# Effect of Commercial and Social Objective on Financial Sustainability: An Analytical Study on MFIs operating in Gujarat

**Dr. Hemendra Shah**

Assistant Professor,
Shree Narayana College of Commerce,
Ahmedabad, Gujarat

## Abstract

*Microfinance is considered as most effective socio-economic tool for poverty eradication. The initial approach of microfinance institutes (MFIs) wassocially driven, Not for Profit. Sustainability of MFIs and growing & unfulfilled demand for microfinance are the major limitations of social approach.This give birth to commercial approachwith self-sustainability and profitability as a primary objective over social. Excess commercialisation and profit-orientation leads to economical imbalance and financial crises like Andhra Pradesh witnessed in 2010. It is argued that 'For profit MFIs' are financially more sustainable than 'Not for Profit MFIs'. The current research studies the difference between financial sustainability of 'For Profit MFIs' and 'Not for Profit MFIs' operating in Gujarat. The study observed that though 'Not for Profit MFIs'are operationally more efficient and 'Not for Profit MFIs' have more efficient capital structure, there is no significant difference in financial sustainability across the MIFs with different profit objectives.*

**Key words:** *Financial Sustainability, Microfinance, For Profit MFIs, Not for Profit MFIs, Operational Sustainability, Return on Equity*

## INTRODUCTION

Microfinance institutions act as a social intervention or a poverty alleviation tool. It empowers the poor rather than giving direct benefits in cash or in kind. Though most microfinance institutions are not financially viable, they always face a dilemma between achieving commercial viability and serving the poor. The concept of microfinance has been influenced by two approaches; the Social approach and Commercial approach **Invalid source specified.**.

### Social v/s Commercial Approach of Microfinance

Not for profit organisation (NGO), government institutions and other institutions who heavily depend on donation and subsidies; comes under Social approach. It mainly focuses on economic safety for the poor by providing financial services to the poorest of the poor at subsidised rate of interest. Though they understand that the long term sustainability of MFI is very important, however, they do not agree that avoiding donor subsidies completely will be required to achieve that state **Invalid source specified.**. Poverty alleviation being the main aim, it gives greater weight on depth of outreach comparedto breath of outreach**Invalid source specified.**. According to Charikinya, Margaret, Gombarume, & Njanike; social intermediation helps in poverty reduction because it develops the economy, empower individuals, building democratic peoples' organizations and changing wider systems within the society **Invalid source specified.**. Until the 1990s, microfinance was mainly seen as an impact-driven development programme based on the support of governments and private donors. MFIs typically charge below-market interest rates and do not necessarily operate on a self-sufficient basis. A number of failures among heavily subsidised state-owned development banks finally led to the conviction that MFIs should become commercially-oriented and seek operational self-sufficiency[33]**Invalid source specified.**.

Commercial approach focuses on developing a financially sustainable institution. The basic foundation of this approach is to provide financial services to poor at an affordable cost. Numerous large-scale, profit seeking microfinance organisations come under this approach that provides high quality financial services to the poor.

---

[33]https://www.db.com/cr/en/docs/Microfinance-in-evolution.pdf

According to this approach, a significant impact on poverty can be achieved only if MFIs are financially self-sufficient and independent from any subsidised funding from donor or government. Institutional self-sufficiency is the only possible means to meet widespread client demand for convenient and appropriate financial services. It allows donors to finance their microloan portfolios commercially and enabling them to multiply outreach by leveraging additional capital**Invalid source specified.**.From a development policy perspective, it was argued that commercialisation of the microfinance business would be conducive to social objectives. Since commercially operating MFIs would make use of existing funds more efficiently and have a strong incentive to grow, they would also be better able to close the perceived gap between supply and demand in microfinance. However, commercialisation through excessive profit approach, by increase in rates of interest, leads to transfer of wealth from the poor to MFI managers and owners **Invalid source specified.**.

From profit point of view, an MFI may have objective of earning profit or may not have profit objective but to fulfil social objective. Non-profit objective does not mean that MFI is incurring losses. Normally it is assumed that 'For Profit MFIs' are financially sustainable and 'Not for Profit MFIs' are financially unsustainable. The current paper is an attempt to study the impact of profit objective on financial sustainability.

## INDICATORS OF FINANCIAL SUSTAINABILITY

As per Mistry and Shah, there are mainly two parameters to decide  financial sutainability of an organisation, Operatoinal sustainability (OS) and Return on Equity (ROE). A firm is said to be financially sustainable if its  OS and ROE is above the desired level of OS and ROE**Invalid source specified.**.

