Microfinance Impact Assessment: Linkage of Financial Inclusion to Welfare Conditions of The MFI's Clients in Rwanda

Jean Bosco Harelimana*

Institut d'Enseignement Superieur de Ruhengeri, Musanze, Rwanda, Musanze, Rwanda

Abstract

The study on microfinance impact assessment: linkage of financial inclusion to welfare conditions of the MFI's clients in Rwanda was conducted with the aim of assessing the impact of microfinance through financial inclusion and welfare conditions of MFI's clients in Rwanda. The study analyzed the financial indicators that were displayed by factsheet tool and the influence of financial inclusion to the welfare conditions of MFI's clients by Statistical Package for Social Sciences (SPSS).

A questionnaire was addressed to a calculated sample of 164 of clients to respond to the question for primary data and secondary data have been collected as well, to validate the primary data. In the paired analysis, there was a statistically significant increase the type of business from Time 1(M=2.6466, SD=1.58986) to Time 2 (M=4.1429, SD=2.09669), t (132)=-7.252, p<000. The magnitude of the difference in the means was large (eta squared 0.346). There was a statistically significant increase own assets from Time 1(M=4.6692, SD=2.5841) to Time 2 (M=7.1654, SD=3.3826), t(132)=-8.219, p<000. The magnitude of the difference in the means was large (eta squared 0.405). According paired t-test, there is significant impact of financial inclusion. This is confirmed by the p-value (p<0.0001) which says that the test is highly significant. Also the profit is positively correlated to both type of saving and type of repayment. An increase the type of saving and type of repayment will also increase the net profit. When the distance is lower, clients are matures enough and improve gender equity, those contribute to increase the net profit to 32.5%, 23.7%, 22.4%, 22.5% and 26.5% unit respectively. It has been confirmed that the financial inclusion influences the positive change of welfare conditions of MFIs clients.

Keywords: Microfinance; Social performance; Financial performance; Financial inclusion and welfare conditions

Introduction

Microfinance has been accepted as a tool for poverty alleviation and financial inclusion in most of the countries [1]. Understanding the need to bridge the gap in accessing credit facilities for the excluded sections of people, microfinance has emerged in late 1970s in Bangladesh. Enthused by the success of Grameen Bank, over hundreds of replication has germinated worldwide over the period of three decades [2].

The program has reached more than 133 millions of poor people from 3316 MFIs worldwide as of December 2006, out of which 69.85% were among the poorest and 85.2 percent were women. In view of burgeoning outreach of MFI model, the present concern is centered on the sustainability of the program. Sustainability and outreach is a widely discussed issue in the field of microfinance and two strands of thought emerge in this connection. The Poverty Camp and The Sustainability Camp [3].

Although it is viewed that sustainability and outreach are competitive, some authors indicates its complementary nature [4]. It implies that sustainability is the means to achieve outreach and it indicates permanency in realizing the intended goal of the program. A financially self-sufficient MFI would earn so much profit that when donors leave it will not shrink in real terms nor will it reduce the size or coverage of its service to the poor in future [5]. Importantly, repayment also spins on the sustainability and permanence of a MFI and also helps in further outreach.

The microfinance sector in Rwanda has been dominated by the network of Banques Populaires especially in terms of a number of recipients of the financial services and volume of activities.

In 1972 Switzerland agreed to help Rwanda duplicate the Caisses Raiffeisen model in Rwanda with a double social objective for Banque Populaire [6].

1. To offer reliable and affordable deposit products,

2. To stimulate the creation of Small and Medium Enterprises (SMEs) by democratizing credit.

The first Banques Populaires was inaugurated in Rwanda at NKAMBA in 1975. After Genocide, the Rwandan financial sector stability continued to be sound and stable throughout the year 2012 and all sectors complemented each other in the national development. The banking sector, which dominates the Rwandan financial sector, demonstrated an increase in the balance sheet of 15.1%. The banking industry has been profitable, liquid and well capitalized to sustain growth, but also resilient to external shocks as a result of strengthened legal, regulatory and supervisory framework [7]. For instance, the Capital Adequacy Ratio (CAR) stood at 23.9% far below the 15% the minimum regulatory requirement, and the non-performing loans (NPL) stands at 6.1% [7]. By end December 2012, the sector registered deposits and gross loans amounting to FRW 54.15 billion and FRW 58.93 billion respectively. Additionally, the SACCOs continued to play a significant role in expanding financial inclusion [7].

