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EFFICIENCY AND FINANCIAL SUSTAINABILITY OF MICROFINANCE INSTITUTIONS: A STUDY OF JAFFNA DISTRICT

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ABSTRACT

Microfinance is the provision of thrift, saving, credit and financial services and products of very small amount to the poor in rural, semi-urban and urban areas for enabling them to raise their income levels and improve their standard of living. (Sen., 2008).In numerous studies done across the world, it is generally believed that various microfinance initiatives have been able to make a difference in the target populations lives. However, increasing doubts have been raised over the financial sustainability of microfinance institutions. MFIs need to be economically viable and sustainable in the long run but economic implications of long term sustainability are not being considered (Srinivasan et al., 2006). Microfinance collectively refers to the supply of loans, savings accounts, and other basic financial services like insurance, to the poor. About one billion people globally live in households with per capita incomes of one dollar per day (Morduch J. 1999).Microfinance Institutions (MFIs) are special financial institutions. They have both a social nature and a for-profit nature. Their performance has been traditionally measured by means of financial ratios. The context of the study is to analyze the prospects of micro finance industry in Jaffna District special reference to MPCS Co-operative Rural Bank. This study examines the relationship between efficiency of co-operative rural banks with its financial sustainability. The objective of the study is to evaluate efficiency and financial sustainability of microfinance institution in relates with its rate of interest, operating revenue, administration & operating expenditure, administrative, operating, and financial and staff efficiency.10 rural banks were selected in Jaffna district using stratified random sampling method. Research hypothesis were formulated that there is an impact of efficiencies on financial sustainability and

operational and financial efficiencies are significant impact in determining the financial sustainability. Ratio analysis was used to evaluate the efficiencies of the rural banks. Findings say that there is a relationship exists between efficiency and financial sustainability.

KEYWORDS: *Micro finance Institutions, Efficiency, and Financial Sustainability.*

INTRODUCTION

Microfinance collectively refers to the supply of loans, savings, and other basic financial services like insurance, to the poor. As the poor people cannot avail these financial services from the formal commercial banks (because of the collateral requirements), microfinance tends to provide to them exclusive of these conditions. For these financial services, the poor people are willing to pay for because of the added advantage they receive for not collateralizing anything. The term also refers to the practice of sustainably delivering such services. More broadly, it is a movement that envisions a world in which as many poor and near poor households as possible have permanent access to an appropriate range of high quality financial services, including not just credit but also savings, insurance, and fund transfers (Christen, R. P., Rosenberg, R., and Jayadeva, V., 2004).

Microfinance institutions focus on providing credit to the poor who have no access to commercial banks. While microfinance institutions try to be financially sustainable, they appear to be often loss making. Nevertheless, they succeed in lending to domestic small companies and poor agents since Western donors and NGOs are still willing to provide financial support against below market interest rates. Recently, however, there seems to be a shift from microfinance institutions to a further focus on financial sustainability and efficiency. Financial sustainability and efficiency of microfinance institutions is obviously very important for a well-functioning financial system in developing countries.

Background and Significance of the study

Microfinance began as a financial system to provide assistance to poor families in order to help them to begin and sustain income-generating activities. Micro credit arose in the 1970s, through the efforts of Mohammed Yunus, a microfinance pioneer and founder of the Grameen bank of Bangladesh.

Microfinance has evolved as an economic development approach intended to benefit low income groups. Asian Development Bank (ADB) has defined Microfinance as “the provision of a broad range of financial service such as deposits, loans, payment services and insurances to the poor and low income households and their Micro enterprises”. In this regard, Microfinance activities usually involve small loans, topically for working capital, informal appraisal of brewers and investments to repeats and larger loans based on debt capacity and repayment performance steam lined-loan disbursement and monitoring secure serving products.

The topically microfinance clients are low income persons that do not have access to formal financial institutions. Microfinance clients are topically self employed often house hold based entrepreneurs. In rural areas they are usually small farmers and others who are engaged in small income generating activities such as food processing and petty trade. In urban areas

Microfinance activities are mire device and include shop keepers, service providers, artisans, street vendors etc.

