

Impact of Microfinance Programmes on Rural Women's Income, Savings and Credit



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Abstract

This study attempts to understand the impact of microfinance programmes on rural women in terms of changes in income, savings, and credit. The study was conducted on a sample of two hundred and twenty women beneficiaries of microfinance services of a leading microfinance institution operating in Kerala state. The sample was selected by multi-stage cluster sampling.

The results of the study suggest that microfinance programmes have created a positive impact for its beneficiaries. The majority of the respondents are engaged in various income generating activities because of the credit facilities provided by microfinance institutions. This has resulted in a significant change in their income level and savings after participating in microfinance programmes. This has helped them to earn income for their families and has also enabled them to play an important role in their families and in society. The results of the study also show that microfinance programmes have also reduced the beneficiaries' dependence for informal financial sources. Thus microfinance programmes have led to a significant improvement of financial literacy.

Keywords: microfinance programmes, rural women, income, savings, credit.

The results of the study also indicate that while microfinance programmes had the most dramatic improvement in income and savings for beneficiaries who had little or no income and savings prior to participation, there was considerably lower shift to formal savings instruments and formal sources of credit for the same group. This could reflect socio-economic difficulties encountered by those with little or no income in coming out of informal financial systems. This suggests that microfinance programmes should be more specifically designed taking into consideration the socio-economic requirements of those with little or no income. Also, an implication of the results is that microfinance institutions should encourage beneficiaries to increase their propensity to save, as this would improve their long-term benefit from the microfinance programmes.

Introduction

The role of microfinance in India has gained ground in recent years mainly because of the influence of two factors. The first factor is that microfinance meets the financial requirements of low income group of people. The second is that microfinance is considered as an important tool for financial inclusion by the

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policy makers in India. The microfinance sector is considered as a commercially viable solution to overcome various issues in attaining financial inclusion, reducing poverty level and empowerment of women has become the primary obstacle in achieving these goals.

The impact of microfinance programmes has been a very widely-studied area in recent years. Several recent studies have studied the impact of participation in microfinance programmes on economic betterment of rural women. All these studies have highlighted the potential of microfinance institutions and microfinance programmes as a means to solve the financial constraints of women especially in rural areas. Microfinance programmes are availed in a big way by women across the country.

Gowda and Manjula (2012) examined the impact of microfinance on living standard of poor people and poverty alleviation in Davanagere District, Karnataka. They found that through microfinance programmes, women were able to increase their income and provide financial support to their families. They also found that microfinance had brought a positive impact in their economic and social situation, enabling them to take an important role in the decision making process in their family and in society.

Krishnan and Silvi (2011) studied the role of microfinance in transforming the socio-economic conditions and livelihood diversification of tribals in Wayanad district of Kerala. They found that the microfinance programmes acted as a catalyst in the livelihood diversification among the tribals, and had improved the employment, income, and savings of the tribals. However, they found only limited social empowerment attained by the beneficiary households. They suggested that more measures have to be taken by microfinance institutions for social empowerment of tribal people and government should take proper action against exploitative activities by informal agencies.

Raghavan (2006) examined the social and economic impact of the Kudumbashree projects on poor women in rural and urban areas of Kerala. The Kudumbashree project was introduced by the state government of Kerala as a vital scheme for alleviating poverty based on microcredit and SHGs. It was found that these projects helped in eradicating poverty, and also encouraged women to get involved in the planning and implementation process of various activities. Also, it has enhanced the confidence and status of women in their families and their community.

McCarter (2006) examined the microfinance movement and the impact it has had on women. The study pointed out that microfinance programmes have enabled women to use small amounts of money received as credit in innovative and successful ways to develop their livelihoods, improve the well-being of their families, and improve their savings. It also helped to tackle the gender inequalities faced by women. However, the study suggests that microfinance has not really been able to empower women, did not create upward mobility, and was not good enough to create long-term economic growth. The study suggests that microfinance institutions should provide various products, services, and interventions to help advance its clients up the financial ladder, and they should also address the financial requirements of small and micro-enterprises, which will create more employment opportunities, wider markets, and economic development of the country.

