

**MICROFINANCING: FIGHTING
AGAINST POVERTY?**

MICROFINANCING: FIGHTING AGAINST POVERTY?

By

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1. INTRODUCTION

Microfinance or microcredit¹, by providing small loans and saving facilities to those who are excluded from commercial financial services has been promoted as a key strategy for reduction or combating poverty. Access to these facilities is seen as a way of providing the client that are economically active with opportunities for self-reliance through entrepreneurship, cushioning them against economic shocks, and providing a means of social empowerment for poor women and men in their communities. Yet although microfinance programs are often driven by a moral imperative to alleviate poverty, the extent to which they are able to reach the poor with their services and likely economic and social impacts continue to be issues of debate.

The existing evidence on the impact of microcredit on poverty is not clear-cut. There is work that suggests that access to credit has the potential to significantly reduce poverty (Khandker, 1998); on the other hand there is also research, which argues that microcredit has minimal impact on poverty reduction (Morduch, 1998).

The evidence on reducing vulnerability however, is somewhat clearer. The provision of microcredit has been found to strengthen crises coping mechanisms, diversify income-earning sources, build assets and improve the status of women (Hashemi et al, 1996).

¹ Microfinance and Microcredit are used interchangeably in this study and refer to the provision of small loans with the social or group collateral.

Zaman (1999) explored the relationship between microcredit and the reduction of poverty and vulnerability by focusing on BRAC, one of the largest microcredit providers in Bangladesh. He concluded that the microcredit contributes to mitigating a number of factors that contribute to vulnerability, whereas the impact on income poverty is a function of borrowing beyond a certain loan threshold and to a certain extent contingent on how poor the household is to start with. His empirical analysis also suggested that microcredit has the greatest effect on female control over assets and also on her knowledge of social issues controlling for a host of other characteristics.

In a more recent study, James et al. (2001) estimated the impact of an urban credit program in Zambia on business performance and on a range of indicators of household well-being. They found that borrowers who obtained a second loan experienced significantly higher average growth in business profits and household income. The Bolivian experience indicates that all the institutions studied had, on balance, positive impacts on income and asset levels (Mosley, 2001).

In Pakistan's context, Khan (2001) estimated the economic impact of the support program on rural households. He concluded that the economic impact of the support program on rural households is substantially large and probably makes a significant difference to the households close to the poverty line. However, he qualified this conclusion by arguing "this conclusion holds particularly for those rural households that participate on a sustained basis over a long period".

However, international experience strongly suggests that microfinance projects do not reach all segments of poor. Even the minimal or no collateral requirements potentially exclude the

poorest from the schemes. In Bangladesh, for example, only one-fourth of all Microfinance clients are among the hard-core poor. The UNDP report (2000) claims that “the hard-core poor, having few assets, are reluctant to take on the risks of credit, and when they do, it is usually for emergencies and consumption, not for production”. Extending financial services to the poorest requires innovations which go beyond those that have been developed so far. Morduch (1999) argued, “the promise of microfinance should be kept in context. Even in the best of circumstances, credit from microfinance programs helps fund self-employment activities that most often supplement income for borrowers rather than drive fundamental shifts in employment patterns. It rarely generates new jobs for others, and success has been especially limited in regions with highly seasonal income patterns and low population densities. The best evidence to date suggests that making a real dent on poverty rates will require increasing overall levels of economic growth and employment generation. Microfinance may be able to help some households take advantage of those processes, but nothing so far suggests that it will drive them”.

The experience of microfinance in Pakistan is not that different from other countries, It is generally recognized that the present microfinancing framework is characterized by low coverage (an inability to reach the poor), targeting inefficiency (the poorest are left out), inadequate of support (insufficient loan sizes), a low degree of ease of lack of self-financing (dependence on donors).

To examine the effectiveness of microfinance in Pakistan, and the impact of microfinancing on business characteristics and household welfare, Social Policy and Development Centre (SPDC) conducted a survey of recipients of the two leading schemes, National Rural Support

program (NRSP) and Orangi Pilot Project (OPP). The former is rural-based, while the latter involves microfinancing in urban squatter settlements in Karachi.

This paper presents the findings of the survey and organized as follows. Section 2 describes the methodology and the selection of the survey. In section 3, characteristics of borrowers are highlighted. Section 4 and section 5 are reserved for the analysis of impact of microfinance on business performance and household welfare respectively, while the concluding remarks are given in the last section.

