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The Impact of Microfinance Non-financial Services on Socio-Economic and Environmental Status of the Low-Income Households in Kicukiro District, Rwanda

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Abstract*:This study evaluated the impact of microfinance non-financial services on the socio-economic and environmental status (SEES) of low-income households in Kicukiro District, Rwanda. Precisely, it examined "the extent to which SEES of deep-rooted MFI clients exceeds that of non-MFI clients in Kicukiro District, Rwanda." This study is impartant due to the fact that the non-financial services coupled to financial services allow low-income households to optimally invest, aquire productive assets and increase their management skills.The study used mixed methods research to attain the objective. It collected quantitative data using a structured questionnaire (schedules) from the intervention group of 389 households (deep-rooted MFI clients) and a regulator group of 111 households (non-MFI clients) . This research used SPSS version 22 for quantitative analysis. The correlation analysis revealed that the microfinance NFS affects the SEES at (0.073) Pearson correlation coefficient with 0.152 p-values. The independent t-test showed that, on average, the SEES of deep-rooted MFI clients was 2.246 million SEES higher than that of the non-MFI clients; t (249.47) = 5.83 with p = .000. This study used NVivo 10 to analyze data from in-depth interviews and focus group discussions thematically. The qualitative findings triangulate the quantitative results. This study concludes that microfinance non-financial services have a low negative and insignificant impact. It recommends that MFIs should make sure that they associate non-financial with financial services. Moreover, policymakers and regulators should reinforce the policy to promote much more non-financial services models to enhance the financial capabilities of their clientele.*

Keywords: *Non-financial services, Socio-economic, environmental status, low-income households, Non-financial integration models.*

1. Introduction

The chief preoccupation of all countries around the world has been sustainable development (SD) of its inhabitants. The SD stresses a positive and significant change moored fundamentally in social, economic, and environmental (SEE) stakes (Mensah & Casadevall, 2019). Policymakers, international development agencies, non-governmental organizations, and other interested parties have invented numerous development approaches. One of these tactics is microfinance (Mensah & Casadevall, 2019).

Theoretically, (Ledgerwood, 1999; Atikus, 2014) defined microfinance as a banking service delivered to unemployed, self-employed, and low-income individuals or groups whose activities provide a stable source of income. This cluster of people otherwise is excluded from access to formal financial services because of low or insufficient income and lack of collaterals. Microfinance ideas started in parts of Latin America and Bangladesh in

the mid-1970s to avail financial services, such as credit, to the poor as it has been reported by (Martina & Karel, 2018). The modern microfinance day was accredited to Bangladesh's economic professor, Dr. Mohammad Yunus, who developed a successful lending model through which a interest-free loan was given to rural women to fabricate and sell bamboo stools at a reasonable price and get the capacity to pay back their money lenders; that led to the creation of Grameen Bank (GB) in 1983 (Martina & Karel, 2018; Ullah & Haq, 2017). It is in the 1990s the industry passed to a "minimalist model" consisting of offering only financial services, and Credit Suisse, Deutsche Bank, and Citigroup entered the microfinance field as it has been reported by (PlaNet Finance Group, 2015).

During this contemporary wave, microfinance institutions (MFIs) have offered two types of services, financial and non-financial services. Financial services comprised two main models, namely, micro-saving services models (Rozas, 2015), and credit-lending services models (Ledgerwood,1999; Gupta, 2008; Srinivas, 2015). In addition to their financial services, microfinance institutions (MFIs) can develop non-financial services like vocational training, technical assistance, and agricultural or health education (Lanao & Serres, 2009). The non-financial services integration model is categorized in linked, parallel, and unified models as it has been reported by (Lanao & Serres, 2009).

Globally, the access and efficient readiness of non-financial services, in addition to financial services, can allow low-income clients to develop small businesses. They boost income earning capacity, well manage risks, smooth consumption, and enjoy an improved standard of life. However, severe and deteriorating socio-economic and environmental development challenges most African countries. To reach sustainable development, a full approach (microfinance) to deal with the anxiety of low-income people is needed in the region (Salia, 2014). Financial and non-financial services are mainly offered by MFIs to promote the socio-economic and environmental status of the low-income people as it has been reported by (Vandenberg & Merten, 2004). The qualification of low-income comes from earning less than poverty based on the international $1.25 a day line (The World Bank, 2015). That microfinance clientele is composed of households, individuals, and enterprises (Restaino, 2010; Beaman, 2011). Providing both financial and non-financial services to low-income clients has been hailed by promoters as a useful tool to impact SEES of the beneficiaries positively. The core perceptive is that availing non-financial services in addition to financial services to low-income households, will allow them to optimally invest, acquire productive assets, capital budget new businesses, or increase their management skills.

