



Effectiveness of Microcredit Fund Scheme in Economic Empowerment of Rural Women in Tehran Province

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Abstract

Microcredit scheme is an important poverty alleviation method that facilitates the development of rural communities by creating and developing income-generating activities; especially for low-income women. The present study was aimed to examine the effectiveness of the microcredit fund scheme on the economic empowerment of rural women in Tehran Province, Iran. It was carried out by a survey methodology. The statistical population was composed of 461 women who were members of 15 rural microcredit funds in Tehran Province in 2014. The sample size was determined by Krejcie and Morgan table and the population was sampled by the proportionate simple random method. Finally, 210 questionnaires were collected. The results revealed that the significant differences in economic capability between member women of the microcredit funds with different educational levels. Also, rural women's economic capability differed significantly in income, saving power, saving management, initiation of income-generating lasting occupations, financial independence, purchase power, possession of vocational skills to start and continue a production activity, and economic skills before and after membership in rural microcredit funds.

Keywords:

Microcredits,
Empowerment,
Rural Women.

1. Introduction

Terminating poverty in any form and anywhere, alleviating inequality within and among countries, and empowering women and girls are among the goals of sustainable development that have been determined by the UN for countries to have plans and take actions for their accomplishment by 2030 (UN, 2015). One major approach to accomplish the goal pertaining to rural women is to provide them with financial services. Microcredit scheme is an important poverty alleviation method that facilitates the development of rural communities by creating and developing income-generating activities, especially for low-income women. The goals of microcredit fund scheme include diversifying income generation methods, creating complementary occupations for agricultural and non-agricultural activities, motivating people for saving and investment, empowering rural women and

strengthening their participation in the form of saving credit groups, and boosting the incomes of poor families by granting small loans for their activities (Najafi, 2005).

The Office of Rural Women Affairs, the Ministry of Jihad-e Agriculture, has initiated the program of establishing microcredit funds for rural women since 1998 given the importance of alleviating poverty in rural areas and the need for women's empowerment and participation in economic activities. So far 355 funds have been founded in 30 provinces. Tehran Province has 13 rural microcredit funds with 461 active members (Ministry of Jihad-e -Agriculture, 2014).

We addressed rural women of Tehran Province in this study because they have low income and they hardly access bank credits and given the fact that several years after the establishment of these funds, no study has been conducted on their

effectiveness in empowering rural women in Tehran Province yet. In the next paragraphs, the relevant literature conducted in Iran and other parts of the world is reviewed.

SaadiandArabmazar (2005) concluded that women's awareness of the conditions for receiving loans in rural microcredit scheme was a determinant of their empowerment.

Kamarei (2010) found that the female members of a microcredit fund had more economic capabilities like the chance of having independent income and saving.

Sultana and Hasan (2010) found that the female members of Bangladesh Rural Advancement Committee (BRAC) had economically progressed in three parameters including personal earning, saving behavior, and property ownership.

Terano et al. (2015) revealed four effectiveness dimensions for microcredit schemes including saving ability, payment plan, members' cooperation, and well-being. Also, the total incomes of members were affected by such factors as loan reception, loan amount, and number of staff.

Ganle et al. (2014) stated that some women who accessed microcredit were empowered. Those who did not have enough control on loads and those who could not pay back the loans in a timely manner were bothered.

In a study in Vietnam, Luan and Bauer (2016) found that the access to microcredits influenced the receiver groups heterogeneously. Access to credits impacted off-farm incomes, but it did not change the income of farmers who were affected by agricultural extension plans. Although credits improved total income, per capita income, and off-farm income of most people in Kinh, they could not change the income constituents of ethnic minorities. Credit scheme inclined towards people with higher income and positively and significantly impacted the prosperous people and people who received high credits. Consequently, economically affluent families benefited from the access to credits.

Kumar et al. (2013) concluded that the microcredit plans in Bangladesh helped women be more independent, be involved in the decision-making process and receive more credits.

Graflund (2013) reported that microcredit scheme in Bangladesh had, in general, positive significant impacts on women's empowerment.