### OS and its Desired level for Financial Sustainability

OSrefers to the ability of MFIs to cover all its costs from its own generated income from operations" **Invalid source specified.**. MIX[34] explain OSas the proportion of total financial revenue to its operating expense, financial expense and loan loss provision**Invalid source specified.**. The current study considers the definition adopted by Mix Market given below,

$$OS = \frac{\text{Total Financial Revenue} \quad X \quad 100}{\text{Financial Expense} + \text{Operating Expense} + \text{Loan Loss \& } provision}$$

According to MIX Market a firm is financially sustainable if it has operational sustainability level of 110% or more **Invalid source specified.**. Most of the researchers have adopted the same rate as parameter for financial sustainability. Current study considers the same level as desired level of operating sustainability described by Mix Market which is 110%. **Invalid source specified.**, **Invalid source specified.**&**Invalid source specified.**.

### ROI and its Desired level for Financial Sustainability

As per the report of Rosenberg published by CGAP as technical guide, profitability for sustainable growth can be reflected as Return on Assets (ROA) or Return on Equity (ROE), after adujsting subsidise cost of fund, in-kind subsidy and inflation to accounting profit. It shows company's financial strength to earn profit on funds applied **Invalid source specified.**. CAPM highlight on return on risk free security and risk premium associated on risky security. The risk premium for the systematic risk of a company or a group of companies can be calculated by comparing it with market risk. The current study considers the definition according to Rosenberg in the technical guide to measure the prefromance of MFIs published by CGAP **Invalid source specified.**. The same is given as follows:

---

[34] MIX Market (www.mixmarket.org) is a public data hub where microfinance institutions (MFIs) and supporting organizations share institutional data to create transparency and market insight.

$$\text{Return on Equity } = \frac{\text{Profit After Tax And Provisions } \text{ X } 100}{\text{Average Owners Capital Including All Reserves And Surplus}[35]}$$

For the current study, desired return on equity is a combined rate of return on risk free security ($R_f$) and associated risk premium ($R_p$) as described CAPM. The risk premium of a particular investment is the product of equity risk premium on the market and the beta coefficient of particular investment[36]. The current study  takesthe rate derived by Mistry and Shah as the desire level of ROE which is 11.94% **Invalid source specified.**.

A firm is said to be financially sustainable if its,

1. OS is 110% or more and (OS ≥ 110) and,

2. ROE is 11.94 % or more  (ROE ≥ 11.94).

### RESEARCH HYPOTHESIS

The objective of the study is to study the profitability objective on financial sustainability. As there are two parameters for financial sustainability the study considers one main and two sub hypothesis. The same are as follows:

**H0**    There is no significant difference in Financial Sustainability of Microfinance Institutions in Gujarat when being categorized as per profit Objective

    **H0$_A$**    There is no Significant Difference in Operating Sustainability among the microfinance institutions when being categorized as per Objective of Profit.

    **H0$_B$**    There is no Significant Difference in Return on Equity among the Microfinance institutions when being categorized as per Objective of Profit.

### *Sample and Data*

Non-random purposive and convenient sampling method is adopted for the study. In total nine MFIs operating in Gujarat are selected as sample. PRAYAS Organisation for Sustainable Development (PRAYAS) and Supath Rural Development Foundation (SUPATH), registered as NGO are considered as 'Not for Profit MFIs'. Arman Financial Services Ltd. (AFSL), Disha Microfin Pvt Ltd.(DML), Pahal Financial Services Pvt. Ltd. (PFSL), Saath Saving and Credit Co Op Society Ltd. (SAATH), Shri Mahila Sewa Sahakari Bank Ltd. (Sewa), Shri Surat Mahila Sewa Nagrik Dhiran Sahkari Mandli (SMDM) and Shri Swashrayi Mahila Nagrik Dhiran Sahkari Mandli (MNSM)are considered as 'Not for Profit MFIs'.For the study, after Andhra crisis 2010 data from 2010-11 to 2014-15 is taken.

### Testing Technique

Parametric tests T- test and F-test analysis was conducted to study, the significant difference between the mean variances of OS and ROE. Same is compared with non-parametric test of Mann – Whitney U test.

### *Data Analysis*

### Testing of H0: Financial Sustainability on the basis of profit Objective

On the basis of Profit Objective, MFIs are bifurcated in two different groups these are 'For Profit' and 'Not for Profit'. The average performance of each group is as follows:

**Table 1 Performance as per Profit Objective**

|          | **Not for Profit** | **For Profit** |
| -------- | ------------------ | -------------- |
| **OS**   | 111.09             | 116.74         |
| **ROE**  | 13.17              | 12.47          |

---

[35] Donations and subsidies are included as a part of reserves and surplus.

