

# **Microfinance: A study of the Effectiveness of Fund Flows among Women of Rural Gujarat**

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## 1. INTRODUCTION

Microfinance scheme is offered to people below poverty line who lack collateral and cannot take bank's assistance for banking and allied services (Malleswari, 2010). The purpose of microfinance is to raise the earnings of low-class people and let them have access to deposits and loans is thus defined as formal schemes designed to improve the well-being of the poor through better access to saving services and loans (Datar, S. E., 2008). While both informal finance<sup>1</sup> and microfinance serve poor people who do not have bank accounts, informal finance derives from the grassroots, bottom-up demand of the poor for appropriate financial services, whereas microfinance derives from donor-driven, top-down supply (Schreiner, 2001). The task force on supportive policy and regulatory framework for microfinance (NABARD, 1999) defined microfinance as "provision of thrift, credit and other financial services and products of very small amounts to raise income levels of clients, and improve their living standards." International Labour Organization (ILO) described microfinance as an economic development approach that involves providing financial services through institutions to low income clients. MIX (Microfinance Information Exchange) describes microfinance as "Microfinance services-as opposed to financial services in general- are retail financial services that are relatively small in relation to the income of a typical individual. In short, microfinance is the supply of loans, saving and other basic financial services to the poor (CGAP).

Microfinance is quite different from micro credit. Micro financing, according to Conroy (Conroy JD, 2003) is the delivery of financial services to poor and low income households with limited access to formal financial institutions. Rolando ( Rolando GT, 2010) opines that microfinance is an excellent way of supporting entrepreneurs. Microfinance products are often accompanied by training in financial literacy and business management, while the later refers to small loan facility provided to poor people to motivate them to become self-employed (Remenyi and Quinones, 2000). In simple words, micro credit includes credit activities only, but microfinance includes credit as well as non-credit activities. Micro credit is thus one aspect of microfinance. Micro credit refers to small loan programmes operated by non-profit organizations, i.e., these programs have

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<sup>1</sup> Informal finance is defined as contract or agreements conducted without reference or recourse to the legal system to exchange cash in the present for promises of cash in the future.

no profit motives. By contrast, microfinance refers to profit-making ventures (Ledge Wood, 1999) supporting that microfinance ventures do not meet the definitional requirement of NGO.

## **2. Problem Definition:**

In India, many studies have focused on microfinance taking into account the different issues and regions. The studies on rural women of Gujarat are lacking. Gujarat is the fastest growing state in Indian economy. During the past decade, it is among the top 4 states of India in terms of economic growth. Gujarat is known for the highest level of women empowerment. But it is necessary to find whether empowerment of women exists equally in rural and urban areas. Besides, there is lot of social and economic disparity in Gujarat. Some districts have a very high level of socio-economic development. In order to know whether the microfinance credit facility has reached the rural women and whether rural women are able to grab the benefit and have become a successful entrepreneur, the proposed would undertake the case of Gujarat. By focusing on the rural women beneficiaries of Gujarat, the study would be able to find the positive and negative factors in the path of women to be an entrepreneur. By determining the flow of funds, the study would be able to highlight the role of banks as well as the family and society constraints in women empowerment. Thus the study would determine status of rural women entrepreneur and would help the policy makers and researcher to frame a proper strategy for the other states as well.

## **3. RESEARCH OBJECTIVES**

The objectives of proposed research work are as follows:

1. To study the process of various microfinance institutions in the rural part of Gujarat.
2. To understand the factors influencing to the effectiveness of fund flows amongst women in rural part of Gujarat.
3. To evaluate the level of factors related to fund flows amongst the women in rural part of Gujarat.
4. To establish the relationship amongst various factors related to the effectiveness of fund flows in rural part of Gujarat.

5. To measure the impact of various factors with the respect to generate the fund flows on women empowerment in rural part of Gujarat.
6. To classify the various factors related to the fund flows to understand the level of women empowerment in rural part of Gujarat.