Based on the 2018 Worldometer approximations of the latest United Nations data, Rwanda "The land of thousand hills" is positioned in East Africa with a whole population of 12,301,970 residents with 499 residents per square kilometer (UN, 2019). The Rwandan economy depends seriously on agriculture, which employs 70% of the total population with a contribution of 32% to the gross domestic product (GDP) as it has been reported by (AMIR, 2015). The World Bank (2015) said that 45% of the population subsisted below the national poverty line ($1.9 a day), and 24% lived lower the national poverty line. Therefore, Rwanda is a low-income country with a GDP per capita of US$764 per year or a lesser amount of 2USD per day (FAO, 2019). Consciously, Rwanda has taken the issue of socio-economic and environmental development as a grave problem, and hereafter devised microfinance as a way of overcoming it. As of 2018, the microfinance sector counted 459 institutions. They comprised 23 licensed non-umurenge SACCOs, 20 licensed public limited companies, and 416 Umurenge SACCOs (NBR, 2018).

Rossi, Lipsey, & Freeman (2004) specified that an impact assessment is vital to any intervention program to control if it operates, to help to upgrade the program delivery, and to provide proof for the continuing support of the program. It determined what influences programs have on their projected outcomes (Rossi et al., 2004). The impact of microfinance NFS is about understanding how NFS models affect the status (social, economic, and environmental) of the low-income clientele (Restaino, 2010). Though the impact assessment (IA) has become progressively important activity as agencies, and especially MFIs sought to be sure that funds were well spent, the IAs of non-financial services are rare, not only in Rwanda but also in the world. Only two studies arrived at contradictory conclusions (Biosca, Lenton, & Mosley, 2011; Dikki, 2014).

It is in this context far-reaching investigation to deal with the impact of the three facets of non-financial services models on the three pillars (social, economic and environmental) of sustainable development of the low-income households was originated. This study randomly chose participants into two groups, namely, intervention group (received non-financial services) and control group (received no NFS). The study observed outcomes (SEES) for both the intervention and the control groups, with any differences attributed to the NFS (Rossi et al., 2004).

One of the original motives for the introduction of microfinance programs was to positively influence the socio-economic and environmental status of low-income households in the world in general, and in Rwanda in particular. Rwanda's National Strategy for Transformation 1 lays the foundations for achieving upper-middle-income country standing by 2035 and high-income standing by 2050 (The World Bank, 2018). The NST_1 planned for the latest seven-year plan (2017-2024) of Rwanda's development strategy. The sustainable development goals (SDGs) establish most of the

regulation, and microfinance rests a valuable instrument to device the NST_1 (Minecofin, 2017). By December 31, 2018, twenty (20) microfinance institutions (i.e.8 licensed MFIs, 2 commercial banks, and 10 Umurenge SACCOs operated in the limits of Kicukiro District (BNR, 2018).

However, the latest Rwanda Poverty assessment by (World Bank, 2015) reported that there was substantial progress since 2000, though low socio-economic and environmental development remains widespread and prevalent in Rwanda. The lingering malnutrition, higher child dependency rate, lack of education, dependency on agriculture to live, isolation of low-income households, and inadequate environmental health are the main features of low SEES in Kicker District as it has been reported by (The World Bank, 2015). Kicukiro district is one of the three Districts of Kigali city. From this prevalent SEES of low-income households, the research sought to respond to the questions "*To what extent did socio-economic and environmental status (SEES) of deep-rooted MFI clients exceeds that of non-MFI clients in Kicukiro District, Rwanda?*

Non-Financial Services (NFS) are increasingly crucial in SEE development strategies, but the knowledge about their impacts remains contradictory. Biosca, Lenton, & Mosley (2011) concluded that Non-financial services reduced the clients' likelihood of being under the asset poverty line. In contrast, (Dikki, 2014) found that the Non-financial services did not have any significant impact on the performance of women entrepreneurs, except in the area of training, which had a significant impact on additional income, asset acquisition, savings, and network.

