Final Report

PPAF MICRO CREDIT FINANCING: ASSESSMENT OF OUTCOMES

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TABLE OF CONTENTS

Executive Summary	3
Introduction	11
Research Methodology	13

Findings

Section 1:	Change in Income	19
Section 2:	Change in Consumption	35
Section 3:	Change in Assets	40
Section 4:	Change in Employment	46
Section 5:	Change in Operating Surplus	47
Section 6:	Change in Lifestyle and Business	
	Practices	49
Section 7:	Change in Social Status	54
Section 8:	Return on Investment (ROI)	57
Section 9:	Views about Borrowing	62
Recommenda	tions for Follow up Research	65
Sample Profile	e	66
	hniad Note	74

Annexure 1:	lechnical Note	74
Annexure 2:	Main Features of PPAF	76
Annexure 3:	Questionnaire	79



Executive summary

It may be mentioned at the very outset that this document is not an academic paper. It is a Survey Report meant for quick and timely policy input. In that spirit it identifies certain key variables, frames clearly spelled out hypotheses and tests them on the basis of data gathered recently from a representative set of households from all across Pakistan. This is not to ignore that Outcome Assessment is a complex and complicated subject which involves a number of nuances and ambiguities. And yet there are certain indicators such as personal and household income, consumption and purchase of assets which provide reasonably valid insight into the change (or its absence) in the life of the households which are being studied. Briefly this study is based on 17 hypotheses suggesting that micro finance improves the socio-economic life of its recipients. The data collected in the course of our study suggests that while a number of these hypotheses are validated, some are not, or that they require serious qualifications or explanations. In the pages that follow we have clearly spelled out our methodology, the data and its interpretation.

As for the **methodology** we have followed, what may be called as, the counter-factual "combined approach". It combines the "with-without approach" and the "before-after approach". The "with-without approach" gathers data on the life of a sample of borrower households and compares it with the data collected from a comparable sample of non-borrower households. The "beforeafter" approach makes a comparison of the change in the life of both groups during the interlude of a year marking the period during which the borrower household benefits from the microfinance loan. While the quantitative data gathered from over 1700 households, interviewed in 140 community organizations spread in 17 districts in all the four provinces of Pakistan, forms the core of outcome study, these data are further elaborated through perceptual and qualitative data collected from the borrower households on what is their own assessment of the net impact of micro-finance loan on their lives.

The **field work** for this study was carried out during August-September, 2002. It was carried out by a competent team of men and women field researchers. They were trained thoroughly with the help of specially designed training instructions before they



undertook the field work. A team of supervisors cross-checked their work and provided the necessary guidance.

The **data were processed** in two stages. In the first stage a team of researchers edited the entire set of questionnaires and prepared summary statistics on key variables. This formed the basis for the preliminary report. This team also made the necessary computations on incomes, expenditures and rates of investments. Later the entire data was computer processed and analyzed with the help of Statistical Package for Social Sciences. A team of senior researchers carried out the **analysis of the data**.

The findings of this study have been summarized in the form of 17 principal hypotheses. In each case it has been assessed as to whether the hypothesis is held, not held or partially held by the evidence collected from the field. Given below is a summary of our assessment.

A quick glance at the following hypotheses and their assessment in the light of the survey data would be helpful.

1. Change in Personal Income:

Hypothesis: Participation in micro-credit leads to increase in personal income.

On the whole around 41% of borrowers and 32% of non-borrowers experienced positive change in their income over the period under study. The ratio of borrowers experiencing positive change in their personal income is significantly higher than non-borrowers. This difference is statistically significant (*at 95% level of significance*). Further increase in the mean income of the borrower group is proportionally higher (8%) compared to the non-borrower (5%). This is a statistically significant difference (*at 95% level of significance*). The hypothesis is held.

2. Change in Household Income:

Hypothesis: Participation in micro-credit leads to increase in household income.

On the whole around 44% of borrowers and 33% of non-borrowers experienced positive change in their household income over the last oneyear period. The ratio of borrowers experiencing positive change in their monthly household income is significantly higher compared to nonborrowers. The difference is statistically significant (at 95% level of significance). Further increase in the mean income of the borrower group is proportionally higher (9%) as compared to non-borrower (6%). This difference is statistically significant (at 95% level of significance). The hypothesis is held.



3. Change in Sector Wise Income:

Hypothesis: Participation in micro-credit leads to increase net annual income *(inclusive of the imputed value of own production, which was used by household)* from 3 key sectors.

AGRICULTURE: On the whole around 47% of borrowers and 48% nonborrowers experienced positive change in their net annual monetary as well as non-monetary income from agriculture. The ratio of borrowers experiencing positive change in their net annual income from agriculture is slightly lower than non-borrowers but the difference is not statistically significant. However the change in mean income from agriculture (inclusive of the imputed value of own production, which was used within the household) is considerably higher for the borrower group (9%) compared to the non-borrower group (2%). This difference is statistically significant (at 95% significance level).

The hypothesis is partially held.

LIVESTOCK: On the whole around 36% borrowers and 33% nonborrowers experienced positive change in their net annual monetary as well as non-monetary income from Livestock. The ratio of borrowers experiencing positive change in their net annual income from livestock is slightly higher than non-borrowers. But the difference is statistically not significant. However the change in mean income from livestock (*inclusive* of the imputed value of own production, which was used within the household) was considerably higher for the borrower group (13%) compared to the non-borrower group (0.7%). This difference is statistically significant (at 95% significance level).

The hypothesis is partially held.

ENTERPRISE: On the whole 65% borrowers and 47% non-borrowers experienced positive change in their net annual monetary as well as nonmonetary income from enterprise/commerce. The ratio of borrowers experiencina change positive in their net income from enterprise/commerce is proportionally higher than non-borrowers. This difference is statistically significant (at 95% level of significance). Furthermore the change in mean income from enterprise/commerce (inclusive of the imputed value of own production, which was used within the household) was considerably higher for the borrower group (7%) compared to the non-borrower group (-3%). This difference is statistically significant (at 95% significance level). The hypothesis is held.

4. Change in Household Consumption:

Hypothesis: Participation in micro-credit leads to increase in consumption of household.

On the whole around 34% of borrowers and 30% of non-borrowers experienced positive change in their overall expenditures during the study period. Ratio of borrowers who experienced positive change is significantly higher than the non-borrowers. The difference is statistically significant (at 90% level of significance). Further change in the mean expenditure of the borrower group is proportionately higher (7%) compared to the non-borrower group (5%). This is statistically significant difference at (90% level of significance) The hypothesis is held.



5, 6. Change in Food Consumption:

Hypothesis: Participation in micro-credit leads to increase in consumption of overall food. Hypothesis: Participation in micro-credit leads to increase in consumption of key high protein food items.

The data show that the change in mean expenditure on overall food items is almost the same for both borrowers and non-borrowers (6% and 7% respectively). However the change in key food items, with high protein contents, is higher among borrowers (chicken, beef, eggs, ghee/oil and milk) compared to non-borrowers. These are relatively more nutritious items and the increase in their consumption level during the period under study is significantly higher among borrowers compared to nonborrowers. Hence it shows improved food intake among borrowers. Hypothesis 5 is not held, while hypothesis 6 is held.

7. Change in Consumption of Home Produced Items:

Hypothesis: Participation in micro-credit leads to increase in consumption of home produced items.

On the whole increase in the consumption of milk, honey and rice was proportionately higher among the borrowing households as compared to non-borrowing households, during the period under study. In the case of wheat and fertilizer, however the increase was proportionately higher among the non-borrowing households. While wheat is generally considered a cheaper substitute of rice, the case of fertilizer is notable for being an exception to the general pattern.

The hypothesis is partially held.

8. Acquisition of Household Consumer Durables:

Hypothesis: Participation in micro-credit leads to increase in the possession of consumer durables

The data show that the increase of assets is higher among the borrowing households as compared to the non-borrowing households. Acquisition of relatively expensive items such as VCR/VCP, iron, fan, washing machine and bicycles was significantly higher among borrowers as compared to the control group.

The hypothesis is held.

9. Acquisition of Property and Business Assets:

Hypothesis: Participation in micro-credit leads to increase in the possession of enterprise/livestock/ agriculture related assets

On the whole the number of borrowers who made additions to their property as well as enterprise related assets are more than the nonborrowers. But the results are mixed.

Taking into account the entire range of property and business assets the hypothesis is partially held.



10. Building of Financial Assets:

Hypothesis: Participation in micro-credit leads to increase in the possession of financial assets.

On the whole the survey shows that the borrower group made more additions to assets during the period under study compared to the control group. The asset building is more pronounced in the case of household goods and less so for financial assets or business and agricultural assets. Apparently the loan is too small to lead to building the latter type of assets.

The hypothesis is not held.

11. Generation of Employment:

Hypothesis: Participation in micro-credit leads to increase in paid employment generated by 3 key sectors.

The data show that neither of the two groups, borrowers and nonborrowers made notable contribution to employment generation. Apparently the size of their business or agricultural and livestock activity, as well as the scale of loan is insufficient to make substantial contribution in this area.

The hypothesis is not held.

12. Increase in Operating Surplus:

Hypothesis: Participation in micro-credit leads to increase in operating surplus.

The data show that a higher proportion of borrowers (60%) reported operating surplus in current year as compared with previous year (56%). Among the non-borrowers there was no increase. The figures show that there was around 7% increase in the number of persons among client group who accrued operating surplus while the change among non-borrowers was nil.

The hypothesis is held.

13. Improvement in Living Conditions (House Repairs):

Hypothesis: Participation in micro-credit leads to increase in expenditure on house repair.

The data show that on average the borrowers spent Rs.1844 and Rs.878 during the current and the previous years respectively on house repair. The comparative figures for the non-borrowers were: Rs.702 and Rs.486. Thus while the borrowers made a positive change to the tune of 110%, the non-borrowers experienced a positive change to the tune of 44%. *The hypothesis is held.*

14. Additions to Household Facilities (Latrine, Water Connection, Electricity, Gas, Telephone): Hypothesis: Participation in micro credit loads to the use of botter bousehold facility

Hypothesis: Participation in micro-credit leads to the use of better household facilities.

On the whole the positive improvement is higher in the case of borrowers compared to the non-borrowers. *The hypothesis is held.*



15. Enhancement in Social Life:

Hypothesis: Participation in micro-credit leads to increase in expenditure on miscellaneous events and items.

The data show that the borrowers spent more on items like funerals, recreation, animal keeping, other accessories, on rent and traveling as compared to the non-borrowers. Moreover the average amounts spent by borrowers were higher than the average amounts spent by the non-borrowers during period under study. *The hypothesis is partially held.*

16. Improvement in Occupational/Agricultural Practices (better seeds and other inputs):

Hypothesis: Participation in micro-credit leads to the use of better agriculture inputs.

The data does not show a significant difference between the changes experienced by the borrowers and the control group during the study period.

The hypothesis is not held.

17. Enhancement of Social Status of Men and Women:

Hypothesis: Participation in micro-credit leads to improvement in social status

Based on the data concerning change in perceived social status, participation in politics and control over financial resources we get a mixed picture. However on the whole the borrower group seems to have improved its social status during the period under study. *The hypothesis is held.*

A summary of the findings on other subjects of interest are the following:

Return on Investment:

While it is quite complicated and hazardous to compute the return on investment for a micro-credit under the conditions, which were the subject of our study, one can however arrive at what may be seen as an informed and educated estimate. We have roughly estimated the mean return on investment for the loans averaging around Rs. 9,138 at approximately 30% per annum.

Value of Loan Required by Borrowers:

While the mean value of loans received by the borrower group was Rs. 9,138, their preferred amount, they said, would have been Rs. 17,136.

Personal Assessment of the Borrower:

In response to a direct question on the subject, nearly 90% of the borrowers said that the loan had benefited them.

Views on Repeat Borrowing:

When asked if they would like to borrow again from the same community organization, 88% of the borrowers answered in the positive.

OVERALL ASSESSMENT

Our research shows that there is adequate evidence to suggest that on the average low income households who borrowed from PPAF are better off today than they would have been if they had not borrowed. On the average their income levels have risen, their consumption has increased, there is improvement in their personal and business assets, their lifestyle by way of housing facilities is better than before and their social status, particularly of the women borrowers, has undergone a positive change. Admittedly the scale of change is limited, as is the scope and amount of the loan. But the direction of change is on the whole positive. Our research shows that the benefits of PPAF loan appear in terms of poverty alleviation and improvement in the basic lifestyle indicators of the borrower. The direct impact on building business assets, generating employment or the effect on other development in the basic lifestyle indicators of the micro-credit borrowers can possibly have a second order positive effect on development indicators.



Hypotheses regarding Effect of Micro-finance on the Socio-economic Status of Borrowers*

List of Hypotheses and Summary Assessment

		Held	Not Held	Partially Held
1	Participation in micro-credit leads to increase in personal income	\checkmark		
2	Participation in micro-credit leads to increase in household income	\checkmark		
3	Participation in micro-credit leads to increase net annual income from 3 key sectors	\checkmark		
4	Participation in micro-credit leads to increase in consumption of household	\checkmark		
5	Participation in micro-credit leads to increase in consumption of overall food		✓	
6	Participation in micro-credit leads to increase in consumption of key food items	\checkmark		
7	Participation in micro-credit leads to increase in consumption of home produced items			✓
8	Participation in micro-credit leads to increase in the possession of consumer durables	\checkmark		
9	Participation in micro-credit leads to increase in the possession of enterprise/livestock/ agriculture related assets			✓
10	Participation in micro-credit leads to increase in the possession of financial assets		✓	
11	Participation in micro-credit leads to increase in paid employment generated by 3 key sectors		✓	
12	Participation in micro-credit leads to increase in operating surplus	\checkmark		
13	Participation in micro-credit leads to increase in expenditure on house repair	\checkmark		
14	Participation in micro-credit leads to the use of better household facilities	\checkmark		
15	Participation in micro-credit leads to increase in expenditure on miscellaneous events and items			✓
16	Participation in micro-credit leads to the use of better agriculture inputs		✓	
17	Participation in micro-credit leads to improvement in social status	✓		

* Determined through counterfactual analysis carried out by a combination of "with-without" and "before-after" approaches.

