Effectiveness of micro finance in sustainable rural development-
A study in Wardha district

**ABSTRACT**

The effectiveness of microfinance is important for reducing the poverty index of the country. Today, we are facing a problem of unemployment along with the increase in population. Migration happens from rural to urban for the search of employment. Around 60 to 75 million households in India live below the poverty line. There are various financial institutes along with the help of a financial corporation, cooperative sector, cooperative bank, NGOs, commercial and nationalizes bank is supporting credit service. Microfinance improves the financial need of rural Indian people. Microfinance helps to implement the development policies of the government with the help of state government, NGOs, NABARD and many other institutes. Microfinance improving the awareness about the saving pattern and accountability with the help of formation of Self Help Group (SHG).

**Keywords**— Microfinance, SHG, Sustainable rural development

**1. INTRODUCTION**

Microfinance and its effectiveness both important for the upliftment of rural development and reduce the unemployment level. NABARD conducting a series of research studies during the eighties and found their existing banking systems and procedure help for the credit facility to poor. In Maharashtra state, Mahila Artik Vikas Mahamandal (MAVIM) is the sole agency for implementation Tejaswini Program financed by IFAD. The program has been commenced from July 2007 and has extended up to 2017.the basic objective of MAVIM, the Microfinance (MF), and Grass-root institution Building (GIB), Livelihoods & woman Empowerment. Around the same time, NABARD has some expose similar experience along with positively responded financial institute, NGO that self-help group (SHGs) provide financial help to the poor.1 This Led to the beginning of the linkage of SHGs with the banks by NABARD and SHGs become financial intermediates linking borrowers with the banks. The Combination efforts to the government at various levels, banks and NGOs have made SHG- Bank linkage programme in India as the largest microfinance programme in the world2.

The Strategic objective is to provide easy and effective credit delivery system to poorest poor to promote them for their own work to promote them become self-entrepreneurs and contribute to Sustainable rural development. Poverty can be reduced for providing skills development, training and another supportive facility.

**2. LITERATURE REVIEW**

Microfinance and Self-help Group (SHG) both are the youngest concept. Availability of literature available in large in numbers but traced thirty years. The various studies available on SHG and microfinance and its impact on rural also urban development.

2.1 Concept and Term

Self Help Group (SHG): SHGs are the voluntary formation of the group. These members are encouraged to serve a regular basis. They use the financial and another resource to meet their credit needs of the group members. The groups are democratic in nature are collectively made a decision.

**Features**

(a) Small in size. (Max 20)
(b) Same economical background & common interest.
(c) Democratic function.
(d) Simple documentation required.
(e) Collective decision making process & peer pressure in repayment.
(f) Regular meeting and saving procedures.
(g) SHG members access to external funds.
(h) Focus on poor people, especially women.

**Advantage**

(a) Help to gain economic, self-reliable and social empowerment.
(b) Reduce the transaction cost of lenders and borrowers.
(c) Women are trained in new skill and technology to start a micro-enterprise.
(d) Increasing the habit of wealth creation and saving.
(e) Improve the social life of members.
2.2 Micro-finance
Microfinance is a retail concept to break a large amount to small amount. Microfinance programme has been introduced in many countries since it has been considered as an important tool for the development of poor people. NABARD has defined microfinance as: “Microfinance is all about the provision of thrift, credit and other financial services and products of a very small amount to the poor in rural, semi-urban and urban areas for enabling them to raise their standard of living”.3

Sharma (2007) explains the principles of microfinance based on the experiences gained during the last three decades all over the world.

(a) Small savings or thrift by poor is possible.
(b) Poor people need small collateral-free loans with regular frequency instead of large loans at a time.
(c) Repayment matches with the family cash flow instead of individual cash flow.
(d) The rate of interest is not crucial.
(e) Timely, adequate and continued credit facility.
(f) Relatively small repayment periods e.g. weekly, monthly, instead of yearly instalments and half yearly instalments.
(g) Credit plus is preferred to credit alone.
(h) Women are better customers than men. Group method of lending is more successful than individual lending.4

2.3. Sustainable rural development
Sustainable Rural Development is the all-around trajectory of development of rural areas and development of weaker sections of the people through productive employment opportunities with diversified activities. These opportunities help people to acquire skills so that they gain confidence and capacity to deal with problems and make efforts to eliminate their poverty with awareness on health and environment with a consideration of future generation. Sustainable Rural Development is not merely the construction of roads, installation of pumps and subsidies. It involves:5

2.3.1. Livelihood and income generation
- Land based: Agriculture, horticulture, wasteland and watershed development, forestry.
- Microenterprises: IGA, trades by women, rural artisans.
- These three are interrelated and interwoven for the sustainable rural development.

