



Impact of Microfinance on Poverty Incidence: A Study of Delhi Slum Households

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Abstract

The primary aim of microfinance is to provide credit to low-income households, enabling them to lift themselves out of entrenched poverty. While many researchers argue that microfinance loans can significantly reduce household poverty levels, others suggest that the impact is only modest. This paper examines the effect of microfinance on household poverty in Delhi, using primary data from 70 households in Delhi slums collected in 2016. The key findings indicate a 25 percent increase in monthly per capita expenditure (MPCE) and around 13 percentage point reduction in the poverty rate among MFI clients, suggesting that loans from MFIs have a positive effect on alleviating poverty, as evidenced by a decrease in the proportion of households living below the poverty line.

Keywords: Microfinance, Poverty Alleviation, Household Consumption, Poverty Incidence, Credit Access.

1 Introduction

The primary goal of microfinance is to provide credit to low-income households, enabling them to escape entrenched poverty. Loans from microfinance institutions (MFIs) play a crucial role in reducing poverty and enhancing the well-being of households by facilitating asset accumulation, building social collateral, and empowering women (Aghion and Morduch, 2000; Littlefield et al., 2003; Roodman and Morduch, 2014). According to Awan & Juiya (2015), the likelihood of alleviating poverty rises with the increasing loan amounts in successive loan cycles.

Many researchers have found that access to loans through microfinance institutions (MFIs) significantly reduces household poverty levels (Kumar et al., 2012; Okpara, 2010; Puhazhendi & Badatya, 2002; Singh, 2003; Vatta, 2003). However, other studies argue that the impact of microfinance on poverty alleviation is only modest and not as significant as to be considered transformative (Banerjee et al., 2015). Additionally, microfinance can be detrimental when offered at high interest rates, as a significant portion of earnings is used to repay the interest and installments to the institutions (Angelucci et al., 2013).

This paper examines the impact of microfinance on household poverty levels, specifically within the context of MFIs in Delhi. The central question it addresses is whether the microfinance accessed by households reduces their poverty incidence and increases their consumption expenditure. The analysis utilizes primary data collected in 2016 from 70 households in Delhi's slums. The study hypothesizes that loans advanced by the MFIs have a poverty-alleviating impact in terms of a reduction in the percentage of households below the poverty line.

Following the introduction, section 2 provides an overview of the existing literature on the impact of MFI's loans on poverty alleviation. Section 3 explains the database and the methodology used. Section 4 presents

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the descriptive results showing the impact of MFI's loans on the household's MPCE and poverty alleviation. The last section concludes.

2 Impact of Microfinance on Poverty Alleviation– A Brief Survey of Existing Literature

The literature on the impact of microfinance on poverty incidence of households can be broadly grouped as (a) those who find the impact to be positive and (b) those who observed this to be negative or inconclusive.

Several studies have evaluated the impact of microfinance on poverty among self-help group (SHG) members, including Aghion & Morduch (2000), Puhazhendhi & Satyasai (2000), Puhazhendhi & Badatya (2002), Singh (2003), and Kumar et al. (2012). These researchers found that members experienced improved conditions in the period after joining SHGs, as evidenced by a decrease in the proportion of households living below the poverty line due to access to credit. Tenaw and Islam (2009) noted that, beyond higher consumption and income levels, significant positive effects on job creation and employment expansion are also signs of reduced poverty. Hossain et al. (2000) highlighted that these programs have successfully promoted self-employment opportunities, offering higher returns compared to traditional wages. Okpara (2010) observed that a continuous increase in microfinance credit substantially reduces poverty in Nigeria. Similarly, Vatta (2003) suggests that providing micro-credit is a highly effective strategy for reducing poverty, particularly in rural areas of India.

Agarwal and Sinha (2010) noted that the success of microfinance institutions in alleviating poverty is not a short-term outcome. Due to the entrenched nature of poverty, sustained efforts and ongoing financial support from these institutions are necessary. This view is supported by Khandker and Chowdbury (1996), who found that it takes approximately five years for a poor client to just cross the poverty line and around eight years to achieve financial independence. Similarly, a study by IDF (2011) revealed that in India, between 1990 and 2010, 12 percent of all MFI clients (equating to 9 million out of 74 million) surpassed the international poverty line of USD 1.25 a day. It generally took five to six years of involvement with an MFI for a poor client to reach this level of consumption.

The relationship between microfinance and poverty remains contentious, as many studies in this area have yielded inconclusive results or only demonstrated a weak positive connection. Hulme (2000) observed that microcredit programs often yield greater benefits for non-poor borrowers. Chen and Snodgrass (2001) investigated the SEWA (Self Employed Women's Association) bank in India, which offers credit and savings services to poor women in the informal sector. Their findings indicated minimal overall change in poverty incidence. Similarly, Martin and Hulme (2003), contended that livelihood promotion programmes like microcredit, skills formation, and vocational training, can be beneficial to the poor, but they do not significantly impact the hardcore poor. Thus, "Microfinance may not be a cure-all for persistent and systemic poverty, but the experience of microfinance providers shows that poor individuals, particularly poor women, gain a significant boost in their efforts to escape poverty through access to microfinance services" (Getubig et al., 2014).