However, both studies included theoretical and methodological deficiencies. Theoretically, they either concentrated on the parallel model ignoring linked and unified models or dealt with the NFS impact on either social, economic, or both ignoring the environmental side. The impact assessment of NFS on SEES has to insist on the influence of the three main models (linked, parallel, and unified integration models) to the three pillars of sustainable development (socio-economic and environmental status) of low-income households. Methodologically, both studies opted for mono-method, mostly quantitative. However, (Creswell, 2011) stated that qualitative investigations give detailed opinions of the clients on their experiences with microfinance services. Qualitative inquiries encompass participants in data collection processes that improve the validity and supplement quantitative by triangulation in mixed-method research (MMR).

By assessing the extent to which SEES of the deep-rooted MFI clients differs from that of the non-MFI clients, using mixed approaches of data collection and data analysis, the study can better appreciate the impact of NFS in uplifting SEES of low-income households. With this understanding, the research can isolate and improve models about the NFS impact. Policymakers and regulators, providers, international development agencies, non-governmental organizations, academicians, and other interested parties can plan more involvements to increase SEES of beneficiaries in general and low-income households in particular.

2. Literature Review

Theoretically, in addition to their financial services, microfinance institutions (MFIs) can develop non-financial services like vocational training, technical assistance, and agricultural or health education (Lanao & Serres, 2009). It has been reported that the combination of financial and non-financial services in highly competitive environments has led to the sustainable success of the microfinance models, including CRECER in Bolivia, FINCA Peru, ASA India, BRAC Bangladesh, and the Pro Mujer network in Latin America (Lanao & Serres, 2009). The linked, the parallel, and the unified are the three main models of non-financial services integrating to get different results in management and performance terms of microfinance as they have been reported by (Lanao & Serres, 2009). With the *linked model*, the MFI provides financial services, while another specialized entity provides non-financial services. This model permits the MFI to know the exact cost of non-financial services. In the *parallel model*, the same MFI is offering financial and non-financial services under different programs, while specialized personnel, who share the same brand separately, does management. With the *unified model*, financial and non-financial services are complementary. They are embedded in a hybrid product to be provided by the same staff. In this model, non-financial services are compulsory to get financial assistance.

This study used the NFS integration model to depict the complete services offered to low-income households. In this study, three theories linked to uplift instructive influence by measuring the technological context of the NFS in linked, parallel, and unified models to back the socio-economic status of low-income households in Kicukiro district, Rwanda. The full impact assessment of NFS cannot bypass any of its three models.

Empirically, the study surveyed a few available related empirical studies. Biosca, Lenton, & Mosley (2011) surveyed the microfinance non-financial services: A key for poverty alleviation? The main objective was to analyze the effect of microfinance non-financial services (NFS) on poverty alleviation in Mexico. This study used standardized structured questionnaires to collect data from four hundred and thirty-four (434) clients of the Mexican MFIs, Alsol and Conserva, the only two MFIs operating complete non-financial programs in Chiapas. This paper examined and compared the participation determinants and added impact of the training session on the monetary

poverty outcomes of the debtors. This study found that the participation decision mainly depended on borrowers' characteristics. It also found that Non-financial services reduced the clients' likelihood of being under the asset poverty line.

Dikki (2014) conducted a study on the impact of non-financial services of microfinance banks (MFBs) on the performance of women entrepreneurs in Nigeria. The objective of this schoolwork was to survey the effect of non-financial services of MFBs in enhancing the performance of women traders in Kaduna state, Nigeria. As the total of women traders was unknown, the study used a sample of 384 drawn from an indefinite population of and as a result, sampled women. This research used a cross-sectional survey design to collect quantitative data through the use of structured questionnaires. The analysis used ordered logit regression analysis. The study concluded that the non-financial services of MFBs did not have any significant impact, except in the area of training, which affected income, assets acquisition, and savings. It concluded that the non-financial services of MFBs did not have any significant impact on the performance of women entrepreneurs, except in the area of training, which had a significant impact on additional income, asset acquisition, savings, and network. It recommended MFBs empowerment by the government to provide entrepreneurship more training to their clients. *However, this study did not explore the impact on all the facets of sustainable development. It overlooked social and environmental variables. Also, this study failed to determine the extent to which training influences the income, asset acquisition, savings, and network of women entrepreneurs was not determined.*

The conceptual framework of this study grounded on the interaction between the three prevalent NFS models and concepts of the socio-economic status of low-income households, as presented in the literature review (Wrenn, 2005). Figure 1 indicates the relationship of the independent variable (NFS models) with the assumption that the independent variable impacts the dependent variable (socio-economic and environmental status).