*Corresponding author: Jean Bosco Harelimana, Institut d'Enseignement Superieur de Ruhengeri, Musanze, Rwanda, Musanze, Rwanda, Tel: 250(0)788903032; E-mail: harelijordan@yahoo.fr

Rwanda has remarkably developed since 1994. Its economic growth has recorded 7% in 2014. Rwanda is one of the most powerful countries in the sub-Saharan Africa and a model of post conflict reconstruction. However, the country is also characterized by a poverty rate which is quite high (44.9% of the total population), a high population density and a high demographic growth. According to, these features as well as the recent population migrations have contributed to the deforestation, soil erosion, insufficient crop production leading to food insecurity (28% of the total population) and persisting extreme poverty (37% of the total population).

To address these challenges, the Government of Rwanda (GoR) has adopted a global "Vision 2020", which focuses on a 7% annual economic growth in order to reduce poverty. The microfinance sector represents 28% of economic growth in Rwanda and Microfinance Sector comprises of 491 institutions including 13 limited companies and 478 SACCOs of which 416 UMURENGE SACCOs. Its asset size registered an increase of 27.4% between December 2012 and December 2013, rising from FRW 101.0 billion to FRW 128.7 billion. The good performance was mainly driven by the liquid assets and gross loans which increased by 27.2% and 24.2%, moving from FRW 33.1 billion to FRW 42.1 billion and from FRW 59.2 billion to FRW 73.5 billion, respectively between 2012 and 2013 [7].

On July 2014, BNR has presided over rapid expansion of the financial sector in term of all aspects of the business. To date they are 495 bank outlets with more than 2.72 million accounts. Internet banking subscribers have reached a record high of 12.399 with mobile banking subscribers reaching at 486.691 compared to 412007 in 2013 [7].

The number of ATM and credit cards has since increased to 340 and 927 respectively.

Mobile payment subscriber has reached a staggering 31.million people with over 542849 debit cards registered so for. These developments, expert say, have meant deeper financial inclusion and have encouraged more investors to make decision to invest in the country [7].

The Microfinance Sector continued to grow and remained liquid and well capitalized. The Capital Adequacy Ratio (CAR) stood at 33.1% end December 2014 well below the minimum regulatory requirement of 15%; the liquidity ratio stood at 61.3% against the minimum required of 30% and the asset quality are not improved as the non-performing loans ratio increased from t 6.8% in December 2013 to 7.9% in December 2014 [7].

National Dialogue Meeting held in December 2008 recommended the creation of at least one SACCO at the level of each Administrative Sector (UMURENGE). Through the survey done by Finscop in same year and showed the 79% Rwandan population are excluded by formal financial service. In 2012 after four years ago and Umurenge SACCOs program started, the result of Finscop survey presented 42% Rwanda population are included. It means Umurenge SACCOs playing important role in financial inclusion. The microfinance sector is comprised of 13 limited companies; 64 non UMURENGE SACCOs and 416 UMURENGE SACCOs (U-SACCOs). The sector's asset grew by 23.8% from FRW 128.7 billion in December 2013 to FRW 159.3 December 2014 largely drive by loans as rose by 22.4%. On the liability side, deposits increased by 23.9% from FRW 69.5 billion in December 2013 to FRW 86.1 December 2014. Monetary Policy and Financial Stability Statement, 17th February 2015: ATMs and POS geographical distribution in December 2014 East Province Kigali Province North Province South Province West Province TOTAL ATMs Number 43 177 41 44 49 35% 12% 50% 12% 12% 14% POS Number 17 962 62 33 78 1152% 1% 84% 5% 3% 7% Source: BNR, Payment System Department 34 Monetary Policy and Financial Stability Statement, 17th February 2015 34 The sector remains liquid and resilience to withstand shocks. The Capital Adequacy Ratio (CAR) stood at 33.2%, well above the minimum regulatory requirement of 15% and the liquidity ratio stood at 86.9%. However, the asset quality, measured by NPL ratio deteriorated slightly from 6.8% end December 2013 to 7.0% end December 2014. By end December 2014 SACCOs continued to play a significant role in expanding financial inclusion [7]. In this paper the researcher looks at how financial inclusion contributes to welfare conditions of UNICLECAM WISIGARA's clients.

UNICLECAM WISIGARA is the Union that unites 7 CLECAMs, 23000 members and 392 VSLAs located in the Western and the North provinces of Rwanda. Based in the Western Province, the UNICLECAM was founded by its CLECAMs members who have taken the initiative to regroup to refine their operations and to harmonize the financial services rendered to their members.

The researcher was focused on the following hypothesis:

1. Financial Variation to previous year, Portfolio quality, financial structure, Efficiency and productivity, sustainability and profitability, targeting the poor and excluded, adaptation of services, benefits to client and social responsibilities are the performance indicators of UNICLECAM WISIGARA to be self-sustainable.

2. Access, Usage, Quality are the financial inclusion dimensions respected by UNICLECAM WISIGARA to assess welfare conditions of the members.