#### **4. SCOPE OF THE STUDY**

- Factors affecting women empowerment is studied in this research.
- Women beneficiaries from selected villages of Gujarat have been taken as respondents.
- The respondents who have taken loan through SHGs are taken from selected villages (Lapkaman, Detroj-Rampura, Kherva, Sipor, Usarvan and Kundha) have been taken into consideration for the study.

#### **5. ORIGINAL CONTRIBUTION BY THESIS**

This study contributes to analyses the factors which affect to the fund flow of women beneficiaries. The major input of the study is to understand the level of fund flows and the factors affect ting to the fund flows of women beneficiaries. The outcomes of this study supports the government agencies for planning new schemes for the betterment of under privileged class of the society. Second contribution is the identification of the factors which affects the fund flows of the women beneficiaries and hurdles they are facing for the development of themselves. It also identifies the importance of each factors in the development of women beneficiaries and the factors which supports for the women empowerment. This study will also help the microfinance institutions to frame the policies for clients to achieve better results.

#### **6. DERIVING FACTORS INFLUENCING WOMEN EMPOWERMENT**

The researcher has done extensive literature review of more than 120 research papers from national and international journals, few prominent books and several websites for conceptual understanding. Post literature review supports and researcher has identified 41 constructs that influence women empowerment in rural area. These 41 constructs are classified into five main categories and it is as under.

6.1 Loan Procedure

6.2 Saving behaviour

6.3 Usage of loan

6.4 Autonomy

6.5 Change in women's life

## 7. **Research Methodology**

- Research Design: Descriptive Study
- Target Population: Women beneficiaries of microfinance scheme from Gujarat
- Sample Size: 627 beneficiaries
- Sampling Technique: Non probability convenience sampling
- Data Collection:
  - ▶ Primary: Structured interview schedule in Gujarati language with women beneficiaries of microfinance scheme
  - ▶ Secondary: Research Articles from Journals, Books, NABARD official reports.
- Data Analysis Techniques:
  - ▶ Graphical Analysis
  - ▶ Cross tabulation
  - ▶ Descriptive statistics
  - ▶ Inferential Statistics – T-test
  - ▶ Relationship Analysis – Pearson's Coefficients Correlations, Regression
  - ▶ Discriminant Analysis
  - ▶ Tools used: Microsoft Excel, SPSS

## 8. **Data Analysis and Results**

### **Reliability:**

Cronbach's alpha ( $\alpha$ ) value			
Factor	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items

LOAN PROCEDURE	0.842	0.804	7
SAVING BEHAVIOUR	0.806	0.784	6
USE OF LOAN AMOUNT	0.721	0.598	9
AUTONOMY	0.767	0.746	8
CHANGE IN WOMEN'S LIFE	0.711	0.709	11

The researcher has checked reliability of all factors and its overall impact on women empowerment using cronbach's alpha and found very significant results as shown in the above table. The researcher has also checked construct wise reliability of all factors, which also is found to be highly acceptable.

In this research the researcher has asked rural women beneficiaries for their opinion regarding microfinance services using basis five identified factors on five point likert scale. The data was analysed using tools mentioned earlier and the results are as under:

PARTICULARS	Mean	Median	Mode	t	Sig. (1-tailed)	Proportion	PREF.	Null Hypothesis
Loan officials are accessible	1.37	1	1	-77.695	0.000	97.9	YES	REJECT
All employees are supportive during the process	2.89	3	3	-3.102	0.001	32.7	NO	REJECT
Disbursement documents and process completed on time	3.47	3	3	13.503	0.000	58.8	YES	REJECT
Able to generate sufficient return from investment alternatives	3.73	4	3	21.615	0.000	47.7	NO	REJECT
Used maturity amount for personal use or for family purpose	2.75	3	3	-8.956	0.000	92.3	YES	REJECT
The fund is sanctioned on time	1.6	2	2	-71.577	0.000	100	YES	REJECT
Sanctioned fund is sufficient for business purpose	3.21	3	3	7.443	0.000	61.8	YES	REJECT
Independent to take saving and investment decisions	3.55	3	3	16.376	0.000	56	YES	REJECT
Able to utilise the fund for valuable child/children's education	1.92	2	1	-21.97	0.000	78.1	YES	REJECT