The earlier paradigm was that Microfinance was on act of charity as lending for micro enterprises and the poor were not profitable. There were many deficiencies in such lending. That is repayments rates were low, unintended beneficiaries were large, inefficient operations and funds were often not used for the purpose for which they were given and the total outreach was not significant. Due to this reasons MFIs became unable to sustain in their operations. If a MFIs should be sustainable it must be financially self sufficient.

Even though microfinance institutions try to be financially sustainable, they appear to be often loss making. Nevertheless, they succeed in lending to domestic small companies and poor agents since western donors and (Non Government Organizations) NGOs are still willing to provide financial support against below market interest rate. Recently, however, there seems to be a shift from microfinance institutions to a further focus on financial efficiency and sustainability. Financial efficiency and sustainability of microfinance institutions is obviously very important for well-functioning financial systems in developing countries.

Significance of the Study

Microfinance is a well- integrated broad range of financial services provides to the poor and low income persons who are excluded from availing themselves of similar services from formal financial institutions. Thus policy makers have paid increasing attention to rural development as an important element of the national development strategy. They have recognized the need for providing financial services at micro level for achieving sustainable rural development and economic empowerment of the poor, which account for a very high proportion of the rural population.

Since, Microfinance can increase the availability of capital for developing income generating micro enterprises and rural agriculture while providing savings and other financial product at village level for increasing the financial security of the poor and low income persons (A.S.Jeyawardene-2003).Due to this microfinance has emerged as a major instrument to provide financial facilities to low income group clients including the small entrepreneurs. Because of this, in recent times there is a huge demand for microfinance activities all over the world especially in developing countries like Sri Lanka. This reflected in rapid growth of the number of institutions engaged in microfinance activities.

If the microfinance institutions financially sufficient, It will increase its capital base. This would in turn increase its capacity to expand the scale of its operation. Therefore,

- Finding of this research will help to the institutions to find out the relationship between the efficiency of the operation and achievement of financial sustainability.
- Finding of this research will highlight the present situation of the co-operative rural banks in Jaffna district.
- Findings of this research will help the institutions to identify the factors which determine the efficiency of its operation and could help the institution to carry out their operation efficiently as well.

- Findings of this research will also help further research question for further investigation in future on financial sustainability of any MFIs in Jaffna and Sri Lanka.

Objectives of the Study

The researcher has planned to carry out this study on the efficiency and financial sustainability of the microfinance. The objectives of the research are;

- To identify the relationship between efficiency and financial sustainability of co-operative rural banks.
- To find out the impact of efficiency on financial sustainability of selected cooperative rural banks.
- To find out the factors which determine the efficiency and financial sustainability.
- To evaluate the trend on efficiency and financial sustainability during the years of 2007, 2008, 2009, 2010 & 2011.
- To suggest the co-operative rural banks to improve or develop the operation in efficient manner in order to uplift the financial sustainability in its operation.

Research Problem

The research aims to study the relationship between efficiency of co-operative rural banks and its financial sustainability. ' A financially self - sufficient credit institution must cover its operating expenses, loan losses and the cost of funds with the income earned from charging fees and interest (Jan Evers, Stefanie Jack, Adriaan Loef & Hedwing Siewertsen ,2000). Therefore the research problems are as follows;

1. Why efficiency of cooperative rural banks is low?
2. Do the rural banks perform their activities towards financial sustainability?

Literature and Hypothesis development

The term " Microfinance" pertains to the lending of extremely small amounts of capital to poor entrepreneurs in order to create a mechanism to alleviate poverty by providing the poor and destitute with resources that are available to the wealthy, albeit at a smaller scale. This particular form of lending has existed in the world for quite some time, though formalized by Mohammed Yunus in Bangladesh during the 1970's. Yunus won the Nobel Peace Prize in 2006 for his efforts in combating poverty and resources to the poor via the Grameen bank and the microfinance model.

According to Otero (1999) Microfinance is "the provision of financial services to low income poor and very poor self-employed people". These financial services according to Joanna Ledgerwood (2000) generally include savings and credit but can also include other financial services such as insurance and payment services.

Schreiner and Colombet (2001) define microfinance as "the attempt to improve access to small deposits and small loans for poor households neglected by banks." Therefore, microfinance involves the provision of financial services such as savings, loans and insurance to poor People

living in both urban and rural settings who are unable to obtain such services from the formal financial sector.

