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# Efficiency of Micro Finance Institutions and Financial Sustainability in Jaffna District

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**Abstract**
Microfinance institutions (MFIs) provide a range of financial services to poor people. This study aims to identify the relationship between efficiency and financial sustainability of microfinance institutions in Jaffna district. For the purpose of this study, Co-operative Rural Banks under two MPCS were selected by using the convenience sampling method. Data was collected and analyzed by using the SPSS for the period of 2007-2009. In this study, correlation and regression analysis were used. The results show that administrative efficiency and operating efficiency are strongly positive associated with financial sustainability among co-operative Rural Banks in Jaffna district. Further the study reveals that administrative efficiency and operating efficiency have a significant impact on financial sustainability.
**Keywords:** Microfinance institutions, Administrative efficiency, Operating efficiency, Financial sustainability.

## 1. Introduction

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. The delivery of financial services to the poor and low-income people has changed significantly over the recent past. Microfinance has evolved as an economic development approach intended to benefit low income groups. Asian development bank 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 (ADB-2000). Microfinance institutions (MFIs) provide a range of financial services to poor households. Their worldwide growth has had a positive impact by providing the poor with loans, savings products, fund transfers and insurance facilities. This has helped create an encouraging socio-economic environment for many of these developing countries households. 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's 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 unban areas Microfinance activities are mire device and include shop keepers, service providers, artisans, street vendors etc. Microfinance clients are poor and vulnerable non-poor who have a relatively stable source of income.

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, 1997). Efficiency measures how well the available resources are utilized to maximized output. (Monica brand 2000). 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 Abdel Karim – 2002). The concept of self – sufficiency 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).

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.

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.

## 2. Objectives of the Study

This study is aimed at achieving the following objectives.

- To find out the relationship between efficiency and financial sustainability of co-operative rural banks in Jaffna district.
- To investigate the impact of efficiency on financial sustainability.

## 3. Literature review

Avishay braver man et.al (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. 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 and Mosly (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. Jo cob Yaron (1997) points out many specialized agricultural credit institution have suffered to function innate deficiencies. They were not designed to function as true financial intermediaries who mobilize deposits to make loans. Instead these institutions have merely channeled government supplied funds to rural borrowers. Since rural financial institutions have not had to function under financial viability constraints because they had regular access to external funds at below market interest rates. Together with the lack of competition and limited accountability this has to bad loans extremely inefficient operations.

Anton Simonouitz (1996) argues that microfinance is compromise between social and financial objective. Therefore, there are tradeoffs between social and financial objectives. Financial self sufficiency is the only way to give the service to the poor people for the long time without the any external help. That is there is no need to depend on donor's fund. According to him, it is now time to innovate and design services that should maintain high standards of financial performance but which set new standards in poverty improving the outreach, ensuring effective delivery also contribute to achieve financial sustainability. More over industry standards and reporting guidelines need to be developed using performance measures that in to account both efficiency and effectiveness.

Elisabeth Rhyne (1998) asserts that MFIs that focus on the very poor bear the burden of providing that they won us efficient and low lost in operations as technically possible, if act subsidies support inefficient operations and concern the for the poor. David Richardson (2000) argues that to 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 reevaluating salary and incentive structures on micro lending institutions can continue to provide high quality services to their clients while lowering its operating expenses.

Todd forringtor (2000) in this 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 mast 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.

Craign Churchill el al (2001) argues 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 et.al (2001) argues 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.

## 4. Conceptual frame work

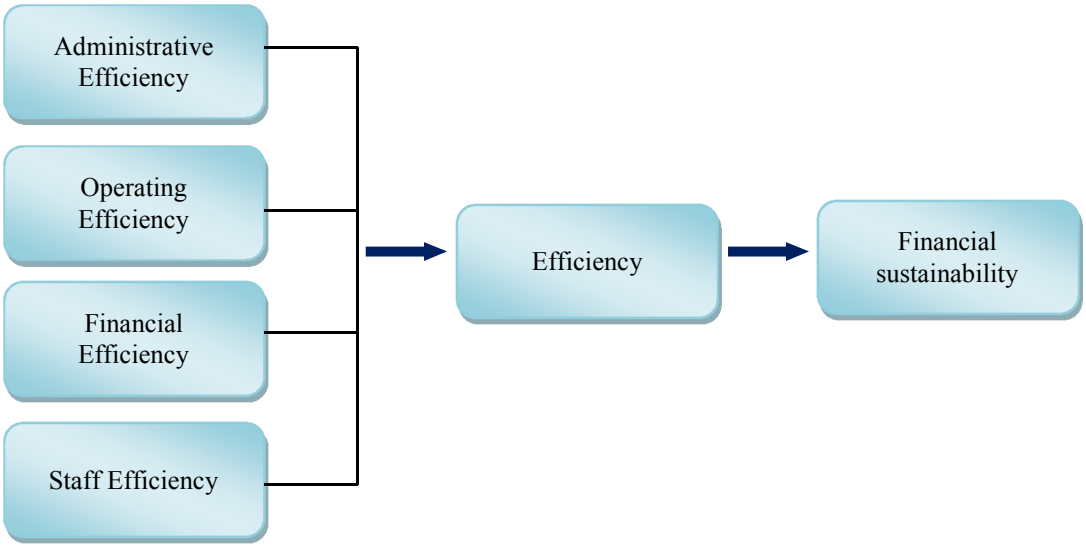
The conceptual frame work is the overall structural diagram. This is a frame work indicating the relationship between two or more variables. It attempts to visualize the causality of the research problem prior to understanding the research based on the research problem. This model developed by the researcher provides an overall idea of the research report. The pattern of the relationship between key concepts of variables could be in this conceptual