2.3.2. Physical and infrastructure development
relate to drinking water, roads, transport and other facilities concerned with rural socioeconomic life, area development, creation of infrastructure, job opportunities, betterment of facilities, sustainability of resources, environmental protection, sustainable utilization of resources, alternate energy such as wind, solar power, biogas, organic agriculture.

2.3.3 Human and Social Development
relate to education, skill training, social welfare, social security, health, nutrition, inter and intragroup development and harmony, strengthening local democratic institutions through the participation of women, landless and socially disadvantaged groups.

2.3.4. Empowerment of participants
rural development remains incomplete without empowerments of its participants, which includes skill and knowledge development, entrepreneurial development, attitude and behavioural changes, self-employment and asset building, capacity building, gender equality and empowerment in all aspects-social, economic and political.

In short, sustainable rural development is the process of empowering people that ultimately lead to holistic development which is sustainable in nature in terms of its longevity and continuity of livelihood practices of people. It results in a wider distribution of benefits and participation of weaker sections of the rural population in the process of development.

2.4. Voluntary Organizations
Traditionally Non-Governmental Organizations (NGOs) are known as Voluntary Organizations (VOs) and Voluntary Agencies (VAs) and recently as Voluntary Development Organizations (VDOs). Voluntary organizations work at the grassroots levels. Even in areas not reached by others, their reach is wider. They are closer to ground realities and they focus on the development of rural poor. They work for the welfare of the disabled, development of women and children, prevention of human rights violation, protection of the environment, rehabilitation of people displaced by major irrigation projects, enforce the right of access to information etc., and above all they reform and develop the society. Prahalad (2008) says that the NGOs are very close to the communities they serve; therefore, they understand their needs and opportunities and they are able to provide solutions. Right from the beginning of SHG movement in India, NGOs are playing facilitating and nurturing role for SHGs in providing training, capacity building, skill development and marketing SHG products. NGOs in our country are serving as catalysts to transform rural women into micro-entrepreneurs at the grass root level.

Damodar and Laxmi(2006) identified the role of Non-Governmental Organisations in rural development in the following lines6:

(a) The staff of Non-Governmental Organisations has a good rapport with rural people. They have knowledge of local resources. They are aware of their needs and they ensure participation of the poor in projects.
(b) They operate with greater flexibility and readjust their activities quickly since they learn from their success and failure quickly.
(c) They are committed and devoted to reducing the sufferings of the poor.
(d) They are being viewed as more efficient and cost-effective than Government in reaching the poor.
(e) Participatory methods of rural development are well known to Non-Governmental Organisations compared to Governmental Organisations.

3. PROFILE OF THE RESPONDENTS
In this chapter, we understand the socio-economic profile of the respondents who are the members of SHGs is analysed. The profiles of the respondents are explained under following headings.

Following major factors are studied.
(a) Personal factors
(b) Formation of SHG.
(c) Reasons for joining SHGs.
(d) Purpose of loan and loan amount.

260 respondents, comprising 130 respondents from Karanja block and 225 from Wardha block, were selected for the study.
4. RESEARCH METHODOLOGY

4.1 The objective of the study

- To study the awareness of members on microfinance through SHG in Wardha district.
- To identify improvements in the living standards, empowerment, capacity building and managerial abilities of the rural women in Wardha district.
- To identify the problems and constraints faced by women during the course of microfinance in Wardha district and to find out the procedures followed in resolving the problems faced by the rural women in Wardha district.
- To assess the attitude of group leaders in Wardha district towards the managerial impact of microfinance

This study is both descriptive and diagnostic one. The research questions are crystallized very clearly and the variables are identified from the earlier research studies, and hence fall in the classification of descriptive as well as diagnostic designs.

4.2 Primary data: This study is primarily based on empirical investigation. Most of the data were collected from primary source through direct contact with the women who formed Self Help Groups.

4.3 Secondary data: The secondary data were collected from a number of reports published and unpublished by the rural development agencies, state and central government departments, agencies and local bodies and also from a number of offices at the district level, such as that of the District Collector, DRDA, Mahalir Thittam, Lead Bank, and NABARD.