2. METHODOLOGY

Several issues complicate the selection of an appropriate methodology for studying the impacts of microfinance. The first is the issue of fungibility, since credit and other resources may be used for both enterprise and household purposes. The fungibility issue concerns the fact that financial and other resources, including credit and/or the profits from a microenterprise activity, may move between and among various household activities, making it difficult to track impacts. The second is the issue of selectivity bias, since both the borrower and the lender "select" participation, which means that loan recipients are decidedly non-random. Impact studies are also very sensitive to temporal issues. The point at which impacts first begin to occur and the length of time that impacts are sustained (as well as the rate of change) are subjects of debate.

This study uses quantitative approach to evaluate the impact of microfinance in the rural and urban environments. Utmost care is taken in the selection of respondents from both programs. The sample comprised 245 and 56 borrowers of NRSP and OPP respectively. These recipients were randomly selected from two groups. Group 1 (Borrowers) comprised

participants who have obtained more than one loan from the institution. The Group 2 (Pipeline Borrowers) consisted of participants, who had been screened by the institution as eligible for loans using the same criteria as the borrower group (Group 1) and the recipients who obtained their first loan and have not yet repaid it.

As the NRSP program has nationwide coverage, districts selection was purposive with the consideration of provincial coverage and the program duration in particular district. Respondents were then selected randomly from each district in proportion of the relative coverage of the program. A schematic view of the sample distribution across districts and programs is given in Table 1.

Program	Province	District	Sample Size		
			Borrowers	Pipeline Borrowers	Total
NRSP	Sindh	Badin	25	11	36
		Mirpurkhas	19	11	30
	Punjab	Khushab	63	11	74
		Bhakkar	40	12	52
	NWFP	Mardan	20	6	26
	Baluchistan	Turbat	19	8	27
	Total – NRSP			186	59
OPP	Sindh	Karachi	45	11	56
Total			231	70	301

A structured questionnaire was administered to sample respondents from each institution during November and December 2001. The questionnaire varied slightly for urban and rural context to cover different types of production activities (agriculture, business, livestock), but its core was to search for information concerning the various dimensions of income, consumption, housing, education, demography, and earning activities.

3. BENEFICIARIES OF MICROFINANCING

This section highlights the important characteristics of borrowers or recipients of microfinance to observe the selection criteria and participants' attributes. Table 2 summarizes these findings.

The evidence at best suggests that the participants of microfinance programs are not all hardcore poor. Only 51 percent NRSP borrowers are below the poverty line, as their per capita per month expenditure is below Rs. 650². Similarly, only 11 percent OPP borrowers are poor according to the Pakistan official poverty line.

TABLE 2 SELECTED CHARACTERISTICS OF BORROWERS [INCLUDE MATURE AND EARLY PARTICIPANTS]		
Characteristics of Borrowers	Program	
	NRSP [Rural]	OPP [Urban]
Male Borrowers (%)	72	93
Average Age (Years)	38	39
Average Years of Schooling	6	7
Household Income Per Capita Per Month	802	1302
Household Expenditure Per Capita Per Month	720	1123
Poverty Incidence (% of poor Households)	51	11
Household Ownership of Land/Shop/Workshop (%)	69	9
House Ownership (%)	93	80
Share in the Main Earning Activity (%)	92	98
Occupation (%)		
Landowners	46	
Share Cropper	6	
Daily Wage Labor	0	
Livestock Management	23	
Shopkeeper/Vender	25	67
Supplier of Goods		14
Workshop/Cottage Industry		19

² Pakistan official poverty line is Rs. 650 per capita per month as reported in Economic Survey 2001-2002 (Government of Pakistan, page 47). No urban and rural difference in poverty lines is given in the Survey.

The table also confirms low level of educational attainment of participants of both programs. The survey data reveals that 33 percent of NRSP borrowers are illiterate and 22 percent have below primary education. OPP borrowers, because of urban environment are relatively better off in terms of education. About 16 percent have no formal education, while same numbers of participants have education below primary level.

Almost all microfinance programs rely on group collateral, or the joint liability of group members because of the premise that poor cannot offer physical collateral. It is interesting to note from the table that 69 percent participants of NRSP own land and 93 percent have ownership of their houses. Similarly, 80 percent OPP borrowers, which are in urban area, reported house ownership. These findings pose question regarding their entry in the formal banking system and thus relieving fund for more vulnerable groups.

