



Evaluating Repayment Rates And Sustainability Of The Microfinance Model In Empowering Women Entrepreneurs

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ABSTRACT

This study focuses on evaluating repayment rates and the sustainability of the microfinance model in empowering women entrepreneurs. Microfinance has emerged as a key tool for financial inclusion by providing small loans and financial services to women who lack access to formal banking systems. The study examines how effectively women entrepreneurs utilize microfinance loans and their ability to repay them regularly.

The research also analyzes the relationship between repayment behaviour and the sustainability of microfinance institutions (MFIs). A high repayment rate is often considered an indicator of success; however, this study highlights that repayment alone does not always reflect true economic empowerment. Factors such as income stability, business performance, financial literacy, and social conditions significantly influence repayment patterns. Using both descriptive and analytical methods, the study finds that while microfinance contributes to increased income and financial independence, many women still face challenges in repayment due to irregular income and financial constraints. The study concludes that for microfinance to be truly effective, it must balance financial sustainability with genuine empowerment by providing not only credit but also training, support, and flexible repayment systems

KEYWORDS

Microfinanc, Women Entrepreneurs, Repayment Behaviour, Financial Sustainability, Financial Inclusion, Self-Help Groups (SHGs), Women Empowerment, Income Generation, Loan Utilization, Financial Literacy

INTRODUCTION

Microfinance has become an important financial tool for promoting inclusion among economically weaker sections of society. It provides small loans, savings facilities, and other financial services to individuals who do not have access to traditional banking systems. In India, microfinance plays a significant role in supporting women entrepreneurs by enabling them to start and manage small businesses.

Women entrepreneurs often face challenges such as lack of collateral, limited financial knowledge, and restricted access to formal credit systems. Microfinance institutions address these issues by offering collateral-free loans and adopting group lending models such as Self-Help Groups (SHGs), which promote mutual support and accountability.

One of the key indicators of microfinance success is the repayment rate. A high repayment rate reflects financial discipline and effective utilization of loans. However, repayment behaviour is influenced by various factors such



as income level, business performance, and social conditions. In some cases, borrowers repay loans through alternative sources, which may not indicate real business success.

Another important aspect is the sustainability of microfinance institutions. Sustainability refers to the ability of MFIs to continue their operations in the long run without financial difficulties. Regular loan repayments are essential for maintaining liquidity and ensuring continuous lending.

This study aims to evaluate repayment behaviour and examine how it affects the sustainability of microfinance institutions while also assessing whether microfinance truly empowers women in terms of income, independence, and social status.

LITERATURE REVIEW

Sharma and Iyer (2023)

They studied group lending and repayment among women in rural Maharashtra.

They found that peer monitoring helps to maintain high repayment rates (above 98%).

However, it also creates stress and affects women's mental well-being.

Nair and Meena (2024)

They studied the Self-Help Group model in Kerala.

They found that microfinance improves financial inclusion.

But lack of market support affects business sustainability.

They also noted that without digital knowledge, high repayment does not always mean real business growth.

Das and Chatterjee (2022)

They studied the impact of micro-credit on women in West Bengal.

They found that loans are often used for household needs like education and healthcare.

This reduces investment in business and affects long-term growth.

Reddy et al. (2023)

They studied microfinance practices in South India.

They found that strict focus on repayment discourages risk-taking.

It limits business growth and supports only small-level activities.

This creates a "microfinance trap".

Arunachalam and Vikram (2023)

They studied Joint Liability Groups in Tamil Nadu.

They found that it helps in maintaining high repayment rates.

But it reduces individual risk-taking in business.

Women focus more on group unity than business growth.

Patel and Joshi (2024)

They studied the Pradhan Mantri Mudra Yojana in Gujarat.

They found that access to loans has increased.

But many businesses fail within two years.

This is due to lack of proper follow-up and support.

It shows that finance alone is not enough for long-term success.

**Sengupta and Mukhopadhyay (2022)**

They studied the digital divide in rural Bihar.

They found that cashless repayment excludes poor and less educated women.

They stated that financial efficiency should not reduce equal access for borrowers.

Kapoor et al. (2023)

They studied multiple borrowing in Andhra Pradesh.