According to common definition of Asian Development Bank (ADB, 2000) “microfinance is the provision of a broad range of financial services such as credit, saving, insurance and money transfer for low income individuals or households”. The term low income used in the definition of microfinance is a relative concept; it varies from countries to countries or even among different areas within a country.

Microfinance is the provision of financial services to the poor who do not have access to capital and financial services (Kosiura, 2001). Financial services can include one or any combination of the following: lending, savings, insurance, pension/retirement and payment services. Increasingly mature MFIs also provide diverse products-housing loans (primarily improvements, repair and maintenance), insurance (both health and life insurance), and private pensions. Microfinance is also frequently combined with the provision of social and business development services, such as literacy training, education on health issues, management or accounting training.

The role of microfinance for development efforts around the world, particularly for poverty alleviation has been significant. Providing poor people with access to financial services are seen to reduce capital market distortions to exclude the poor, reduce vulnerability by providing the poor with financial resources when needed, and opportunities for income-generating activities. Microfinance enables clients to protect, diversify and increase their income, as well as to accumulate assets, reducing their vulnerability to income and consumption shocks (Robinson, 2002).

Similarly, microfinance refers to as “the provision of loans, savings, payments and other basic financial services to low income populations. Microfinance activities involve small loans, employ collateral substitutes, streamline procedures and offer swift and frequent access. Their clients cover typically self-employed, low income entrepreneur and households in both rural and urban areas” (Imboden, 2005).

Efficiency

Efficiency ratio provides information about the rate at which microfinance institutions generate revenue to cover their expenses. Efficiency refers to the cost per unit (Joanna Ledger wood, 2000).Efficiency measures how well the available resources are utilized to maximized output (Monica brand, 2000).

Efficiency is defined here as the amount of outputs per unit of cost. Costs are defined as expenses recorded in the organizations accounts a long with any unrecorded expenses or implicit Subsidies. Outputs of a microfinance organization may be the amount of the loan portfolio or the number of loans outstanding or the number and amount of loan disbursed. (Claudio Gonzalex - Vega, Mark Schreiner, Richard L. Mayer, Jorge Rodriguez & Serigo Navajas, 1996).

A number of accounting variables reflect the efficiency of the microfinance institutions. These accounting variables are administrative expense ratio, number of loans per loan officer and loan officers to total staff, portfolio size, loan size, lending methodology, source of funds and salary

structure as the efficiency drivers and hence as the measurements for MFI efficiency.(Todd Forrington, 2000)

Studies Related to Efficiency

Avishay braver and Monica brand (1991) argues that purely supply driven credit schemes must be transformed into self sustainable systems and rural financial intermediaries must become viable and self carrying agents. Intervention in rural financial markets of developing countries should focus on re-structuring and strengthening rural financial institutions and remove obstacles to the efficient functioning of rural credit markets.

Reinhard schmid (1994) found that credit technology also one of the determinants of cost minimization process or institution's sustainability. The study discloses individual based credit technology giving benefits to the borrower in the form of reduced transaction costs.

USAID (1995) in this study they argue the prerequisites to operational efficiency appear to include the adaptation of an effective service delivery methodology and significant institutional competence in such areas as delinquency control information management and staff development.

Hume David and Paul Mosley (1996) pointed out that operational efficiency is of paramount significance as it has a direct bearing on the quality of lending and the rate of defaults. The rate of defaults is the single most important factor in cost as the interest rate has to be enhanced considerably to off-set the amount of defaults, other cost, remaining the same.

Cecile Lapenu [1999] conducted a study which relates to efficiency of the MFIs, as Distribution, Growth, and performance of MFIs in Africa, Asia and Latin America. The study reveals that by continent Asia accounts for the largest volume of savings and loans. It employs the largest number of MFI staff, but has lower personnel costs than Africa and Latin America. At the same time staff productivity in Africa is low as the continent still faces the constraints of poor infrastructure, undiversified economies and high transaction costs as well as poverty and illiteracy among potential Clients. All of this limits transaction volume per staff member.

David Richardson (2000) describes that the achievement of the efficiency in the operation is the vital condition. He prescribed the seven doctrines of success for micro lenders or micro lending institutions. One of his doctrines emphasizes that "by broadening base, increase loan size, and revaluating salary and incentive structures on micro lending institutions can continue to provide high quality services to their clients while lowering its operating expenses".