Chakrabarti (2005) evaluated the state of SHG-based microfinance in India. The study pointed out that SHG-based microfinance, which is nurtured and supported by NGOs, is becoming an important way to meet the financial requirements of people in rural areas, and leading to the empowerment of women by providing financial training and guidance to the poor which help them to reap long-term social and economic benefits. The study suggested that through microcredit programmes the credit availability problem can be alleviated, and the beneficiaries of microfinance programmes need guidance on various matters such as micro-consulting, business planning and services, marketing, and so on.

Oommen and Meenakshisundararajan (2005) analysed the working pattern, financial status, and economic-social activities undertaken by the SHGs in Kanyakumari district. They suggested that the SHGs were not able to create enough employment opportunities to its members and failed to empower women because they were not able to provide proper guidance and training. The study suggested that the government should play a larger role either by buying the commodities of the SHGs, or by helping market them. This would boost up the sales of the SHGs and rejuvenate them. Also, the study suggested that the microfinance institutions should provide guidance and should monitor the activities done by SHGs.

This study extends the literature by investigating the impact of microfinance programmes on rural women's change in income, savings, and credit.

Methodology

The data for the study was collected through structured questionnaire which is distributed to women beneficiaries who had participated in microfinance programmes from a leading microfinance institution operating in Kerala. The sample size for the study was two hundred and twenty beneficiaries, selected through multistage cluster sampling, in eight villages of Malappuram district, Kerala.

In order to analyse the impact of microfinance programmes on

changes in rural women's income, savings, and credit, the questionnaire was structured in a way to measure their levels among the respondents before and after availing microfinance programmes of the microfinance institution. The impact was tested using the Wilcoxon paired-samples test.

Findings

The various income generating activities taken up by women under microfinance programmes among the respondents are shown in Table 1.

Table 1: incomegenerating activities of the respondents

Income Generating Activities	Frequency	Percentage
Tailoring/Laundry	40	18.18%
Agriculture/Farming	39	17.72%
Book binding	28	12.72%
Packing	26	11.81%
Animal husbandry/Cattle rearing/Poultry	24	10.91%
Food/Catering/Hotel	24	10.91%
Handicrafts	23	10.45%
Shops	16	7.27%

The respondents were mainly engaged in eight types of income generating activities under microfinance programmes. The most prevalent was tailoring and laundry activities (18.2%), followed by agriculture/farming-related activities (17.7%). Book binding (12.7%) and packing (11.8%) were also prevalent. Animal husbandry/cattle rearing or related activities (10.9%) and food related activities (10.9%) were also prevalent. Handicrafts (10.5%) and shops (7.3%) were relatively less

prevalent. The success of each activity is directly dependent upon the activities of the microfinance institution, which provides training and skill development programmes, and also helps in marketing the products made by the beneficiaries.

The change in income level of the respondents participating in the microfinance programmes is presented in Table 2, and the results of the Wilcoxon test are presented in Table 3.

Table 2: Shift in Income level

Income Level- Before	Income Level- After				Total	
	Less than Rs. 500	Rs. 500- Rs. 1000	Rs. 1000- Rs. 3000	Rs. 3000 or more		
No income	2 3.51%	34 59.65%	18 31.58%	3 5.26%	57	25.91%
Less than Rs. 500	2 2.99%	50 74.63%	14 20.90%	1 1.49%	67	30.45%
Rs. 500- Rs. 1000	1 1.47%	4 5.88%	59 86.76%	4 5.88%	68	30.91%
Rs. 1000- Rs. 3000	0 0.00%	0 0.00%	0 0.00%	19 100.00%	19	8.64%
Rs. 3000 or more	0 0.00%	0 0.00%	1 11.11%	8 88.89%	9	4.09%
Total	5 2.27%	88 40.00%	92 41.82%	35 15.91%	220	

Pearson $\chi^2 = 240.895$, p-value = 0.000**

Table 3: Wilcoxon test for significance of shift in income level

	N	Mean Rank
Negative Rank (Before > After)	2	66.50
Positive Rank (Before < After)	204	103.86
Ties (Before = After)	14	
Total	220	