model.

The following model clearly depicts the relationship between efficiency and financial sustainability. In present study efficiency is measured in the form of operating efficiency, administrative efficiency, financial efficiency and staff efficiency. All these four types of efficiency lead to the overall efficiency of the institution. Moreover, all these efficiencies are contributed together to the financial sustainability of the rural banks.

**Figure:1: Conceptual frame work**




Source: Developed by researcher

The above model clearly depicts the relationship between efficiency and financial sustainability. In present study efficiency is measured in the form of operating efficiency, administrative efficiency, financial efficiency and staff efficiency. All these four types of efficiency lead to the overall efficiency of the institution. Moreover, all these efficiencies are contributed together to the financial sustainability of the rural banks.

## 5. Research Methodology

*5.1 Data collection*

In this study, only secondary data representing the period of 2007-2009 is used to measure the efficiency and financial sustainability of Co-operative rural banks in Jaffna district. The data was collected from the annual reports, journals, and magazines of Co-operative rural banks.

*5.2 Reliability and validity*

Information was collected from annual reports of Co-operative rural banks and journals. Therefore the researcher satisfied with the content and construct validity, then it was decided to continue the analysis.

*5.3 Sample of the research*

There are several microfinance institutions (MFIs) in Jaffna district. But all MFIs have not properly provided data or records in microfinance activities. So, Co-operative Rural Banks were selected for this research. In the case of Co-operative Rural Banks, there are 34 rural banks which are functioning under 23 MPCS in Jaffna district. For the purpose of this research, 06 banks under two MPCS were selected by using the convenience sampling method. Such as Chunnakam, Ellalai, Kupilan, Innuvil, Kokuvil and Thirunelvelly Under Chunnakam MPCS and Nallur MPCS.

*5.4 Measurement*

Secondary data was used to measure the indicators which are related to efficiency and financial sustainability. The indicators of efficiency and financial sustainability are as follows,

- Operating Efficiency = (Operating Expenses + In – Kind Donations) / Average Net Portfolio
- Administrative Efficiency = (Personnel Expenses + Other Administrative Expenses + In – Kind Donations) / Average Net Portfolio
- Staff Efficiency = Number of active loan clients / Number of staff members at the end of period
- Financial Efficiency = Cash Financial Revenue from Loan portfolio / Average gross loan portfolio
- Financial Sustainability = Operating Revenue / (Adjusted Operating Expense + Financial Expense +

Loan loss provision expense)

## 6. Hypotheses

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

$H_1$: There is a positive relationship between efficiency and financial sustainability

$H_2$: Efficiency has a significant impact on financial sustainability

## 7. Data Analysis

This section deals with the detailed analysis of efficiency and financial sustainability. The efficiency and financial sustainability which is based on the calculated ratios are presented in the form of statistical output.

The purpose of this analysis is to identify the relationship between efficiency and financial sustainability. It consist an empirical examination of cooperative rural banks over the three year period 2007 – 2009. The purpose is to identify factors that have statistically significant with financial sustainability among the selected cooperative rural banks and the direction of the relationship.

## 8. Results and Discussion

### *8.1 Correlation Analysis*

Correlation analysis is a statistical analysis which statistically measures the extent and nature of the relationship between the variables.

**Table 1: Correlation matrix for Rural bank.**

| | Administrative efficiency | Operating efficiency | Financial efficiency | Staff efficiency | Financial sustainability |
|---|---|---|---|---|---|
| Administrative efficiency | 1 | | | | |
| Operating efficiency | .949**<br>.004 | | | | |
| Financial efficiency | .794<br>.59 | .6744<br>.142 | | | |
| Staff efficiency | .255<br>.626 | .480<br>.336 | .203<br>.699 | | |
| Financial sustainability | .968**<br>.002 | .977**<br>.001 | .710<br>.114 | .296<br>.569 | |

** Correlation is significant at the 0.01 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 0.968** which is significant at 0.01 levels, represents a strong positive relationship between the administrative efficiency and financial sustainability of Rural banks. Therefore, when administrative efficiency increases financial sustainability of Cooperative rural banks in Jaffna district also increases.