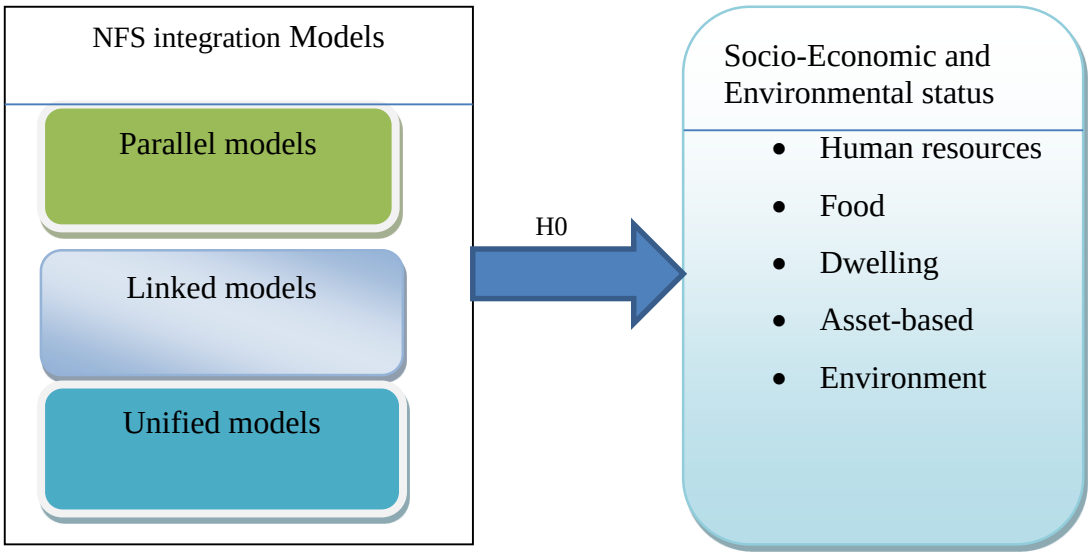

Figure 1: Conceptual Framework *(Study determinants)*

The conceptual framework for the impact of NFS on the SEES of the low-income households in Kicukiro District comprised three primary levels. The first level includes an independent variable in terms of NFS like parallel, linked, and unified models. The second level comprises the dependent variable in terms of socio-economic and environmental status. It evaluated human resources indicators (number, age, health, education, occupation), food-related indicators (quantity, frequency, specificity, stock maintenance), dwelling-related indicators (size, durability, the extent of keeping right conditions), asset-based indicators (size of landholdings, the value of livestock, value of transportation-related assets, value of appliances and electronics), and environmental-related indicators (energy cooking habits, fuel-saving devices, friendly construction technologies, environmental education projects, and area of degraded land). The third level displayed arrow proposing relationships of the independent variable on the dependent variable. The crescendos of this conceptual framework exist in the extent to which NFS impact human resources, food-related, dwelling-related, asset-based, and environmental-related indicators of the low-income households in Kicukiro district, Rwanda.

As the research gap was concerned, an IA of NFS had to carefully evaluate the extent to which NFS models influence the SEES of loyal microfinance customers. But,

theoretical and methodological shortages were in both studies (Biosca et al., 2011; Dikki, 2014). Theoretically, they failed to focus on the three NFS models separately, or they dealt partially with SEES. Methodologically, both studies used mono-method, mostly quantitative. However, qualitative investigations detail opinions of microfinance clients on their experiences with microfinance services (Creswell, 2011). In mixed-method research, qualitative surveys include participants in data collection processes that increase the validity and enhance quantitative by triangulation (Creswell, 2011). Then, this study came up with mixed-methods research (MMR). It explored first, the relationship between NFS models and SEES of low-income households, second identified the difference between the SEES of deep-rooted MFI clients and the SEES of non-MFI clients in Kicukiro district, Rwanda. This study hypothesized that "*There is no significant difference between the SEES of intervention group (deep-rooted MFI clients) and the SEES of control group (non-MFI clients" (H0).*

3. Methodology

This study adopted pragmatism as a philosophical worldview that arises out of actions, situations, and consequences rather than antecedent conditions (Creswell, 2014).