The study of USAID (2001) based on operation efficiency of the MFIs. According to the study, its success in holding down administrative cost plus loses from bad loans strongly affects its overall financial suitability. Further the study argues that attainable level of operational efficiency differ according to local performances, the methodology pursued by the MFIs and the target group that rural financial intermediation is very expensive less attention has been directed towards microfinance programs operate efficiently.

Todd Forrington (2000) in his study rightly pointed out that improving efficiency is an effective way of reducing the interest rate charged to borrowers. Based on his Latin American MFIs study,

MFIs can wring significant efficiencies from operating process and systems. The study highlights some efficiency innovations employed by leading Latin American MFIs. They are easy access to information is must essential client information also enhances efficiency, specialized products for low risk borrowers can reward repayment performance and simultaneously lower administrative expenses specialized loan officers also can improve efficiency, borrow per screening and geographic concentration of loan officers in specific zones is efficient and it reduces credit risk.

Craig Churchill and Dan Coaster (2001) argue that efficiency remains one of the greatest challenges for MFIs. It reflects an organization ability to manage costs per unit of output and thus is directly affected by both cost control and level of outreach. Inefficient MFIs waste resources and ultimately provide clients with poor services and products as the cost of these Inefficiencies are ultimately passed on to clients through higher interest rates and higher client transaction costs.

Monica brand and Julie Gerschick (2001) argue that high level of operating efficiencies in microfinance is unfortunately the exception rather than the rule. The reason is twofold. First many MFIs have not fully exploited the minimum economies of scales required to improve efficiencies. There are many small MFIs serving to few clients to operate efficiently. Second many MFIs still operate in non competitive environment where there is little pressure to improve efficiency given that high operating costs often can be covered by charging higher interest rates. Further they argue that MFIs can improve efficiency in three ways;

1. Increase the number of clients to achieve greater economies of scale.
2. Stream line system to improve productivity and
3. Cut costs, the first two goals are closely related both seek to increase the no of clients, or units of output.

The MFIs serves by having staff work harder or preferably smarter. In MFI that are not managed in a businesslike manner, employees often have excess capacity. Third goal addresses cost side of the equation. Administrative cost including salaries and other operating expenses, represent the greatest component of the cost structure of an MFI. Reducing the delivery costs associated with providing financial services improves operating efficiency. If these costs can be reduced the savings can be passed on to clients through more competitively priced products, ultimately improving customer satisfaction. Improving efficiency should however be of paramount importance to MFIs from a social as well as a financial perspective. Competition market saturation will prevent many MFIs from charging undifferentiated high interest rates in perpetuity for inefficient MFIs facing these conditions that only way to maintain self-sufficiency is via larger loan which are typically not well suited to lower market segments and thus may conflict with the designed social mission. Thus efficiency is critical for a MFI to remain agile competitive and responsive to client needs.

Indrani Hettiarachchi (2003) argues that sustainability of MFI in any country depends on their ability to operate efficiency and gain the confidence of the community as reliable institution capable of providing the required services. This depends on the acceptability of MFIs by the clients, funding organizations, and the regulatory mechanism of the country.

Financial Sustainability

Financial sustainability is defined as the ability of microfinance institutions to cover actual operating expenses as well as adjustments for inflation and subsidies with adjusted income generated through its financial services operations. Financial sustainability implies commercial leverage for donors and repeat use for customers (Mark Schreiner, 1996).

Financial sustainability refers to the ability of an MFI to develop a diverse resources based on that it could continue its institutional structure and production of benefits for intended clients' population after support cessation of donor financial support (Naser Abdelkarim, 2002). The concept of financial sustainability means that a program must meet its operational expenses entirely of out of the income generated by the services it offers to its clients. That is an institution should be maintained by its clients not by donors (Robert Peck Christen, 1997).

Full financial sustainability measures how well a MFI can cover its costs taking into account a number of adjustments to operating revenues and expenses. The purpose of most these adjustments is to model how well the MFI could cover its costs if its operation were unsubsidized and it was funding its expansion with commercial cost liabilities. Financial sustainability can be gauged by an organization's net income (the surplus of revenues over expenses); liquidity (the cash available to pay bills); and solvency (the relationship of assets and debt or liabilities). Again, this manual promotes a broad, interdisciplinary role for financial management, as one component of overall sustainability.