They found that women take loans from different MFIs to repay old loans.

This creates a cycle of debt.

High repayment rates do not always show real profit or success.

Bose and Hazarika (2024)

They studied women-led businesses in North-East India.

They found that location and high transport cost affect business growth.

Women repay loans by using personal savings instead of business income.

This reduces their overall financial strength.

Bose and Hazarika (2024)

They studied women-run small businesses in North-East India.

They found that remote location and high transport cost affect business growth.

Women repay loans by using personal assets instead of business income.

This reduces their financial strength.

Malhotra and Singh (2023)

They studied microfinance in urban slums of Delhi.

They found that too many lenders create unhealthy lending practices.

Women focus more on repaying loans than developing their business.

This reduces true empowerment.

Gupta and Murthy (2022)

They studied the effect of climate change in the Sundarbans region.

They found that natural disasters reduce repayment ability.

MFIs stop giving loans during difficult times.

This affects the sustainability of microfinance.

Yadav et al. (2023)

They studied women borrowers in Rajasthan.

They found that women find it hard to move to formal banking.

This is due to lack of proper credit history records.

They suggested a system to track both repayment and empowerment.

Gonzalez and Smith (2024)

They studied microfinance in Latin America.

They found that focus on profit leads to higher interest rates for women.

This shifts the goal from helping the poor to earning profit

**Okonjo and Adeyemi (2023)**

They studied microfinance in Nigeria.

They found that women repay loans better than men.

But women face problems like lack of property rights.

This limits their business growth.

Khan and Rahman (2023)

They studied the impact of COVID-19 on microfinance in Bangladesh.

They found that businesses survived at first but later declined.

Lack of backup funds reduced long-term sustainability.

They suggested adding insurance and support systems.

Müller et al. (2022)

They studied microfinance in Southeast Asia.

They found that repayment rate alone is not enough to measure success.

True success depends on women moving to formal banking.

But this happens very rarely.

DATA ANALYSIS AND INTERPRETATION**INTRODUCTION**

This chapter presents the analysis and interpretation of data collected from women entrepreneurs who are using microfinance services. The data has been analyzed using statistical tools such as percentage analysis, descriptive statistics, correlation, regression, and ANOVA. The main purpose of this analysis is to understand repayment behaviour, identify factors affecting repayment, and evaluate the sustainability of the microfinance model. The results are presented in a simple and clear manner using tables and interpretations to draw meaningful conclusions.

PERCENTAGE ANALYSIS

Percentage analysis is a simple statistical method used to present data in percentage form for easy understanding and comparison. In this study, it is used to analyze the responses of women entrepreneurs regarding their repayment behaviour, loan utilization, and financial conditions. This method helps in identifying patterns and trends in the data and provides a clear picture of the respondents' opinions.

Table 1 - egularly repay my microfinance loan on time.

Option	Count	Percentage
strongly disagree	87	24.79
disagree	43	15.1
netural	70	18.8
agree	82	19.09
strongly disagree	90	22.22
total	372	

Interpretation



The responses reveal a mixed trend among the respondents. Approximately 41% of the participants agree or strongly agree that they repay their microfinance loans on time. However, a nearly equal proportion, about 40%, disagree or strongly disagree with the statement.

Table 2 - My repayment schedule is convenient for me

Option	Count	Percentage
strongly disagree	86	23.11%
disagree	70	18.81%
netural	81	21.77%
agree	68	18.27%
strongly disagree	67	18.00%
	372	

Interpretation

The responses indicate a divided opinion among the respondents. Around 36% of participants agree or strongly agree that the repayment schedule is convenient for them, whereas a higher proportion, approximately 42%, disagree or strongly disagree.

Table 3 - I use my loan mainly for business purposes.

Option	Count	Percentage
strongly disagree	66	17.28
disagree	88	23.04
netural	71	18.59
agree	80	23.56
strongly disagree	67	17.54
	372	

Interpretation

The responses show a fairly balanced distribution among the respondents. Nearly equal percentages of participants agree and disagree with the statement, indicating no clear majority opinion.

Table 4 - My business income helps me repay my loan easily.