INTRODUCTION

Overview of Study

This study focuses on gauging the outcome of participation in the micro credit program of Pakistan Poverty Alleviation Fund (PPAF), an autonomous private company sponsored by the Government of Pakistan and funded by the World Bank. PPAF was established in February 1997 " to help the poor by facilitating them in getting access to resources for their productive self employment, to encourage them to embark on the activities of income generation and poverty alleviation, and for enhancing their quality of life".

PPAF is providing the financial assistance through its three main windows.

- By undertaking micro-credit programs.
- By providing community physical infrastructure on cost sharing basis.
- By strengthening and building the institutional capacity of partner organizations and communities.

The current study focuses only on its micro-credit program^{*} by identifying and assessing the socio-economic outcomes of the program on PPAF borrower in comparison with a comparable group of non-borrower at individual, households and enterprise/livestock/ agriculture level. The core hypotheses that have been tested to evaluate the outcome of loan are as follows:

It leads to increase the household's total income, personal income of the borrower, income from the source for which the loan has been taken, as segregated in three main categories namely, agriculture, livestock and enterprise/commerce.

It is nevertheless conceivable that some of the non-borrowing households are beneficiaries of the public good generated through the community infrastructure program funded by PPAF.



- It helps its clients to attain improvement in the level of consumption through spending more on overall food and on high calorie food items. Furthermore consumption level for those items that are consumed by household own production also experiences improvement.
- It leads to increase in household ownership level as possession of consumer durables, financial assets, and enterprise/livestock/agriculture related assets.
- It leads its client to live improved business and personal life as by spending more on housing, education, recreation, personal accessories, healthcare, agriculture/livestock inputs etc.
- □ It leads to increase operating surplus.
- Participation in micro credit program leads to an increase in the borrower's own perceived status and control over resources in the household and greater participation in community affairs and local polities. This might be especially true for female recipients of micro-finance loans.

The above hypotheses have been tested both for borrowers of PPAF and non-borrowers of the same profile for current year and previous year specifically for the period before and after loan taking. The effects of the micro credit financing have been evaluated through measuring the change in the concerned variables over a year. Our study is based on the expectation that the benefits of participation in the financial service offered by PPAF would be manifested in a period of one year.

Research Methodology

Purpose:

The purpose of this study is to gauge whether the intended outcomes of the micro credit facility are really accruing to end user, that is, the borrower.

Research Design:

The basic challenge in impact assessment is to determine the effect of an intervention on an outcome variable. In other words, **impact evaluation seeks to measure the difference in outcome between an individual who received the treatment and what the outcome would have been for the same individual, if he or she had not received the treatment. A "Counter-factual" question has to be answered. Since one is looking for an unobservable event, the only practical alternative is to compare the outcome for individuals who receive treatment with the outcome for individuals who do not receive treatment. This is a fundamental challenge in outcome or impact evaluation and the source of the associated selection bias problem.**

The selection bias problem implies that individuals who receive treatment and those who do not may be inherently different, and that these differences may lead to incorrect measurement of the treatment effect. It is possible that clients differ, on average, from those who choose not to participate. If differences between participants and non-participants relate to the ability to realize benefits from program services, that could lead to differences in the outcome variables (*e.g. income and revenue*) that should not be attributed to the program.

In a non-experimental design, also known as a quasi-experimental design, the outcome variable is measured for the treatment (e.g. the borrower) group and for a control group (e.g. the non-borrower) of respondents who do not receive the treatment but who are similar to the treatment group in critical ways that affect outcomes. The most commonly used method for constructing a control group is to select respondents who share critical characteristics with the treatment group, then to control statistically for differences in other variables that are expected to affect outcomes. The arguments lead us to conclude that in spite of stipulating standards for control group, selection bias problem could emerge if we simply evaluate the abovementioned hypotheses for borrower and non-borrower at a point of time. To avoid the problem our study is based on **measuring "change"**, experienced by the individual who received treatment in comparison with the individual who did not receive treatment, between t1 (period between July 2001 to 2002) and t2 (period between July 2000 to 2001), where t1 and t2 have been referred to as periods before and after taking loan. All the variables have been analyzed by measuring change, pertaining to both periods. This, as we have explained later in the Report is referred to as the "combined approach", combining the "with-without" and "before-after" approaches.

Additionally, the study relies on a mixed-method approach. This approach combines quantitative and qualitative methods to reach a new level of understanding about the clients of micro credit programs. The qualitative method includes borrower's own perception about positive and negative impacts of those programs.

Sample Design:

To conduct the survey, a sample of 1800 households was selected, of which 900 were borrowers defined as those who had taken at least one loan from PPAF before July 2001. The repeated borrowers have also been included in the sample. The other half of the sample comprised non-borrowers having more or less the same profile as the borrowers. As the PPAF's lending procedure is different from conventional banking, the sample selection process was done with the help of Partner Organizations. POs assisted us to be introduced to the local community where our team chose to interview 6 borrower households, which typically constituted approximately half or more of all borrowers in the community. To select the sample first of all geographical region was determined. For the study initially 17 districts were chosen on random basis. Then the POs working in the selected region were contacted to get the lists of their borrowers of the stipulated time period. After getting the lists of borrower or Community Organizations (CO) from all POs, sample was selected on the basis of borrowers size in each districts. As both males and females are eligible for getting loan; gender selection for the sample was made roughly according to the ratio of male to female borrowers in each district.

The following table gives a comparison between the planned and the achieved sample. In some cases the planned number of borrowers could not be interviewed because the respective community organization did not have sufficient number of borrowers or those who qualified for our condition of having completed one year after borrowing. This was particularly true for certain areas in the Balochistan province.



	District	Planned Sample	Achieved Sample
	Punjab	696	672
1	Rawalpindi	144	144
2	Lahore	144	132
3	Gujranwala	24	12
4	Sheikhupura	24	24
5	Bhakkar	180	180
6	Lodhran	180	180
	NWFP	288	274
7	Malakand	132	118
8	Battagram	24	24
9	Mansehra	132	132
	Sindh	528	528
10	Hydrabad	144	146
11	Sanghar	36	36
12	Badin	120	120
13	Tharparkar	60	60
14	Thatha	168	166
	Balochistan	288	244
15	Quetta	120	60
16	Mastung	24	48
17	Gawadar	144	136
	Total	1800	1718

Selection of Non-Client Sample:

A common methodological problem in conducting impact or outcome studies is the difficulty of finding a satisfactory control group that can be used to isolate the effect of improved access to micro finance services. This, in turn, makes it difficult to obtain a valid estimate of the effect of improved access. The study has tackled the problem by requiring a matching criteria for selecting the control group. Borrowers and control group were required to match on the following criteria.

- Gender
- Main Occupation
- Monthly income
- Household size
- Number of earning persons in the family
- Age of borrower

In other words the borrower and control group were required to have the same gender, same main occupation, same monthly income group etc. Enumerators were instructed to first complete the interview with borrower and later find a non-borrower in the same location (*within or outside the Community Organization*) who would match the borrower

on the above-mentioned criteria. The non-borrower was preferably of the same locality if he/she could be found. Otherwise the non-borrower from the proximate areas, fulfilling the criterion, could also be interviewed. The selection of borrower was done independently by the enumerator or the field supervisor on the basis of the stipulated criteria.

Questionnaire Design:

The Questionnaire was developed through an extended process. In the first phase Gallup team, developed a set of hypotheses which needed to be tested. Based on these a draft questionnaire was developed. It was pre-tested by the research team initially in a community organization run by NRSP outside Islamabad. Therefore a number of changes were made in the questionnaire. The pre-test also helped in developing field instructions and devising a strategy for organizing the field work. The revised questionnaire was again pre-tested in communities in Lahore. This led to further revisions. The next draft was discussed with experts from Pakistan Institute of Development Economics (PIDE) who had previously conducted similar surveys. The draft was then discussed with the client in an extended session. It led to further changes. Thereafter it was run on a pilot basis in a community in Islamabad. Once the research team was satisfied with the pilot, the Questionnaire and the field instructions were finalized for printing. In summary the Questionnaire was built by strong input from a team of senior researchers and consultants. It was pre-tested by the senior researchers themselves in the field and revised twice before discussing it with the client team. After incorporating the feedback from the client, it was run on a pilot basis in 4 different locations. Thereafter it was printed in the final form. A detailed set of Instructions were developed to accompany the Questionnaire for the benefit of the Field team. These instructions formed the core of the training imparted to the field team.

Data Collection Procedure:

Gallup Pakistan was entrusted with the task to *(independently)* define the sampling frame, test the questionnaire, recruit and train the investigators, conduct the survey, enter and clean the data, and carry out analysis of the data. During September 2002, Gallup Pakistan recruited a team of enumerators. They went through a three-day training (two days of classroom training and one day of field training). The training curriculum covered the background and programs of PPAF, including the operations of PPAF; the background and purpose of the Project; the conceptual framework and hypotheses of the study; and the survey questionnaire. Particular attention was paid to explaining and discussing the important terms and concepts used in the questionnaire. Special attention was also given to explaining how to calculate net income and other economic estimates in the questionnaire and how could these be crosschecked. The enumerators were trained in how to conduct an interview and what to do if the respondent is distracted, loses interest, or runs out of time. Each enumerator was given the questionnaire with an instructions manual, which described in detail all significant variables and questions and the manner of asking these questions. After a thorough review of each question in the questionnaire, the enumerators started fieldwork under the supervision of their field supervisors.

FINDINGS

Background:

The impact of micro finance programs can be inferred from "with-without" comparisons and/or from "before-and-after" comparisons. In the former approach, program participants are compared to a control group. The latter approach examines changes in the participants' situation over time. In a "combined approach", changes affecting participants are compared to changes experienced by members of the control group. The findings presented in this report must be understood as the outcome of "combined approach" related with change in a borrower's household compared with nonborrower over a year.

In other words the findings of our study provide an answer to the "**counter-factual**" **question:** "If this person had not borrowed from PPAF, would he or she be better off today?" This question is answered by comparing the change in the life of the borrower with a non-borrower of similar profile (*control group*) who had not borrowed during the period under study.

If, for example, the results show that the difference between a variable such as household income increased for an average borrower from previous to current year more than a comparable average non-borrower then we can attribute the change to PPAF financing. Alternatively if the increase in the income of the borrower was less than or equal to non-borrower it would reflect that PPAF borrowing did not make a significant contribution to the borrower's income. Another hypothetical situation is that borrower income decreased during a year while non-borrower experienced increment in income, then the interpretation would be that rather than increasing, financing led to decrease in the income level of its client. However if income level dropped off for both groups, but borrower experienced less reduction than non-borrower, the interpretation would be that PPAF financing contributed to the client's income positively. Hence depending upon each situation an interpretation could be provided.



This study provides its findings concerning a set of hypotheses as outlined below:

- H-1 Participation in micro-credit leads to increase in personal income.
- H-2 Participation in micro-credit leads to increase in household income.
- H-3 Participation in micro-credit leads to increase net annual income from 3 key sectors.
- H-4 Participation in micro-credit leads to increase in the consumption of household.
- H-5 Participation in micro-credit leads to increase in consumption of overall food.
- H-6 Participation in micro-credit leads to increase in consumption of key food items.
- H-7 Participation in micro-credit leads to increase in consumption of home produced items.
- H-8 Participation in micro-credit leads to increase in the possession of consumer durables
- H-9 Participation in micro-credit leads to increase in the possession of enterprise/livestock/ agriculture related assets.
- H-10 Participation in micro-credit leads to increase in the possession of financial assets.
- H-11 Participation in micro-credit leads to increase in paid employment generated by 3 key sectors.
- H-12 Participation in micro-credit leads to increase in operating surplus.
- H-13 Participation in micro-credit leads to increase in expenditure on house repair.
- H-14 Participation in micro-credit leads to the use of better household facilities.
- H-15 Participation in micro-credit leads to increase in expenditure on miscellaneous events and items.
- H-16 Participation in micro-credit leads to the use of better agriculture inputs.
- H-17 Participation in micro-credit leads to improvement in social status.

In the following pages each of the 17 hypotheses is assessed in the light of the survey data.



Section 1

CHANGE IN INCOME

Participation in micro credit services leads to an increase in the level of household income

The above hypothesis has been tested by further segregating income into three main categories: personal, households and net annual income of the respondent and his/her household.

Hypothesis 1: Participation in micro-credit leads to increase in personal income

Table 1.1

CHANGE IN PERSONAL INCOME

	Borr	ower	Non-bo	orrower
	Count	Percentage	Count	Percentage
Negative	76	9%	68	8%
Nil	435	50%	518	60%
1% to 10 %	36	4%	40	5%
11% to 20%	110	13%	93	11%
21% to 30%	64	8%	46	5%
31% to 50%	77	9%	60	7%
51% and above	59	7%	34	4%
Total	857	100	859	100

Number of persons affected by change

Change in Mean Income

Change in Mean	859	8%*	859	5%
Personal Income	003	0%	000	570

*Significant at 95% level

The data showed that 9% of the borrowers experienced negative change in their personal income, while among the non-borrowers 8% showed the same trend. Further 50% of borrowers and 60% of non-borrowers experienced no change in the personal income in the specified period, 4% of borrowers and 5% of non-borrowers experienced increase in income between 1 to 10 percent, 13% (*borrowers*) and 11% (*non-borrowers*) experienced 11% to 20% increase in income over the year while 8% borrowers and 5% non-borrowers experienced 21% to 30% increase. In brief more borrowers compared to non-borrower experienced positive change in income, during the period under study.