Wilcoxon $z = -12.668$, p-value = 0.000**

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The results in Table 2 indicate a significant shift in the income level as a result of participating in microfinance programmes, with improvement in income level in 91.3% of cases. The most dramatic shift was observed for respondents with little or no income prior to participation in microfinance programmes. The sample mean monthly income of the respondents before and after participating in the microfinance programmes was Rs. 623.86 and Rs. 1698.86, with sample standard deviation Rs. 806.40 and Rs. 980.75, respectively, yielding 95% confidence intervals for the population mean monthly income of Rs. 501.16 - Rs. 746.57 before participating in microfinance programmes, and correspondingly Rs. 1549.63 - Rs. 1848.10

after participating in microfinance programmes. There was also found to be positive correlation between the income level before and after participating in microfinance programmes (Spearman $P = 0.633$, $p = 0.000^{**}$). To test the significance of the increase in the income level, the Wilcoxon signed-rank test was applied, as shown in Table 3, and the results indicate that there was a significant increase in income by participating in the microfinance programmes.

The change in savings level of the respondents by participating in microfinance programmes is presented in Table 4, and the results of the Wilcoxon test are presented in Table 5. The results

Table 4: Shift in Savings

Savings Before	Savings- After							Total	
	No savings	Less than Rs.100	Rs. 100- Rs. 500	Rs. 500- Rs. 1000	Rs. 1000- Rs. 3000	Rs. 3000 or more			
No savings	10 7.1%	30 21.4%	74 52.9%	19 13.6%	7 5.0%	0 0.0%	140	63.64%	
Less than Rs100	0 0.0%	5 11.1%	32 71.1%	7 15.6%	1 2.2%	0 0.0%	45	20.45%	
Rs. 100- Rs. 500	0 0.0%	1 4.3%	4 17.4%	14 60.9%	4 17.4%	0 0.0%	23	10.45%	
Rs. 500- Rs. 1000	0 0.0%	0 0.0%	1 16.7%	3 50.0%	1 16.7%	1 16.7%	6	2.73%	
Rs. 1000- Rs. 3000	0 0.0%	0 0.0%	0 0.0%	2 40.0%	2 40.0%	1 20.0%	5	2.27%	
Rs. 3000 or more	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 100.0%	1	0.45%	
Total	10 4.5%	36 16.4%	111 50.5%	45 20.5%	15 6.8%	3 1.4%	220		

Pearson $\chi^2 = 163.893$, $p\text{-value} = 0.000^{**}$

Table 5: Wilcoxon test for significance of shift in savings

	N	Mean Rank
Negative Rank(Before > After)	4	41.50
Positive Rank(Before < After)	191	99.18
Ties(Before = After)	25	
Total	220	

Wilcoxon $z = -12.144$, $p\text{-value} = 0.000^{**}$

in Table 4 indicate a significant shift in savings as a result of participating in microfinance programmes, with improvement of savings in 86.8% of cases. The most dramatic shift was observed for respondents with little or no savings prior to participation in microfinance programmes. The sample mean monthly savings of the respondents before and after participating in the microfinance programmes was Rs. 123.41 and Rs. 497.05, with sample standard deviation Rs. 395.76 and Rs. 594.64, respectively, yielding 95% confidence intervals for the population mean monthly savings of Rs. 63.19 - Rs. 183.63 before participating in microfinance programmes, and correspondingly Rs. 406.56 - Rs. 587.53 after participating in

microfinance programmes. There was also found to be positive correlation between the savings before and after participating in microfinance programmes (Spearman $P = 0.411$, $p = 0.000^{**}$), and the improvement in savings was found to be positively correlated with the improvement in income (Spearman $P = 0.526$, $p = 0.000^{**}$). To test the significance of the increase in savings, the Wilcoxon signed-rank test was applied, as shown in Table 5, and the results indicate that there was a significant increase in savings by participating in the microfinance programmes.

The preference for formal/informal savings instruments among the respondents is presented in Table 6.