Li et al. (2011b) observed that in rural China, non-poor households constituted the majority of the more prosperous beneficiaries, suggesting that these programs may not effectively reduce poverty levels (Saad and Duasa, 2009; Pitt and Khandker, 1998). Buihya et al. (2016) found that loans were often used for stabilizing household consumption rather than for productive investments, raising questions about their long-term effectiveness in poverty alleviation. As a result, while consumption and income may initially rise with the implementation of these programs, this growth tends to slow down and eventually revert to previous levels (Kaboski and Townsend, 2012).

3 Database and Methodology

The study's sample comprises 70 women/household clients from the Sanchay Cooperative Urban Thrift and Credit Society (a mutual benefit MFI) operating in various urban slums of Delhi. The sample households (women) were selected using a convenience sampling method. The respondents have been associated with microfinance institutions (MFIs) for at least three years and have already taken out loans.

The household poverty status is assessed using the monthly per capita expenditure (MPCE) of each household, which is estimated through a scorecard² approach based on the NSS 68th round (2011-12) household data on consumption expenditure for urban Delhi. A primary survey of the 70 respondents was conducted in the last quarter of 2016, utilizing a structured questionnaire that incorporated all the variables included in the scorecard.

Data was collected for two distinct periods: the 'current' period, which corresponds to the year of the survey (2016), and the 'before' period, which refers to the time when each household first joined a specific MFI. The data for the 'before' period was gathered on a recall basis. Using the scorecard (regression model) and the information from the questionnaire, the monthly per capita expenditures (MPCE) for each household were predicted for both the 'current' and 'before' periods.

To determine the poverty incidence among households, the poverty line established by the Planning Commission (now NITI Aayog), Government of India, for urban Delhi in 2011-12, set at an MPCE of Rs 1134, is used as the consumption threshold. Each surveyed household's predicted MPCE is compared to this poverty line to classify them as either poor or non-poor. Households with an MPCE below this threshold are designated as 'Poor,' while those above it are considered 'Non-Poor.' The poverty incidence for the MFI is then calculated by determining the percentage of surveyed households classified as poor.

4 Results

Impact of MFI's Loans on Household's Consumption Expenditure

As described, the monthly per capita expenditure (MPCE) for each household is estimated using a scorecard approach, based on the NSS 68th round (2011-12) data for urban Delhi households. This MPCE serves as a proxy for assessing the household's economic welfare and is calculated for both the 'before' and 'current' periods. Table 1 illustrates the percentage increase in each household's MPCE over these two time periods.

Table 1: Percentage increase in average MPCE

Number of observations	MPCE- before (Rs)	MPCE- current (Rs)	Difference in mean (t-test)	Percentage increase in MPCE
70	1721.5	2155.7	11.271***	25.22

Source: Author's calculation (primary data). Note: *** $p < 0.01$

The results indicate a significant 25 percent increase in the MPCE of MFI clients in the post-loan period compared to the pre-loan period. This suggests a strong positive impact of the MFI loans on improving the economic welfare of its clients, aligning with the findings of other studies such as Noreen et al. (2011), Li et al. (2011b), Islam et al. (2013), and Fattah (2014).

Each surveyed household is classified as poor or non-poor by comparing its predicted MPCE with the poverty line of Rs. 1134 for urban Delhi in 2011-12. The poverty incidence among households is then compared between the 'before' and 'current' periods to analyze changes over time due to their involvement with the MFIs. The findings are as follows.

Table 2: Poverty incidence of MFI

	'before' period (%)	'current' period (%)
Poor	15.7(11)	2.9(02)
Non-poor	84.3(59)	97.1(68)
Total number of observations	70	70

² To develop a scorecard, the NSS 68th round data and the OLS regression method are used to select the final indicators that yield the best prediction of household expenditure,

Source: Author's calculation (primary data). Note: Figures in parentheses show the frequencies of the variables.

Table 2 reveals a 12.8 percentage point decrease in the poverty incidence among MFI clients, dropping from 15.7 percent to 2.9 percent. This indicates a significant upward shift of households from the poor to the non-poor category. This finding supports the conclusions of several other studies (Aghion & Morduch, 2000; Puhazhendhi and Satyasai, 2000; Puhazhendhi and Badatya, 2002; Singh, 2003; Kumar et al., 2012), which also observed a decline in the proportion of below poverty line households following credit provision. This demonstrates that the 'Mutual Benefit MFI' Sanchay has been successful in alleviating poverty among its clients, as shown by the notable increase in MPCE and the significant reduction in poverty incidence. The result conforms to the postulated hypotheses that loans advanced by the MFIs have a poverty-alleviating impact in terms of a reduction in the percentage of households below the poverty line.

5 Conclusion

The study investigated the impact of MFI loans on poverty incidence and economic welfare among clients, using a scorecard approach based on NSS 68th round (2011-12) data for urban Delhi. The analysis, which included primary data from a 2016 survey of 70 households, compared outcomes between pre-loan and post-loan periods. The monthly per capita expenditure (MPCE) of the household is used as an indicator of economic welfare.

The key findings indicate a 25 percent increase in MPCE and a reduction in poverty incidence among MFI clients by approximately 13 percentage points in the post-loan period compared to the pre-loan period. This transition of households from the poor to the non-poor category underscores the effectiveness of MFI loans in poverty alleviation. The results accept the postulated hypotheses that loans advanced by the MFIs have a poverty-alleviating impact in terms of reduction in the percentage of households below the poverty line.

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