Many factors influence the financial sustainability of an organization, including the operating environment, national and local politics and policy, the activities of other organizations, the availability of skilled personnel, Institutional innovations, Strong commitment and political support for change, Learning and experimentation, New products appropriate for the poor, Long term banking relationship, Procedural simplification, Enabling macroeconomic environment and Reforming a government bank to reach the poor. Understanding the nature and impact of these influences on the organization and programs is critical because it better prepares to anticipate and respond to changes in the external environment in order to generate sufficient resources to consistently meet the clients' needs.

There are varying degrees of sustainability, and therefore some organizations are more sustainable than others. The "starting point" is different for each organization: each has strengths that can be enhanced and weaknesses that can be improved upon. For example, some organizations always require international donor funding, while others may be able to generate sufficient funds through cost recovery and local donations.

Studies Related to Financial Sustainability

Berenbach and Guzman (1992) in their study revealed that lending methodology also one of the Determinants factors for the sustainability of the MFI since a dysfunctional methodology may produce various manifestation of weakness, such as poor quality portfolio, high clients' desertion, and difficulty enforcing contracts, the inability to reduce cost sufficiently or to achieve sustainability. Further he pointed out that to become sustainable MFI may change their methodology to increase scale and improve efficiency since decision to modify product pricing costs and increase staff productivity have significant ramifications on the lending methodology.

Claudio Gonzalez- Vega (1994) explains that the sustainability generates compatible incentives for all those with an interest in its survival, such as clients, managers, and the staff because it underpins of the microfinance organization's permanency.

Claudio Gonzalez – Vega, Mark Schreiner, Richard L. Mayer, Jorge Rodriguez & Serigio Navajas(1996) conducted a case study about a microfinance institution in Bolivia, in their study they reveal that organizational design and technological development also contribute financial sustainability of an institution. Leaders' attitudes about sustainability gradually lead through a process of search for formalization to self sustainability. According to them, this concern will also reflect among other things. Such as adoption of interest rate policies those seek to cover the costs of lending and in a resolute attitude toward loan collection. Further their lending technologies always appropriate its market niche. The study pointed out that success of on the development of a microfinance program rests on the accumulation of knowledge and experience about the environment in which it operates relevant features of the clientele it series, the individual credit worthiness of heterogeneous clients, this success requires constant time- turning and adjustment of the technology to varied local circumstances. In this way, the particular institution always in line with these concepts. Payton (1997) conducted a study as outreach and sustainability, comparative analysis of savings first vs. credit – a comparative analysis of eight MFI in Africa. In his study he argues "ability to reach large number of clients with financial services in the long run is a function of their financial viability is necessary to reach the poor". However, he pointed out that "a program that reaches the very poor". But relies on donor fund is wasteful in several ways.

Mark Schrenier (1997) revealed sustainable MFI helps a lot of poor people through a time frame. At the same time understandable MFI helps just a few people through a short time frame. He argues that this sustainability requires profit since profit perfect the permanency. That is when the donors leave this will protect the institution. But, sustainability requires more than just financial sustainability from profit. According to his argument, are you of high profit and strong performance do not mean a MFI is sustainable. Therefore he places several conditions. If financial sustainability last in the long run. Such as structure of the rules and incentives and the system of organization prompt. He emphasizes that sustainability is meeting goals now and in the long term with subsidized funds replaced with market funds.

Jan Evers, Stefanie Jack, Adriaan Loef, Hedwing Siewertsen (2000) according their book the sustainability is divided into four different levels;

1. High subsidized programs grants and soft loans cover operating expenses and establish the revolving loan fund. The fund erodes due to loan losses and inflation. There is a permanent need for subsidies and grants.
2. Fully revolving fund interest earned covers the cost of funds and some operating expenses. Grants are required to finance some operational expenses.
3. Operational sustainability income covers cost of funds and operational expenses. However, some element of subsidy remains due to the financial cost of maintaining the value of a revolving loan fund in a high inflationary environment or of paying commercial rates of refinancing cost.

4. Financial sustainability or FSS: all costs are covered with interest and fees charge by the organizations and funds are raised at commercial rates from formal financial institutions.