According to Roxin et al. (2010), microcredits can considerably influence women's economic empowerment, had only a limited effect on their social empowerment and had no effect on their political empowerment.

In a study in Kenya, Ouma and Rambo (2013) concluded that women's access to

microclimate was favorable for business owning women.

According to EBRD (2015) conducted in seven countries, poor people's access to microcredits did not boost the family income considerably. Also, no important benefits were observed in training or empowering women. However, these attempts helped poor families compromise with risk and enjoy more flexibility in making income and spending money. In summary, microcredit is a useful funding tool, but not a powerful strategy against poverty.

Schroeder (2014) found that the increased amount of loans granted by Grameen Bank and similar institutions in Bangladesh influenced per capita consumption of families desirably and significantly. These estimations showed that microcredits were more effective than what was thought before.

In another study in Bangladesh, Chowdhury (2009) concluded that Grameen Bank's microcredit schemes did not lead to women's self-employment by their empowerment to launch microbusinesses at the family level. However, participation in these schemes significantly helped the member women's husbands to start a small business and provided them with self-employment opportunities. Also, these schemes significantly enhanced the capital in families whose businesses were handled by the men. The theoretical framework on microcredit approach is to poverty reducing and empowerment low-income rural women to access credit resources to improve the economic and social situation (Graflund, 2013). Since the program has been accomplishing through several years in Tehran province, and the effects of the microcredit program are not clear, the study was carried out.

2. Materials and methods

The present work was an applied study in terms of objective and a survey in terms of data collection methodology. The statistical population was composed of all female members of 15 active rural microcredit funds in Tehran Province (N = 451 as per 2014 census). The sample size was determined as 210 individuals according to Krejcie and Morgan table (1970). The dependent variable was the extent of rural women's economic empowerment for which such indices as income, saving power, saving management, initiation of income-generating and lasting occupations, financial independence, purchase power, possession of vocational skills to start and continue a manufacturing activity, and the economic skills (financial, sale and marketing management) were used. Also, the independent variables included age, marital status, educational level, record of membership in a fund, work experience in a major

activity, income, credit granted to launch the new activity, sound management of the fund, frequency of receiving a loan from the fund, and attendance in training courses.

The research tool was a questionnaire. To check its validity, it was given to a panel of experts and then, it was adjusted according to their critiques. To estimate its reliability, it was administered to 30 female members of microcredit funds out of the studied area (Alborz Province). Then, the ordinal alpha coefficient was estimated to be, on average, 0.86 for the whole questionnaire (Table 1).

Table 1. Results of the Cronbach Alpha Test

Different parts of the questionnaire	Number of questions	Cronbach alpha value
Economic empowerment before membership in the fund	8	0.86
Economic empowerment before membership in the fund	8	0.90
The extent to which the goals of micro-credit funds are realized	11	0.87
Management of micro-credit fund	6	0.82
Barriers to the activity of the credit fund	18	0.88
Total of questionnaire	51	0.86

3. Results and discussion

The results showed that the mean age of respondents was 24 years. Also, 71% were married, 24.8% were single, and 4.2% were householders. It was found that 19% of respondents were illiterate, 22.4% were elementary school graduates, 16.6% were intermediate school graduates, 15.2% had high school education, 14.6% had diploma, 7.3% had associate degree, and 3.9% had bachelor's degree, but no one had master's degree or higher. On average, the record of respondents' membership in rural women microcredit funds was 4.5 years. Data revealed that 73.8% had received a loan from the microcredit funds and 26.2% had not yet.

Among respondents, 39% said that they had launched a new job by themselves, 20.8% asserted that they had continued their previous occupation by themselves, 20.1% had used the loan to initiate a job with a group, 11% had continued their previous occupation with a group, and 9.1% had spent the loan on urgent everyday life expenditures.

It was revealed that 58.4% of respondents believed that the amount of the loans was low and very low to initiate an economic activity, 24%

assessed it as to be fair, and 17.5% assess it as to be high and very high.