## Correlations Analysis

Correlations						
		CLP1	CSR1	CUL1	CAU1	CWL1
CLP1	Pearson Correlation	1	.595**	.522**	.556**	.545**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	627	627	627	627	627
CSR1	Pearson Correlation	.595**	1	.532**	.532**	.551**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	627	627	627	627	627
CUL1	Pearson Correlation	.522**	.532**	1	.518**	.572**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	627	627	627	627	627
CAU1	Pearson Correlation	.556**	.532**	.518**	1	.856**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	627	627	627	627	627
CWL1	Pearson Correlation	.545**	.551**	.572**	.856**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	627	627	627	627	627

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

Pearson's correlation was applied to check the relationship among the factor affecting the overall women empowerment of the women beneficiaries. The results shows that there is significant correlation between all the five factor and with the overall women empowerment.

Null Hypothesis	Accepted/ Rejected
There is no significant relationship between loan procedure and saving behaviour.	REJECT
There is no significant relationship between loan procedure and uses of loan amount.	REJECT
There is no significant relationship between loan procedure and autonomy of respondents.	REJECT

There is no significant relationship between loan procedure and women's empowerment.	REJECT
There is no significant relationship between saving behaviour and use of loan amount.	REJECT
There is no significant relationship between saving behaviour and women's autonomy.	REJECT
There is no significant relationship between saving behaviour and women's empowerment.	REJECT
There is no significant relationship between use of loan amount and women's autonomy.	REJECT
There is no significant relationship between use of loan amount and women's empowerment.	REJECT
There is no significant relationship between women's autonomy and women's empowerment.	REJECT

### Regression

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. Change	
1	.871 <sup>a</sup>	.759	.758	3.010	.759	490.194	4	622	.000	1.348
a. Predictors: (Constant), CAU1, CUL1, CSR1, CLP1										
b. Dependent Variable: CWL1										

Here  $R = .871$  and  $R^2$  is  $.758$  which means 75.80% variation in the dependent variable (change in women's life) are explained by the independent variables (Loan procedure, Saving behaviour, Use of loan amount and Autonomy) and rest 24.20% variations are due to all other factors. Adjusted  $R^2$  is also  $.758$  which confirms the results. Durbin-Watson score of 1.348 strongly suggests that there is no specific issue of multi co-linearity.

### **ANOVA Analysis and hypotheses testing**

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	17768.670	4	4442.167	490.194	.000 <sup>b</sup>
	Residual	5636.597	622	9.062		
	Total	23405.266	626			

Null Hypothesis	Results	Accepted / Rejected
There is no significant impact of all independent variables (loan procedure, saving behaviour, use of loan amount, women's autonomy, change in women's life) on dependent variable (change in women's life)	F: 490.194 / Sig.:0.000	REJECT

Coefficients <sup>a</sup>										
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations	Correlations		Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Partial	Tolerance	VIF
(Constant)	1.90	0.72		2.64	0.01					
CLP1	0.03	0.04	0.02	0.72	0.47	0.55	0.03	0.01	0.54	1.85
CSR1	0.11	0.04	0.07	2.80	0.01	0.55	0.11	0.06	0.55	1.82
CUL1	0.19	0.03	0.14	5.73	0.00	0.57	0.22	0.11	0.61	1.64
CAU1	0.90	0.03	0.73	28.51	0.00	0.86	0.75	0.56	0.59	1.70

$$Y = 1.903 + 0.025 (\text{Loan procedure}) + 0.106 (\text{Saving behaviour}) + 0.192 (\text{Use of loan amount}) + 0.898 (\text{Autonomy}) + \epsilon$$

### Multiple Discriminant Analysis

<b>Tests of Equality of Group Means</b>			
Null Hypothesis	Wilk's Lambda	Sig.	Results
There is no significance difference in the discriminant score with respect to loan procedure of high and low women empowerment.	0.826	0.000	REJECT
There is no significance difference in the discriminant score with respect to saving behaviour of high and low women empowerment.	0.821	0.000	REJECT
There is no significance difference in the discriminant score with respect to use of loan amount of high and low women empowerment.	0.815	0.000	REJECT
There is no significance difference in the discriminant score with respect to women's autonomy of high and low women empowerment.	0.692	0.000	REJECT
There is no significance difference in the discriminate score with respect to change in women's life of high and low women empowerment.	0.584	0.000	REJECT