Moreover, institutions that do not cover 100 percent of their operational costs will remain dependent on donations or government subsidies to maintain their current activity level. A drop in subsidies would automatically deplete loan capital and result in a reduction in the number of borrowers using the institution. Institutions that cover more than 100% of their operational costs but do require funds for lending. Institutions that cover operational & financial costs are fully sustainable.

Paul (1997) in his study point out transaction costs of lending and borrowing are major barrier to providing access to micro credit services for the poor on a sustainable basis.

Mohsmmst Mazirwam (2003) argues that strengthening institutional capacity is one of the key issues for the sustainability of the microfinance sector. String institutions together with good governance will be able to provide good quality financial services to the poor increase their outreach significantly and achieve financial sustainability.

Otero (1999) argues to be successful financial intermediaries that provide services and generate domestic resources must have the capacity to meet high performance standards. They must achieve excellent repayments and provide access to clients and they must build forward operating and financial sustainability. According to the study, in order to do so MFIs need to find ways also to broader their resources base.

Canadian International Development Agency (1999) in their reference guide clearly pointed out that gradually changing has as more MFIs decrease their donor dependence. Some became totally non-dependent to maintain their non-operations. They further revealed that this being done by contribution of changes including;

- Increasing scale of operations.
- Improving the efficiency of delivery of the financial service.
- Setting appropriate interest rate policy.

All these build up the institution to become sustainable.

David Richardson (2000) states that to achievement of the efficiency in the operations is the vital condition. He prescribed seven doctrines of success for micro lenders or micro lending institutions. One of his doctrines emphasized that by broadening base increase loan size and re-evaluating salary and incentive structures on micro lending institution can continue to provide high quality services to their clients while lowering its operating expenses.

Methodology

When the research population is seen large or in extreme, the researchers mostly use samples of research because it is difficult to take as a whole for the research. Jaffna’s microfinance sector is served by a diverse range of institutions. These can be segregated into the following broad categories,

- ✓ Co-operative rural banks and other co-operatives
- ✓ Thrift and credit co-operative societies (TCCSs/ sanasa societies)
- ✓ Samurdhi bank societies (SBSs)
- ✓ Non government organizations (TRRO, etc)
- ✓ Licensed specialized banks
- ✓ Other financial institutions (commercial banks, registered finance companies,etc)

Regarding the research, there are several microfinance institutions in Jaffna district. But all MFIs have not properly provided or maintain the data in microfinance activities. So, co-operative rural banks were selected for this research. In the case of co-operative rural banks, there are 31 rural banks which are functioning under 23 MPCS in Jaffna district. For the purpose of this research 10 rural banks were selected under 10 AGA's division or DS's division by using stratified random sampling method.

Hypotheses

Based on the conceptual model and the research question the following hypotheses are taken in this research;

H_1: There is a relationship between efficiency and financial sustainability of co- operative rural banks.

H_2: There is an impact of efficiencies on financial sustainability of co-operative rural banks.

H_3: Operating and Financial efficiencies have significant impact on financial sustainability of co-operative rural banks.

Data Analysis

The efficiency and financial sustainability which is based on the calculated ratios are presented in the form of statistical output.

TABLE 1: CORRELATIONS MATRIX FOR RURAL BANKS

	Administrative efficiency	Operating efficiency	Financial efficiency	Staff efficiency	Financial sustainability
Administrative efficiency	1				
Operating efficiency	.084	1			
Financial efficiency	-.228	-.497	1		
Staff efficiency	-.281	.261	.220	1	
Financial sustainability	-.200	-.691*	.651*	.256	1

*. Correlation is significant at the 0.05 level (2-tailed).

Table 1 describes the correlation between efficiencies and financial sustainability for cooperative rural banks. The value of correlation between administrative efficiency and financial sustainability of rural banks is -.200 which is not significant at 0.05 levels, represent weak negative relationship between administrative efficiency and financial sustainability of rural banks.

The value of correlation between operating efficiency and financial sustainability of rural banks is -.691* which is significant at 0.05 levels; represent strong negative relationship between operating efficiency and financial sustainability of rural banks. Therefore, when operating expenses reduces financial sustainability of cooperative rural banks in Jaffna district increases.