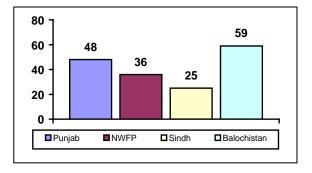


The average income stood at Rs.3490 and Rs.3231 per month for borrower in current and previous year respectively and at Rs.3607 and Rs.3442 for non-borrower in the same periods. Thus the increase in the mean income of the borrower group is proportionally higher (8%) compared to the non-borrower (5%). This is a statistically significant difference (*at 95% level of significance*).

Analysis by Provinces: By geographically segregating the sample, it is observed that in Punjab almost 52% of the borrowers experienced negative or no change in their income, while remaining 48% experienced positive change in their personal income, in NWFP 36%, in Sindh 25% and in Balochistan 59% of the borrowers experienced positive change in their income.



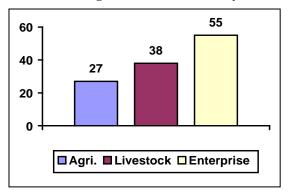
Percent of Borrowers who experienced Positive Change in Personal Income by Province

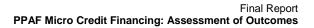


Analysis by Loan Purpose: If the sample is categorized by loan purpose it shows that 55% of those who borrowed for enterprise/commerce experienced positive change while the comparative figure for livestock was 27% and for agriculture it was 38%. The figures suggest that the borrowers who took loan for enterprise/commerce experienced relatively higher proportion of change.



Percent of Borrowers who experienced Positive Change in Personal Income by Sector



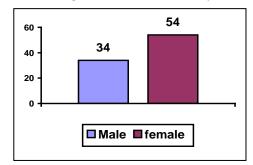




Analysis by Gender: The gender segregation of the borrower sample shows that among male borrower incidence of change appears to be around 34%, while for female borrower that is 54%. This means that the proportion of females who experienced positive change in their personal income is relatively higher than males.

Figure 1.3

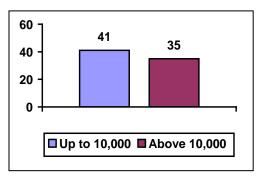
Percent of Borrowers who experienced Positive Change in Personal Income by Gender



Analysis by Loan Size: The borrower sample has also been categorized according to the size of loan. Our analysis shows that 41% of those borrowers who obtained loan up to 10,000 experienced positive change, while the comparable figure among those whose loan value was higher (above 10,000) was 35%. Thus it could be inferred from the statistics that the benefit accrued to smaller borrower is comparatively higher.

Figure 1.4

Percent of Borrowers who experienced Positive Change in Personal Income by Loan Size



Analysis by Loan Purpose in all Provinces: The following table shows the relationship between change in personal income and purpose of loan in all the four provinces of Pakistan.

Table 1.2

Provinces		Purpose of loan					
Read in rows		Enterprise (%)		Livestock (%)		culture %)	
Punjab	62	n=97	34	<i>n</i> =70	43	n=148	
NWFP	51	n=37	28	n=54	33	<i>n</i> =42	
Sindh	30	n=67	19	n=113	29	n=63	
Balochistan	67	n=86	45	n=11	50	n=4	

Number of Borrowers Experienced Positive change

-	<u>.</u>			
Percentage	Change I	n Mean	Personal	Income

Provinces		Purpose of Ioan				
Read in rows	Enterprise (%)	Livestock (%)	Agriculture (%)			
Punjab	16	3	9			
NWFP	17	5	4			
Sindh	3	4	11			
Balochistan	12	13	19			

Note: the above table shows the relevant number of cases (n). The reader may read the data with caution, considering the small size of the sample in certain cells.

In Balochistan around 67% of the borrowers who took loan for enterprise, experienced positive change in their personal income. In Punjab and NWFP more or less same trend appears (62%) and (51%) except for Sindh where the comparable figure is much lower at 30%. If analyzed alternatively, by estimating the percentage change in income of the borrowers, figures advocate the previous arguments. Percentage change in income is much lower in Sindh than the other provinces standing at 3%, 4% and 11% for enterprise, livestock and agriculture respectively.

Conclusion:

On the whole around 41% of borrowers and 32% of non-borrowers experienced positive change in their income over the period under study. The ratio of borrowers experiencing positive change in their personal income is significantly higher than non-borrowers. This difference is statistically significant (at 95% level of significance). Further increase in the mean income of the borrower group is proportionally higher (8%) compared to the non-borrower (5%). This is a statistically significant difference (at 95% level of significance). The hypothesis is held.

Hypothesis 2: Participation in micro-credit leads to increase in household income.

Table 1.3

CHANGE IN HOUSEHOLD INCOME

Number of persons ancoled by change						
	Borrov	ver	Non-borr	ower		
	Count	Percentage	Count	Percentage		
Negative	91	11%	78	9%		
Nil	386	45%	494	58%		
1% to 10 %	73	9%	77	9%		
11% to 20%	150	18%	91	11%		
21% to 30%	60	7%	43	5%		
31% to 50%	55	6%	46	5%		
51% and above	41	5%	30	3%		
Total	856	100	859	100		

Number of persons affected by change

Change in Mean Income

Change in Mean household Income	859	9%*	859	6%

* Significant at 95% level of significance

In terms of change in number of respondents, experiencing change in household income, 45% borrowers and 58% non-borrowers experienced "no change" in their household income, 11% of borrowers and 9% of non-borrowers experienced "negative change". While 9% borrowers and non-borrowers experienced upto 10 percent positive change and 18% of borrowers and 11% of non-borrowers experienced between 11 to 20 percent change in their household income. On the whole more borrowers experienced proportionately positive change, in their household income, than non-borrowers, during the period under study.

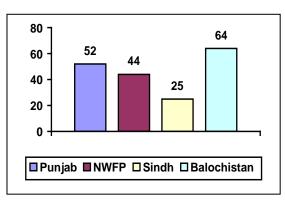
The average monthly income of borrower was Rs.5033 and Rs.4634 in the current and previous years, respectively while it was Rs.4852 and Rs.4548 for non-borrower. Thus the increase in the mean income of the borrower group is proportionally higher (9%) as compared to non-borrower (6%). This difference is statistically significant (*at 95% level of significance*).

Analysis by Provinces: Province wise analysis shows that comparatively more borrowers in Balochistan (64%) experienced positive change in their household income compared to 44%, 25% and 52% of the client sample experiencing positive change in their household incomes in NWFP, Sindh and Punjab respectively.



Figure 1.5

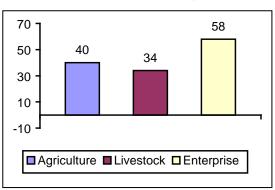
Positive Change in Borrower's Household Income Analysis by Provinces



Analysis by loan purpose: Among the sample 58% of those who borrowed for enterprise experienced positive change in their household income. The comparative figure for livestock was 34% and for agriculture it was 40%. The data shows that borrowers who took loan for enterprise/commerce have benefited more than others.

Figure 1.6

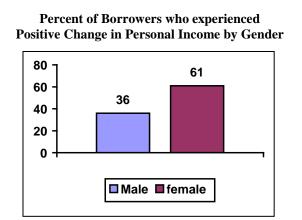
Positive Change in Borrower's Household Income



Analysis by Loan Purpose

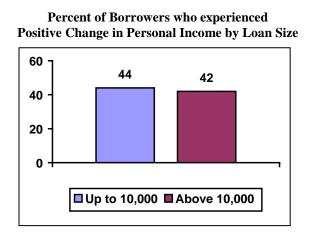
Analysis by Gender: The gender-wise analysis show that around 36% of the male borrowers experienced positive change as a comparison with 61% of the female borrowers. The results again have a tilt towards female borrower.

Figure 1.7



Analysis by Loan Size: Loan size wise analysis show that there isn't any notable discrepancy, between the two groups, as 44% and 42% of borrowers who obtained loan up to 10,000 and above 10,000 respectively estimated to be positively affected.





Analysis by Loan Purpose in all Provinces: The following table shows the relationship between change in household income and purpose of loan in all the four provinces of Pakistan.



Tabl	e 1	.4

Number of Borrowers experienced Positive Change						
Provinces		Purpose of Ioan				
	Ente	Enterprise Livestock Agriculture				
	(*	(%) (%) (%)				(%)
Punjab	67	n=97	41	n=70	46	n=148
NWFP	70	n=37	34	n=54	36	n=42
Sindh	19	n-67	26	n=113	23	n=63
Balochistan	69	n=86	63	n=11	75	n=4

Percentage Change in Mean Household Income

r creentage onalige in Mean nousehold income						
Provinces		Purpose of loan				
	Enterprise (%)	Livestock (%)	Agriculture (%)			
Punjab	9	5	7			
NWFP	19	4	2			
Sindh	2	7	4			
Balochistan	26	14	12			

Note: the above table shows the relevant number of cases (n). the reader may read the data with caution, considerably the small size of the sample in certain cells.

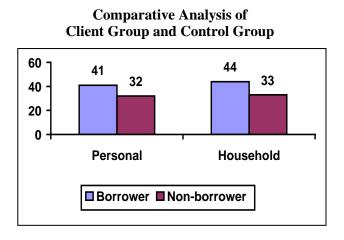
Enterprise tops the list in all provinces except Sindh, as comparatively greater proportion of borrower sample experienced positive change in Punjab (67%), NWFP(70%) and Balochistan (69%) who took loan for enterprise purpose. If analyzed alternatively, by estimating the percentage change in mean incomes of the borrower figures strongly support the previous arguments in NWFP and Balochistan and weekly in Punjab, in favor of enterprise related loan.

Conclusion:

On the whole around 44% of borrowers and 33% of non-borrowers experienced positive change in their household income over the last one-year period. The ratio of borrowers experiencing positive change in their monthly household income is significantly higher compared to non-borrowers. The difference is statistically significant (at 95% level of significance). Further increase in the mean income of the borrower group is proportionally higher (9%) as compared to non-borrower (6%). This difference is statistically significant (at 95% level of significant (at 95% level of significance). The hypothesis is held.

Figure 1.9

Positive Change in Household Income



Hypothesis 3: Participation in micro-credit leads to increase net annual income from 3 key sectors.

The net annual income has been measured by estimating the incomes from three core sectors: Agriculture, Livestock and Enterprise/commerce. In each case income includes cash income and the imputed value of own production, which was used within the households.

Agriculture

Table 1.5

Change in Net Annual Income

Number of persons affected by change					
	Borr	ower	Non-bo	orrower	
	Count	Percentage	Count	Percentage	
Negative	78	23%	71	19%	
Nil	102	30%	127	34%	
1% to 10 %	48	14%	53	14%	
11% to 20%	36	11%	49	13%	
21% to 30%	30	9%	21	6%	
31% to 50%	19	6%	23	6%	
51% and above	24	7%	34	9%	
Total	337	100	378	100	

Change in Mean Income

Percentage change in				
Average Net Income	337	9%*	378	2%
from Agriculture				

* Significant at 95% level of significance

The data shows that in terms of change in number of people experiencing change around 47% borrowers and 48% non-borrowers experienced positive change in their net annual income from agriculture. While 30% of the borrowers and 34% of the non-borrowers, in the agri sector, experienced no change in their net annual income. In addition 23% borrowers and 19% non-borrowers also experienced negative change in their annual income in this sector.

The mean annual incomes for borrowers (inclusive of the imputed value of own production, which was used within the household) stood at Rs.30,610 and Rs.28,096 for current and previous years respectively, while the same for non-borrowers was Rs.28,833 and Rs.28,356 respectively. Thus the increase in the mean income of the borrower group is proportionally higher (9%) compared to the non-borrowers (2%). This difference is statistically significant (*at 95% level of significance*).

Analysis by Province: In Punjab 54% of the borrower sample experienced positive change in their net income from agriculture, while in NWFP and Sindh figures were 43% and 22%. In Balochistan none of the cases experienced change in their income. For the net annual income from agriculture positive change is relatively higher in Punjab compared to other provinces.

Analysis by Loan purpose: 58% of those who borrowed for agriculture experienced positive change in net annual income from agriculture while the comparative figure for livestock was 37% and for enterprise it was 32%.

Analysis by Loan Size: The loan size wise results show that 45% of borrowers who obtained loan up to 10,000 experienced positive change while the comparable figure for higher borrowers is 50%.

Analysis by Land Type: The analysis by isolating the borrower sample by type of land shows that around 57% of the borrower who cultivate irrigated land experienced positive change in their agriculture income as against 34% and 50% for those who cultivate non-irrigated and both type of land respectively.

Analysis by Loan Purpose in all Provinces: The following table shows the trends for change in agriculture income for those who obtained loan for agriculture, in all the four provinces of Pakistan.



Table 1.6

Number of Borrowers Experienced Positive Change

Provinces	Purpose of loan
	Agriculture
	(%)
Punjab	62
NWFP	61
Sindh	20
Balochistan	0

Provinces	Purpose of loan			
	Agriculture			
	(%)			
Punjab	8			
NWFP	20			
Sindh	-13			
Balochistan	0			

Note: There is slight variation in the number of respondents from table 1.4. This is mostly explained by those borrowers who may have switched the purpose of loan.