Table 6: Shift in Informal/Formal Savings Instruments

Savings Before	Savings- After					Total	
	Cash	Money Lenders	Gold/Silver	Banks/Post Office	MFI		
Cash	12 8.22%	2 1.37%	13 8.90%	89 60.96%	30 20.55%	146	66.36%
Money Lenders	1 2.38%	0 0.00%	1 2.38%	26 61.90%	14 33.33%	42	19.09%
Gold/Silver	0 0.00%	0 0.00%	0 0.00%	9 81.82%	2 18.18%	11	5.00%
Banks/Post Office	1 4.76%	0 0.00%	0 0.00%	10 47.62%	10 47.62%	21	9.55%
Total	14 6.36%	2 0.91%	14 6.36%	134 60.91%	56 25.45%	220	

Pearson $\chi^2 = 16.291$, p-value = 0.178

It was found that there was a shift from informal savings instruments (cash holdings, money lenders, and investing in gold/silver) to formal savings instruments (banks/post office/government institutions, and MFIs). Further, 85.4% of respondents who earlier preferred informal savings instruments have shifted to formal savings instruments. Binary logistic regression analysis of this latter group indicated that savings was the most important factor affecting this shift; beneficiaries with

savings of Rs. 100 or more were more likely to shift to formal savings instruments. Further, there was a mediating effect of income level on the tendency to shift, with a reduction in savings threshold for higher income levels.

The preference for formal/informal sources of credit among the respondents is presented in Table 7. Discussion

Table 7: Shift in Informal/Formal Sources of Credit

Savings- Before	Savings- After				Total	
	Money Lenders	Family/ Relatives	Banks	MFI		
Money Lenders	3 2.40%	3 2.40%	40 32.00%	79 63.20%	125	56.82%
Family/Relatives	2 3.03%	1 1.52%	16 24.24%	47 71.21%	66	30.00%
Friends	0 0.00%	0 0.00%	5 26.32%	14 73.68%	19	8.64%
Banks	0 0.00%	0 0.00%	1 10.00%	9 90.00%	10	4.55%
Total	5 2.27%	4 1.82%	62 28.18%	149 67.73%	220	

Pearson $\chi^2 = 5.163$, p-value = 0.820

The results of the study suggest that microfinance programmes have created a positive impact for its beneficiaries. The majority of the respondents are engaged in various income generating activities because of the credit facilities provided by microfinance institutions. This has resulted in a significant change in their income level and savings after participating in microfinance programmes. This has helped them to earn income for their families and has also enabled them to play an important role in their families and in society.

The results of the study also show that microfinance programmes have also reduced the beneficiaries' dependence for informal financial sources. Before joining microfinance programmes, the majority of respondents depended on

informal financial sources for availing loans to meet their financial requirements, whereas after joining the microfinance programmes, they became more aware about the benefits that they could receive from formal financial sources, and also the illegal practices followed by informal sources. This made them shift from depending informal sources to formal sources of credit. This was also observed in the case of savings. Before joining microfinance programmes the majority of respondents invested their savings in informal financial instruments, whereas after joining the microfinance programmes, they have shifted to formal financial instruments. Thus microfinance programmes have led to a significant improvement of financial literacy.

The results of the study also indicate that while microfinance programmes had the most dramatic improvement in income and savings for beneficiaries who had little or no income and savings prior to participation, there was considerably lower shift to formal savings instruments and formal sources of credit for the same group. This could reflect socio-economic difficulties encountered by those with little or no income in coming out of informal financial systems. This suggests that microfinance programmes should be more specifically designed taking into consideration the socio-economic requirements of those with little or no income. Also, an implication of the results is that microfinance institutions should encourage beneficiaries to increase their propensity to save, as this would improve their long-term benefit from the microfinance programmes.

To conclude, microfinance programmes have helped women to become "more creative, intelligent, innovative, proactive, inclined toward planning, and better organised." They gain self-confidence and, with this, an increased ability to make decisions and mould their own lives. Microfinance programmes build

mutual trust and confidence among women, encouraging them to approach formal financial institutions to meet their various financial requirements. Thus, microfinance programmes are an important strategy for women's financial empowerment.

There are several limitations inherent in the study. The sample size for the study was relatively small. Also, the demographics of the respondents were not properly captured in the study. Thus, the sample may not be representative/generalisable, particularly if the respondents were of a specific caste and/or if they varied widely by age group, marital status, and family size. Also, the data was collected through a structured questionnaire, so that there could be some scope for response bias, particularly in the pre-participation data. The results of the study suggest that further studies should examine in greater detail the difficulties encountered by low income groups and perhaps particular social groups in shifting to formal savings instruments and formal sources of credit, in order to design suitable microfinance programmes to encourage the same.

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