Ontological assumptions were used in this study. "To what extent did the SEES of deep-rooted MFI clients differ from non-MFI clients in Kicukiro district, Rwanda?" was the main problem of this study. To the research side, this study assumed reflexivity about the time in the field, good field-notes, detailed knowledge of literature and theories, the capacity to quantitative and qualitative methods, high-level skills for the writing up of quantitative and qualitative analysis. To the respondents' side, it assumed the appropriate sample; and a real, objective, truthful, and good quality of data. Generally, this study assumed that NFS models improve the SEES of the low-income households; and that the impact of NFS is a change in the SEES of the low-income households in Kicukiro district. This study opted for the functionalist paradigm as it dealt with rational explanations and developing sets of references within the current structures, as stated by Saunders et al. (2016). It used a mixed research paradigm through which it integrated quantitative to qualitative. This study chose the deduction research approach to theory development. It found the central assumption in the mixture of quantitative and qualitative methods as it offers a complete understanding of a research problem than either approach alone (Creswell, 2014).

To research design, this study used a mixed-methods research (MMR) design in which combines quantitative and qualitative data to deliver a comprehensive analysis of the research problem (Creswell, 2014). The concurrent triangulation paralleled how quantitative and qualitative data sets support one another, as it has been described by (Saunders et al., 2016). The study chose the cross-sectional research time horizon as it inferred the study of a specific occurrence at a particular time. It founded on responses to schedules, observations, in-depth interviews, and focus group discussions (FGDs) directed over a specified short period.

To the targeted population, sampling unit, and sample size, this study used the household as the primary sampling unit. Only deep-rooted MFI clients and non-MFI clients were considered eligible for the survey. By the end of 2012, the total number of thirteen thousand four hundred and fifty-five (13,455) households were living in Kicukiro district (NISR, 2012). As the number of population was finite, a ninety-five percent (95%) confidence level and $p = 0.5$ were assumed. By the use of Yamane's formula, the study found a sample size of three hundred and eighty-nine (389) low-income households, intervention group (deep-rooted MFIs clients). A ratio of one (1) non-MFI client against three point five (3.5) deep-rooted MFI clients was adopted (Henry, Sharma, Lapenu, & Zeller, 2003) to select one hundred and eleven (111) non-MFI clients to constitute the control group. To the sampling procedure, this study used a complex random sampling (CRS). For qualitative sampling, the research followed the general rule of "Saturation," as it has been reported by (Elmusharaf, Farrokhi, & Mahmoudi-Hamidabad, 2012). Consequently, it only interviewed twenty-one (21) respondents. This study used a combination of research techniques, namely document analysis, direct observation, schedules (questionnaires), in-depth interviews, and focus group discussions (FGDs) for data collection.

To validity, this study commenced by undertaking an extensive literature review to identify and confer the facets related to the research topic. The research instruments as schedules questionnaire (the principal tool to collect quantitative data) and interviews (minor tools to collect qualitative information), were presented to the experts as well as to the research advisor for improvements. Also, they have been pre-tested before administration for data collection. The results helped to reshape questions that looked inappropriate. Again, this study gave clear instructions on 'how to fill the questionnaire' as it has been reported by (Gray, 2004).

Conderning reliability, the study calculated a Cronbach's Alpha coefficient, as it has been described by (Gliem & Gliem, 2003). The Cronbach's Alpha of .85 meant higher consistencies and indicated higher reliability of the instruments. The design and distribution of the questionnaires passed through the pilot study, the validity testing, and the formal data gathering. The pilot and the final survey, the direct observation, and the in-depth interviews were self-administered. Quantitatively, this study edited, coded, and recorded data in the Statistical Package for Social Sciences (SPSS) version 22 to shape, arrange, and analyze. The study used several statistical

techniques, namely, Cronbach's alpha coefficient, descriptive statistics, Pearson product-moment correlation coefficient, and independent samples t-test.