<b>Test Results</b>		
Box's M		256.263
F	Approx.	16.884
	df1	15
	df2	413135
	Sig.	0.12
Tests null hypothesis of equal population covariance matrices.		
<b>Log Determinants</b>		

CHANGES	Rank	Log Determinant
LOW	5	9.211
HIGH	5	13.137
Pooled within-groups	5	12.498
The ranks and natural logarithms of determinants printed are those of the group covariance matrices.		

The test results indicates significance value of 0.120 and it indicates that the data do not differ significantly from multivariate normal. It indicates that the researcher can proceed with the further analysis.

<b>Eigenvalues</b>				
Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	1.12 <sup>a</sup>	100	100	0.653
a. First 1 canonical discriminant functions were used in the analysis.				
<b>Wilks' Lambda</b>				
Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	0.432	345.998	5	0.000

Null Hypothesis	Sig.	Accepted / Rejected
There is no significance difference between observed and expected independent variable impact on discriminant score of all five independent variables namely loan procedure, saving behaviour, use of loan amount, women's autonomy and change in women's life.	0.000	REJECT

Standardized Canonical Discriminant Function Coefficients		Structure Matrix		Canonical Discriminant Function Coefficients	
	Function		Function		Function
	1		1		1
CLP1	0.1	CWL1	0.978	CLP1	0.024
CSR1	0.108	CAU1	0.773	CSR1	0.028
CUL1	0.102	CUL1	0.553	CUL1	0.025
CAU1	-0.043	CSR1	0.541	CAU1	-0.01
CWL1	0.885	CLP1	0.532	CWL1	0.189
		Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions		(Constant)	-6.972
		Variables ordered by absolute size of correlation within function.		Unstandardized coefficients	

Discriminant score = constant + (.024\*Loan procedures) + (.028\*saving behaviour) + (.025\*use of loan amount) - (.010\*women's autonomy) + (.189\*changes in women's life) - 6.972

Functions at Group Centroids	
CHANGES	Function
	1
LOW	-1.423
HIGH	.521
Unstandardized canonical discriminant functions evaluated at group means	

Prior Probabilities for Groups		
CHANGES	Prior	Cases Used in Analysis

		Unweighted	Weighted
LOW	.268	168	168.000
HIGH	.732	459	459.000
Total	1.000	627	627.000

<b>Classification Results<sup>a,c</sup></b>					
		CHANGES	Predicted Group Membership		Total
			LOW	HIGH	
Original	Count	LOW	158	10	168
		HIGH	29	430	459
	%	LOW	94.0	6.0	100.0
		HIGH	6.3	93.7	100.0
Cross-validated <sup>b</sup>	Count	LOW	153	15	168
		HIGH	33	426	459
	%	LOW	91.1	8.9	100.0
		HIGH	7.2	92.8	100.0
a. 93.8% of original grouped cases correctly classified.					
b. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.					
c. 92.3% of cross-validated grouped cases correctly classified.					

## 9. FINDINGS

- The major married women are having age of less than 25 years and it indicates very young women are in majority and it has family as their priorities and has impact on their saving and investment decisions.
- As the majority respondents are illiterate, from that highest numbers are in the age group of 31-35 years. Education level has impact on their use of loan amount.
- The major labourers are in the age group of 31-35 years as well as for more than 46 years. It may possible that these age groups women are allowed to work outside to support their families.

- From the research, it is found that majority of the labourers belongs to ST category while this caste has very less weightage as self-employed respondents. The caste restriction may become the hurdles to make them self-employed. The general category has about one fourth of the respondents engaged in self-employment work and it may be again because of their forward thinking.
- The researcher found that as about 90 percent of the respondents are married, on an average it is equally distributed in all caste, the ST and general category have least number of married representatives.
- It is found in this study that majority of illiterate respondents are from ST caste and again it may be because of caste restrictions. The highest number of graduate or post graduates are from SC caste.
- The researcher has found that more labourers belongs to other than married category. The major self-employed respondents are married and they are able to reach to this level because of the support of their family members. The total percentage of housewives are 30% and it indicates that majority of women are engaged in some activities either labour work or self-employment and they are supporting to their family members.