3. The financial inclusion influences positively the welfare of the clients of UNICLECAM WISIGARA.

Research Objectives

The study is focused on achievement of following three objectives:

1. To examine the Financial and social performance indicators of UNICLECAM WISIGARA

2. To determine dimensions of financial inclusion of UNICLECAM WISIGARA

3. To measure the correlation between financial inclusion and wellbeing conditions of clients of UNICLECAM WISIGARA.

Literature Review

This section aims at illustrating different researches which have been done and related to the study topic. Within this section, some studies that have been carried out was presented to support this study where gap and weakness was found Demirgüç-Kunt and Klapper [8] carried out a study entitled "measuring financial inclusion"' on the problem of knowing the number of population uses the formal and informal financial system to manage their day-to-day finance plan for the future. The objective was to measure the financial inclusion indicators. The key finding showed that having to formal accounts does not necessarily imply that financial products are actually used. Of the 39% of adults in LAC with an account, only about 30% conduct more than three transactions (deposits and withdrawals) a month, while close to 50% make between one and two transactions a month. An estimated 10% are inactive. Hence, while account penetration in Africa is slightly lower than in LAC, the frequency of account use in both

regions is very similar. Usage data is low both in Africa and LAC, but the limited information available shows that there are many informal financial mechanisms that low-income people use. Interestingly, data from Findex suggest that Africans are slightly better at saving using formal financial institutions with 13% of adults using the financial system to save compared to only 9.5% of adults in Latin America and Caribbean. In this case of this study, financial inclusion is considered as a tool to boost the usage of financial services through microfinance institutions.

The study concluded that microfinance institution is indeed a potent strategy of poverty reduction and a viable tool for purveying credit to the poor after carried out a research on Impact of Microfinance on Poverty Alleviation in Nigeria: An Empirical Investigation. Jegede examined the role of microfinance in reducing poverty due to the problem of knowing whether microfinance can be a tool for poverty alleviation. The empirical relationship between microfinance loan disbursement and poverty alleviation was tested in this paper by employing chi-square test, F-test and T-test. The findings revealed that there was a significant difference between those people who use microfinance institutions and those who do not use them. There is a significant effect of microfinance institutions in alleviating poverty by increasing income and changing welfare conditions of those who patronize them. However, microfinance can be more viable tool for sustainable poverty alleviation if more is done on program outreach and depth than the present outreach. Then, relative to this topic, if micro finance institutions respect the dimensions of financial inclusion can influence the poverty reduction. Thus, if the poverty is reduced, the welfare conditions of clients will be improved.

Studies [9] have shown that to access to timely credit, savings, insurance and entrepreneurial training, women have become successful entrepreneurs, increased their household income and well-being. Regardless of their scale, outreach, location and the type of clients, all microfinance program interventions target one thing in common – human development that is geared towards both the economic and social uplift of the people that they cater for. There are a couple of studies argued that microfinance is a very helpful in improving the economic and social welfare of households. Achievement of microfinance in reducing the poverty in, Bangladesh and Indonesia is quite impressive and reached reasonably large number of poor (not the vulnerable poor or extreme poverty) [10].

Simanowitz and Brody [11] found that the key challenges MFIs was facing to that period was affecting their impact on poverty alleviation. They have seen to be an over-emphasis on financial sustainability over social objectives, and a failure of many MFIs to work with the poorest in society. The impact of microfinance on poverty alleviation was a keenly debated issue as we have seen and it is generally accepted that it is not a silver bullet, it has not lived up in general to its have commented on the critical role of microfinance in achieving the Millennium Development Goals (MDGs). They stated that microfinance is a key strategy in reaching the MDGs and in building global financial system that meet the needs of the poorest people. Microfinance is unique among development interventions; it can deliver social benefit on an ongoing, permanent basis and a large scale.

McKernan [12] shown that the microcredit programs provide a two-tiered approach to poverty alleviation: credit for the purchase of capital inputs in order to promote self-employment and noncredit services and incentives. These noncredit aspects may be an important component of the success of microcredit programs. However, because they are costly to deliver and their contribution to the success of the programs is difficult to measure, they may not be properly valued. The researcher used primary data on household participants and nonparticipants in Grameen Bank and two similar microcredit programs to measure the total and noncredit effects of microcredit program participation on productivity. The total effect was measured by estimating a profit equation and the noncredit effect by estimating the profit equation conditional on productive capital. Productive capital and program participation were treated as endogenous variables in the analysis. The researcher found the large positive effects of participation and the noncredit aspects of participation on self-employment profits. The impact studies from Bangladesh showed that participation in microfinance program can exert a large positive impact on self-employment profits.

