme, outline or plan that is used to generate answers to research problems[12]. For the purpose of this study, a descriptive design specifically a survey was employed using qualitative and quantitative approaches. The method is preferred as it permits gathering of data from the respondents in a natural setting. It involves establishing what is happening as far as a particular variable is concerned and the design used training and the performance of Micro Financial Institutions (MFI) in Rwanda. The study was to establish the relationship between training and the performance of Micro Finance Institutions in Rwanda.

Target Population

A study population is a well-defined or specified set of people, group of things, households, firms, services, elements or events

which are being investigated[13]. The target population for this study was the HR staff of the 7 group companies in MFI in Rwanda totaling to 76.

Sampling Frame

A sampling frame is a complete list of all members of the population that is to be studied[14]. This study has seven strata, with a total population of 76 MFIs. This therefore means that simple stratified random sampling was employed when conducting the study. The table 3.1 indicated the population distribution per stratum of 76 and sample size of 45 respectively.

Table 3.1: Population of the Study

SN	Name of the Institutions	Sample size	Population
1	ATLANTIS (Former Al	6	10
	Halaal Ltd)		
2	CAF-Isonga Ltd.	7	11
3	Amasezerano CB Ltd.	8	12
4	INKINGI Micro Finance	6	15
	Ltd.		
5	RIM S.A.	7	11
6	Vision Finance Company	6	9
	Ltd.		
7	Goshen finance Ltd	5	8
	Total	45	76

Source: Research field survey, December 2021

Sampling Techniques

The study adopted stratified random sampling technique which is aimed at selecting a group of subjects for the study in such a way that their attributes represented the larger 7 group from which they are to be drawn. The size of a sample influences the detection of significant differences, relationships and interactions[15]. Critical factors in determining sample size include the population size, the desired level of precision, the level of confidence and the degree of variability of attributes being measured Since the population of the required characteristics was estimated at 50% (p=0.5), the sample size was determined as follows according to Saunders et al. (2009): n = Z 2 pq d 2 where: n = estimated sample size if the target population is greater than 10,000. Z =standard normal deviate at the required confidence level (value for selected alpha level (1.96) p= The proportion of the target population estimated to have characteristics being measured. q=1-Pd = the level of statistical significance set (0.05). Executing the formula, the distribution of the target population and the corresponding sample size was 45

Data Collection Procedure

Data collection is the gathering of information to serve or prove some facts. Data collection as a way of gathering information for analysis[16]. Questionnaire was self-administered to the respondents and two research assistants who were recruited and trained so that they could be able to get quality results. The target participants were human resource staff of their business that filled in the questionnaires. Before administering the questionnaires to them, the researcher took time to explain the purpose of the study. With their consent, the survey proceeded. Research assistants were used to provide more explanations and clarity in cases where the respondents did not understand

Primary data

Primary quantitative data was collected by use of self-administered structured questionnaires. A questionnaire was adequate for this study since questionnaires are commonly used to collect important information about a population [17] and each parameter in the questionnaire was developed to address a specific objective. The questionnaire was divided into several sections: managerial training, technical training, and financial training, networking training and financial stability of micro finance institutions in Rwanda. Perceptual responses were captured in a five or three– point Likert scale.

Data Collection Procedure and Instruments

The study used questionnaires to collect data from 7 MFIs in Rwanda. The questionnaire is common instrument for observing data beyond the physical reach of the observer [18]. In a questionnaire there may be open and closed questions. This study used closed questions, which is one where responses are restricted to small set of responses that generate precise answers to develop the empirical study. In designing the

questionnaire, a five point likert-type scale was used in order to provide the extent of the respondent's feelings or opinions on the impact of the various training variables under consideration on firm performance where by a scale of one implies strong disagreement with an issue or statement while a scale of five implies a strong agreement in that order[19].

Pilot study

The pilot testing exercise was conducted in a manner that mirrored the actual study. Observations were made during the pilot test were helped to improve the nature of questions contained in the questionnaire. The pilot sample was conveniently selected to fast track the process and minimized time wastage in the collection of the pilot data as well as analysis. The pilot sample was conveniently selected to fast track the process and minimized time wastage in the collection of the pilot data as well as analysis. After the study, certain items that seemed unclear were altered or eliminated. Cronbach's coefficient alpha was computed using the formula alpha = Np/ [1+p (N-1)]; where N equals the number of items and p equals the mean interterm correlation to determine the internal consistency of the questionnaire.

4. Results and Discussions:

Gender of the Respondents

Table 4.1: Distribution of Respondents by their Gender

Age range	Male		Female		
[years]	No	%	No	%	
20 -30yrs	8	17	4	9	
31-40 yrs	12	27	8	18	
41-50 yrs	5	11	3	7	
51-60 yrs	2	4	1	2	
Over 60 yrs	1	2	1	2	
TOTAL	28	61	17	37	

Source: Research field survey, December 2021

According to the findings, majority of the respondents (27%) were males while female respondents were (18%). The study attributed this trend to the existing gender gap in training and the performance of MFIs in Rwanda that is predominantly dominated by the male gender.

Distribution of Respondents by Age

The study then sought to establish the age groups of the respondents in the study.