5. HYPOTHESIS

H1: There is no significant difference between the respondents of the two blocks regarding awareness of microfinance and SHGs.

H2: There is no significant relationship between age and awareness of microfinance through SHG.

H3: There is no significant relationship between the educational status and awareness of microfinance.

H4: There is no significant relationship between the years of membership in SHG and awareness of microfinance and SHGs.

H5: There is no significant relationship between the loan amount and awareness of microfinance and SHGs.

6. DATA ANALYSIS AND DISCUSSION

6.1 Reliability and Interpretation

The researcher has used SPSS 20 for analyzing the data.

Statistical tools: The statistical tools implemented in this study are

(a) The validity of data as to check any missing values or outlier present in the data which would affect the further statistical analysis.

(b) Cronbach’s alpha Reliability test is used to check the internal consistency of items under consideration of any model.

(c) Descriptive Statistics to find the trend of responses under measures of central tendency (mean, mode and median), standard deviation as a measure of dispersions, skewness and kurtosis.

Inferential Statistics for Hypothesis Testing to map the responses with the hypothetical statements of this study hypothesis 1 and hypothesis 3 were asked to all the four mentioned category of people.

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Dimensions</th>
<th>Initial Sample size</th>
<th>No. of Questions</th>
<th>Cronbach's Alpha Value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Awareness of the constitution of the group</td>
<td>30</td>
<td>8</td>
<td>0.913</td>
<td>Excellent</td>
</tr>
<tr>
<td>2</td>
<td>Awareness of bookkeeping and accounts</td>
<td>30</td>
<td>5</td>
<td>0.905</td>
<td>Excellent</td>
</tr>
<tr>
<td>3</td>
<td>Awareness on managerial aspects</td>
<td>30</td>
<td>6</td>
<td>0.915</td>
<td>Excellent</td>
</tr>
<tr>
<td>4</td>
<td>Awareness of banking procedure</td>
<td>30</td>
<td>12</td>
<td>0.944</td>
<td>Excellent</td>
</tr>
<tr>
<td>5</td>
<td>Overall Status of the Model 1</td>
<td>30</td>
<td>31</td>
<td>0.973</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Interpretation: Since for all the Dimensions, Cronbach’s $\alpha > 0.9$, model 1 is an Excellent for all the attribute under consideration for testing Hypothesis 1 and 3. For conducting the post-survey under these hypotheses, there is no need for any of the alteration in any of the questions.

6.2 Analysis of pilot survey for model 2

On the basis of initial samples collected for Pilot Survey or say pre-survey, total 30 were tested for hypothesis No. 2, No.4 and No.5 under consideration.

The following table provides the results of the pre-survey of the study where 21 questions for the given three hypotheses were asked under the three dimension.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Category type</th>
<th>Initial Sample size</th>
<th>No. of Questions</th>
<th>Cronbach's Alpha Value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Economic Empowerment</td>
<td>30</td>
<td>09</td>
<td>0.910</td>
<td>Excellent</td>
</tr>
<tr>
<td>2</td>
<td>Social Empowerment</td>
<td>30</td>
<td>10</td>
<td>0.903</td>
<td>Excellent</td>
</tr>
<tr>
<td>3</td>
<td>Political Empowerment</td>
<td>30</td>
<td>02</td>
<td>0.930</td>
<td>Excellent</td>
</tr>
<tr>
<td>4</td>
<td>Overall Status of the Model 2</td>
<td>30</td>
<td>21</td>
<td>0.901</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Interpretation: Since for all the Dimensions, Cronbach’s $\alpha > 0.9$, model 2 is an Excellent for all the attribute under consideration for testing Hypothesis 2, 4 and 5. For conducting the post-survey under these hypotheses, there is no need for any of the alteration in any of the questions.

6.3 Analysis of Pilot Survey for Model 3

The following table provides the results of the pre-survey of the study where 31 questions for were asked to all the three mentioned category of people.