The frequency distribution of respondents' responses to the item pertaining to the awareness of the conditions and the procedure to receive and spend loan in microcredit funds shows that 54.6% of respondents were highly and very highly aware, 25.4% were fairly aware, and 20% were lowly and very lowly aware.

The results about respondents' economic capability before membership in microcredit funds indicated that 19.1, 64.7, 10.8, 2.9, and 2.5% had very low, low, fair, high, and very high capability, respectively.

Also, their economic capability after membership in microcredit funds was assessed by respondents to be very high in 2.12%, high in 55.2%, fair in 18.2%, low in 3%, and very low in 2.5%.

Respondents' assessment of the extent of the accomplishment of the goals of rural microcredit funds in Tehran Province shows that 19.2% assessed it as very high, 51.7% as high, 22.2% as fair, 3.9% as low, and 3% as very low.

The ranking of the items pertaining to the members' opinion about the extent of the accomplishment of the goals of rural microcredit funds in Tehran Province (Table 2) shows that "rural women's strong feeling to work" was ranked the first and "the improvement of life management skills among the women" was ranked the last.

Kruskal-Wallis test was applied to examine the difference in rural women's economic capability at different educational levels. The coefficient was calculated as chi-square = 15.26 in determining the difference with sig = 0.018, showing a significant difference in economic capability between rural women who were members of credit funds with different educational levels at the 0.05 error level. According to the mean, it can be said that rural women with higher educational level (associate and bachelor's degree) had higher economic capability (Table 3).

The results of the Wilcoxon test for the comparison of economic capability indices before and after membership in rural microcredit funds are summarized below.

Results of Table 4 ($Z = -9.95$) and significance level ($p = 0.000$) showed significant differences in rural women's income before and after membership in rural microcredit funds at the 1% error level. In other words, women's membership in rural microcredit funds influenced their income positively.

Results of Table 4 ($Z = -10.18$) and significance level ($p = 0.000$) indicated that there were significant differences in rural women's saving

power before and after membership in rural microcredit funds at the 1% error level. In other words, women's membership in rural microcredit funds influenced their saving power positively.

Results of Table 4 ($Z = -9.28$) and significance level ($p = 0.000$) showed significant differences in rural women's saving management before and after membership in rural microcredit funds at the 1% error level. In other words, women's membership in rural microcredit funds influenced their saving management positively.

Results of Table 4 ($Z = -9.28$) and significance level ($p = 0.000$) showed significant differences in rural women's efforts to initiate income-generating, lasting occupations before and after membership in rural microcredit funds at the 1% error level. In other words, women's membership in rural microcredit funds influenced their efforts to initiate such occupations positively.

Results of Table 4 ($Z = -10.73$) and significance level ($p = 0.000$) revealed significant differences in rural women's financial independence before and after membership in rural microcredit funds at the 1% error level implying that women's membership in rural microcredit funds influenced their financial independence (independent income) positively.

According to the results of Table 4 ($Z = -10.69$) and significance level ($p = 0.000$), there were significant differences in rural women's purchase

power before and after membership in rural microcredit funds at the 1% error level. It shows that women's membership in rural microcredit funds influenced their purchase power positively.

Results of Table 4 ($Z = -9.24$) and significance level ($p = 0.000$) showed significant differences in rural women's possession of vocational skills before and after membership in rural microcredit funds at the 1% error level implying that women's membership in rural microcredit funds improved their vocational skills.

As the results of Table 4 ($Z = -9.35$) and significance level ($p = 0.000$) indicated, there were significant differences in rural women's economic skills (financial, sale and marketing management) before and after membership in rural microcredit funds at the 1% error level implying that women's membership in rural microcredit funds improved their economic skills (financial, sale and marketing management).

Results of Table 4 ($Z = -10.77$) and significance level ($p = 0.000$) revealed significant differences in rural women's economic empowerment before and after membership in rural microcredit funds at the 1% error level. In other words, women's membership in rural microcredit funds influenced their economic empowerment positively.