The value of correlation between operating efficiency and financial sustainability of rural banks is 0.977** which is significant at 0.01 levels, represents a strong positive relationship between the operating efficiency and financial sustainability of Rural banks. Therefore, when operating efficiency increases financial sustainability of Cooperative rural banks in Jaffna district also increases.

The value of correlation between financial efficiency and financial sustainability of rural banks is 0.710 which is not significant at 0.05 levels. The value of correlation between staff efficiency and financial sustainability of rural banks is 0.296 which is not significant at 0.05 levels.

### *8.2 Regression Analysis*

Multiple regression analysis is a powerful technique used for predicting the unknown value of a variable from the known value of two or more variables.

**Table 2: Regression Analysis for Rural banks**

| Model | Dependent variable | Independent Variables | Beta | Standard error | t | Sig |
|---|---|---|---|---|---|---|
| 1. | Financial Sustainability | Administrative efficiency. | 0.520 | 0.37 | 6.519 | 0.041 |
| | | Operating efficiency | 1.232 | 0.80 | 20.972 | 0.030 |
| | | Financial efficiency | 0.223 | 0.032 | 6.963 | 0.081 |
| | | Staff efficiency | 0.001 | 0.000 | 15.453 | 0.061 |
| $R^2 = 0.763$ | | | | | | |

The table 2 presents the multiple regression summaries. In this model the specification of four variables (Administrative efficiency and Operating efficiency, financial efficiency and Staff efficiency) represents the ability to predict financial sustainability. $R^2$ value of 0.763 denotes that 76.3 % of the observed variability in financial sustainability can be explained by the differences in independent variables namely administrative efficiency, operating efficiency, financial efficiency and staff efficiency. The remaining 23.7% is not explained which means that the remaining 23.7 % of the variance in financial sustainability is related to other variables not depicted in this model. In the above table 2, t values are significant for independent variables namely administrative efficiency and operating efficiency (Sig< 0.05). Therefore administrative efficiency and operating efficiency have a significant impact on financial sustainability.

**Table 3: Hypothesis Testing**

| No | Hypotheses | Tools | Supported / Not supported |
|---|---|---|---|
| ***$H_1$*** | ***There is a positive relationship between efficiency and financial sustainability*** | | |
| $H1_a$ | There is a positive relationship between Administrative efficiency and financial sustainability of co-operative rural banks. | Correlation | Supported |
| $H1_b$ | There is a positive relationship between Operating efficiency and financial sustainability of co-operative rural banks. | Correlation | Supported |
| $H1_c$ | There is a positive relationship between financial efficiency and financial sustainability of co-operative rural banks. | Correlation | Not supported |
| $H1_d$ | There is a positive relationship between Staff efficiency and financial sustainability of co-operative rural banks. | Correlation | Not supported |
| | | | |
| ***$H_2$*** | ***Efficiency has a significant impact on financial sustainability*** | | |
| $H2_a$ | Administrative efficiency has a significant impact on financial sustainability | Regression | Supported |
| $H2_b$ | Operating efficiency has a significant impact on financial sustainability | Regression | Supported |
| $H2_c$ | Financial efficiency has a significant impact on financial sustainability | Regression | Not supported |
| $H2_d$ | Staff efficiency has a significant impact on financial sustainability | Regression | Not supported |

## 9. Conclusion

Microfinance emerged as a noble substitute for informal credit and an effective and powerful instrument for poverty reduction among people who are economically active but financially constrained and vulnerable in various countries. The objective of the study is to identify the relationship between efficiency of micro finance institutions and financial sustainability. This study reveals that Administrative efficiency and operating efficiency are positively correlated with financial sustainability of micro finance institutions in Jaffna district. Further financial efficiency and staff efficiency are not significantly correlated with financial sustainability. Based on the regression analysis administrative efficiency and operating efficiency have a significant impact on financial sustainability. Therefore, when micro finance institutions increase administrative efficiency and operating efficiency their financial sustainability can be increased.

## 10. Suggestions and Recommendations

In this analysis, it is given that how efficiency deals with financial 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 rural banks should reduce the administrative, operating, financial costs for loan. For this purpose they can provide more loans to existing customers by extending maximum loan limit and they can attract new customers.
- The management of rural banks should reduce their employee's salary and rent expenses of office for reducing operating expenses of co-operative rural banks. So that operating efficiency will increase.
- 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. Not only introducing quick lending services but also initiating possible legal or regulatory measures against the moneylenders must be worked out immediately.
- 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 up the loan quickly.
- Operating income should be increased for recovering 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 may computerize their works and complete their activities quickly and very accurately.
- When they introducing new loan system or new work system, they should provide training to their loan officers for loan recovery and group decision making should be encouraged.