Pitt and Khandker [13] find that has a significant impact on the well-being of poor households and that this impact is greater when credit is targeted to women. The program participation has positive impacts on household income, production, and employment, particularly in the rural non-farm sector.

Otero [14] illustrates that microfinance creates access to productive capital for the poor, together with human capital, addressed through education and training and social capital achieved through local organization building, enables people to move out of poverty. By providing material capital to a poor person, their sense of dignity is strengthened and this can help to empower the person to participate in the economy and society [14].

Liliana and Maria assessed four types of factors to financial inclusion: macroeconomic weaknesses, income inequality, institutional deficiencies and financial sector inefficiencies. A key finding of this paper was that, although the four types of obstacles explain the absolute level of financial inclusion, institutional deficiencies and income inequality are the most important obstacles behind the Latin America's financial inclusion gap. From their analysis at the individual level, they found that there is a Latin America-specific effect of education and income. The results suggested that the effect of attaining secondary education on the probability of being financially included is significantly higher in Latin America than in its comparators. In this paper, the importance of institutional quality in the provision of financial services was stated as very necessary in financial inclusion and the institutional environment in which financial entities operate and plays a central role in the provision of financial services.

Shetty [15] carried out a research "The Microfinance Promise in Financial Inclusion and Welfare of the Poor" with a problem to know if microcredit is a recent addition to India's poverty-alleviation strategy. However, it has been taken a paradigm shift from credit (only) services to microfinance (credit plus services) services [16]. The study examined the promise of microfinance (institutions) program in the (financial) inclusion of marginalized and vulnerable poor, who have been excluded from the formal credit markets for a long period of time. In the paper the researcher also looked at the welfare impact of "credit plus services" on the poor. The researcher found that majority of the sample households were not accessed the credit and non-credit services in the pre-microfinance program. While, in the post-microfinance large numbers of the member households were not only accessing the credit services, but also they were competent enough to access the savings, micro-insurance and other non-financial services [17]. The access to "credit plus services" of microfinance program has improved the income, employment, assets, household expenditure, housing condition and empowerment of the poor. Policy recommendation includes the delivering of credit plus services to the marginalized and

vulnerable poor at a minimum cost will have wider impact on the socio-economic welfare of the poor. In this case, microfinance program improved welfare conditions of clients.

During the research, the researcher could not find the study carried on financial inclusion and Wellbeing of MFI's client in Rwandan Microfinance industry. However, by observation, many MFIs in Rwanda operate with poor people in rural areas. This topic should have interested many researchers; this is the main reason that pushed the researcher to choose this topic on one hand. On the other hand, researches conducted on that topic have had divergent findings and this research aims to measure the social and financial indicators and proposes some recommendation which will help UNICLECAM WISIGARA to improve the Management in the future [18-20].

Research Methodology

In this section a brief overview of various dimensions of the research, tools and techniques and methods used to achieve three research objectives has been discussed.

The data

The research is analytical and empirical in nature and makes use of both primary and secondary data. The population for the study is client of UNICLECAM WISIGARA. The data has been sourced from financial statement of UNICLECAM WISIGARA. The sample period undertaken for the objectives is from the year 2012 to 2014.

The sample

Sample frame: The sample frame is the list of target population. The sample frame in this study is all clients of UNICLECAM WISIGARA which are reporting in NBR(National Bank of Rwanda).

Sample size: According to Alain Boucher formula, the sample size was found:

N: is the size of the population=23000

N_0: is the sample size for a finite population which is equal to 165 from Bouchard table.

n: is the sample size=165/(1+165/23000)=164

The sample size was composed by 164 members of UNICLECAM WISIGARA. The simple random sampling technique was used to select the members to be included in the sample.

Sampling technique and procedure: Simple random sampling is chosen for analyzing the Social and financial performance and their welfare conditions.

Models and techniques

Paired simple test: SPSS output for the paired t-test gives researcher, the mean difference between prior and after of the financial inclusion. The statistic used to determine the effect size is Eta squared. The formula for eta squared for a paired-samples t-test is $t^2 / (t^2 + N - 1)$.

Multiple linear regression analysis: To find out the influence of financial inclusion to Welfare conditions of UNICLECAM WISIGARA clients, a multiple regression equation can be expressed as:

$$Y_1 = \beta_0 + \beta_A + \beta_U + \beta_Q P + \varepsilon$$

This formula can be represented by some indicator like:

Y1=Welfare conditions represented by Profit generated after joining MFI

X=Financial inclusion represented by Access (geographic distance, age of adult member, marital status of member); Usage (amount received, type of business, type of saving used, Quality (Education, Type of repayment used).