Table 2. Ranking of the members' opinions about the extent of the accomplishment of the goals of rural microcredit funds in Tehran Province

Items	Categorical Rank mean	
Strong feeling towards working among rural women	3.95	1
The increase in group confidence among rural women	3.81	2
Accumulation of non-productive saving and its transformation to productive, efficient resources	3.71	3
The increase in women's awareness of their potential capabilities	3.67	4
Diversification of activities and income generating resources	3.66	5
Attention to and emphasis on low-income women	3.66	6
The increase in low-income rural women's access to credit facilities	3.65	7
The improvement of rural women's status in families and society	3.64	8
The increase in women's self-confidence	3.64	9
The increase in life management skills among women	3.63	10

Very low: 1; low: 2; fair: 3; high: 4; very high: 5.

Table 3. Results of Kruskal-Wallis test

Variable	Level	Number	Mean rank	Chi-square	df	sig.
Educational level	Illiterate	35	72.77	15.26**	6	0.018
	Elementary school	44	98.02			
	Intermediate school	34	95.04			
	High school	30	103.88			
	Diploma	30	110.63			
	Associate's degree	15	121.07			
	Bachelor's degree	8	120.38			

Table 4. The results of the Wilcoxon test for the comparison of rural women's economic capability indices before and after membership in rural microcredit funds

Variable		Number	Mean rank	Z	Sig.
Pre-membership income – post-membership income	Positive ranks	157 ^a	83.92	-9.95*	0.000
	Negative ranks	10 ^b	85.30		
	Draws	35 ^c	-		
	Total	202	-		
Pre-membership saving power – post-membership saving power	Positive ranks	166 ^a	88.83	-10.18*	0.000
	Negative ranks	11 ^b	91.50		
	Draws	22 ^c	-		
	Total	1999	-		
Pre-membership saving management – post-membership saving management	Positive ranks	151 ^a	88.11	-9.28*	0.000
	Negative ranks	20 ^b	70.05		
	Draws	32 ^c	-		
	Total	203	-		
Pre-membership initiation of income-generating lasting occupation – post-membership initiation of income-generating lasting occupation	Positive ranks	148 ^a	84.35	-9.28*	0.000
	Negative ranks	17 ^b	71.24		
	Draws	38 ^c	-		
	Total	203	-		
Pre-membership financial independence (independent income) – post-membership financial independence (independent income)	Positive ranks	174 ^a	122.33	-10.73*	0.000
	Negative ranks	6 ^b	89.40		
	Draws	21 ^c	-		
	Total	201	-		
Pre-membership purchase power – post-membership purchase power	Positive ranks	175 ^a	91.48	-10.69*	0.000
	Negative ranks	8 ^b	103.31		
	Draws	20 ^c	-		
	Total	203	-		
Pre-membership possession of vocational skills to start and keep a production activity – post-membership possession of vocational skills to start and keep a production activity	Positive ranks	150 ^a	82.20	-9.24*	0.000
	Negative ranks	14 ^b	85.75		
	Draws	36 ^c	-		
	Total	200	-		
Pre-membership economic skills (financial, sale and marketing management) – post-membership economic skills (financial, sale and marketing management)	Positive ranks	149 ^a	83.10	-9.358	0.000
	Negative ranks	15 ^b	76.50		
	Draws	35 ^c	-		
	Total	199	-		
Pre-membership economic capability – post-membership economic capability	Positive ranks	179 ^a	90.46	-10.77*	0.000
	Negative ranks	5 ^b	165.40		
	Draws	13 ^c	-		
	Total	197	-		

* = $p < 0.01$

a: pre-membership variable < post-membership variable

b: pre-membership variable > post-membership variable

c: pre-membership variable = post-membership variable

4. Conclusion and recommendations

According to the results, the mean age of the studied women was 34 years. Thus, it can be said that the participants were middle-aged. Since half the rural female members of microcredit funds were unlearned and illiterate, remedial actions should be taken for their literacy and suitable educational methods like cooperative learning methods should be used for their empowerment.

Also, the women's membership record in rural women microcredit funds was, on average, 4.5 years. It shows that the studied women had relatively high experience which is an important factor in their responses to the questions. With respect to the adequacy of the loans received to start a new economic activity, since 58.4% checked "low" and "very low", it can be concluded that the female members did not assess the received loans as to be adequate.