[36]http://thefinancebase.com/calculate-beta-coefficient-single-stock-2072.html

Table 1shows that the average rate of Operating Sustainability of both For Profit (116.74%) and Not for profit (111.09%) is above the desired level of operating sustainability. The average rate of Return on Equity for Profit (12.47%) and Not for Profit (13.17%) is also above the desired level of Return on Equity. It suggests that both the groups (For Profit and Not for Profit) fulfil both the criteria for financial sustainability and fall under the first position of financial sustainability. The rate of OS of 'For Profit MFI' is more than 'Not for Profit MFI'. Whereas rate of ROE of 'For Profit MFI' is less than 'Not for Profit MFI'. This indicates that even though Profit is not the objective of 'Not for Profit MFIs' they yield higher rate of ROE. The significant difference in OS and ROE across the MFIs as per their Profit objective is further studied to decide H0, the significant difference in Financial Sustainability of MFIs in Gujarat.

***Testing of H0$_A$: Significance of OS as per Profit Objective***

Figure 1 shows that the graph of 'For Profit MFI' shows marginally increasing trend during the year 2011-12 to 2014-15. The graph of 'Not for Profit MFI' shows fluctuation in the rate of Operating Sustainability, the trend shows sharp decrease during 2010-11 to 2013-14.

T test and F test have been conducted to test H0$_A$, to study significant difference in Operating Sustainability among the microfinance institutions across the objective of Profit.

**Table 2 Operating Sustainability as per Profit Objective**

| Year | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|---|---|---|---|---|---|
| **Not for Profit** | 120.33 | 113.39 | 105.99 | 104.39 | 111.35 |
| **For Profit** | 111.10 | 116.85 | 117.91 | 118.43 | 119.44 |

**Figure 1 Operating Sustainability as per Profit Objective**
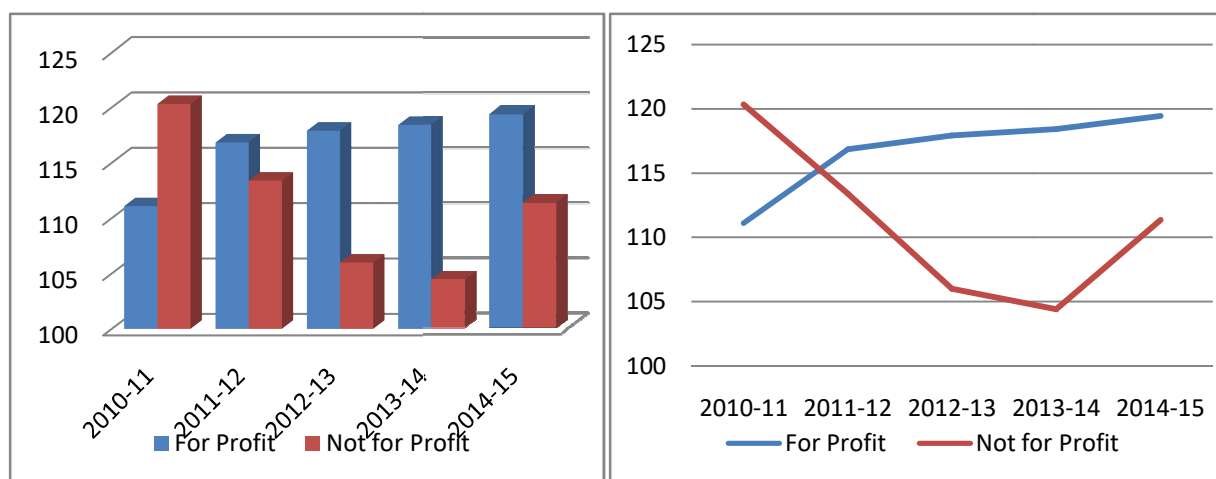


T-test of Table 3 shows the result of Operating Sustainability of 'Not for Profit' (Mean = 111.09, Variance = 40.41) and 'For Profit MFI' (Mean = 117.31, Variance = 10.67). The value of two tailed t statistic (calculated) at 5% significance level is -1.37 whereas; t-critical (table) value is 2.78. It indicates that, the t statistics value -1.52 is more than –t critical value -2.78 and less than t critical 2.78 (i.e. -2.78 < -1.52 < 2.78). It depicts that there is no significant difference in observed sample means of Operating Sustainability (111.09 and 116.74 and) between 'Not for Profit MFI' and 'For Profit MFI'.