The value of correlation between financial efficiency and financial sustainability of rural banks is .651* which is significant at 0.05 levels; represent strong positive relationship between financial efficiency and financial sustainability of rural banks. Therefore, when financial revenue from loan portfolio increases financial sustainability of cooperative rural banks in Jaffna district increases.

The value of correlation between staff efficiency and financial sustainability of rural banks is **.**256 which is not significant at 0.05 levels; represent weak positive relationship between staff efficiency and financial sustainability of rural banks.

The Impact of Efficiency on Financial Sustainability

Efficiency and financial sustainability of microfinance institutions is very important for a well functioning financial system in developing countries, financial sustainability is equally important for any microfinance institutions as is wide outreach. Here multiple regressions are used to identify the relationship between efficiency and financial sustainability.

TABLE 2 REGRESSION ANALYSIS FOR RURAL BANKS

Dependent variable	Independent variable	Beta	Standard error	R^2	t	Sig
Financial sustainability	**Administrative efficiency**	**.064**	**4.589**	**.852**	**.348**	**.742**
	Operating efficiency	**-.772**	**3.525**		**-3.492**	**.017**
	Financial efficiency	**.583**	**.054**		**2.876**	**.035**
	Staff efficiency	**.154**	**8.923**		**.703**	**.513**

Table 2 reveals the multiple regression summaries. In this model the specification of four variables (administrative efficiency, operating efficiency, financial efficiency and staff efficiency) revealed the ability to predict financial sustainability (R^2=.852). Respective R^2 value of 0.852 denotes that 85.2 percent of the observed variability in financial sustainability can be explained by the differences in four independent variables namely administrative efficiency, operating efficiency, financial efficiency and staff efficiency. The remaining 14.8 percent is not explained which means that the remaining 14.8 percent of the variance in financial sustainability is related to other variables not depicted in this model (such as environmental factors, competitors etc). In the above table 4.16, t values are significant for independent variables

namely financial efficiency and operating efficiency. (p value < 0.05).operating efficiency has negative correlation as well as financial efficiency has positive correlation which means financial sustainability increases with increasing level of financial efficiency and decreasing level of operating expenses.

Hypotheses Testing

H1: There is a relationship between efficiency and financial sustainability of co-operative rural banks.

This hypothesis is subdivided into three because; efficiency includes Administrative efficiency, operating efficiency, financial efficiency and Staff efficiency.

$H1_a$: There is a negative relationship between Administrative efficiency and financial sustainability of co-operative rural banks.

When considering the above table 4.15, correlation value between administrative efficiency and financial sustainability is -.200.so there is a weak negative correlation between them. This implies that when administrative expenses decreases financial sustainability can increase in a small level. Because it is not significant at 0.05 levels. So $H1_a$ is accepted.

$H1_b$: There is a negative relationship between operating efficiency and financial sustainability of co-operative rural banks.

When considering the above table 4.15, correlation value between operating efficiency and financial sustainability is -0.691*.so there is a strong negative correlation between them. This implies that when operating expenses decreases financial sustainability can increase in a larger level. Because it is significant at 0.05 levels. So $H1_b$ is accepted.

$H1_c$: There is a positive relationship between financial efficiency and financial sustainability of co-operative rural banks.

When considering the above table 4.15, correlation value between financial efficiency and financial sustainability is +0.651*. So there is a strong positive correlation between them. This implies that when financial revenue increases financial sustainability can increase in a larger level. Because it is significant at 0.05 levels. So $H1_c$ is accepted.

$H1_d$: There is a positive relationship between staff efficiency and financial sustainability of co-operative rural banks.

When considering the above table 4.15, correlation value between staff efficiency and financial sustainability is +0.256. So there is a weak positive correlation between them. This implies that when staff efficiency increases financial sustainability can increase in a small level. Because it is not significant at 0.05 levels. So $H1_d$ is accepted.

H2: There is an impact of efficiencies on financial sustainability of co-operative rural banks.

According to the table 4.16 administrative, operating, financial and staff efficiencies have greater impact (R2= 0.852 OR 85.2%) on Financial sustainability of co-operative rural banks. so H_2 is accepted.

H3: Operating and Financial efficiencies have significant impact on financial sustainability of co-operative rural banks.