**Bibliography**

Asia Development Bank (2000). 'Finance for the Poor: Microfinance Development Strategy', Manila.

ADB. 'Finance for the Poor Microfinance Development Strategy', http://www.ab.org

Akhtar, M. H. & Bokhari, S. M. H. (2005). 'X-efficiency Analysis of Commercial Banks In Pakistan: A Preliminary Investigation'. European Journal of Scientific Research, 10 (2), 78-91.

Asian Development Bank. Selected Monitoring Indicators for Microfinance Projects – Focal Point for Microfinance, Finance and Infrastructure Division Regional and Sustainable Development, Asian Development Bank, 2003.

Avishay. B and Monica. H. (1991). 'Improving Rural finance in Developing Countries'. A Quarterly publication of the International Monetary Fund and the World Bank vol. 28, No. 1.

Berenbach and Guzman. (1992). 'The Solidarity Group Methodology World Wide: Evaluation of Credit Methodologies', Concept Paper.

Claudio Gonzalez – Vega, Mark Schreiner, Richard L. Mayer, Jorge Rodriguez, Serigio Navajas, 'BANCOSOL. (1996). The Challenge of Growth for Microfinance Organization'.

Canadian International Development Agency, 'Reference Guide for the Microfinance Sector', 200, Promenade du Portage Gatineau, Quebec , August 1999.

Craig Churchill and Dan Coaster., 'Microfinance Risk Management Hand Book', CARE International., 2001.

Damian von Stauffenberg., 'Definitions of Seleted Financial Terms, Ratios and Adjustments for Microfinance', Micro Banking Bulletin., April 2002.

Elisabeth Rhyne., The Yin and Yang of Microfinance: Reaching the poor and Sustainability., Micro Banking Bulletin., July 1998

Hume David and Paul Mosley, 'Micro Credit Interest Rate', CGAP Secretariat . ,Occasional Paper No.1 August, Washington D.C 1996.

Jan Evers, Stefanie Jack, Adriaan Loef, Hedwing Siewertsen, 'Reducing Cost and Managing Risk in Leading to Micro enterprise: Hand Book for Micro Leading in Europe', IFF- Institutfurfinanzdien Stleistungen e.v., Hurburg Germany.,February 2000

Jacob Yaron., 'Successful Rural Finance Institutions', World Bank Discussion Papers. The World Bank Washington, D.C., 1992.

Jeyawardene. A.S, 'Role of Microfinance in Rural Development, Issues and Challenges of Microfinance': Workshop Report: Sarvodaya Economic Enterprise Development Services (GTE) Ltd. Hotel Coral Gardenes, Hikkaduwa, SriLanka 2003.

Joanna Ledgerwood., Microfinance Hand Book., The world Bank Washington D.C., July 2000.

Joe Remenyi., 'Microfinance: A Panacea for Poverty', Development Research Briefings ., University College Dublin., 1997.

Marguerit S. Robimson., The Microfinance Revolution – Sustainable Finance for the Poor., The world Bank Washington D.C , Open Society Institute, New York.

Martin Holtman., Designing Financial Incentives to Increase Loan Officer Productivity: Handle with care., Micro Banking Bulletin., April 2001.

Monica Brand., Julie Gerschick., 'Maximizing Efficiency: The path to Enhanced Outreach and Sustainability', ACCION Publication Monograph Series No12,2002.

Monica Brand, 'More Bang for the Buck: Improving Efficiency', Micro Banking Bulletin , February,2000.

Nimal Sanderatne., 'Microfinance Interest rate and Financial Viability', Research Paper 1st of May 2003.

Nimal Sanderatne, 'Leading Issues in Microfinance', Research Paper 1st of May 2003.

Naser Abdelkarim., 'The Long Term Financial Sustainability of the Palestenian NGO Sector, An Assesment Study commissioned by The Welfare Association Consortium., 2002.

Robert Peck Christen., 'An Expanded and Revised Guide Book for Microfinance Institutions', February 1997.

Richart Gant, Dulan de Silva, Anura Attapattu, Steve Durant., National Microfinance Study of Sri Lankan Survey of Practice and Policies, Colombo., June 2002.

Todd Forrington, 'Efficiency in Microfinance Institutions', Micro Banking Bulletin, February, 2000.

USAID., 'Maximizing the Outreach of Micro enterprise Finance': The Emerging Lessons of Successful Programs., 1995.

Yaron Jacob, 'How to Assess Performance of Development Finance Institutions', Finance For the Poor. 1997.