Punjab is at top with 62% of the borrower sample, which obtained loan for agriculture purpose, experienced positive change in their net annual income from agriculture. NWFP shows the same trend (61%) while comparable figure for Sindh is much smaller standing at 20%. If analyzed alternatively, by estimating the percentage change in income, the figures strongly support the previous arguments. As in Punjab and NWFP figures are 8% and 20% while in Sindh figure shows that there is decline in the income of borrower sample to the tune of 13%, who obtained loan for agriculture purpose.

Conclusion:

On the whole around 47% of borrowers and 48% non-borrowers experienced positive change in their net annual monetary as well non-monetary income from agriculture. The ratio of borrowers experiencing positive change in their net annual income from agriculture is slightly lower than non-borrowers but the difference is not statistically significant. However the change in mean income from agriculture (inclusive of the imputed value of own production, which was used within the household) is considerably higher for the borrower group (9%) compared to the non-borrower group (2%). This difference is statistically significant (at 95% confidence level). The hypothesis is partially held.

Livestock

Table 1.7

Change in Net Annual Income

	Borrower		Non-bo	orrower	
% Change	Count	Percentage	Count	Percentage	
Negative	87	15%	67	14%	
Nil	276	49%	248	52%	
1% to 10 %	28	5%	22	5%	
11% to 20%	49	9%	39	8%	
21% to 30%	21	4%	18	4%	
31% to 50%	34	6%	34	7%	
51% and above	67	12%	45	9%	
Total	562	100%	473	100%	
Change in Mean Income					
Percentage change in Average Net Income from Livestock	562	13%*	473	0.7%	

Number of persons affected by change

* Significant at 95% level of significance.

In terms of change in number of respondents experiencing change, the data showed that about 49% of borrowers and 52% of the non-borrowers experienced no change in their net annual income from livestock, while 36% of borrowers and 33% of non-borrowers experienced positive change in their net annual income from livestock. In addition 15% of borrowers and 14% of non-borrowers also experienced negative change in their net income from livestock.

The mean incomes of borrowers from livestock (*inclusive of the imputed value of own production, which was used within the household*) stood at Rs.17,676 for *current year* and Rs.17,665 for previous year, while it was Rs.15,234 (*current year*) and Rs.15,123 (*previous year*) respectively for non-borrowers. Thus the increase in the mean income of the borrower group is proportionately higher (13%) compared to the non-borrower (0.7%). This is a statistically significant difference (*at 95% level of significance*).

Analysis by Province: In Punjab almost 50% of client group experienced positive change in net income from livestock, 29% and 24% experienced the same in NWFP and Sindh, while in Balochistan only one case experienced positive change in its net income from livestock.

Analysis by Loan purpose: 45% of those who borrowed for livestock experienced positive change in net livestock income while the comparative figure for agriculture was 35% and for enterprise it was 21%.



Analysis by Loan Size: The loan size wise analysis shows that 35% of borrowers who obtained loan up to 10,000 experienced positive change as against 38% for higher borrowers.

Analysis by Loan Purpose in all Provinces: The following table shows the trend of change in net annual income from livestock who took loan for livestock purpose, in all the four provinces of Pakistan.

Number of Borrowers Experienced Positive Chang				
Provinces	Purpose of loan			
	Livestock			
	(%)			
Punjab	72			
NWFP	40			
Sindh	31			
Balochistan	0			

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Deveentere	Change	:	Maan	المربعة مام	1
Percentage	Change	m	wean	nousenoia	income

Provinces	Purpose of Ioan
	Livestock (%)
Punjab	70
NWFP	11
Sindh	5
Balochistan	0

Note: There is slight variation in the number of respondents from table 1.4. This is mostly explained by those borrowers who may have switched the purpose of loan.

Punjab is at top with 72% of borrowers experienced positive change, who took loan for livestock. The comparable figures for NWFP and Sindh are 40% and 31%. Alternative analysis shows that, percentage change in mean incomes of the borrower figures strongly support the previous arguments. As in Punjab the percentage change in livestock income is 70% while for Sindh the comparable figure is much smaller stood at 5%.

Conclusion:

On the whole around 36% borrowers and 33% non-borrowers experienced positive change in their net annual income from Livestock. The ratio of borrowers experiencing positive change in their net monetary as well as monetary annual income from livestock is slightly higher than non-borrowers. But the difference is insignificant. However, the change in mean income from statistically **livestock**(inclusive of the imputed value of own production, which was used within the household) was considerably higher for the borrower group (13%) compared to the non-borrower group (0.7%). This difference is statistically significant (at 95%) significance level). The hypothesis is held.

Enterprise/Commerce

Table 1.9

Change in Net Annual Income

% Change	Bor	Borrower		Non-borrower	
	Count	Percentage	Count	Percentage	
Negative	39	15%	43	19%	
Nil	52	20%	74	33%	
1% to 10 %	30	12%	23	10%	
11% to 20%	40	16%	24	11%	
21% to 30%	22	9%	14	6%	
31% to 50%	23	9%	14	6%	
51% and above	48	19%	31	14%	
Total	254	100%	223	100%	

Number of persons affected by change

Change in Mean Income

Percentage change in				
Average Net Annual	254	7%*	223	-3%
income from Enterprise				

* Significant at 95% level of confidence.

In terms of change in income experienced by respondents; 65% borrowers and 47% of non-borrowers experienced positive change in their net income from enterprise/commerce. Among them 28% of borrowers and 21% of non-borrowers experienced up to 20 percent positive change in their net annual income. Among the borrowers 20% experienced no change in net income as compared to 33% of the nonborrowers in the enterprise sector. In addition 15% borrowers and 19% non-borrowers also experienced negative change in their net income from enterprise during the study period.

The data shows that average incomes (*inclusive of the imputed value of own production*, *which was used within the household*) stood at Rs.29,475 (*current year*) and Rs.27,462 (*previous year*) for borrower group and Rs.34,765 (*current year*) and Rs.35,739 (*previous year*) for non-borrower group. Thus the increase in the mean income of the borrower group is proportionately higher (7%) compared to the non-borrower (-3%). This is statistically significant difference (*at 95% level of significance*).

Analysis by Province: Province wise segregation showed that around 72% of the borrowers experienced positive change in Punjab, 67% in NWFP, 59% in Balochistan and 51% in Sindh.

Analysis by purpose of loan: Around 67% of the borrowers in the enterprise/commerce sector who borrowed for enterprise purposes experienced positive change in their net income from enterprise, while the comparative figure for livestock was 35% and for agriculture it was 69%.



Analysis by Loan Size: The loan size wise analysis shows that 65% of those who obtained loan up to 10,000 experienced positive change as against 61% for higher borrowers.

Analysis by Loan Purpose in all Provinces: The following table shows the trend of change in net annual income from enterprise/commerce, who obtained loan for enterprise/commerce, in all the four provinces of Pakistan.

	Table	e 1.1	10
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Provinces	Purpose of Ioan				
	Enterprise/Commerce				
	(%)				
Punjab	74				
NWFP	68				
Sindh	54				
Balochistan	63				

Percentage Change in Mean Household Income

Provinces	Purpose of loan	
	Enterprise/Commerce	
	(%)	
Punjab	14	
NWFP	31	
Sindh	18	
Balochistan	0.5	

Note: There is slight variation in the number of respondents from table 1.4. This is mostly explained by those borrowers who may have switched the purpose of loan.

Again Punjab is at top with 74% of borrowers experienced positive change. The comparable figures for NWFP, Sindh and Balochistan is 68%, 54% and 63%. The mean income results do not robustly support the previous results, as the percentage change in mean income is around 14%, 31% and 0.5% for Punjab, NWFP and Balochistan respectively.

Conclusion:

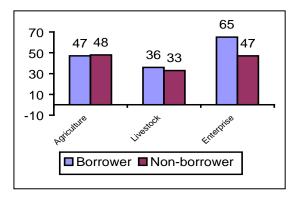
On the whole 65% borrowers and 47% non-borrowers experienced positive change in their net annual monetary as well as non-monetary income from enterprise/commerce. The ratio of borrowers experiencing positive change in their net income from enterprise/commerce is proportionally higher than non-borrowers. This difference is statistically significant (at 95% level of significance). Furthermore the change in mean income from enterprise/commerce (inclusive of the imputed value of own production, which was used within the household) was considerably higher for the borrower group (7%) compared to the non-borrower group (-3%). This difference is statistically significant (at 95% significance level). The hypothesis is held.



Figure 1.10

Positive Change in Net Income

Comparative Analysis of 3 key sectors by Borrower and non-borrower group



Section 2

CHANGE IN CONSUMPTION

Hypothesis 4: Participation in micro-credit leads to increase in the consumption of household.

The consumption level of the household has been gauged by measuring monthly overall expenditure of the household, expenditure on overall food, key food items especially focusing on high protein items. Additionally consumption of home produced items was also computed.

Table 2.1

Change in Mean Expenditure

	Borrower	Non-borrower
Average monthly Expenditure (current year)	Rs.3987	Rs.3947
Average monthly Expenditure (previous year)	Rs.3725	Rs.3751
Change in monthly expenditure	7%**	5%

**Significant at 90% level of confidence.

The preceding table presents percentage change in mean expenditure of the borrower in comparison with non-borrower in current and previous years. Reported current mean monthly expenditure is around Rs.3987 for borrower group and Rs.3947 for non-borrower group, whereas the average expenditure for previous year was Rs.3725 for borrowers and Rs.3751 for non-borrowers. Thus the change in the mean expenditure of the borrower group is proportionately higher (7%) compared to the non-borrowers (5%). This is a statistically significant difference (*at 90% level of significance*).

Table 2.2

Percent of Borrowers and Non-borrowers who Experienced Change In Household Expenses during the study period

Number of persons affected by change

	Figures are column percentages			
	Borrower		Non-borrower	
% Change	Count	Percentage	Count	Percentage
Negative change	58	7%	51	6%
Nil	502	59%	559	65%
1% to 10 %	57	7%	49	6%
11% to 20%	122	14%	92	11%
21% to 30%	44	5%	36	4%
31% to 50%	46	5%	40	5%
51% and above	29	3%	32	4%
Total	858	100%	859	100%

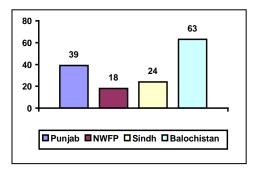


In terms of change experienced by borrowers and non- borrowers more than half (59%) of the borrowers experienced no change in expenses as compared to almost two-thirds (65%) of the non-borrowers. In addition 34% of the borrowers and 30% of the non-borrowers reported increase in their consumption during the study period. Among them (who reported increase) 21% of borrowers and 17% of the non-borrowers experienced up to 20 percent increase in their consumption. However 7% borrowers and 6% non-borrowers also reported negative change (*decrease in expenses*) in their household consumption during the study period.

Analysis by province: Province wise segregation shows that around 39% of the borrowers experienced positive change in consumption in Punjab, 18% in NWFP, 24% in Sindh and 63% in Balochistan.

Positive Change in Consumption Level of Borrowers

Analysis by Provinces

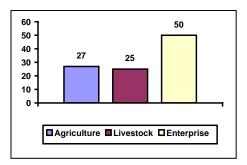


Analysis by purpose of loan: Around 50% of those who borrowed for enterprise experienced positive change in their expenditure during the study period. The comparative figure for livestock was 25% and for agriculture it was 27%.

Figure 2.2

Positive Change in Consumption Level of Borrowers

Analysis by Loan Purpose



On the whole around 34% of borrowers and 30% of non-borrowers experienced positive change in their overall expenditures during the study period. Ratio of borrowers who experienced positive change is significantly higher than the non-borrowers. The difference is statistically significant (at 90% level of significance). The hypothesis is held.

Change in Expenditure on Overall Food & Key food items:

Hypothesis 5: Participation in micro-credit leads to increase in consumption of overall food.

Hypothesis 6: Participation in micro-credit leads to increase in consumption of key food items.

The following table presents the change in average expenditure in overall food consumption and key food items.

of the items consumed during the period under study				
	Borrower	Non-borrower		
Overall Food	6%	7%		
Wheat /Flour	7%	9%		
Rice	2%	1%		
Pulses	7%*	2%		
Spices	2%	6%*		
Chicken	8%*	3%		
Mutton ¹	.06 %	5%*		
Beef	2%*	- 1%		
Fish ²	-3%	6%*		
Vegetable	4%	3%		
Fruit	4%	6%**		
Sugar	0.24%	4%*		
Tea	11%*	6%		
Egg	2%	1%		
Milk	8%*	4%		
Ghee/oil	10%*	7%		
Fuel	5%	6%**		
Soap/laundry	7%	7%		
Canned food	20%*	10%		

 Table 2.3

 The percentage change below represents the change in the money value of the items consumed during the period under study

Significant at 95% of confidence level.

** Significant at 90% of level of significant.

^{1,2:} Apparently the decline in the consumption of beef and fish has been more than compensated for by increase in the consumption of chicken.

The data show that the change in mean expenditure on overall food items is almost the same for both borrowers and non-borrowers (6% and 7% respectively). However the change in key food items, with high protein contents, is higher among borrowers (chicken, beef, eggs, ghee/oil, canned food and milk) compared to non-borrowers. These are relatively more nutritious items and the increase in their consumption level during the period under study is significantly higher among borrowers compared to non-borrowers. Hence it shows improved food intake among borrowers.

Hypothesis 5 is not held, while hypothesis 6 is held.

Change in consumption of home produced items:

Hypothesis 7: Participation in micro-credit leads to increase in consumption of home produced items.