With respect to rural women's awareness of the conditions and procedures for granting and spending loans in microcredit funds, we can see that 54.6% checked "high" and "very high". It implies that their awareness of these conditions and procedures was moderate to high. Saadi and Arabmazar (2005) concluded that women's awareness of the conditions and characteristics of the loans granted by rural microcredit funds is an important determinant of rural women's empowerment.

In total, it was revealed that the rural women's economic empowerment was low before their membership in microcredit funds, but it was high and acceptable after their membership in these funds. Kamareyee (2010) stated that women who were members of microcredit funds were economically more capable, for example in having independent income and saving.

When it comes to the extent of the accomplishment of the goals of rural microcredit funds in Tehran Province, we can say that their goals have been realized at a good level in Tehran Province given that 70.8% of respondents assessed it as high and very high.

According to Kruskal-Wallis test, there were significant differences in economic capability between rural women who were members of microcredit funds with different educational levels. Thus, it can be said that rural women with higher educational level were economically more capable. SaeiArasi and Valipour (2011) found that educational level had a critical role in empowering women in Lorestan Province, Iran.

The following findings can be drawn from the Wilcoxon test.

Significant differences were found in rural women's income before and after their membership in rural microcredit funds. It means that women's membership in rural microcredit funds improved their income. Nazari and Adeli (2011) concluded that the credit facilities were highly effective on income improvement.

Rural women's saving capability differed significantly before and after their membership in microcredit funds. In other words, their membership in these funds had a positive impact on their saving power. Sultana and Hasan (2010) found significant differences in saving behavior empowerment between women who were members of Bangladesh Rural Development Committee and those who were not. This is confirmed by our results.

Significant differences were observed in saving management among rural women before and after membership in rural microcredit funds. It implies that their membership in these funds

positively impacted their saving management. Kamareyee (2010) reported that the effect of microcredits on women's economic capability was reflected on their control over their savings. We found similar results in the present work.

The extent of initiating income-generating, lasting occupations significantly differed among rural women before and after their membership in rural microcredit funds. In other words, the impact of these funds was favorable on the initiation of income-generating, lasting occupations. Nazari and Adeli (2011) found that the credit facilities were highly effective on job creation. However, Chowdhury (2009) in a study in Bangladesh concluded that the microcredit schemes of Grameen Bank did not result in women's self-employment through their empowerment to start a small business at the family level.

Significant differences were revealed in financial independence among rural women before and after their membership in microcredit funds. It means that their membership in these funds resulted in their higher financial independence. Similarly, Kumar et al. (2013) found that the microcredit schemes in Bangladesh made women more independent and that they could participate in the decision-making process and enjoy credits to a greater extent as we found in the present study too.

We observed significant differences in rural women's purchase power before and after membership in microcredit funds; i.e. their purchase power was enhanced after their membership in these funds. Kireti and Sakwa (2014) showed that microcredit availability improved the income and business stocks and production, and at the same time, increased money spent on health and educational services.

Rural women's vocational skills to initiate and continue a business differed significantly before and after their membership in rural microcredit funds so that membership in these funds positively influenced their vocational skills. In a study in Kenya, Ouma and Rambo (2013) concluded that microcredit availability to women had a desirable impact on business owning women.

There were significant differences in rural women's economic skills (financial, sale and marketing management) before and after membership in rural microcredit funds as their economic skills were improved after their membership in these funds. Similarly, Sorousherh (2009) reported a positive, significant relationship between economic capability and economic skills, which was confirmed in the present study.

Rural women's economic capability differed significantly before and after membership in rural

microcredit funds. Overall, it can be said that women's membership in these funds had a positive impact on their economic capability. Kamareyee (2010) concluded that member women had higher economic capability than non-member women. Sultana and Hasan (2010) found significant differences between women who were members of Bangladesh Rural Development Committee and non-member women in their empowerment in personal income, saving behavior, and property ownership. Member women were more capable than non-member women in all these parameters from an economic perspective.

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