**Table 3 T-test & F-test analysis of OS between Not for Profit and for Profit**

| | T-test | | | | | | | F-test | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | Variance | Observations | df | Stat | P Value (two tail) | Critical | Mean | Variance | Observations | df | F | P Value (one tail) | F Critical |
| Not for Profit | 111.09 | 40.41 | 5 | 4 | -1.37 | 0.24 | 2.78 | 111.09 | 40.41 | 5 | 4 | 3.73 | 0.12 | 6.39 |
| For Profit | 116.74 | 10.84 | 5 | | | | | 116.74 | 10.84 | 5 | 4 | | | |

F-test of Table 3shows that, the calculated value of F is 3.73 whereas; F critical (table) value at 5% significant level is 6.39. It indicates that, F calculated value (3.79) is less than F critical value (6.39) at 5% significance level. Further p value is 0.12 which is above the 5% significant level. The result suggests that, there is no significance difference in variance of Return on Equity between 'Not for Profit MFIs' and 'For Profit MFIs'.

The result of above, T-test and F-test for Operating Sustainability accepts H0$_A$, it suggests that there is no significant difference in the Operating Sustainability between 'Not for Profit MFIs' and 'For Profit MFIs'. Further as the data are non-normal, to cross verify the result obtained from parametric test, Mann – Whitney U test of nonparametric is conducted. SPSS result of Mann – Whitney U at 5% significance level shows U=111 and $p$=0.220. Indicating that distribution of Operating Sustainability is the same across the 'Not for Profit MFIs' and 'For Profit MFIs' in Gujarat and accepts H0$_A$.

***Testing of H0$_B$: Significance of ROE as per Profit Objective***

**Table 4 Return on Equity as per Profit Objective**

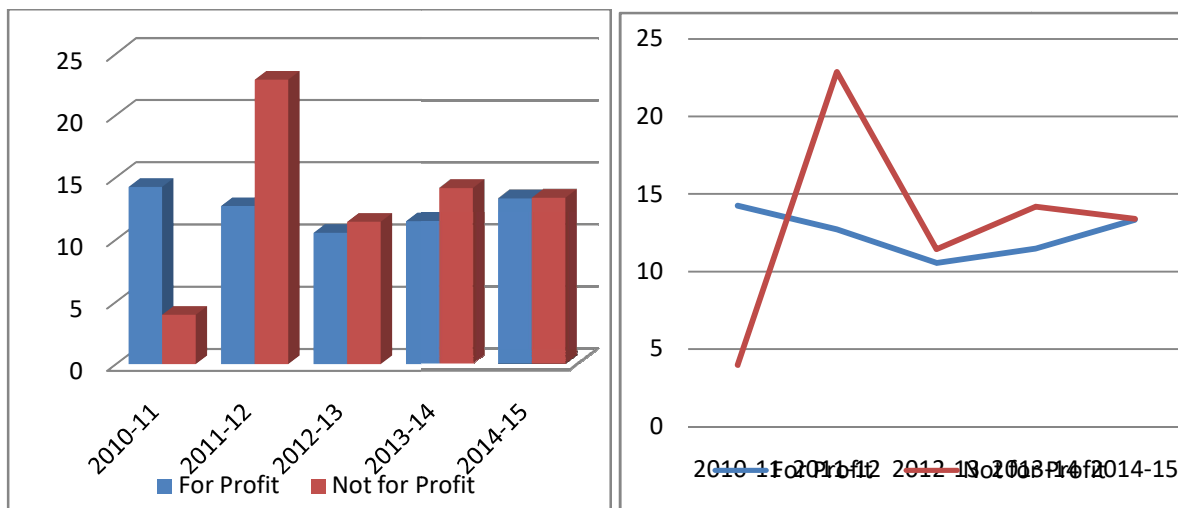| Year | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|---|---|---|---|---|---|
| **Not for Profit** | 3.97 | 22.86 | 11.44 | 14.17 | 13.39 |
| **For Profit** | 14.24 | 12.71 | 10.56 | 11.49 | 13.34 |

**Figure 2 Return on Equity as per Profit Objective**



Table 4shows, that the rate of Return on Equity of 'For Profit MFI' is below 'Not for Profit MFI' during 2011-12 to 2014-15. It indicates that, though profit is not the primary objective of 'Not for Profit MFI', it shows higher return then the 'For Profit MFI'. It is to note that 'Not for Profit MFI' has the highest rate of Operating Sustainability

(120.33%) but the lowest rate of Return on Equity in 2010-11 (3.97%). Further the Return on Equity of 'For Profit MFI' is below the desired rate during 2012-13 (10.56%) and 2013-15 (11.49%).