The following table reports the change in consumption of the home produced food items which are produced by households using their own resources like agriculture (*wheat*, *vegetables etc.*), livestock (*milk*, *curd etc.*) and enterprise related items, and these are used by households without making any monetary payment. The consumption level of these items had been gauged by calculating their monetary value at approximate current prices. The following table presents the percentage change in average monetary value for those items during the study period.

Table 2.4

	Borrower	Non-borrower
Milk	4%*	-5%
Chicken	6%	6%
Honey	14%*	0
Wheat	1%	3%
Rice	18%*	4%
Fuel	3%*	-12%
Fertilizer	0.3 %	3%*

Change in consumption of home produced items

* Significant at 95% level of significant.

Reported change in the mean monetary value of home produced and consumed items was slightly in favor of the borrowers; as for milk the change is 4% for borrower and -5% for non-borrower, for chickens, honey, rice and fuel average change is 6, 14,18 and 3 percent *(borrower)* and 6, 0, 4 and -12 percent *(non-borrower)* respectively. For wheat/flour and fertilizer average change was 1 and 0.3 percent for borrowers 3 and 2 percent for non-borrowers respectively.

On the whole increase in the consumption of milk, honey and rice was proportionately higher among the borrower households as compared to nonborrower households, during the period under study.

In the case of wheat and fertilizer, however the increase was proportionately higher among the non-borrowing households. While wheat is generally considered a cheaper substitute of rice, the case of fertilizer is notable for being an exception to the general pattern.

The hypothesis is partially held.

Section 3

CHANGE IN ASSETS

Participation in micro credit services leads to increase in the ownership of household assets

It is hypothesized that during the period under study the acquisition of assets including consumer durables, property, financial assets, assets related to agriculture, livestock and enterprise, would be higher among the borrowing households compared to the nonborrowing households.

Acquisition Of Consumer Durables:

Hypothesis 8: Participation in micro-credit leads to increase in the possession of consumer durables.

The respondents were presented a list of assets and asked whether their households possessed the listed items. If they responded positively they were questioned as to when was that item purchased. If the respondent had purchased the item in the current year then it was recorded as a positive change in respondent's household acquisition.

The following table shows the positive change in ownership level of borrowing and nonborrowing households.

5					
	Borrower		Non-borrower		
	Positive change	Average Expenditure (Rs.)	Positive change	Average Expenditure (Rs.)	
VCR/VCP	0.7%*	5,340	0.1%	13,000	
Tape Recorder	4%	2,363	3%	2,447	
Mobile Phone	0.1%	7,000	0	0	
Radio	5%	625	4%	511	
Air Cooler	0.3%	3,633	0.1%	10,000	
Iron	7%**	917	5%	867	
Television	3%	9,439	2%	10,270	
Motor Cycle	0.3%	75,000	0.2%	45,000	
Fan	6%*	1,810	3%	1,559	
Bicycle	2%**	2,150	1%	2,011	
Swing Machine	3%	3,268	2%	3,393	
Washing Machine	1%*	3,875	0.2%	3,250	
Refrigerator	0.6%	15,460	0.3%	18,000	
Suite case	2%	815	2%	745	

 Table 3.1

 Positive change in ownership of household durables

Percent of households that acquired the asset during the study period and the average value of the asset

* Significant at 95% level of significance.

* Significant at 90% level of significance.

A quick look at the table reveals that the increase of assets is higher among the borrowing households as compared to the non-borrowing households. Acquisition of relatively expensive items such as VCR/VCP, iron, fan, washing machine and bicycles was significantly higher among borrowers as compared to the control group.

The hypothesis is held.

Acquisition of Property and Business Assets:

Hypothesis 9: Participation in micro-credit leads to increase in the possession of enterprise/livestock/agriculture related assets.

The following table gives the data regarding acquisition of property during the period under study.

Table 3.2

Acquisition of property

	Borr	ower	Non-bo	orrower	
	Positive	Average	Positive	Average	
	change	Expenditure	change	Expenditure	
		(Rs.)		(Rs.)	
House	2%*	201,000	0	0	
Any other property	0.8%	124,000	0.3%	29,687	
* Significant at 95 level of significance					

Significant at 95 level of significance.

The above data shows that 2% of the borrowers purchased house and 0.8% (7 cases) acquired some other property during the study period, with the average expenses of Rs.201,000 and Rs.124,000 respectively. In comparison around 0.3% (3 cases) of the non-borrowers purchased some property with an average expenditure of Rs.29,687. The hypothesis concerning proportionately higher acquisition of assets among borrowers (compared to the control group) is supported by the data.

Agriculture/Livestock/Enterprise Related Assets:

The following table shows the change in agriculture related assets among borrowing and non-borrowing households. While the acquisition is low in both the groups, it is relatively higher among the non-borrower group. The hypothesis is therefore not held by data in this case.

Table 3.3

Positive change in Agriculture related Assets

	Borr	ower	Non-bo	orrower
	Positive	Average	Positive	Average
	change	Expenditure	change	Expenditure
		(Rs.)		(Rs.)
Trolley	0		0	
Agri. Equipment	0.1%	2,000	0	
Thresher	0		0.1%	110,000
Tractor	0		0.2%	300,000
Truck	0		0	

Table 3.4

Positive Change in Land Holding

	Borrower			1	Non-borrowe	r
	Mean	Mean	% change	Mean	Mean	% change
	(CY)	(P Y)		(<i>CY</i>)	(PY)	
Land Holding	59	59	0	58	58	0
Cultivated land	56	56	0	56	56	0
Monetary value of land	908,437	891,806	2%	914,003	904,906	1%

The land holding data also does not support the hypothesis, as there is no significant difference in the acquisition of cultivatable land between the borrower and the control group. Average monetary values are slightly above for current year for both groups with percentage change of 2% and 1% for borrower and control group respectively. The difference is not statistically significant.



Table 3.5

Acquisition of Livestock related assets

The subsequent table presents the change in livestock ownership among the borrowers and the control group during the period under study.

Change in number of	Direction of change	Borrower (%)	Non-borrower (%)	Borrowers who had taken loan for livestock (%)
	Negative Change	12	9	9
Cow	No Change	73	77	66
	Positive Change	16	14	25
	Negative Change	13	10	16
Buffalo	No Change	67	80	58
	Positive Change	20*	11	27
	Negative Change	17	0	0
Bull	No Change	50	100	0
	Positive Change	33*	0	100
	Negative Change	7	2	6
Bullock	No Change	84	94	76
	Positive Change	9*	4	18
	Negative Change	18	14	16
Goat	No Change	55	61	50
	Positive Change	27	25	34
	Negative Change	31	17	37
Sheep	No Change	41	60	37
	Positive Change	29*	23	26

Significant at 95% level of significance.

The data in the above table shows negative, positive and no change status in the acquisition of livestock during the study period for both borrowers and non-borrowers. The borrowers added more cows, buffaloes, bulls, bullocks, goats and sheep to their livestock as compared to the non-borrowers. The difference is particularly significant in the case of buffaloes, bulls, bullock and sheep (at 95% level of significance) which is in line with hypothesis of the study that borrowers are more likely than control group to add to their livestock during the period under study.

The acquisition of livestock including cows, buffalo, bull, goat and sheep is generally high among those borrowers who had taken the loan for livestock purposes. This is shown in the last column in the table above.



Acquisition of Enterprise related Assets

The following table gives the percentage change in acquisition of enterprise related assets.

Table 3.6

Number of persons affected by change

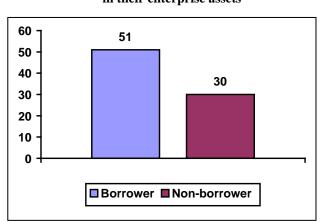
% Change	Borrower		Non-borrower	
% Change	Count	Percentage	Count	Percentage
Negative change	42	16%	35	16%
Nil	84	33%	119	53%
1% to 20 %	25	10%	20	9%
21% to 30%	20	8%	9	4%
31% to 50%	35	14%	21	9%
51% and above	48	19%	19	8%
Total	250	100%	221	100%

The data shows that 33% of the borrowers and 53% of non-borrowers experienced no change in enterprise related assets. Around 51% of the borrowers and 30% of control group experienced positive change in acquisition of enterprise related assets, during the study period. The difference is statistically significant (*at 95% level of significance*).

Conclusion:

On the whole the number of borrowers who made additions to their property as well as enterprise related assets (51%) is more than the non-borrowers (30%). The difference is statistically significant at (95% level of significance). But the results are mixed.

Taking into account the entire range of property and business assets the hypothesis is partially held.



Percent of borrowers who made additions in their enterprise assets

Figure 3.1



Financial Assets:

Hypothesis 10: Participation in micro-credit leads to increase in the possession of financial assets.

The respondents in the survey were asked to provide information on their financial assets before and after the loan period. The following table shows the status of borrower and the control group.

Table 3.7

Financial Assets	Percentage change in Average Monetary Value of Financial Assets			
	Borrower Non-borrower			
Bank Account	- 23%	- 28%		
Cash in Pak rupees	24%	9%		
Deposits in form of committee	- 25%	18%		
Deposits in form of advances	0	0		
Saving Certificates	0	0		
Gold Jewelry	7%	2%		

Change in Financial Assets

The table shows positive change in the case of cash in local currency and gold jewelry among borrowers. Their assets in the form of Committees (*an informal network of savers*) declined, but this could be as a result of its substitution by the more formal channel of their current CO (Community Organization). In the case of non-borrowers there is a visible decline in terms of financial assets during the period under study.

Conclusion:

On the whole the survey shows that the borrower group made more additions to assets during the period under study compared to the control group. The asset building is more pronounced in the case of household goods and less so for financial assets or business and agricultural assets. Apparently the loan is too small to lead to building the latter type of assets.

The hypothesis is not held.

Section 4

CHANGE IN EMPLOYMENT

Hypothesis 11: Participation in micro-credit leads to increase in paid employment generated by 3 key sectors.

Paid Employment

The respondents were asked if they hired any workers during the period under study. The questions relate to employment for the three main sectors: Agriculture, Livestock and Enterprise/Commerce. The following table shows the percentage of sample, which employed paid workers in current and previous years and the average number of workers employed.

Table 4.1

		Borrower		Non-bo	orrower
		(%) Average # of workers		(%)	Average # of workers
Agriculture:	Current year	3	1.56	8	1.73
	Previous year	2	1.80	6	1.65
Livestock:	Current year	0.5	1	0.2	1
	Previous year	0.5	1	0.1	1
Enterprise:	Current year	9	1.44	6	1.54
	Previous year	8	1.33	4	1.75

Change in Paid Employment

Conclusion:

The data show that neither of the two groups, borrowers and non-borrowers made notable contribution to employment generation. Apparently the size of their business or agricultural and livestock activity, as well as the scale of loan is insufficient to make substantial contribution in this area. *The hypothesis is not held.*



Section 5

CHANGE IN Operating Surplus

Hypothesis 12: Participation in micro-credit leads to increase in Operating Surplus.

The hypothesis was tested by asking each respondent about his/her household's total income and the households total expenditure. The latter was deducted from former. The results calculated give the operating surplus for each group. The pattern for both groups in the two periods has been presented in the following table.

		Borrower (%)	Non- borrower (%)
	Negative Operating Surplus	7	5
Current year	No Operating Surplus	33	42
	Operating Surplus	60	54
	Negative Operating Surplus	10	5
Previous year	No Operating Surplus	35	41
	Operating Surplus	56	54

Table	5.1
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Percentage change in	Negative Operating Surplus	-30	0
number of respondents	No Operating Surplus	-5	2
who able to accrue	Operating Surplus	7.14*	0

* Significant at 95% level of significance.

Conclusion:

The above statistics show that a higher proportion of borrowers (60%) reported operating surplus in current year as compared with previous year (56%). Among the non-borrowers there was no increase. The figures show that there was around 7% increase in the number of borrowers who were able to accrue operating surplus while the change among non-borrowers was nil.

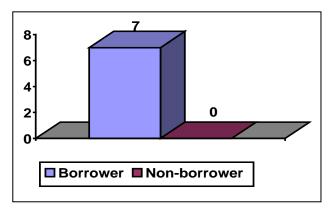
The statistics show that operating surplus provides funds for financing expenditure on extra ordinary events (reported in section 6, page 45), as when the expenditure on these events were deducted from the income, the number of persons who have accrued operating surplus becomes quite insignificant. The hypothesis is hold

The hypothesis is held.



Figure 5.1

Percentage change in the Number of Savers Comparison of Borrowers and Non-Borrowers





Section 6

CHANGE IN PERSONAL LIFESTYLE AND BUSINESS PRACTICES

Participation in micro credit services leads to Improvement in Personal Lifestyle and Business Practices

This subject was probed by gauging the change in several variables like house repair, expenses on miscellaneous events and items, household facilities, agricultural inputs during the period under study among both borrower and non-borrower groups.

Expenditure on house repair

Hypothesis 13: Participation in micro-credit leads to increase in expenditure on house repair

The respondents were asked whether they made any expenditure on house repair in the current year. If the response was positive they were asked how much was spent on repairs in the prevailing year in comparison with previous year. The following table shows the results:

Tab	ble	6.1	
		· · ·	

	Borrower			Non-borrower		
	Mean (Current year)	Mean (Previous year)	% change	Mean (Current year)	Mean (Previous year)	% change
Expenditure on House repair	1844	878	110%*	702	486	44%

* Significant at 95% level of significance.