Pt=is Welfare conditions

The the formula became:

$$Pt = \beta_0 + \beta_G + \beta_A + \beta_{MS} + \beta_{AR} + \beta_{TB} + \beta_{TS} + \beta_E + \beta_{TR} + \varepsilon$$

Then, G, MS, AR, TB, TS, E, TR as the independent variables (as indicators) and Pt as Dependent variable.

Data Analysis and Interpretation of Results

Portfolio quality

The figure below shows the quality of portfolio of UNICLECAM WISIAGARA is not good because the ratio are 20.6%, 8.4% and 9.9% respectively in 2012, 2013 and 2014.The international maximum ratio of PAR is 5%. Those ratios should be low and fairly stable, and managers should monitor it daily, if possible. When referring to PAR, the MFI should always specify the number of days (Figure 1).
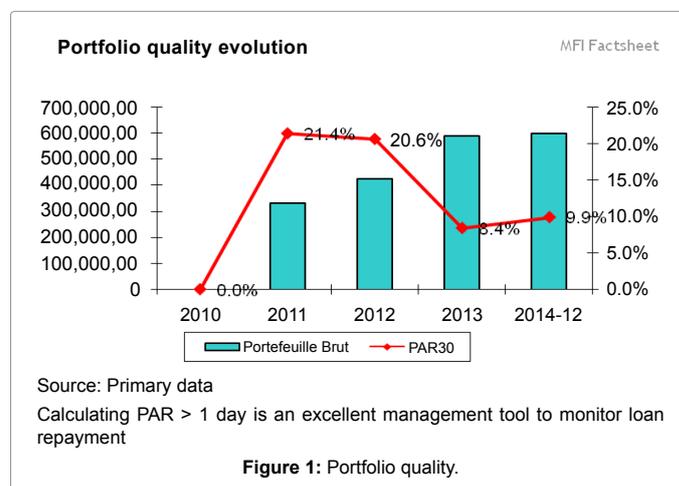
Liquidity management

The liquidity ratio represented by UNICLECAM WISIGARA is increased to 31%, in 2012, 35% in 2013 and 41 in 2014 respectively. The standard minimum of Rwanda national bank is 30%.

In financial institutions particularly those taking deposits, enough deposit ratio should guaranty the credibility of the MFIs in the financial market. If the liquidity ratio is low can influence the mismanagement and cause the liquidation of financial institution.

Liability composition

The deposits of client represented 78%, 66%, 52% in 2012, 2013 and 2014 respectively. UNICLECAM WISIGARA has to make effort in saving mobilization. The borrowed funds is increased to 17% to 43%. It means that the deposits are insufficiency to satisfy the needs of clients. Also the 4%, 13% 38% of portfolio is financed by other resources respectively in 2012, 2013 and 2014.

UNICLECAM has to mobilize the saving from their members than to requesting the borrowing in commercial banks because the cost of borrowing is very high comparing the operation income.

Source: Primary data

Calculating PAR > 1 day is an excellent management tool to monitor loan repayment

Figure 1: Portfolio quality.

Efficiency and productivity

The 100 francs of portfolio generated 30.5 Rwandan francs, 34.5 Rwandan francs and 34.4 Rwandans francs in 2012, 2013, and 2014 respectively. The manager should increase the yield of portfolio as a main activity of MFI.

Operation expenses

UNICLECAM represent the 35.9%, 50.5%, and 44.9% in 2012, 2013 and 2014 respectively of operation expenses. UNICLECAM WISIGARA has to minimize the operation expense because if the ratio is lower, the MFI is more efficient.

Portfolio Rotation

The rotation is positively to 112%, 116% in 2012 and 2013. In 2014 the portfolio rotation decreased to 5% comparatively to 2013. When the portfolio is not rotated positively the interests become low while the wages of staff are still constant in that same period.

The manager has to make effort in recovery strategy.

Efficiency and productivity indicators reflect how well an MFI uses its resources, particularly its assets and personnel. UNICLECAM WISIGARA network use high number of staff than their resources.

Profitability and sustainability

Return on equity: UNICLECAM WISIAGARA represented the ROE 10.9%, 6% and 15.1% in 2012, 2013, and 2014 respectively. It means 100 Rwandan francs of equity generate on average 10.6 Rwandan francs. This ratio does not attract the investors.

Return on asset: UNICLECAM WISIGARA, their ROA is still low to 2.7%, 0.9% and 2.4 in 2012, 2013 and 2014. The assets of UNICLECAM WISIGARA is not increased the percent amount comparing their operation expensive. The 100Rwandan francs of asset generate 2.4 Rwandan francs in 2014. It has to reduce the suspense account in their balance sheet. It has a lot of amount that did not generate the income.

Operation self-sufficiency

UNICLECAM WISIGARA is still under breakeven in two last year and presented 102%, 82.3% and 79.7% in 2012, 2013 and 2014. It has to reduce the Administrative expenses. The high percent indicators of sustainability of IMF indicate the performance of MFI but UNICLECAN WISIGARA has still low percent of them.