This study used NVivo 10 for words program to analyze qualitative data. It imported the interview transcripts, explored the data to identify the keywords and ideas, and coded the keywords to make the feature of the node. It ran search query of all keywords and concepts, grouped keywords into themes and subthemes, and organized thematic representation of the data. Quantitative results were exposed to qualitative findings to be either reinforced or opposed (triangulation). Ethically, this study guaranteed and well-maintained the confidentiality, secured the privacy, diligently tracked the informed consent, and supervised the respect and dignity of the participants.

4. Results and discussion

This section embraces a discussion of research findings on the specific research objective, and a review of the research hypothesis. The objective of this study was to *"assess the extent to which SEES of deep-rooted MFI clients (beneficiary of NFS) exceed SEES of Non-MFI clients (not-beneficiary of NFS) in Kicukiro District."* For attaining this objective, the study started by finding out the relationship between NFS and SEES of low-income households. This study used Pearson product-moment coefficient calculation.

Table 1: Non-Financial Services and SEES of Deep-rooted MFI Clients

		Non-financial services	SEES of deep-rooted MFI Clients
Non-financial services	Pearson Correlation	1	-.073
	Sig. (2-tailed)		.152
	N	389	389
SEES of deep-rooted MFI Clients	Pearson Correlation	-.073	1
	Sig. (2-tailed)	.152	
	N	389	389

Table 1 shows a Pearson correlation coefficient of (0.073) with a p-value of 0.152. It means that there is a negative effect between non-financial services and SEES of deep-rooted MFI clients in Kicukiro district, Rwanda. The inverse relationship means that once non-financial services increase 1%, the socio-economic and environmental status will decrease by 7.3%; the qualitative findings from in-depth interviews supported these findings. The findings are supported by Dikki (2014) who found that the non-financial services have neither positive nor considerable impact on the socio economic status of clients, except in the area of training.

In addition to the relationship, this study used an independent sample t-test to identify the extent to which SEES of deep-rooted MFI clients differ from SEES of non-MFI clients. For ascertaining the differences in the social, economic, and environmental status (SEES) of the intervention group (deep-rooted MFI clients) and its control group (non-MFI clients), this study tested for Equality of Means with an independent t-test.

Table 2: Independent Samples T-Test Output in SEES

		Independent T-test		N	Mean	Std. Dev.	Std. Error Mean
SEES of Low-income households		Deep-rooted MFI clients		389	13,886,759.34	4,592,539.36	232,850.99
		Non MFI clients		111	11,640,870.74	3,235,340.71	307,084.95
Independent Samples Test							
		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
SEES of Low-income households	Equal variances assumed	21.74	**.000**	4.82	498	.000	2,245,888.60	465,895.57
	Equal variances not assumed			**5.83**	**249.47**	**.000**	**2,245,888.60**	385,383.90

Source: Primary data, 2019

Table 2 shows that the SEES value averaged FRw **2,245,889** for deep-rooted MFI clients difference from the non-MFI clients. As the p-value (.00) was less than .05, this study accepted that there was no equal variance (**2,245,889** SEES of difference). On average, the deep-rooted MFI clients had a higher SEES than the non-MFI clients; t (249.47) = 5.83 with p = .000. Thus, *there is a significant difference between the SEES of deep-rooted MFI clients and the SEES of non-MFI clients (H0 rejected).*

Though the impact was there, the relationship between NFS and SEES was negative. These findings translated that non-financial services were not beneficial to the MFI clients. Findings from in-depth interviews revealed that out of twenty-one (21) participants, only one respondent (5%) focused on non-financial services. *"I joined Umurenge SACCO-Kigarama because they have facilitated me to send fees to the school of my kids (Interviewee 21, 58 years, female)".* Out of ten (10) FGDs, only two (20%) focused on the theme of financial training. Financial training and money transfer constitute the parallel model. The linked and unified models are unknown to the participants. The impact of non-financial services does not exist for the FGDs. To all the FGDs, MFIs offered non-financial services like financial training to safeguard their financial sustainability, not for the sake of their clients. One of the reasons was the fees MFIs charge for some non-financial services they offer to their clients.

These findings have a significant implication on other researches; Some studies on their impact on the socio-economic status of the clients concluded that they have a positive and significant effect while other studies found that they have neither positive nor considerable impact, except in the area of training.