Conclusion:

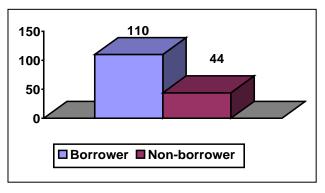
The figures show that on average the borrowers spent Rs.1844 and Rs.878 during the current and the previous years respectively on house repair. The comparative figures for the non-borrowers were: Rs.702 and Rs.486. Thus while the borrowers made a positive change to the tune of 109%, the non-borrowers experienced change to the tune of 44%.

The hypothesis is held.



Figure 6.1

Percentage Change in Average Expenditure



Addition to Household Facilities

Hypothesis 14: Participation in micro-credit leads to the use of better household facilities.

Improvement in the usage of household facilities has been examined by looking at construction of latrine and housing utility connections. The following table shows the percentage of borrowers and non-borrowers who constructed a latrine and obtained any utility connections during the period under study. This was considered as positive change in the respondent's household.

	Borrower (%)	Non-borrower (%)
Latrine construction	5%*	3%
Water connection	3%	2%
Electricity connection	2%**	1%
Gas connection	0.3%	0.6
Telephone connection	0.2%	0.9%*

Tab	le	6.2	
	-	-	

Significant at 95% level of significance.

** Significant at 90% level of significance.

The figures show that almost 5% of the borrowers constructed latrine during the last 12 months as against 3% of the non-borrowers. Further around 3% of borrowers and 2% of non-borrowers had obtained water connection and 2% borrowers and 1% non-borrowers have taken electricity connection during the current year respectively. The gas and telephone connection figures show a higher increase in the case of non-borrowers but the incidence is quite small.

On the whole the positive improvement is higher in the case of borrowers compared to the non-borrowers. *The hypothesis is held.*

Change in Expenditure on Miscellaneous events & items

Hypothesis 15: Participation in micro-credit leads to increase in expenditure on miscellaneous events and items.

The following table represents the yearly expenditure on specified items and events by the two groups during the period under study.

		Borrower		Γ	Non-borrowe	r
	Mean (Rs.) (Current year)	Mean (Rs.) (Previous year)	%age change	Mean (Rs.) (Current year)	Mean (Rs.) (Previous year)	%age change
Expenditure on weddings ceremonies	2799	3077	-9	2346	1714	36*
Expenditure on Illness	2659	2224	19	2465	1941	27*
Expenditure on funerals	1231	1079	14*	906	838	8
Expenditure on Utility Bills	3009	2928	3	2800	2734	2
Expenditure on Recreation	207	174	19*	190	171	11
Expenditure on Education (of male children)	1172	1006	16	1056	826	27*
Expenditure on Education (of female children)	545	474	15	395	322	22*
Expenditure on animals.	2138	1921	11*	1576	1619	-2
Expenditure on salaries of workers	489	346	41*	131	124	5
Expenditure on Accessories	2874	2600	10	3013	2782	8
Expenditure on Children's toys	65	56	16	74	40	86*
Expenditure on Rent	221	217	2	312	292	6*
Expenditure on Traveling	1272	1203	6**	1091	1040	4
Expenditure on Litigation/Legal issues	173	221	-22	372	21	1653*

Table 6.3

* Significant at 95 % level of significance.

** Significant at 90 % level of significance

The above table shows that the borrowers spent more on items like funerals, recreation, animal keeping, other accessories, on rent and traveling as compared to the non-borrowers. Moreover the average amounts spent by borrowers were higher than the average amounts spent by the non-borrowers during period under study. *The hypothesis is partially held*.

Change in Use of Agricultural Inputs

Hypothesis 16: Participation in micro-credit leads to the use of better agriculture inputs.

It is hypothesized that micro-credit facility helps its clientele to make improvements in its business or agricultural tools and practices. This hypothesis was tested by estimating the average expenditure on agriculture inputs and by comparing the types of inputs used during the current and previous year.

The subsequent table reflects the change in expenditure on agriculture inputs.

Table 6.4

	Borrower			ľ	Non-borrowe	r
	Mean (Current Year)	Mean (Previous Year)	%age change	Mean (Current Year)	Mean (Previous Year)	%age change
Expenditure fertilizer.	9045	9206	-2%	9609	8966	7%*
Expenditure Irrigation.	10234	9784	5%	10945	10405	5%

* Significant at 95% level of significance.

The findings are not in accordance with the hypothesis of the study since the data show that average expenditure on fertilizer declined by 2% for borrower while control group shows a 7% increase for the same input. Irrigation expenses reflected a positive change of 5% for both groups.

Change in Use of Seed Type

The hypothesis is that micro-credit facility leads its clientele to use better quality seed than before. The seed type was categorized according to its price level. The findings are given below:

Table 6.5

			Non-borrower
Type of seed		(%)	(%)
	Most Expensive	32	34
Type of seed used during the	In Expensive	19	18
current year	Cheap	2	2
	Own Produced	47	46
	Most Expensive	36	35
Type of seed used in	In Expensive	16	16
previous year	Cheap	1	2
	Own Produced	48	47

Conclusion:

The data does not show a significant difference between the changes experienced by the borrowers and the control group during the study period. *The hypothesis is not held.*



Section 7

CHANGE IN PERSONAL SOCIAL STATUS

Hypothesis 17: Participation in micro-credit leads to improvement in social status

This hypothesis was tested by directly asking the borrowers to assess their social status within or outside their household, by using before and after loan technique and also by assessing borrower's participation in local politics and his/her control over certain key resources.

The following table shows the findings:

Table 7.1

			Figures are Colun	ın percentages
		Total (%)	Male (%)	Female (%)
How has your social status	Increased	45	39	60
been affected after taking	Decreased	4	5	1
loan?	Unchanged	51	56	39
Has the importance of your	Increased	37	33	46
opinion regarding children	Decreased	1	1	0
marriages	Unchanged	63	67	54
Has the importance of your	Increased	31	27	40
opinion regarding decisions	Decreased	3	3	2
on education of children	Unchanged	66	70	58
Has the importance of your	Increased	19	18	20
opinion in resolving family	Decreased	12	10	15
disputes	Unchanged	70	72	65
Has the importance of your	Increased	37	32	48
opinion in business	Decreased	3	3	3
decisions	Unchanged	60	65	49
Has the importance of your	Increased	25	22	31
opinion in purchase or sale	Decreased	3	4%	2
of household items	Unchanged	72	74	67
Has the importance of your	Increased	21	20	22
opinion in purchase and sale	Decreased	2	2	2
of property	Unchanged	78	79	75

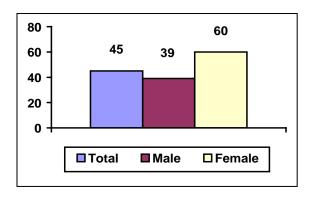
Perception about change in personal Social status

The data show that broadly speaking 45% of the borrower claimed that their social status had increased, while 4% said their status had declined after taking loan; 51% of the borrower perceived no change in their status. When asked about influence on their opinion in taking family decisions nearly one-third of the borrowers said there had been a positive change regarding children's marriage decision, education decision, resolving

family disputes, business affairs, trade of household items and trade of property. The gender segregation of the data strongly supports the hypothesis that more of the female borrowers (60%) claimed to have improvement in their social status as compared to male borrowers (39%). Other related variables also show the same trend.

Figure 7.1

Positive change in Self Perception of Social Status among the Borrowers



In summary nearly half of the borrowers improved their social status after taking loan and the incidence was higher among female borrowers compared with male borrowers.

Participation in local politics: The borrowers were asked if they had participated in last local bodies election and whether elected or not? In response 5% said they had participated in local bodies elections and from among them 40% had been elected. The participation of women was also notable by way of contesting the elections (3%) and winning (50%). Interestingly the proportion of winners was higher among female contestants (50%) compared to male (38%).

Table 7.2

	Total	Male	Female
Participated in local bodies elections (% saying Yes)	5%	6%	3%
Elected (% of those who participated)	40%	38%	50%

Participation in Local Politics

Control over resources: The hypothesis was further tested by asking the respondents their control over the financial resources of the family at the start of the study period and its conclusion. The following table shows the results.

Table 7.3

		Figures a	ire Column	percentages
	Response	Total	Male	Female
	Keep all income to yourself	61%	67%	46%
Control on resources	Give all to husband/family	19%	12%	34%
currently	Partially with self and partially to husband/family.	20%	21%	19%
Control on resources at	Kept all income to yourself	61%	68%	45%
the start of the period	Gave all to husband/family	19%	11%	37%
under study	Partially with self and partially to husband/family.	20%	21%	18%

Control over Income before & after Loan

The data show there was no difference in control over use of resources during the period under study: 61% of the borrowers used to spend all their income by themselves, 20% spent their partial income by themselves and gave to family/husband, 19% of the borrower gave all income to their family/husbands in the current as well as in the previous year. Gender segregated results also do not support the hypothesis, as 46% and 45%, of the female used to keep their income to themselves in current and previous years respectively.

Conclusion:

Based on the data concerning change in perceived social status, participation in politics and control over financial resources we get a mixed picture. However on the whol the borrower group seems to have improved its social status during the period under study.

The hypothesis is held.



Section 8

RETURN on INVESTMENT (ROI)

Considering that we are dealing with micro-credit to household based micro-enterprises, it is very hazardous to calculate business expenses and deduct them from revenues accruing in both cash and kind for calculating the rate of return on loans averaging at Rs. 9,000, a part or all of which may have been used for business investments usually lumped up with a host of other expenses, loans and investments. Yet we have made an attempt.

We have tried to calculate the Return on Investment by directly asking the borrower about the estimated monetary benefits of the loan during its overall tenure. The responding borrowers were requested to summarize in monetary terms the profit earned on the loan, which they had received. They were asked to compute the amount borrowed and the profit earned. On this basis a rough Return on Investment was calculated. So the ROI estimated here is totally based upon the borrower's own perception. The following table reflects the ROI data.

ROI	Number of	Borrowers			
ROI	Count	Percentage			
Negative	20	2%			
Nil	114	13%			
1 to 20 %	186	22%			
21 to 50%	316	37%			
51% to 100%	140	16%			
101% and above	83	10%			
Total	859	100			
Average Gross ROI	50%				
Estimated costs of	20%				
financing	20%				
Net ROI		30%			

Return on Investment (ROI)

Computed from a quantitative and descriptive summary statement made by the borrowers

Around 2% of the borrowers reported negative ROI, 13% reported nil ROI. It shows that around 15% of borrowers experienced no economic benefit or even faced loss; about 22% of the borrowers experienced up to 20 percent return on their investment exclusively by loan taken from PPAF¹, 37% of the borrowers experienced benefit from 21 to 50 percent and 26% experienced more than 50 percent benefit. Since these figures do not take into account the cost of financing, they should be adjusted accordingly.

¹ The benefit of loan taken from any other source or other investment has been deducted from the total monetary benefit.



Analysis by purpose of loan: The following tables present the ROI figures according to the loan purpose.

(Cost of financing has not been deducted)		
ROI	Number of borrowers	
KOI	Count	Percentage
Negative	9	3%
Nil	26	9%
1 to 20 %	48	17%
21 to 50%	101	35%
51% to 100%	71	25%
101% and above	32	11%
Total	286	100

	ROI "Enterprise"	
st	of financing has not been de	duct

Average ROI	61%
Estimated cost of financing	20%
Net ROI	41%

ROI "Livestock"

(Cost of financing has not been deducted)		
	Number of Borrowers	
	Count	Percentage
Negative	4	2%
Nil	34	14%
1 to 20 %	61	25%
21 to 50%	101	41%
51% to 100%	36	14%
101% and above	12	5%
Total	248	100

Average ROI	40%
Estimated cost of financing	20%
Net ROI	20%

ROI "Agriculture"

(Cost of financing has not been deducted)

	Number of	Number of Borrowers	
	Count	Percentage	
Negative	3	1%	
Nil	21	8%	
1 to 20 %	63	24%	
21 to 50%	103	40%	
51% to 100%	31	12%	
101% and above	36	14%	
Total	257	100	

Average ROI	56%
Estimated cost of financing	20%
Net ROI	36%



Analysis by province: The following tables presents the ROI figures in all the four provinces.

(Cost of financing has not been deducted)		
ROI	Number of borrowers	
KOI	Count	Percentage
Negative	10	3%
Nil	23	7%
1 to 20 %	62	19%
21 to 50%	147	44%
51% to 100%	53	16%
101% and above	39	12%
Total	334	100

ROI and "Punjab" (Cost of financing has not been deducted)

Average ROI	57%
Estimated cost of financing	20%
Net ROI	37%

ROI "NWFP"

(Cost of financing has not been deducted)

	Number of Borrowers	
	Count	Percentage
Negative		
Nil	6	4%
1 to 20 %	17	12%
21 to 50%	49	36%
51% to 100%	37	27%
101% and above	28	20%
Total	137	100

Average ROI	84%
Estimated cost of financing	20%
Net ROI	64%

ROI "Sindh"

(Cost of financing has not been deducted

		Number of Borrowers	
	Count	Percentage	
Negative	3	1%	
Nil	55	21%	
1 to 20 %	71	27%	
21 to 50%	86	33%	
51% to 100%	37	14%	
101% and above	12	5%	
Total	264	100	

Average ROI	33%
Estimated cost of financing	20%
Net ROI	13%



(Cost of financing has not been deducted			
	Number of Borrowers		
	Count	Percentage	
Negative	7	6%	
Nil	29	24%	
1 to 20 %	36	30%	
21 to 50%	34	28%	
51% to 100%	13	11%	
101% and above	3	2%	
Total	122	100	

ROI "Balochistan"

Average ROI	28%
Estimated cost of financing	20%
Net ROI	8%

Analysis by Gender: The following tables presents the ROI figures in all the four provinces.