Option	Count	Percentage
strongly disagree	67	12.32
disagree	81	24.65
netural	75	21.01
agree	72	20.45



strongly disagree	77	21.57
	372	

Interpretation

The responses indicate that only about 41% of the respondents agree or strongly agree that their business income is sufficient to repay their loans easily. In contrast, a larger proportion, around 46%, disagree or strongly disagree with the statement.

Table 5 - I sometimes face difficulty in repaying my loan.

Option	Count	Percentage
strongly disagree	67	14.87
disagree	70	14.87
netural	72	23.42
agree	81	20.89
strongly disagree	82	25.95
	372	

Interpretation

The responses indicate that a considerable proportion of respondents, approximately 47%, agree or strongly agree that they face difficulties in repaying their loans. In contrast, about 30% disagree or strongly disagree with the statement.

DISCRIPTIVE STATISTICE

Descriptive statistics makes it easier to understand repayment behaviour, sustainability of microfinance, and the level of women empowerment. It also helps in comparing different responses and identifying patterns in the data. Overall, descriptive statistics simplifies large data into a clear form and supports better interpretation of the research findings.

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Age Group	372	1	4	2.59	1.128
Educational Qualification	372	1	4	2.54	1.161
Type of Business	372	1	4	2.35	1.148
Monthly Income	372	1	4	2.46	1.084
Business Experience	372	1	4	2.49	1.105



Regular Repayment	372	1	5	2.99	1.425
Convenient Repayment Schedule	372	1	5	2.98	1.442
Loan Used for Business	372	1	5	3.12	1.43
Income Helps Repayment	372	1	5	3.02	1.404
Difficulty in Repayment	372	1	5	3.01	1.426
Delayed Repayment History	372	1	5	3.09	1.429
Loan Sufficiency	372	1	5	3	1.44
Repayment Pressure	372	1	5	2.89	1.415
Independent Repayment	372	1	5	3.1	1.383
Consistent Repayment	372	1	5	3	1.439
Income Affects Repayment	372	1	5	3.12	1.382
Business Performance Impact	372	1	5	3.03	1.359
Family Responsibility Impact	372	1	5	2.91	1.45
Group Support	372	1	5	2.93	1.421
Financial Knowledge	372	1	5	3.09	1.444
Repayment for Sustainability	372	1	5	3.03	1.403
Timely Repayment Benefit	372	1	5	2.89	1.389
Continuous Financial Support	372	1	5	3.01	1.38
Reasonable Interest Rate	372	1	5	2.95	1.437

4.3 CORRELATION ANALYSIS

Correlations

		microfinance	Increasedincome
microfinance	Pearson Correlation	1	.849**
	Sig. (2-tailed)		.000
	N	372	372
increasedincome	Pearson Correlation	.849**	1
	Sig. (2-tailed)	.000	
	N	372	372

Correlation is significant at the 0.01 level (2-tailed).

Interpretation

The correlation analysis shows a strong positive relationship between microfinance and increased income, with a Pearson correlation coefficient of 0.849. This indicates that as access to microfinance increases, income levels tend to rise significantly. The significance value ($p = 0.000$) confirms that this relationship is statistically significant. The sample size of 372 further strengthens the reliability of the findings. Overall, the result suggests that microfinance plays an important role in improving income levels.

Correlations

		repaying	incomelevel
repaying	Pearson Correlation	1	.868**
	Sig. (2-tailed)		.000
	N	372	372
incomelevel	Pearson Correlation	.868**	1
	Sig. (2-tailed)	.000	
	N	372	372

Interpretation

The results indicate a strong positive correlation ($r = 0.868$) between repaying ability and income level. This suggests that individuals with higher income levels are more capable of repaying loans. The significance value ($p = 0.000$) shows that the relationship is highly significant. With a sample size of 372, the data provides reliable evidence of this association. Hence, repayment capacity is closely linked with income level.