Table 4. 2: Distribution of Respondents by Age

Age	Frequency	Percent
20 -30yrs	15	33.3
31-40 yrs	10	22.2
41-50 yrs	6	13.3
51-60 yrs	8	17.7
Over 60 yrs	6	13.3
Total	45	100

Source: Research field survey, December 2021

The findings above indicate that majority of the respondents in the region were of the age-group 20 -30 years (33.3%) while the least age group was above 60 years (13.3%), (22.2%) were of the age group 31-40 years while 13.3% and 17.7% were of the age group 41-50 and 51-60 years respectively. This shows that the sample used by the study (3%) were distributed in terms of age and could therefore give reliable information. It also attributes that (68.8%) of the respondents were between 20 and 50 years which is usually the productive age group hence improved organization performance. Furthermore, the researcher attributed this trend to the fact that most people in the training retire before they reach 65yrs

Managerial Training and Performance of MFI in Rwanda

The first objective of this study was to establish the relationship between managerial training and the performance of Micro Finance Institutions (MFI) in Rwanda

Table 4.3 Managerial Training [MT1]

Age	Strongly		Disagree		Neutral		Agree		Strongly	
range Disagree								Agree		
[years]	No	%	No	%	No	%	No	%	No	%
20 -30yrs	1	12.5	4	22.2	2	50	10	25	10	33.3
31-40 yrs	3	37.5	6	33.3	1	25	8	20	8	26.6
41-50 yrs	2	25	3	16.6	1	25	8	20	8	26.6
51-60 yrs	1	12.5	3	16.6	-	-	8	20	2	6.6
Over 60	1	12.5	2	11.2	-	-	6	15	2	6.6
yrs										
TOTAL	08	100	18	100	4	100	40	100	30	100

Source: Research field survey, December 2021

Regarding the statement that the enterprise owner can now plan how to do the business well based on the training that was given on how to run their business, majority of the respondents (58.3%), agreed and strongly agreed to the statement while the 12.5% strongly disagree with the statement. The results agree that a well-trained workforce is critical in the growth of MFI in Rwanda[20].

Table 4.4 Employees Training [MT2]

Age	Strongly		Disagree		Neutral		Agree		Strongly	
range	Disagree								Agree	
[years]	No	%	No	%	No	%	No	%	No	%
20 -30yrs	2	20	3	30	2	40	13	32.5	13	37
31-40 yrs	3	30	2	20	1	20	10	25	10	28.5
41-50 yrs	2	20	2	20	2	40	12	30	6	17
51-60 yrs	2	20	2	20	-		4	10	4	11.4
Over 60	1	10	1	10	-		1	2.5	2	5.7
yrs										
TOTAL	10	100	10	100	5	100	40	100	35	100

Source: Research field survey, December 2021

Respondents between 20-30 years indicated that the training that they attended has enabled them to give better directions to their employees. The study also sought to find out the extent to which training had helped respondents in controlling their business operations. Results of the study showed that 50% of the respondents agreed and strongly agreed to the statement. Poor employee's skills are still highlighted as one of the significant contributory factors in the failure of the MFIs[21]. Regarding the statement that they have learnt how to keep the records of their business from the training they attended.

5. Recommendations

It was found that governance training influences the performance of MFIs in Rwanda. It is recommended that MFIs adopts better systems of corporate governance. It should be noted that the main

constraints to MFIs growth is lack of governance structures. It is recommended that MFIs attend training on legal requirements before starting a business. In the absence of a conducive legal framework, businesses operate under the Local Government Act which is restrictive and non-responsive to the emerging contributions of MFIs. MFIs do not adopt good governance practices because of high cost associate in their implementation. It was found that managerial training influences the performance of MFIs in Rwanda. It is recommended that business managerial trainings are organized for MFIs owners. This will enable them to acquire managerial skills regarding business planning, organizing, directing and quality control of assets and human resources. For MFIs to succeed them need to train their employees the best practice in managerial. It was found that technical training influences the performance of MFIs. It is recommended that there is need for all stakeholders including government and other participants to crusade for entrepreneurship programme to redirect and rethink with emphasis on technical entrepreneurship development among small and medium enterprises. Further, it was found that financial training influences the performance of MFIs in Rwanda. It is recommended that financial training are conducted for MFI owners in order to understand financial products available and to boost their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and take other effective actions to improve their financial status.

6. Conclusion

From this study it is concluded that human resources management strategies have a significant positive effect on the performance of MFI. When all this strategies (recruitment, training, employee relations, reward and compensation) were used, it was found that there was a big variance in performance of MFI. The study concluded that managerial training and the performance of MFIs are positively and significantly related. For MFIs to succeed they need to train their employees the best practices in managerial. Poor managerial skills are highlighted as one of the significant contributory factors in the failure of the MFIs. In conclusion, the aspects of managerial training that are important to performance include training on planning, organizing, directing, controlling ,motivating, time managerial, recruitment, appraising and monitoring.

The study further concluded that technical training and the performance of MFIs are positively and significantly related. There is need for all stakeholders including government and other participants in the crusade for entrepreneurship programme to redirect and rethink with emphasis on technical entrepreneurship development. In conclusion, the aspects of technical training that are important to performance include training on record keeping, information gathering, multitasking, selling skills, marketing skills, ease of doing business, more products and importance of technology.

It was also concluded that training and development influences Performance of MFIs in Rwanda. Employee empowerment was highly emphasized in post merged organizations. Results led to a conclusion that all employees received induction training and all the learning was incorporated on the job training. The study concluded that financial training and the performance of MFI are positively and significantly related.

Financial training helps in empowering and educating investors so that they are knowledgeable about finance in a way that is relevant to their business and enables them to use this knowledge to evaluate products and make informed decisons. It is widely expected that greater financial knowledge would help overcome recent difficulties in advanced credit markets. Financial literacy prepares investors for tough financial times, through strategies that mitigate risk such as accumulating savings, diversifying assets, and purchasing insurance. In conclusion, the aspects of financial training that are important to performance include training on, loss and profit, accounting, budgeting, savings, fraud detection, managing loan, tax compliance, insuring business, inflation and debt Managerial.

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