(Cost of financing has not been deducted)		
ROI	Number of borrowers	
KOI	Count	Percentage
Negative	8	1%
Nil	78	13%
1 to 20 %	148	25%
21 to 50%	236	40%
51% to 100%	85	14%
101% and above	36	6%
Total	591	100

ROI and "Male" Borrowers (Cost of financing has not been deducted)

Average ROI	42%
Estimated cost of financing	20%
Net ROI	22%

ROI and "Female" Borrowers

(Cost of financing has not been deducted)

	Number of Borrowers	
	Count	Percentage
Negative	12	5%
Nil	35	13%
1 to 20 %	38	14%
21 to 50%	80	30%
51% to 100%	55	21%
101% and above	46	17%
Total	266	100

Average ROI	69%
Estimated cost of financing	20%
Net ROI	49%

On the whole it could be inferred from the above statistics that when asked to describe the rate of return on their loan almost 80 percent of the sampled borrowers said they had benefit from the loan while only 20% of the clients said they had experienced negative or nil ROI.

Alternative Computation:

Net ROI

The ROI of the borrower was also calculated through another procedure to cross-check the results obtained from the summary statement of the borrower, as explained above. In this method the difference of aggregate income of the borrower for previous and current year was divided by the loan value i.e. the change in income was divided by the change in capital. The subsequent table shows the results.

	Number of Borrowers	
	Count	Percentage
Negative	109	13%
Nil	400	46%
1 to 20 %	63	7%
21 to 50%	80	9%
51% to 100%	81	9%
101% and above	125	14%
Total	858	100
Average ROI	48%	
Estimated cost of financing	20%	

30%

ROI Computed by Alternate Method

According to the above table around 60% of the borrowers experienced no or negative change in ROI, while around 40% of the borrowers should having earned a profit. The average ROI is reported to be 48%. If we compare the results obtained from the two methods it appears that the average values from both methods are roughly the same while the percentages of borrowers showing profits are inconsistent. The results show the difficulties in estimating the impact of micro finance loans on household based micro businesses. It may be appropriate to draw conclusions by keeping in view the reported findings through both methods of calculating Return on Investment. However there is adequate indication that one half or more or the borrowers feel they earned a profit, and on the average the net ROI is approximately 30% on loans averaging slightly under Rs. 10,000.



Section 9

Views and Opinions ABOUT BORROWING

The questionnaire included a number of queries on borrowers perception about loans from PPAF's and other sources. Given below are the findings.

Attitude towards borrowing from other source:

Around 2% of the PPAF borrowers had obtained another loan from the Agriculture Bank at some point. The remaining 97% who claimed not to have borrowed from this source provided reasons such as: did not require (32%), repayment conditions are strict (22%), markup is high (20%) and others (19%). Only 0.2% of the borrowers took loan from a commercial bank. The reasons stated for not taking loan from commercial bank were more or less the same as in case of Agriculture Bank.

When asked about loan taken from relatives/friends, only 4% said yes had taken loan from relatives/friends. Reasons given for non-borrowing from this source included: don't like to borrow from them (38%), repayment conditions are tough (14%), they don't give loan (32%), mark up is high (5%), matter of prestige (7%). Only 0.6% of the borrowers obtained loan from a moneylender and around 0.2% had borrowed from *aarhti*.

20% of those who had borrowed from some other sources also gave certain guarantee against that loan. The guarantee included land (25%), jewelry (7%), livestock (7%), house (4%) and personal guarantee (57%).

Views on Need Fulfillment and Preferred Value of Loan:

The average value of the amount of loan which they had taken was reported to be around Rs.9,381 ranging from Rs.1500 to Rs.30,000 *(in respondents own assessment)* while the average value of the loan they desired to get was around Rs.17,136. The subsequent table reflects the borrower's desired amount of loan.

Figure 9.1	
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Loan requirement			
	Number of Bo	Number of Borrowers	
	Count	Percentage	
Up to 5,000	116	14%	
5001 to 10,000	337	39%	
10,001 to 30,000	332	39%	
30,001 and above	73	8%	
Total	858	100	



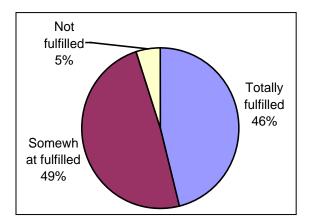
The statistics show that around 53% of the borrower did not show preference for loan over 10,000 while the remaining were keen for loans of higher value including 8% who were keen to get loan higher than 30,000.

On asking about how they made up for the difference between the required amounts and provided amount, 33% replied that they could not compensate the difference between the two; 17% said that they made up for the difference by borrowing from somewhere else, 43% fulfilled it by own savings and 5% by taking assistance from miscellaneous sources.

On asking about the extent to which their need was fulfilled through the loan taken from PPAF, 46% claimed that their needs had been totally fulfilled, 49% claimed that their need was somewhat fulfilled and only according to 5%, their need was not fulfilled through the loan.



Fulfillment of Need through Loan

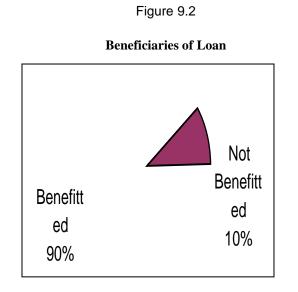


Further, the borrowers were asked about the increment in their income through the loan. Responding to this 25% reported high increment in their income, 54% reported some increment in their income, 13% reported very low increment, 5% reported no increment in their income while 2% of the borrowers said they faced loss. This was only vaguely consistent with the findings obtained through other quantitatively framed questions.

Another question put before the borrower was on whether they felt their life had changed after taking loan. In response they said their business improved (28%), their household prospered (32%), they got mental satisfaction (6%), got relief from high markup loan (6%), got financial independence (6%), household production increased (2%) and savings increased (1%). Conversely 9% said the purpose of loan was not fulfilled and 2% said that their problems increased.



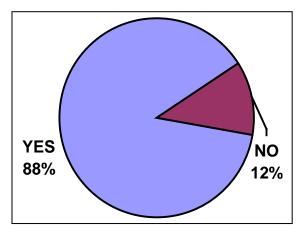
On the whole data show that almost 90% of the sample perceived that the loan had benefited them.



The borrowers were also asked if they would like to obtain another loan from PPAF; 88% replied in the positive.



Want to again get loan from PPAF?





RECOMMENDATIONS FOR FOLLOW UP RESEARCH

The results of the evaluation of the PPAF show that despite certain limitations the funds provided to the ultimate borrower through the POs had on the whole resulted in high rates of return, had empowered the poor and deprived groups especially women to participate more actively in social affairs of the community and had a favorable impact on the poverty alleviation front. Not withstanding the importance of this first assessment, there is a need for an evaluation of the programme intervention on a continuing basis with a more comprehensive scope of the evaluation. Certain areas requiring larger attention in future evaluations are highlighted below.

First, there is a need to evaluate the impact of small-scale physical and social infrastructure in further evaluation work. The present study had focused on the impact of micro-finance in terms of higher private incomes and their impact on poverty reduction. The impact of the PPAF programs on and through social infrastructure fell outside the scope of this study, but needs to be undertaken.

Second, there is a further issue of ensuring sustainability of benefits from program intervention. There is a need to assess the base-line situation of relevant capacity in each of the proposed sectors of PPAF for physical and human infrastructure. There is a need to assess the efficiency of privatization of physical and social infrastructure.

Third, the need to ensure the favorable outcome of PPAF within the framework of PRSP is urgent. PPAF's institutional innovation with respect to procedures of loan appraisals has mobilized community resource and improved their efficient use. There is a need to have case studies to promote understanding of how and why changes have occurred as a result of PPAF progress.

Last but not the least, there is a need to develop an MIS for the PPAF to ensure that the fund always stays ahead of the new and emerging challenges.



Sample Profile

The achieved sample included a total of 859 borrower or client households and 859 nonborrower households, that is, the control group. They were selected from all the four provinces and represented all the Partner Organisations funded by PPAF. The field work was conducted among 140 Community Organisations (COs) located in 17 districts all across the country.

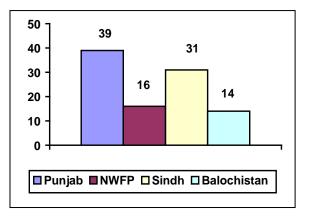
	District	Planned Sample	Achieved Sample
	Punjab	696	672
1	Rawalpindi	144	144
2	Lahore	144	132
3	Gujranwala	24	12
4	Sheikhupura	24	24
5	Bhakkar	180	180
6	Lodhran	180	180
	NWFP	288	274
7	Malakand	132	118
8	Battagram	24	24
9	Mansehra	132	132
	Sindh	528	528
10	Hydrabad	144	146
11	Sanghar	36	36
12	Badin	120	120
13	Tharparkar	60	60
14	Thatha	168	166
	Balochistan	288	244
15	Quetta	120	60
16	Mastung	24	48
17	Gawadar	144	136
	Total	1800	1718

National Distribution of the Planned and Achieved Sample of Households

A brief socio-economic profile of the sample is given below:

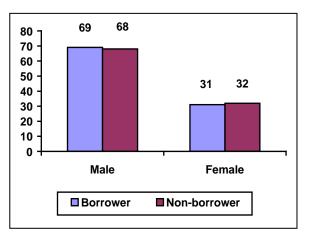
Provincial Distribution: The geographical division of the sample shows that 39% of the sample was taken from Punjab, 16% from NWFP, 31% from Sindh and 14% from Balochistan. The sample was drawn from each province is according to the population of the PPAF's borrowers in that area. The proportion of borrower and control group was exactly same in each specified area.





Province-wise distribution of the sample

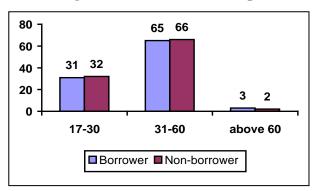
Gender: The sample comprised both men and women as both are eligible for getting loan. Around 69% of the borrowers were male and the remaining 31% were female. Similarly among the non-borrower 68% were male and 32% were female.



Gender-wise distribution of the sample

Age: The borrower and the non-borrower groups comprised both men and women of age 17 to 80 years for borrowers and 18 to 85 for non-borrowers with the average age of 38 (borrower) and 37 (non-borrower). Around 31% (borrower) and 32% (non-borrower) were in the younger (17-30) age group; nearly 65% (borrower) and 66% (non-borrower) were in middle aged (31-60) group and almost 3% (borrower) and 2% (non-borrower) were above 60 years of age.

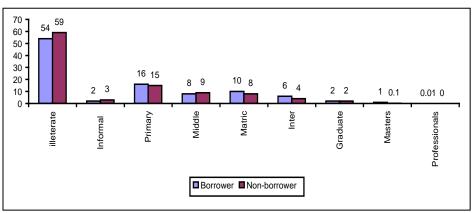




Age distribution of the sample

Literacy: Around 54% and 59% of the borrower and non-borrower respectively had never attended school, 2% (borrower) and 3%(non-borrower) of them had religious education. 16% (borrower) and 15% (non-borrower), 8% (borrower) and 9% (non-borrower), 10% (borrower) and 8% (non-borrower), 6% (borrower) and 4% (non-borrower) had education up to primary, middle, matriculation and intermediate respectively. Nearly 2% of both groups had acquired bachelor's degree and only 1% and 0.1% of borrower and non-borrower respectively had attained masters degree. Among borrower one case reported to have professional degree. It is quite evident that literacy figures were consistent for both groups.



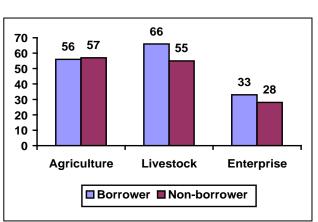




Economic Activity: PPAF membership includes three categories of borrowers who belong to agriculture, livestock and enterprise/commerce.

- □ Agriculture related are defined as those who cultivates either own land or others land on lease.
- □ Livestock related are defined as those who keep animals and use their production for consumption or for earning income.
- □ Enterprise/commerce related are defined as those who operate any other non-agriculture enterprise for earning purposes.

The company provides loan for only these three main categories. The data show that around 56% cultivate land, 66% keep livestock and 33% of the borrower related with enterprise/commerce. Similarly 57%, 55% and 28% of the control group related with these occupations respectively. Since several respondents had ore than one occupations, the sum is greater than 100.

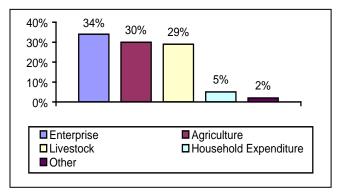


Occupational distribution of the sample

The distribution of economic activity among borrowers of various provinces shows that in Punjab 67% of the borrowers belonged to agriculture, 72% to livestock and 31% to enterprise/commerce. In NWFP, 75%, 71% and 34% belonged to the same occupations respectively, for Sindh figures are 58%, 78% and 17% and in Balochistan 3%, 13% and 70% of the borrowers belong to the same economic activities respectively.

Purpose of loan: The sample of borrower had also been segregated according to the purpose for which the loan was taken. The data show that around 34% of the borrowers in the sample had obtained loan for enterprise/commerce, 29% for livestock and 30% for agriculture. Additionally 5% of the sample took loan for household expenditure and 2% for unspecified purpose.





Distribution of the sample by purpose of loan

The following table gives a summary of the profile of borrowers.