According to the table 4.16, both operating efficiency and financial efficiency have high beta value of 0.772 & 0.583 are respectively. At the same time both are significant at 0.05 levels. Because P value of operating efficiency is .017 ($p < 0.05$) and financial efficiency is 0.035 ($p < 0.05$).so H3 is accepted.

Findings of the Study

Any research is carried out to find out truth. Based on the presented data and data analysis, findings are identified. To conducting this research four different types of efficiencies were considered. Then how these efficiencies impact on financial sustainability was analyzed by using statistical tools. Based on the correlation and regression analysis many findings related to the relationship between efficiency and financial sustainability is identified.

The value of correlation between administrative efficiency and financial sustainability of rural banks is -0.200 which is not significant at 0.05 levels, representing a weak negative correlation between the administrative efficiency and financial sustainability of rural banks. The value of correlation between operating efficiency and financial sustainability I of rural bank is -0.691* which is significant at 0.05 levels, represents a strong negative relationship between the operating efficiency and financial sustainability of rural banks.

The value of correlation between financial efficiency and financial sustainability of rural banks is +0.651* which is significant at 0.05 levels, representing a strong positive correlation between the financial efficiency and financial sustainability of rural banks. The value of correlation between staff efficiency and financial sustainability of rural banks is +0.256 which is not significant at 0.05 levels, representing a weak positive correlation between the staff efficiency and financial sustainability of rural banks.85.2 % of the observed variability in financial sustainability can be explained by the differences in four independent variables namely administrative efficiency, operating efficiency, financial efficiency and staff efficiency. The remaining 14.8% is not explained which means that the remaining 14.8% of the variance in financial sustainability is related to other variables.

Overall Findings of the Research

- Rural bank of MPCS utilizes its retail earnings to the portfolio investment (outstanding).
- Financial assets of the rural banks of MPCS are utilized efficiently every year.
- There is not enough staff for rural banks to carry out their activities.
- There is a high level of gearing or leverage and which trend is in on increasing manner every year.
- There is an increasing trend of administrative expenses and operating expenses over the year’s from2007 to 2011.
- Major revenue source of more rural bank is interest income from direct investment in head office and banks.

Suggestions and Recommendations

Suggestion to manage rural banks' efficiency and to increase their financial sustainability. In this analysis, it is given that how efficiency deals with sustainability. So, suggestions are presented to manage the efficiency and to increase sustainability. Some suggestions are given to manage the microfinance institution's efficiency. They are;

- The management of microfinance institutions should reduce their administrative and operating expense. Then only they can provide more loans to existing customers by extending maximum loan limit and they can attract new customers.(increasing efficiency)
- The management of MFIs increases the loan to borrower through reducing the interest rate.
- For sustainable development of rural banks, a mechanism must be there to help the poor farmers or borrowers instantly and quickly in the event of any emergency need.
- The office layout system is very poor in public sector. Therefore, department head should establish proper layout system in their office.
- A rigorous and deeper investigation is required to find out the ways to prevent the misuse or inappropriate use of credit by borrowers and encourage the clients to settle the loan quickly.
- Operating income should be increased for set off the transaction cost of rural banks. Therefore, interest rate structure should be reviewed, and appropriate interest rate should be determined scientifically.
- Rural banks should maintain their records properly. For this, they should completely computerize their activities quickly and very accurately.
- When they introducing new loan system or work scheme, they should provide proper training to their loan officers for loan recovery and group decision making should be encouraged.
- Importantly, the rural banks should recruit new loan officers and staff for providing their services to the clients effectively and staff for providing their services to the clients effectively and staff should work at office from 9 am to 4 pm.
- The co-operative rural banks should follow flexible conditions for getting the loans. They should encourage clients to invest in important sectors to develop our country.
- MFIs officers should not do in same work continuously. They should transfer another subject to every two or three years, by which they can't feel degradation among their work.

Suggestions for Future Research

- This research has been done, taking the Jaffna district as a sample. But, future researcher should take other districts as samples.
- There are 31 rural banks which are functioning under 23 MPCS in Jaffna district. This research has taken only 10 rural banks as sample. But, the future research should take more than 20 rural banks as sample.
- This research was carried out based on only give years from 2007 to 2011.this types of research require long rue period.

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