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Dimensions</th>
<th>Initial Sample size</th>
<th>No. of Questions</th>
<th>Cronbach's Alpha Value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capacity Building</td>
<td>30</td>
<td>15</td>
<td>0.962</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Interpretation: Since for the Dimension of capacity building, Cronbach’s $\alpha > 0.9$, model 3 is an Excellent for all the attribute under consideration. For conducting the post-survey under this dimension, there is no need for any of the alteration in any of the question.
6.4 Descriptive Statistics using various measures

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Categories</th>
<th>No of parameters</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Empowerment</td>
<td>Before 2013</td>
<td>9</td>
<td>151</td>
<td>3.60</td>
<td>4.00</td>
<td>4.00</td>
<td>0.98</td>
<td>-0.45</td>
<td>-0.22</td>
</tr>
<tr>
<td></td>
<td>After 2013</td>
<td>9</td>
<td>109</td>
<td>3.38</td>
<td>4.00</td>
<td>3.00</td>
<td>1.00</td>
<td>-0.26</td>
<td>-0.46</td>
</tr>
<tr>
<td>Social Empowerment</td>
<td>Before 2013</td>
<td>10</td>
<td>151</td>
<td>3.80</td>
<td>4.00</td>
<td>4.00</td>
<td>1.52</td>
<td>-0.23</td>
<td>-1.45</td>
</tr>
<tr>
<td></td>
<td>After 2013</td>
<td>10</td>
<td>109</td>
<td>3.81</td>
<td>3.00</td>
<td>1.00</td>
<td>1.55</td>
<td>-0.20</td>
<td>-1.48</td>
</tr>
<tr>
<td>Political Empowerment</td>
<td>Before 2013</td>
<td>2</td>
<td>151</td>
<td>3.75</td>
<td>4.00</td>
<td>4.00</td>
<td>0.98</td>
<td>-1.01</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>After 2013</td>
<td>2</td>
<td>109</td>
<td>3.64</td>
<td>4.00</td>
<td>5.00</td>
<td>1.01</td>
<td>-0.97</td>
<td>0.70</td>
</tr>
<tr>
<td>Overall Status under 3</td>
<td>Before 2013</td>
<td>21</td>
<td>151</td>
<td>3.60</td>
<td>4.00</td>
<td>4.00</td>
<td>1.31</td>
<td>-0.60</td>
<td>-0.72</td>
</tr>
<tr>
<td>dimensions</td>
<td>After 2013</td>
<td>21</td>
<td>109</td>
<td>3.38</td>
<td>4.00</td>
<td>4.00</td>
<td>1.33</td>
<td>-0.52</td>
<td>-0.81</td>
</tr>
</tbody>
</table>

**Interpretation:** Mean, Median and Mode almost coincide within as well as among the two groups, above 3 that positively supports the facts under 3 dimensions as well as in overall status. Social Empowerment for a group formed after 2013 only over rules with every other fact. Std deviation more than unity in both the group indicate variability among the respondents. All Negative skewness indicated the responses with respect to the two groups are amassed at the right end of the distribution. The coefficient kurtosis less than 3 are the cases of Platykurtic curve having a short height. Data seem to have flatness where the data point is not concentrated on the central value.

The comparative figures of various measures indicate that formation of groups before/after does not matter in the region.

6.5 Inferential Statistics for Hypothesis Testing

Null Hypothesis:
H0: There is no significant relationship between the years of membership in SHG and awareness of microfinance and SHG.

H1: There is some significant relationship between the years of membership in SHG and awareness of microfinance and SHG.

Note: The use of the Student t-test for independent samples on SPSS tool determines the outcomes of this hypothesis. The various parameters are the dimensions which are determined in the following table:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Year of membership in terms of group formed</th>
<th>N</th>
<th>Mean</th>
<th>StdDev.</th>
<th>Mean Diff.</th>
<th>T statistics</th>
<th>df</th>
<th>Sig p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>Before 2013</td>
<td>151</td>
<td>33.4967</td>
<td>6.61803</td>
<td>-0.46968</td>
<td>0.615</td>
<td>258</td>
<td>.539</td>
</tr>
<tr>
<td>Empowerment</td>
<td>After 2013</td>
<td>109</td>
<td>33.0000</td>
<td>6.13883</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.6 For Hypothesis No. 5