## **11. ACHIEVEMENT WITH RESPECT TO OBJECTIVES**

- The first stage for loan procedure is starts with accessibility of loan officials. Around 98% of the respondents have been positive to the statement that bank officials are accessible. It indicates that it becomes easy for women respondents to reach to the bank officials for require funds.
- Only 33% respondents agree that all employees are supportive during the loan procedure.
- Majority of respondents have negative opinion regarding document disbursement and loan process.
- The respondents are not satisfied with the return from investment alternatives.
- Around 93% of respondents have neutral opinion regarding use of maturity amount either for their personal use or for family purpose
- All respondents are agree that loan amount is sanctioned on time and it supports in fulfilling their requirement.

- Majority of respondents opines that sanctioned loan amount is not sufficient for business purpose. It becomes hurdles to be an entrepreneur.
- More than half of the women opines that they are not free to take saving and investment decisions by themselves.
- Almost 80% women are able to utilise fund for their children's education.

#### **Findings from Correlation analysis**

- The correlation value of 0.518 indicates good relationship between use of loan amount and women's autonomy. It implies that women's autonomy is strongly affected by use of loan amount.
- The correlation of 0.856 indicates very strong positive relationship between women's autonomy and change in women's life. It implies that if women gets more autonomy it will definitely leads to the positive changes in their life.
- The overall analysis indicates strong inter-relationship amongst all variables and it indicates that loan procedure, saving behaviour, use of loan amount, women's autonomy, change in women's life and women empowerment has strong relationship with each other.

#### **Findings from Regression analysis**

- The researcher has found that almost 76 percent of overall changes in women's life is because of four independent factors which are loan procedure, saving behaviour, use of loan amount and women's autonomy.
- As researcher has derived, the autonomy is the most influential independent factor.

#### **Findings from discriminant analysis**

- There are 459 respondents whose responses are likely towards women empowerment while there are 168 respondents whose responses are unlikely towards women empowerment.
- There is significance difference in the discriminant score with respect to independent variables of high and low women empowerment.
- The mean value towards high and low indicates majority of opinion are towards agree and strongly agree.
- Women empowerment is most influenced by independent factor 'change in women's life'.
- The model used by research shows overall 93.8% validity regarding prediction for low and high women empowerment.

## **12. CONCLUSION AND RECOMMENDATION**

- Considering the response from different villages of Gujarat, it is noted that it is very essential to provide on time and sufficient loan amount for the success of the programme. The delay in the process is one of the hurdles in achieving better results of poverty reduction and creation of entrepreneur.
- The result indicates that women's autonomy is the major factor and it has highest impact on women's life. It requires more attention for the policy makers to work on this part to improve the utilisation of fund for the upliftment of rural women of Gujarat.
- The opinion of beneficiaries indicates that they are looking for more investment alternatives for saving of their hard-core money. It emphasis on information sharing regarding investment alternatives.
- It is found that majority time the loan amount is taken for social purposes only and not able to add to the productivity in the society. It requires the training and motivation provided to the women beneficiaries to enhance their entrepreneurship.
- The mere loan provides does not provide the expected results. It is very important to provide them freedom to move outside to enhance their work capacity. It requires more efforts to provide entrepreneurship training and it should be provide at all the stages starting from incubation till the establishment and running for the business to achieve healthier results.

## **13. Details of research papers published**

1. Title: Effectiveness of microfinance on women empowerment among Women of Rural Gujarat  
Authors: Dr. Viral Bhatt & Shital R. Shastri  
Journal: International Journal of Review and Research in Social Scinces; Vol:6No:3:July-September:2018. IJRRSS-184
2. Title: Classification Of Factors Affecting Overall Women Empowerment  
Authors: Dr. Viral Bhatt & Shital R. Shastri  
Journal: International Journal of Review and Research in Social Scinces; Vol:6No:3:July-September:2018. . IJRRSS-183

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