Social responsibility of MFI

Social responsibility requires an adaptation of the MFI corporate culture to their cultural and socio-economic context, an adequate human resource policy, credit guarantees adapted to the local conditions, and balanced relationships between staff and clients (in particular in MFIs where there are elected clients who participate in decision making. The figure above showed that UNICLECAM WISIGARA represented 68% of social responsibility. UNICLECAM WISIGARA has to improve the social responsibility. Indeed, UNICLECAM WISIGARA respected the access, usage, quality as the dimension of financial inclusion (Figure 2).

This Figure 2 above showed the details indicators of main dimension of SPM for WISIGARA IN 2012-2014 and it presented geographic targeting 56%, individual targeting 70%, pro-poor methodology 67%, range of traditional services 86%, quality of services 67%, innovation and non-financial services 78%, economic benefits
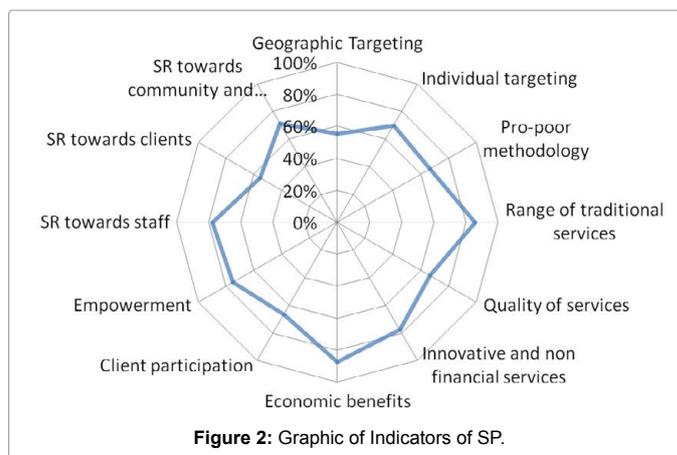

Figure 2: Graphic of Indicators of SP.

The FI fully meets the indicator

The FI doesn't meet all parts of the indicatior

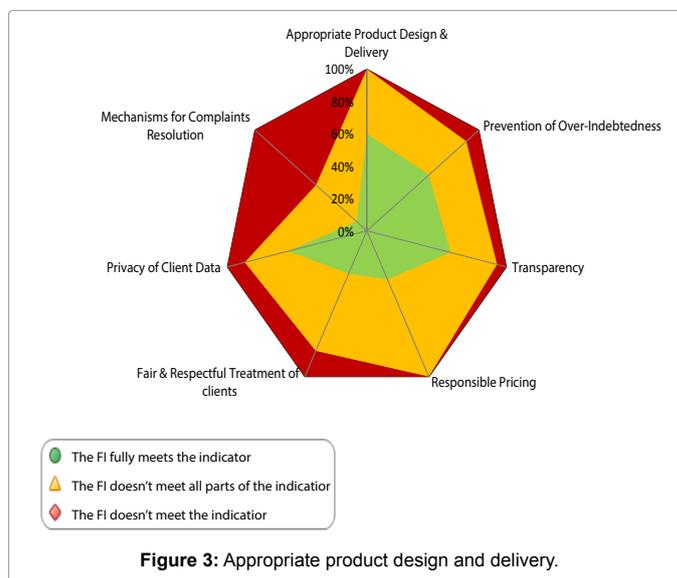The FI doesn't meet the indicatior

Figure 3: Appropriate product design and delivery.

88%, client participation 67%, empowerment 50%, Client protection social responsibility toward staff 78%, social responsibility toward client 56%, social responsibility to community and environment 71%.

According to smart card, the client protection principles are a key to achieve the social performance management. To complete this assessment, the figure below presented the position area of UNICLECAM WISIGARA in client protection principals (Figure 3).

CLECAM WISIGARA meets the standards of care in four of the seven principles, with satisfactory practices in appropriate product design and delivery (with a score of 60%), transparency (60%), privacy of clients' data (56%), and prevention of over-indebtedness (56%). Adjustments are needed to meet the standards in the areas of responsible pricing (in which WISIGARA scored 33%), fair and respectful treatment of clients (29%), and mechanisms for complaints resolution (9%).

The influences of financial inclusion in wellbeing conditions of the clients

A paired sample t-test is used to determine whether there is a significant difference between the average values of the same measurement made fewer than two different conditions. Both

measurements are made on each unit in a sample, and the test is based on the paired differences between these two values. The usual null hypothesis is that the difference in the mean values is zero. In this research, the researcher examine if there is significance between the households situation prior financial inclusion and after financial inclusion of clients of MFI.