The occupation of participants indicates that most loans are taken for family business, as only 9 percent of OPP borrowers reported loans for workshop and cottage industry. NRSP borrowers are mostly landowners and obtain loans for agriculture inputs. The other major category of NRSP borrowers is engaged in livestock management, which is also a family enterprise.

During the survey, an additional effort is made to interview female participants in both programs. Therefore, the sample is not random for discussing gender participation. However, the official female participation rates are 27 and 15 percent for NRSP and OPP respectively.

4. IMPACT ON BUSINESS PERFORMANCE

The main objective of the paper is to observe credit effect on business performance and thus on household welfare. Three business indicators viz., employment, sales and working capital

are considered for the impact of credit on business. The Group 2 (Borrowers) were requested to record number of family workers engaged in business, permanent workers, occasionally hired workers, sales value (agriculture, livestock and trading) and working capital requirement (only for urban borrowers) at the time of survey and at time when they obtained first loan (baseline). For comparison sales values and working capital values are adjusted with the rate of inflation.

4.1 Impact on Employment

Both institutions provide microcredit to livelihood enterprises and not to growth enterprises. These enterprises are involved in agricultural activities, livestock management and trading. Very few organizations in urban area are engaged in cottage industry (weaving, seaming and handicrafts). Further, most microenterprises are single -person, owner -operated enterprises or slightly larger units engaging one or more family members.

Therefore, it could not be hypothesized that the credit supplied to these organizations will generate or enhance employment in the area. The average values of number of employment and the statistical significant of differences are provided in Table – 3 and Table – 4 for rural and urban areas respectively.

TABLE 3 IMPACT ON EMPLOYMENT – RURAL (NRSP)			
Type of Employment	Mean Value		T-Value
	Now	When Obtained First Loan	
Family Workers Engaged	2.29	2.06	1.8**
Permanent Hired Workers	5.34	5.31	0.03
Occasionally Hired Workers	5.90	3.90	1.5

** Indicates that the difference is statistically significant at least at 10 percent level of significance.

It is evident from Table – 3 that, although average number of permanent and seasonal/occasional employees has increased since obtaining loan from the institution, but the differences between ‘now’ and ‘then’ are not statistically differences. However, the difference in family worker involvement in rural enterprises is statistically significant perhaps due to disguise employment in agriculture.

Urban enterprises showed no significant differences in employment, even in family workers. According to Table 4, average involvement of family workers and occasionally hired workers showing upward trend, but the impact is not statistically significant.

TABLE 4 IMPACT ON EMPLOYMENT – URBAN (OPP)			
Type of Employment	Mean Value		T-Value
	Now	When Obtained First Loan	
Family Workers Engaged	1.42	1.35	0.6
Permanent Hired Workers	3.23	3.76	-0.9
Occasionally Hired Workers	5.50	3.25	1.4
** Indicates that the difference is statistically significant at least at 10 percent level of significance.			

The result in Table 4 also shows a decline in permanent hired workers. The difference, although is not statistically significant, perhaps indicates a trade-off between permanent and seasonal employment.

4.2 Impact on Business Turnover or Sales Proceeds

The study found positive and significant, in case of NRSP borrowers, increase in sales and output. Table 5 reports the average sales volume ‘before’ and ‘after’ taking loan from NRSP.

TABLE 5			
IMPACT ON PRODUCTIVE ACTIVITIES – RURAL (NRSP)			
[INFLATION ADJUSTED SALE PROCEEDS]			
Enterprise Activities	Mean Value		T-Value
	Now	When Obtained First Loan	
Agriculture (Rabi and Kharif Crops)	100383	73791	4.09**
Livestock Sale	285892	195781	2.82**
Business – Trading	59744	42400	0.88
** Indicates that the difference is statistically significant at least at 10 percent level of significance.			

It is clear from the table that both crop and livestock turnover has increased since obtaining first loan. However, no significant impact is evident in case of rural trading or business enterprises. The field experience reveals some diversification in cropping mix, timely application of fertilizer and pesticide, livestock vaccination are some of the answers of upward trend in output and sales.

Table 6 provides similar information for urban borrowers of OPP. Surprisingly, the differences, although positive, are not statistically significant. Few explanations may be cited for these unexpected results. During the survey, most of the urban borrowers complained about the recession in the economy. They were complained about the decreasing demand of their trading goods and manufactured products. Another factor, which is perhaps responsible for this result, is the timing of the survey. The survey was undertaken during the USA strike on Afghanistan. The reported figures of current sales values might be affected due to the prevailing condition of Karachi. These factors might be caused of declining sales of the sample borrowers.