While study contradicts the findings of Biosca & Lenton (2011) who concluded that the non-financial services have a positive impact on the socio economic status of the clients; it supports the findings of Dikki (2014) who found that they have neither nor considerable impact on the socio economic status of the clients. The findings from an in-depth interview reveal that "money transfer" was the non-financial service they most benefited from MFI. That service is charged and it negatively affects the SEES of the deep-rooted MFI client.

Limitations for this part of the study, only one interviewee talked about being charged for any other non-financial services they receive, except when trained on how to get and use the microcredit. Other interviewees seemed not to know other microfinance services except savings and credits.

This study also hypothesized that *"there is no significant relationship between microfinance non-financial services and socio-economic and environmental status of low-income households in Kicukiro district, Rwanda (H0)."* The non-financial services have *no significant relationship with the socio-economic and environmental status of low-income households in Kicukiro district, Rwanda (H0 accepted).* The possible explanation of the negligible influence of non-financial services is the complementarity between financial and non-financial services.

5. Conclusion and Recommendations

This study hypothesized that microfinance non-financial services have no significant impact on the socio-economic and environmental status of low-income households in Kicukiro district. The results from Pearson correlation calculation show a correlation coefficient of (0.073) with a p-value of 0.152. Again, on average, the deep-rooted MFI clients have a SEES of 2.2 million higher than the SEES of non-MFI clients. Though there is a negative and insignificant relationship between NFS and SEES, there is an impact on NFS as the SEES of deep-rooted MFI clients is higher than that of non-MFI clients. From the findings, discussion, and conclusions, this study has implications on theories, regulators, MFIs, MFI clients, and researchers.

Regarding theoretical implications, the study completes the research gap, as identified in the literature review. It focuses on the microfinance services MFIs can offer to boost the wellbeing of their clients. Previous studies dealt with micro-savings and microcredits, most of the time forgetting non-financial services. This study researched three microfinance service models.

Policymakers and regulators have to review the policy governing microfinance institutions regularly. This study constitutes a source of information to create a safe microfinance environment. From the findings of this study, it is possible to set policies and regulations about non-financial services. As most of the MFIs focused much on the financial viability, policymakers and regulators would set policy and rules requesting MFIs to more associate the non-financial to financial services (promoting linked model). The insignificant effect of non-financial services can inform MFIs about where the focus will be oriented. The three types of microfinance non-financial services integration models should be applied, with much emphasis on the unified model, to boost their impact on the socio-economic and environmental status of low-income households. Microfinance Institutions (MFIs) should increase the frequency of training their respective clients in fields such as the use of loans, income generation activities, project planning, product diversification, and the like.

Any MFI client should take advantage of non-financial services offered by his/her respective institution. Most of the non-financial services we explored in this study focused on finance, agriculture, and health education. Acquiring knowledge and skills in any field of life (business) should make MFI clients more productive and useful.

To researchers, this study has fulfilled the theoretical and methodological gap of the prior studies; therefore, it proposes a guideline for future researchers interested in microfinance NFS impact assessment. This study has contributed to the theoretical literature by pinpointing

non-financial services integration models, namely parallel, linked, and unified.

It has also added to the methodological literature of prior researches through the use of pragmatism philosophy, ontology assumptions, and functionalist research paradigm, which is concerned with rational explanations and developing sets of recommendations (Saunders, Lewis, & Thornhill, 2016a). This study can inspire future researchers about the use of mixed-methods research design. The MMR is on fashion in today's business research. The use of quantitative and qualitative approaches sheds enormous light on the triangulation process to make the research findings more valid, reliable, and generalizable.

This study has provided a better link of variables related to prior studies in NFS impact assessment. The study contributes to the body of knowledge in delivering findings that related to non-financial services integration models (parallel, linked, and unified) to the socio-economic and environmental indicators. This study suggests that future researchers carry out similar research at a national level for academic purposes. Since there was no much literature on microfinance non-financial services, there is need for the locals to be made aware of other microfinance services.

This study has limitations; it was conducted in Kicukiro District, one of the 30 districts of Rwanda, therefore the results are not generalizable. This study recommends a survey at the national level or to be duplicated in more than one country to confirm if the impact of non-financial services of Microfinance are having a negative or positive impact on the socio economic status of their clients.

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