The mean and standard deviation of Type of business before joining CLECAMWISIGARA and Type of business after joining CLECAM WISIGARA (M=2.6466, SD=1.58986), Average net income received before joining CLECAM WISIGARA and Average net income generated after joining CLECAM WISIGARA (M=4.1429, SD=2.09669). Benefit before joining CLECAM WISIGARA and Benefit after joining CLECAM WISIGARA (M=7.1654, SD=3.3826). Statistically there is an increasing of mean and standard deviation between one time to second time (before and after).

Correlation of financial inclusion

There is a correlation prior and after financial inclusion (Type of business before joining CLECAM WISIGARA and Type of business after joining CLECAM WISIGARA (0.03), Average net income received before joining CLECAM WISIGARA and Average net income generated after joining CLECAM WISIGARA (0.00). Benefit before joining CLECAM WISIGARA and Benefit after joining CLECAM WISIGARA (0.00) to $P < 0.05$.

Influence of financial inclusion to welfare conditions

The types of business, average net incomes, benefits obtained by the beneficiaries are influenced by financial inclusion and improve the welfare of clients. In this research the Eta squared is:

$(-7.252)^2 / (-7.252^2 + 100-1) = 0.34$

$(-7.945)^2 / (-7.945^2 + 100-1) = 0.38$

$(-8.219)^2 / (-8.219) + 100-1) = 0.40$

Interpretation of eta squared: Multiply eta squared value 0.34, 0.38, and 0.40 by 100 that new value (34), (38) and (40) becomes the percent of variance accounted for, in the dependent variable (welfare condition) by the independent variable (financial inclusion). A paired-samples t-test was conducted to evaluate the impact of the financial inclusion. There was a statistically significant increase the type of business from Time 1(M=2.6466, SD=1.58986) to Time 2 (M=4.1429, SD=2.09669), t(132)=-7.252, p<000. The magnitude of the difference in the means was large (eta squared 0.346).

There was a statistically significant increase the average of income from Time 1(M=2.4586, SD=0.50017) to Time 2 (M=3.0902, SD=0.97280), t (132)=-7.945, p<000. The magnitude of the difference in the means was large (eta squared 0.389).

There was a statistically significant increase own assets from Time 1(M=4.6692, SD=2.5841) to Time 2 (M=7.1654, SD=3.3826), t (132)=-8.219, p<000. The magnitude of the difference in the means was large (eta squared 0.405).This test is highly significant.

This interval does not include 0 which means that we can be pretty sure that the difference between the 2 groups is significant. This is confirmed by the p-value (p<0.0001) which says that the test is highly significant. The manager should respect the dimension of financial inclusion in order to improve the welfare condition of their client. The means and standards deviations of welfare conditions are increased after joining UNICLECAM WISIGARA.

The regression model of variation of profit

a. Predictors: (Constant), type of repayment used, age of respondent, types of saving used by respondent, amount of loans received by respondent, education of respondent, distance to join CLECAM WISIGARA, sex of respondent, marital status of respondent, type of business after joining UNICLECAM WISIGARA (Table 1).

R2=0.451 which suggest 45.1.% of the welfare condition(profit generated after joining UNICLECAM WISIGARA can be explained by the variation geographic distance, marital status, amount received, type of business (farming and others), education (illiteracy and others) gender, and type of repayment.

ANOVA of regression model of variation profit

H_0: Geographic distance, marital status, amount received, type of business (farming and others), education (illiteracy and others) gender, type of repayment affect the variation of profit generated after joining UNICLECAM WISIGARA.

An F-statistic of 11.23% (p-Value=0.000 therefore <0.05) suggests that a regression model containing the geographic distance, Marital status, amount received, type of business (farming and others), education (illiteracy and others) gender, type of repayment affect the variation of Profit is better than a model without any predictor variables.

Therefore, we reject the null hypothesis and conclude that the model overall goodness of is statistically significant, meaning that this is a good model for explaining the improvement of welfare conditions trough the variation of profit generated after joining UNICLECAM WISIGARA (Table 2).

Influence of financial services in household profit

The regression model equation model is:

Pt=-1606 + 0.325 Age of respondent+0.237 gender +0.224 Geographic distance –225 type of saving +265 type of repayment system +ε $ε_i$

The profit is positively correlated to both type of saving and type of repayment. An increase of the type of saving and type of repayment will also increase the net profit. When the distance is lower, clients are matures enough and improve gender equity, those contribute to increase the net profit to 32.5%, 23.7%, 22.4%, 22.5% and 26.5% respectively. Those independents variable are statically significant at 0.5% level of significance because the p-value (0.007, 0.000, 0.004, 0.002 and 0.00 respectively) is than an α-value of 0.05. Gender of borrowers increase 0.002 standard unity, distances increase 0.004 standard unit, type of saving increase 0. 007 standard units respectively to the profit.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.672	0.451	0.411	2.59614
Source: primary data April 2015.				