		%
	Agriculture	56
Occupation	Livestock	66
	Enterprise	33
Gender	Male	69
Gender	Female	31
	Irrigated	41
Type of land	Arid	55
	Both	4
	Agriculture	30
Purpose of loan	Livestock	29
	Enterprise	34
Status	Repeated borrower	55
Status	Once borrower	45
	1-6 months	27
Lean Dunitian	7-11 months	15
Loan Duration	12 months	54
	13 months and Above.	4
Average loan value	Rs.9, 381	

Summary of the socio-economic profile of the Borrowers included in the sample



List of POs Covered

S.No.	POs
1	National Rural Support Programme (NRSP)
2	Sarhad Rural Support Programme (SRSP)
3	Kashaf Foundation
4	Sindh Agriculture and Forestry Workers Coordinating Organisation (SAFWCO)
5	Development Action for Mobilization and Emancipation (DAMEN)
6	Jinnah Welfare Society (JWS)
7	Taraqee Trust (TT)
8	Balochistan Rural Support Programme (BRSP)
9	Rural Community Development Society (RCDS)
10	Thardeep Rural Development Programme (TRDP)

List of COs Covered

S.No	COs	S.No	COs
			DEHI KHAWATIN TANZIM UMER
1	2 RM	31	DAR NRSP
2	MAKHNI	32	DEHI KHAWATIN TANZIM
		32	WAZIRABAD NO 1
3	1 RM	33	DEHI TANZIM GUL BABA NRSP
4	CHALU KHAIL	34	DEHI TANZIM HABAT GRAM – III
5	DAKI RANGO KHAIL	35	DEHI TANZIM HABAT GRAM – I
6	LARA	36	DEHI TANZIM HABAT GRAM
7	RAKHO KHASOR / QASOOR	37	ALI KHAIL NRSP
8	26ML	38	LOONDIA
9	210 TDA	39	LATGRAM
10	FASIL – II	40	ASANULLAH MOHALLAH
11	AWATAN WALA – II	41	MAKI MASJI MUHALLAH
12	29 ML	42	BALOCH MOHALLAH
13	KARTANAWALA	43	SHEIKH UMER
14	LARA – 11	44	ZOBAK MOHLA
15	KHAYARY WALA	45	GHULAM COLONY
16	MONI SHAH WALA	46	MOHAMMAD BUKSH MOHALLAH
17	BASTI SHAH WALA	47	MULA BAND ROAD
18	SAFAID BARAMOLA SRSP	48	ABU BAKER MOHALLAH
18	MANSHERA	40	ADU DAKER MOHALLAH
19	DAHI TARQEYATI TANZIM	49	HABIB SHAKRI ROAD
	KUMARNAKA SRSP DEHI TARQEYATI TANZIM BEDER		
20	BELA	50	GHULAM SARWAR
	DEHI TANZIM DOHARAY PEERAN	51	
21	SRSP	51	ZAMINDAR M/44
22	DEHI TANIM DANA CHATERLAY	52	HAWALI WALA
	SRSP		
23	DEHI TARQEYATI TANZIM BARA MOLA	53	ITEHAD
	DEHI TARQEYATI TANZIM		
24	LONDIAN	54	SHAHNAL
25	KHALI KOD	55	KHUSHAL KISAN
26	DEHI TARQEYATI TANZIM	56	JINNAH
20	SAFAIDA	50	JIMMAII
27	DEHI TANZIM KARKAY SYEDAN	57	AWAZ
	SRSP DEHI KHAWATEEN TANZIM		
28	SANBIL SRSP	58	388-WB
29	MOLANU CHAM NRSP	59	AL-REHMAN
	GARHI HAZRAT KHAIL TARQEYATI		
30	TANZIM (NRSP)	60	ALHAFIZ

S.No	COs
61	CHAND
62	SANJHA
63	AL-FAIZ
64	AROOM
65	GHOCIA AKANU
66	SOTHATHARA
67	P.D.C AKASH
68	SAGAR MAKWAR
69	HARHABAR
70	MANGHAR HARA
71	TARQI TRUST T.T
72	TARQI PPAF
73	GHRO MEERO
74	В
75	TANZIM KALI DINYA KHAN
76	HASHIM HALARI
77	JMOSAGI
78	KAKO MANGWANO NRSP
79	KAMAROSARIF
00	NRSP GHOT KHATAR KHAN
80	SOLANGI THADO LUCHADI NDED
81	THARO LUGHARI NRSP
82	KONJ GHOT KAL MOHAMMAD JHAGRI
83	NRSP
84	HAMDARD
85	AZAM BROHI
86	DOST ALI PALARI
87	NOOR MOHAMMAD CHANDU
88	BAND BHABHRO
89	MIRZA CHANG
90	LIYAR SHADY
91	QASIM HASMALI
92	SANI BABA
93	MOTI JI MIAN
94	ALDSHAKAR
05	ΡΛΕΡΙΙΤΛ

95 PAEPUTA

S.No	COs
96	ALMADAD
97	SAKHI BABA
98	SALAHAY GRANY
99	CRIPTION GROUP
100	HAJI MUBARIK
101	HASAN WAFRAI
102	DODO JHANDAR
103	НАВТА
104	SAHIB DONOMENO
105	AL=JELANI
106	MOHAMMAD HASHIM
107	GHULAM MOHAMMAD BROHI
108	BHARWAL DOLAL
109	HAMID JHANGI NRSP
110	BHAG PUR
111	HAZRAT FAIL NRSP
112	SOOD
113	BAGH PUR
114	MAKU WAL GOJAR
115	DEHI TARQYATI TANZIM
116	DEHI TARQYATI TANZIM
117	DEHI TANZIM DASEGAL
118	LODHAL
119	LODEYA
120	BORAY A.T
121	KHAN PUR NRSP
100	DEHI TARQYATI TANZIM
122	CHAWRYAN DEHI TADOVATI TANZIM DAHU
123	DEHI TARQYATI TANZIM DAHU SHAHU
120	DEHI TARQYATI TANZIM MALA
124	KANT
125	ABAB KOLAR MOHALLAH
126	ZAHEER BARACH
127	SAGAR MANFIGWAL
128	ZAMINDAR
129	CHRISTIAN GROUP

Annexure 1

TECHNICAL NOTE

The study design has been built on the grounds that of matching the two groups on key variables like gender, household income, dependency ratio, age group and main occupation in time period t1 and then measuring change between time period t1 and t2 on key variables such as income, consumption, asset holding, improvement in lifestyle etc... For example if we take the change in income, it has been calculated through the following formula.

Percentage change in = $\underline{\text{Income in t1-Income in t2}}$ x 100 Income in t2

This formula has been applied to measure the change in income of borrower as well as non-borrower group in t1 based on t2.

Our hypothesis (*alternate hypothesis as explained below*) is that:

Change in B (t1-t2) > Change in NB (t1-t2).

Where

B (t1-t2) is the change in the status of borrower from previous to current year. NB (t1-t2) is the change in the status of non-borrower from previous to current year.

Test of significance:

In order to assess that the change in the behavior of treatment group (borrower) and control group (non-borrower) is a "real" change and not a result of "chance" due to the nature of the sample or other factors. We have applied the requisite test of significance, t-test of significance. The test was applied at 95% and 90% confidence level as explained below.

Level of Significance:

The t-test has been applied at both 95% and 90% confidence level. In each case we tested the hypothesis of change first at 95% and only if the difference was not significant we moved to 90% confidence level. Hence when we report that the difference was significant at 90%, it would mean that the difference was not significant at 95% level.



The Null Hypothesis:

The null hypothesis was that the difference between the behavior of the treatment group (borrower sample) and control group (non-borrower sample) is not real. It emerges from chance factor.

The Alternative Hypothesis:

The alternate hypothesis is that the difference between the behavior of the treatment group (borrower sample) and control group (non-borrower sample) is real. It is caused by the intervention, that is, the effect of taking a loan. Wherever the t-test shows significant results, we have stated that the hypothesis, meaning the alternate hypothesis, has been held. This result has been reported for each of 17 hypotheses listed at the outset of the study. (page 4-9)

Definitions:

Borrower's Household: Household of the person who has obtained loan from PPAF.

Non-Borrower's Household: Household of the person who did not ever obtained loan from PPAF.

Intervention: Micro-credit provided by PPAF.

Current Year: Period from July 2001 to 2002.

Previous Year: Period from July 2000 to 2001.

Annexure 2

Main Features of PPAF

The company was registered in Pakistan on 6 February 1997 as a public company with limited liability under section 42 of the Companies Ordinance, 1984. The company is a social fund with the primary objective to help the poor, the landless and the asset-less by enabling them to gain access to the resources for productive self employment. It enables the poor to undertake activities of income generation, poverty alleviation and for enhancing the quality of life. Since experience shows that access to micro-credit is not sufficient condition to achieve the objectives of poverty alleviation, the PPAF provides funding for physical infrastructure and human resource development to maximize return from micro-finance advance to borrowers. The Fund also strengthens the institutional capacity of partner organizations and supports them in their capacity building efforts with communities. Designed to be non-profit, politically independent and transparent in its operation, company has full authority to operate without any interference by the government. The members of the Fund's general body and board of directors are respected professionals and are appointed by the government of Pakistan in consultation with civil society. The political independence of the company and its emphasis on partnership ensures that funds provided by PPAF travel an unhampered path directly to the individuals in most need of financial resources.

Under the Development Credit Agreement (DCA) signed between International Development Association (IDA) and Government of Pakistan (GOP), IDA was to provide GOP a sum of Special Drawing Right (SDR) 66.5 million over a period of five years for use by PPAF. Half of this amount is to be disbursed as loan to the company, repayable in 23 years (including a grace period of eight years) and the other half as a grant. Under a Subsidiary Financing Agreement between GOP and the company, GOP is obliged to provide PAK Rs.500 million (equivalent to US\$ 10 million) to the company as its contribution for establishing an Endowment Fund. The earning from Endowment Fund, required to be invested in highest profit yielding schemes/investment, are to be utilized to meet the running expenditure of the company.

Governing Structure of the Company

The PPAF has a three- tier structure i.e. a General Body, a Board of Directors and a management team headed by the Chief Executive. In order to achieve its objectives, the company is mandated under the Project Agreement (PA), signed between IDA and PPAF, to work through the partner organizations (PO), i.e. Non Government Organizations (NGOs), Rural support Programmes (RSPs) and other private organizations. The significant POs working in collaboration with PPAF are National Rural Support Programme (NRSP), Agha Khan Rural Support Programme (AKRSP), Sarhad Rural Support Programme (SRSP), Thardeep Rural Support, Kashf Foundation, Sindh

Agriculture & Forestry Workers Coordinating Organization (SAFWCO), Development Action for Mobilization and Emancipation (DAMEN), Family Planning Association of Pakistan, Jinnah Welfare Society (JWS), Taraqee Trust (TT), Balochistan Rural Support Programme (BRSP) and Rural Community Development Society (RCDS). It should be noted that the scope of POs covering activities in rural and urban areas and is supposed to be transferred to the poor.

There are three main components of activities of the company. Only a brief description of each type of activity is provided:

Micro-credit/Micro Enterprise

This component provides a line of credit to partner organizations that meet the eligibility criteria of funding for working capital, marketing, input supply or product development, etc. The government lends World Bank's loan to the PPAF, which in turn lends to partner organizations (PO). The PO gives micro-credit loans to group-based organizations called Community Organizations (CO). The group based procedure of loans serves as a social collateral. Peer pressure is used to monitor and enforce contracts and screen the credential of the borrowers. The company disburses Micro-credit loan to POs on an annual mark up raging from 6 percent to 8 percent. The major PO of PPAF loans is NRSP which accounted for 62% of micro financing in 2001 with geographical coverage of 19 districts countrywide. The NRSP-PPAF partnership began in April 2000.

By the end of Financial Year 2001, PPAF funding had been disbursed in urban and rural areas of 37 districts in all provinces through POs. Six of the POs are exclusively catering to females. More than 40,000 individuals have availed the facility of micro finance with loan size ranging from Rs.1000 to Rs.30,000. The average loan amounted to Rs.9,041. Among borrowers 30 percent are females. In terms of sectoral distribution, income-generating activities in agriculture/cropping accounted for nearly half of the financing (49%). Livestock represented the second largest share (31%) followed by enterprise/commerce/trading which constituted 20% share.(First Annual Report PPAF, 2001)

Community Physical Infrastructure

This activity of the PPAF supports partner organization in the form of loans or grants on a cost- sharing basis for small-scale community infrastructure sub-projects. Identification of the sub-project is demand driven. The ability of communities to recover the operations and maintenance costs is a major criterion for funding such activities. Projects funded by PPAF include irrigation, link roads, bridges/culverts, causeways and drinking water supply (accounted 50% of the all the projects). By the end of FY 2001, 1920 projects had been approved for 12 POs, involving a cumulative amount of Rs.518 million. Of this amount Rs.220 million had been disbursed for 720 projects in 29 districts.

Capacity Building:

This component supports POs, in the form of loan and grants, in capacity building of POs and the community organizations. By the end of FY 2001, cumulative financing of over Rs.276 million had been approved. Rs.70 million were disbursed and 85 training events were organized during FY 2000-1 with the key objective of ensuring efficient planning, cost effective implementation and strategic management.

Envisaged as s lead institution, the operational scope of the company extends to the entire country. Within this domain, the institution accords priority to women and relatively less developed areas. Additionally it endeavors to maintain a judicious balance between urban and rural areas as well as emerging and mature organizations.

Micro-credit groups have become the focal point leading to empowerment of the poor. The groups build communities of women; create the collective will, the solidarity, the trust and respect, the network of alliances, which are essential elements of social capital.

It should be noted that while micro financing for the poor benefits mainly the borrowers, the impact of physical infrastructure benefit both borrower and non-borrower in the community, the non-borrower could not be excluded from the impact of physical infrastructure.