Figure 2shows that the graph of 'For Profit MFI' shows marginal decrease from 2010-11 to 2012-13 and increases marginally from 2012-13 to 2014-15. The graph of 'Not for Profit MFI'shows fluctuation in the rate of Return on Equity, the graph shows the highest and lowest- point of Return on Equity for 'Not for Profit MFI'.

T test and F test of parametric test have been conducted to test $H0_B$, Significant difference in Return on Equity among the microfinance institutions across the objective of Profit.

Table 5 shows the result of Return on Equity of 'Not for Profit MFI' (Mean = 13.17, Variance = 45.62) and 'For Profit MFI' (Mean = 12.47, Variance = 2.14). The value of two tailed t statistic (calculated) at 5% significance level is 0.21 whereas; t-critical (table) value is 2.78. It indicates that, the t statistics value 0.21 is more than –t critical value -2.78 and less than t critical 2.78 (i.e. -2.78 < 0.21< 2.78). Further p value (*p*=0.84) is more than the significance level (0.05). It depicts that there is no significant difference in observed sample means of Return on Equity (13.17 and 12.47) between 'Not for Profit MFIs' and 'For Profit MFIs'.

**Table 5 T-test analysis of ROE between Not for Profit and for Profit**

| | T-test | | | | | | | F-test | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | Variance | Observations | df | t Stat | P Value (two-tail) | t Critical | Mean | Variance | Observations | df | F | P Value (one-tail) | F Critical |
| Not for Profit | 111.09 | 40.41 | 5 | 4 | -1.37 | 0.24 | 2.78 | 111.09 | 40.41 | 5 | 4 | 3.73 | 0.12 | 6.39 |
| For Profit | 116.74 | 10.84 | 5 | | | | | 116.74 | 10.84 | 5 | 4 | | | |

Table 5shows that, the calculated value F is 21.27 whereas; F critical (table) value at 5% significant level is 6.39. It indicates that, F calculated value (21.27) is more than F critical value (6.39) at 5% significance level. Further p value is 0.01 which is less than 5% significant level. The result suggests that, there is significant difference in variance of Return on Equity between 'Not for Profit MFIs' and 'For Profit MFIs'.

Though F test result indicates that there is significant difference in the variance of 'Not for Profit MFIs' and 'For Profit MFIs', the T test result of Return on Equity suggests that there is no significant difference in the mean of 'Not for Profit MFIs' and 'For Profit MFIs'. Considering the results of T-test $H0_B$ is accepted. Further to cross verify the result obtained from parametric test, Mann – Whitney U test is conducted. SPSS result of Mann – Whitney U at 5% significance level shows U=151 and *p*=0.95. It indicates that distribution of Return on Equity is the same across 'Not for Profit MFIs' and 'For Profit MFIs' and accepts $H0_B$.

## OBSERVATION AND CONCLUSION

From the analysis of $H0$, it is observed that the 'Not for Profit MFIs' and 'For Profit MFIs' are financially sustainable, as their average rate of OS and ROE are above the desired rate for financial sustainability. Further it is observed that the 'For Profit MFIs' has the higher rate of OSwhereas, 'Not for Profit MFIs' has higher rate of Return on Equity. From the T-test and Mann – Whitney U test for $H0_A$ and $H0_B$, it is observed that the distribution of rate of Operating Sustainability and Return on Equity is same across the category of profit objective and null hypothesis $H0_A$ and $H0_B$ is accepted. It indicates no significant difference in Financial Sustainability across the category of objective of Profit and null hypothesis H0is accepted.

The observations drawn from the data analysis leads to the conclusions that, the financial sustainability of 'Not for Profit MFIs' and 'For Profit MFIs' operating in Gujaratis nearly same. Further 'For Profit MFIs' are operationally more efficient whereas 'Not for Profit MFIs' have more efficient capital structure.

## REFRENCES

➢ Anand Rai, S. R. (2012). Factors Affecting Financial Sustainability of Microfinance Institutions. Journal of Economics and Sustainable Development, 1-10. Retrieved from http://www.iiste.org/Journals/index.php/JEDS/article/viewFile/1673/1635

➢ Avdhani, V. (2011). Securities Analysis and Portfolio Management (10 ed.). Mumbai, Maharastra, India: Himalaya Publishing House.