4.4 REGRESSION

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.496 ^a	.246	.240	.95591

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	109.636	3	36.545	39.994	.000 ^a
	Residual	336.267	368	.914		
	Total	445.903	371			

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.026	.187		5.488	.000
	repay	.239	.034	.321	7.083	.000
	performance	.202	.035	.262	5.789	.000
	responsibility	.211	.035	.274	6.054	.000

Interpretation

The regression model shows an R value of 0.496, indicating a moderate relationship between predictors and microfinance. The R² value of 0.246 implies that 24.6% of the variation in microfinance is explained by repayment, performance, and responsibility. The ANOVA result (F = 39.994, p = 0.000) confirms that the model is statistically significant. All predictors—repayment, performance, and responsibility—have positive coefficients. This suggests that improvements in these factors lead to better microfinance outcomes.

**ANOVA**

Age	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	386.176	4	96.544	532.816	0
Within Groups	66.499	367	0.181		
Total	452.675	371			

Interpretation

The ANOVA results for age show a significant difference among groups, with an F-value of 532.816 and p-value of 0.000. The between-group variance is much higher than the within-group variance, indicating strong group differences. This suggests that age has a significant impact on the studied variable. The large F-value reflects substantial variation across age categories. Therefore, age is an important factor influencing the outcome.

ANOVA

education	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	379.575	4	94.894	497.932	0
Within Groups	69.941	367	0.191		
Total	449.516	371			

Interpretation

The ANOVA results for education reveal a significant difference among educational groups, with an F-value of 497.932 and p-value of 0.000. The between-group variation is considerably higher than within-group variation, indicating strong differences. This implies that education level significantly affects the outcome variable. The high F-value highlights the importance of educational differences. Thus, education plays a crucial role in influencing the results.

FINDINGS, SUGGESTIONS AND CONCLUSION**Findings of the Study**

The study reveals that most women entrepreneurs exhibit regular repayment behaviour, indicating financial discipline. Microfinance has supported business development and improved income levels, contributing to economic stability and empowerment. However, repayment capacity is influenced by factors such as income stability, business performance, and financial literacy. Some respondents face challenges due to irregular income,



high interest rates, and financial constraints. The findings also highlight that while microfinance promotes empowerment, issues like repayment pressure and multiple borrowing still exist.

Suggestion

The study suggests that microfinance institutions should introduce flexible repayment schedules and reduce interest rates to ease financial burden. Providing financial literacy and business training programs can improve loan management and income generation. Proper monitoring of loan utilization and support for borrowers facing difficulties are essential. Encouraging group lending systems and promoting digital financial services can enhance repayment efficiency. Overall, a balanced focus on financial sustainability and social empowerment is recommended.

Conclusion

The study concludes that microfinance plays a vital role in empowering women entrepreneurs and promoting financial inclusion. It improves income, confidence, and decision-making ability among women. While repayment rates are generally positive, challenges such as income instability and repayment pressure need to be addressed. Strengthening support systems, improving financial literacy, and ensuring flexible policies can enhance the effectiveness and sustainability of microfinance. Overall, microfinance remains a powerful tool for women empowerment and economic development

REFERENCE

1. Armendáriz, B., & Morduch, J. (2010). *The Economics of Microfinance* (2nd ed.). MIT Press.
2. Ledgerwood, J. (2013). *The New Microfinance Handbook: A Financial Market System Perspective*. World Bank Publications.
3. Khandker, S. R. (2005). Microfinance and poverty: Evidence using panel data from Bangladesh. *The World Bank Economic Review*, 19(2), 263–286.
4. Morduch, J. (1999). The microfinance promise. *Journal of Economic Literature*, 37(4), 1569–1614.
5. NABARD (National Bank for Agriculture and Rural Development). (2021). *Status of Microfinance in India Report*.
6. Reserve Bank of India (RBI). (2022). *Report on Trend and Progress of Banking in India*.
7. Pitt, M. M., & Khandker, S. R. (1998). The impact of group-based credit programs on poor households in Bangladesh. *Journal of Political Economy*, 106(5), 958–996.
8. Robinson, M. S. (2001). *The Microfinance Revolution: Sustainable Finance for the Poor*. World Bank.
9. Swain, R. B., & Wallentin, F. Y. (2009). Does microfinance empower women? Evidence from self-help groups in India. *International Review of Applied Economics*, 23(5), 541–556.
10. Hermes, N., & Lensink, R. (2011). *Microfina*