TABLE 6			
IMPACT ON PRODUCTIVE ACTIVITIES – URBAN (OPP)			
[INFLATION ADJUSTED SALES AND WORKING CAPITAL]			
	Mean Value		T-Value
	Now	When Obtained First Loan	
Monthly Sale	46724	34226	1.15
Working Capital	34943	21942	1.44
** Indicates that the difference is statistically significant at least at 10 percent level of significance.			

5. IMPACT ON HOUSEHOLD WELFARE

To explore the impact of microcredit on business performance, ‘before and after’ technique of evaluation is used. Sample borrowers were requested to provide information of business indicators at the time of survey and at the time when they obtained first loan from the institution. On the contrary, the impact of credit on household welfare is analyzed by ‘with-and-without’ approach of evaluation. Unlike business indicators, it might be difficult for respondents to recall the welfare indicators at the time of obtaining first loan. Therefore the difference between two groups (borrowers and pipeline borrowers) in various welfare indicators, were compared for examining impact on household welfare.

5.1 *Differences in Housing Quality*

Four indicators were selected for examining the differences in two groups. These include quality of outer-wall, roof and floor and overcrowded houses or housing congestion, which was measured through rooms per person.

Table 7 reports comparative mean values and t-statistics for the differences among rural respondents. It is clear from the table that borrowers group has an edge over pipeline borrowers with respect to quality of outer-wall and roofing. The t-values of these indicators

are highly significant. The strong relationship between income and housing quality suggests the likely impact of credit. The average values of other two indicators (floor quality and housing congestion) are, although higher for borrowers, not statistically significant.

Indicators	Mean Value		T-Value
	Borrowers	Pipeline Borrowers	
Houses with Cemented Outer-wall (%)	49	36	1.9 **
Houses with Concrete – Asbestos Roofing (%)	25	14	2.1 **
Houses with Cemented or Tiled Floor (%)	23	22	0.2
Rooms per person (#)	0.41	0.35	1.4

** Indicates that the difference is statistically significant at least at 10 percent level of significance.

The urban picture is portrayed in Table 8. Being urban or peri-urban, all respondents have cemented outer-wall. The difference between two groups in quality of floor is, however statistically significant. Unexpectedly, the significant average value for housing congestion is higher for pipeline borrowers, demonstrating the inverse relationship between credit and this aspect of housing quality. The percentage of houses with concrete/asbestos roofs is higher for borrowers, but not statistically differ from the pipeline borrowers.

Indicators	Mean Value		T-Value
	Borrowers	Pipeline Borrowers	
Houses with Cemented Outer-wall (%)	100	100	--
Houses with Concrete – Asbestos Roofing (%)	89	64	1.6
Houses with Cemented or Tiled Floor (%)	80	36	2.7**
Rooms per person (#)	0.42	0.59	-1.8**

** Indicates that the difference is statistically significant at least at 10 percent level of significance.

5.2 *Difference in Income and Expenditure Patterns*

Table 9 and Table 10 depict the differences in household expenditure pattern for rural and urban areas respectively. Besides total expenditure, expenditure on food, education and electricity are reported to get a grasp of household expenditure phenomenon.

Indicators	Mean Value		T-Value
	Borrowers	Pipeline Borrowers	
Per Capita Expenditure on Food	394	414	-0.4
Per Capita Expenditure on Education	40	41	-0.1
Per Capita Expenditure on Electricity	36	34	0.3
Per Capita Income	802	720	1.96**

** Indicates that the difference is statistically significant at least at 10 percent level of significance.

According to Table 9, which presents rural picture of income and expenditure per capita income is significantly different for both groups. The borrowers, on the average, reported higher income than the pipeline borrowers. Surprisingly expenditure on food and education are higher for pipeline borrowers. Although not significant, this phenomenon demands an explanation. There may be some systematic bias in responding this question. Perhaps, borrowers are more cautious about the expenditure figure to prove that the loan they have taken is not used for consumptive purposes.