➢ Bogan, V. (2009). Capital Structure and Sustainability: An Empirical Study of Microfinance Institutions. Retrieved from http://www.aem.cornell.edu: http://www.aem.cornell.edu/faculty_sites/bogan/doc/research/MFICapitalStructure.pdf

➢ Bogan, V., Johnson, W., & Mhlanga, N. (2007, July). Does Capital Structure Affect the Financial Sustainability of Microfinance Institutions? Retrieved from http://www.cid.harvard.edu: http://www.cid.harvard.edu/neudc07/docs/neudc07_poster_bogan.pdf

➢ Brau, J. C., & Woller, G. M. (2004, December). Microfinance: A Comprehensive Review of the Existing Literature. The Journal of Entrepreneurial Finance, 9(1), 1-28. Retrieved from http://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1074&context=jef

➢ Charikinya, A., Margaret, M., Gombarume, F. B., & Njanike, K. (2011). THE IMPACT OF MICRO FINANCE INSTITUTIONS ON THE SOCIO-ECONOMIC LIVES OF PEOPLE IN ZIMBABWE. Annals of the University of Petroşani, Economics, 161-170.

➢ Deutsche Bank. (2012, Sepetember 13). Microfinance in Evolution.pdf. (C. Lützenkirchen, W. Christian , B. Speyer, Editors, & Deutsche Bank) Retrieved from https://www.db.com: https://www.db.com/cr/en/docs/Microfinance-in-evolution.pdf

➢ Kinde, B. A. (2012). Financial Sustainability of Microfinance Institutions in Ethiopia. 4(15), pp. 1-11. Retrieved from http://pakacademicsearch.com/pdf-files/ech/517/1-10%20Vol%204,%20No%2015%20(2012).pdf

➢ Marakkath, N. (2014). Sustainability of Indian Microfinance Institutions A Mixed Methods Approach. Mumbai, Maharastra, India: Springer India. Retrieved from http://link.springer.com/chapter/10.1007/978-81-322-1629-2_4

➢ Meyer, R. L. (2002, Decemeber). Track Record of Financial Institutions in Assisting the Poor in Asia. Retrieved March 15, 2014, from http://www.esocialsciences.org: http://www.esocialsciences.org/Download/repecDownl ... &AId=2284&fref=repec

➢ Mistry , D., & Shah, H. (2016, Dec.). Financial Sustainability of NBFC-MFI Operating in Gujarat. in Adhyayan- A Journal of Management Sciences, 6(2), 10-19.

➢ Mistry, D. S. (2015, July). Determinants of Porfirability: Evidance from Indian Microfinance Institutions. Global Vistas, 1, 11-17.

➢ Mixmarket. (2014). Glossary. Retrieved May 2014, from http://www.mixmarket.org: http://www.mixmarket.org/about/faqs/glossary#ixzz3UoN58H7T

➢ mixmarket.org. (2012). mixmarket. Retrieved 2012, from www.mixmarket.org.

➢ Planning Commission. (2013, July). Planning Commission Report. Retrieved April 29, 2015, from http://planningcommission.nic.in: http://planningcommission.nic.in/news/pre_pov2307.pdf

➢ Robinson, M. S. (2001). The Microfinance Revolution Sustainable Finance for the Poor Lessons from Indonesia The Emerging Industry (1 ed.). Washington, D.C., USA: The World Bank. Retrieved from http://documents.worldbank.org/curated/en/226941468049448875/pdf/232500v10REPLA18082134524501PUBLIC1.pdf

➢ Rosenberg, R. (2009). Measuring Results of Microfinance Institutions - Minimum Indicators That Donors and Investors Should Track. Washington, DC: CGAP. Retrieved from

https://www.cgap.org/sites/default/files/CGAP-Technical-Guide-Measuring-Results-of-Microfinance-Institutions-Minimum-Indicators-That-Donors-and-Investors-Should-Track-Jul-2009.pdf

➤ Sa-Dhan. (2005, July 19). Sustainability in Microfinacne. Retrieved May 2013, from http://www.sa-dhan.net: http://www.sa-dhan.net/Adls/Microfinance/Miscellaneous/SustainabilityInMicrofinance.pdf

➤ Shahidur Khandker, B. K. (1995). World Bank Discussion Papers: Grameen Bank Performance and Sustainability. Washington, D.C.: The World Bank.

https://www.gapjournals.org/