Descriptive Statistics using various measures

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Categories</th>
<th>No of parameter</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>Before 2013</td>
<td>151</td>
<td>30.3709</td>
<td>6.29351</td>
<td>-0.95024</td>
<td>-1.180</td>
<td>258</td>
<td>.239</td>
<td></td>
</tr>
<tr>
<td>Empowerment</td>
<td>After 2013</td>
<td>109</td>
<td>31.3211</td>
<td>6.56433</td>
<td>-0.06422</td>
<td>329</td>
<td>258</td>
<td>.742</td>
<td></td>
</tr>
<tr>
<td>Political</td>
<td>Before 2013</td>
<td>151</td>
<td>8.0000</td>
<td>1.59164</td>
<td>-0.38933</td>
<td>-252</td>
<td>258</td>
<td>.801</td>
<td></td>
</tr>
<tr>
<td>Empowerment</td>
<td>After 2013</td>
<td>109</td>
<td>7.9358</td>
<td>1.49861</td>
<td>-0.06422</td>
<td>329</td>
<td>258</td>
<td>.742</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>Before 2013</td>
<td>151</td>
<td>71.8675</td>
<td>12.5632</td>
<td>-0.38933</td>
<td>-252</td>
<td>258</td>
<td>.801</td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>After 2013</td>
<td>109</td>
<td>72.2569</td>
<td>11.8988</td>
<td>-0.06422</td>
<td>329</td>
<td>258</td>
<td>.742</td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** The mean difference in the given three dimensions based on the two groups found less than one unit. The negative sign in case of second and last and indicates that the groups formed after 2013 respondents are more aware as compared to the respondents of the groups formed before 2013. According to the last column of p-value where all of them are greater than 0.05, we can accept the null hypothesis H0 at 5% level of significance for 258 Degree of freedom and state that there is no significant relationship between the years of membership in SHG and awareness of microfinance and SHG.
The fact and figure indicate a large variability in the region. This means the loan amount does matter in case of awareness of microfinance and SHG, in the region.

6.7 Inferential Statistics for Hypothesis Testing
The hypothetical statement is:

Null Hypothesis:
H₀: There is no significant relationship between the loan amount and awareness of microfinance and SHGs.

vs

H₁: There is some significant relationship between the loan amount and awareness of microfinance and SHGs.

Note: The use of One-way Analysis variance for different age groups on SPSS tool determines the outcomes of this hypothesis. The various parameters are the dimensions which are determined in the following table:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sources of variation</th>
<th>df</th>
<th>Mean Square</th>
<th>F statistics</th>
<th>Sig p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Empowerment</td>
<td>Between Groups</td>
<td>4</td>
<td>1338.199</td>
<td>64.354</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>255</td>
<td>20.794</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>259</td>
<td>10655.365</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Empowerment</td>
<td>Between Groups</td>
<td>4</td>
<td>211.893</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>255</td>
<td>38.449</td>
<td>5.511</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>259</td>
<td>10652.154</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpretation: According to the last column of Sig p-value, all are less than 0.05, for the given dimensions, we can reject null hypothesis H₀ and accept the alternative hypothesis H₁ at 5% level of significance for (4, 255) Degree of freedom and state that there is some significant relationship between the loan amount and awareness of microfinance and SHGs.

From the facts and figures of the above mentions 3 Statistics and the interpretation statements (13), (14) and (15) for Hypothesis No. 5, the awareness of SHG among the different categories of the loan amount is not same in the region. So people of the region are more concern about the burden of the loan amount.

7. CONCLUSIONS
So as per this research study, the statement of the

- Hypothesis No.1, "There is no significant difference between the respondents of the two blocks regarding awareness of microfinance", stands true.
- Hypothesis No. 2, the awareness of microfinance through SHG among the different categories of ages is not the same in the region. Thus the age factor thus matters in the region.
- Hypothesis No.3, "There is no relationship between the educational status and awareness of microfinance", stand non-supportive.
- Hypothesis No.4, "There is no significant relationship between the years of membership in SHG and awareness of microfinance and SHG", stands true.
- Hypothesis No. 5, the awareness of microfinance through SHG among the different categories of the loan amount is not the same in the region. So people of the region are more concern about the burden of the loan amount.

So "There is no significant relationship between the loan amount and awareness of microfinance and SHGs", stand non-supportive.

On examining the awareness of SHG and microfinance among the respondents, it is concluded that the respondents are well aware of the concepts of microfinance through SHG viz. awareness about the constitution of the group, bookkeeping and accounts, group management and banking procedures.

Among the four dimensions of awareness, awareness of bookkeeping and accounts is very high followed by group management aspects, group constitution and banking procedure aspects. Further, the respondents expect that the training program and continuing education programs may be organized to improve the awareness on microfinance. NGOs should take a proactive role in this process by organising training programs for the members and exposure visits.
8. REFERENCES