Table 1: The regression model of variation of profit.

Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	681.345	9	75.705	11.232	0.000
	Residual	829.015	153	6.74		
	Total	1510.361	164			

Source: Primary data April 2015.

Table 2: ANOVA of regression model of variation profit.

Then the financial inclusions influence the welfare conditions of client of microfinance. When the financial inclusion dimension increasing the unity, the net profit is also increased. It means that the profit is increased the welfare conditions of clients are improved also.

Conclusion

After the analysis, the findings have revealed the influence of financial inclusion assessed to the Welfare condition of UNICLECAM WISIGARA's clients. The access, usage and quality play important role to change the wellbeing condition of clients. The MFIs which respect the dimension of financial inclusion contribute to welfare conditions of their clients. It is also that MFI respect the social and finance indicators contribute also to the profitability and sustainability.

To conclude, it has been revealed that financial inclusion and welfare conditions improvements of households have a positive relationship while the MFIs are profitable and sustainable where after analyzing the regression coefficients, the profit is positively correlated to both type of saving and type of repayment. An increase of the type of saving and type of repayment will also increase the net profit. The financial inclusion influences the positive change of welfare conditions of MFIs clients. When the MFIs respect the dimensions of financial inclusion, social and financial performance indicators, the welfare conditions of clients will also be improved.

Therefore, Members of UNICLECAM network should:

- Avoid a bad understanding of repayment of loan;

- Actively participate in different meetings organized by CLECAM to exchange necessary information about their organization;

- Actively participate in the saving and credit services;

- Calculate and save the income from loan received.

The study has covered UNICLECAM WISIGARA network. It is therefore recommended for further researchers to conduct the similar study in the rural area and assess the contribution of financial inclusion and welfare conditions of clients of IMIRENGE SACCO (Appendix 1). Other financial institutions like, microfinance institutions limited, commercial bank, and pension funds can also be assessed.

References

1. Helms B (2006) La finance pour tous: construire des systèmes financiers inclusifs. Washington (DC): CGAP pp: 234-678.

2. Peachy S, Roe A (2006) Access to finance: What does it mean and how do savings banks foster access. WSBI, World Savings Banks Institute pp: 14-34.

3. Morduch J (2000) The microfinance schism. World development. Economic Journal 28: 617-629.

4. Rhyne E (1998) The yin and yang of microfinance: Reaching the poor and sustainability. MicroBanking Bulletin 2: 6-8.

5. Schreiner MJ (1997) A framework for the analysis of the performance and sustainability of subsidized microfinance organizations with application to Bancosol of Bolivia and Grameen Bank of Bangladesh. Ohio State University 32: 67.

6. Kantengwa A (2008) History of microfinance in Rwanda. Kigali pp: 10-15.

7. BNR (2014) Economic Review. Kigali, N0006, 46: 97.

8. Demirguc-Kunt A, Klapper LF (2012) Measuring financial inclusion: The global findex database. World Bank Policy Research Working Paper 60: 25.

9. Hossain M (1988) Credit for alleviation of rural poverty: The Grameen Bank in Bangladesh. Food Policy Research Institute 65: 54.

10. Mosley P (2001) Microfinance and poverty in Bolivia. Journal of Development Studies 37: 101-132.

11. Simanowitz A, Brody A (2004) Realising the potential of microfinance. Management sciences journal 51: 98.

12. McKernan SM (2002) The impact of microcredit programs on self-employment profits: do noncredit program aspects matter? Review of Economics and Statistics 84: 93-115.

13. Pitt MM, Khandker SR (1998) The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter? Journal of Political Economy 106: 958-996.

14. Otero M (1999) Bringing development back, into microfinance. Journal of Microfinance/ESR Review 1: 8-19.

15. Shetty NK (2008) The microfinance promise in financial inclusion and welfare of the poor: Evidence from Karnataka. International Finance Journal 23: 53.

16. Goldberg N (2005) Measuring the impact of microfinance: taking stock of what we know. Grameen Foundation USA publication series 21: 78.

17. Khandker SR (1998) Fighting poverty with microcredit: experience in Bangladesh. Oxford University Press, 224-534.

18. Littlefield E, Morduch J, Hashemi S (2003) Is microfinance an effective strategy to reach the Millennium Development Goals? Focus Note 24: 1-11.

19. Lukes S (2004) Power: A radical view. Palgrave Macmillan 24: 54.

20. Morduch J (1999) The microfinance promise. Journal of economic literature 37: 1569-1614.