Indicators	Mean Value		T-Value
	Borrowers	Pipeline Borrowers	
Per Capita Expenditure on Food	605	662	-0.4
Per Capita Expenditure on Education	117	59	1.8**
Per Capita Expenditure on Electricity	40	36	0.4
Per Capita Income	1238	1568	-0.8

** Indicates that the difference is statistically significant at least at 10 percent level of significance.

Unexpected results are also obtained in case of urban respondents. An inverse relationship is observed between Income and expenditure and number of loans. Only the significant difference is observed in case of education expenditure. The borrowers reported more expenditure on education than the pipeline borrowers.

5.3 Differences in Household Assets

Because of systematic biases in reporting income and expenditure, it is considered appropriate to observe the differences in the asset ownership of both groups. The average position of respondents' wealth is summarized in Table 11 and Table 12, which show the ownership of various assets.

Indicators	Mean Value		T-Value
	Borrowers	Pipeline Borrowers	
Houses Owning Land (%)	73	54	2.6 **
Houses Having Washing Machine (%)	9	5	1.0
Housing Having Refrigerator (%)	14	11	0.5
Houses Owning Having Colored TV (%)	3	2	0.9
Houses Owning Black & White TV (%)	23	19	0.7

** Indicates that the difference is statistically significant at least at 10 percent level of significance.

Indicators	Mean Value		T-Value
	Borrowers	Pipeline Borrowers	
Houses Ownership (%)	82	72	0.6
Houses Owning Motor-Cycle (%)	51	27	1.5
Houses Having Washing Machine (%)	22	1	1.2
Housing Having Refrigerator (%)	1	0	1.8**
Houses Owning Having Colored TV (%)	13	0	2.6**
Houses Owning Black & White TV (%)	1	0	2.1**

** Indicates that the difference is statistically significant at least at 10 percent level of significance.

Land ownership is the only asset in which the difference in the average values for both groups is significant and has a positive relationship with number of loans. However, the average values of all other assets are higher for borrowers group as depicted in Table – 11.

In case of urban borrowers, the significant differences are observed in the ownership of refrigerator and TV, although with the low percentages. The average ownerships of other assets for borrowers group, although higher, but are not significantly different.

6. CONCLUDING REMARKS

The study is based on the quantitative survey of 300 respondents (borrowers and pipeline borrowers) of two microcredit institutions viz., NRSP and OPP. These institutions provide small loans with social or group collateral in rural and urban areas respectively.

The findings reveal that most of the recipients of credit are not hard-core poor. According to the Pakistan official poverty line, about 51 and 11 percent of rural and urban borrowers respectively are poor. About 69 percent of rural borrowers have ownership of land and a majority of respondents own their houses in rural and urban areas. These findings indicate the exclusion of poor from the programs.

The study found positive changes in sales and turnover of rural borrowers, but the phenomenon is not appeared significant in case of urban borrowers. Similarly, no clear-cut evidence of employment generation is visible from the finding of survey. The rural borrowers reported more family workers involvement after the participation in the program, but this is due to disguise rural employment.

Resources are fungible within the household and hence the use of credit and profits from enterprises may be evident across a range of household activities. The findings are mixed on the impact of credit on household welfare. Some indicators of housing quality show positive relationship with the number of loans. Except land ownership, no significant impact on asset holding is evident from the study. Moreover, no significant differences are observed in expenditure on education, electricity and food.

Self-selection of participants and non-random placement of microcredit programs make it difficult to analyze the impact of credit on business performance and household welfare. Also, this study does not cover those who are no longer program participants, that is, 'drop-outs', and this is likely to result in an overestimation/underestimation of the program impact. For further research, it is suggested that greater attention should be on the composition and management of household economic portfolios (agriculture, livestock, trading), analysis of differences in impact should be across different socio economic or poverty level of borrowers, and more attention should be given to how program design, performance and context influence impact. Due to small sample, it was not possible to give due consideration of the above aspects. Therefore, the results are indicative and should be interpreted accordingly.

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The paper examines the effectiveness of microfinance in Pakistan by exploring the impact of microfinancing on business characteristics and household welfare. The study is based on the survey of about 300 recipients of the two Pakistan's leading schemes, National Rural Support program (NRSP) and Orangi Pilot Project (OPP). The former is rural-based, while the latter involves microfinancing in urban squatter settlements in Karachi (Pakistan). Keeping general caveats regarding self-selection of participants and non-random placement of microcredit programs in mind, the study indicates that most of the recipients of credit are not hard-core poor. Further, no clear-cut evidence of employment generation is visible from the findings of the survey.

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