

SOCIO-ECONOMIC BASELINE SURVEY OF KANDIARO TALUKA DISTRICT NAUSHERO FEROZE, SINDH



Impact Assessment Unit (IAU)
Rural Support Programmes Network
Islamabad

DFID Department for
International
Development

Socio-Economic Baseline Survey of Kandiaro Taluka, District Naushero Feroze, Sindh

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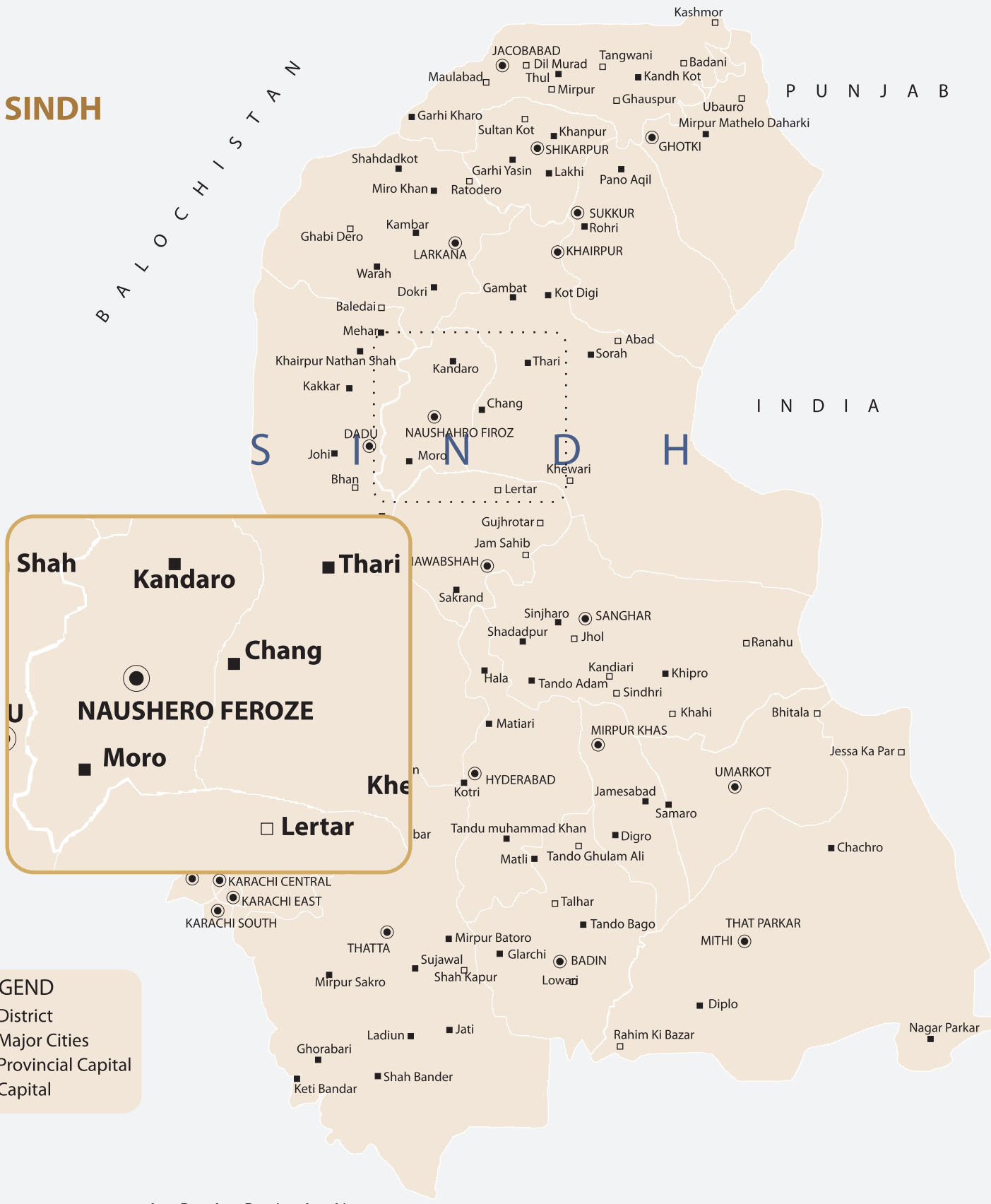
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SINDH



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S E A



RSPN SOCIO-ECONOMIC SURVEY SERIES REPORT # 01

SINDH RURAL SUPPORT ORGANISATION (SRSO)

SOCIO-ECONOMIC BASELINE SURVEY

Kandiario Taluka, District Naushero Feroze
SINDH

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Preface

One of the key challenges for development programmes is to capture the impact of their work. It has been our concerted endeavour at the Rural Support Programmes Network (RSPN) to strengthen our Monitoring & Evaluation (M&E) systems and processes and to assess programme impact. For this purpose, the RSPN has established an Impact Assessment Unit (IAU) with professional expertise in this area. The work of the IAU is also to build the M&E capacities of professionals within the RSPs. Training courses are organised by our own resource persons from the RSPs while also offering on-the-job advice to RSPs' M&E staff.

This document is one of a series of 11 baseline surveys conducted by the RSPN's IAU. Quantitative research methods are used to establish benchmarks, on the basis of which impact assessments can be carried out later. The processes involved in these baseline surveys provide hands-on training for RSPs' M&E professionals by involving them as enumerators for primary data collection, as well as supervisors in data cleaning and entry stages. Data analysis and report writing is a centralised expertise within the RSPN in Islamabad.

This baseline survey was carried out in Kandiaro Taluka of District Naushero Feroze, Sindh, using a sample of 399 rural respondents. This baseline will be used to carry out an impact assessment of the Sindh Rural Support Organisation's programme in this area in 2011. SPSS software was used to analyse the primary data. The document includes a demographic profile, basic analysis on education and health, the economic condition of households in terms of absolute poverty and asset ownership, loans and debts, etc. A special effort has been made to bifurcate indicators and data between poor and non-poor respondents. An interesting dimension of women's and men's perception on problems and the status of household level decision-making has also been presented.

The information and analysis contained in this document will hopefully be of use to the RSPs in enhancing their programme analysis and design, in future, apart from serving as a benchmark for future impact assessment.

RSPN is grateful to Dr Mahmood Hasan Khan, Professor Emeritus, Simon Fraser University, Canada for helping us in institutionalising the process of baselines and impact assessments at the RSPN.

Shandana Khan

Chief Executive Officer

Acknowledgments

RSPN is pleased to present the Socio-Economic Survey of Kandiaro Taluka, District Naushero Feroze, Sindh for the year 2006. This report is the outcome of a joint effort of Rural Support Programmes Network (RSPN) and Sindh Rural Support Organisation (SRSO). The whole-hearted support and encouragement of Mr. Nazar Memon, CEO, SRSO and Mr. Ali Ahmad Khoso, GM, Operations, SRSO have made this survey a success. Thanks are also due to all the enumerators, who were largely SRSO's field staff, for undertaking this challenging exercise with interest and dedication. The survey team is particularly grateful to the respondents in the survey area, who extended their cooperation and provided useful information to complete this survey. The support of Mr. Sabir the SPSS expert is also recognised whose services made the data tabulation possible in its meaningful manner. We are also grateful to all RSPN staff who provided useful inputs to us in adding many new dimensions to the survey questionnaire.

We are thankful to Ms. Shandana Khan, CEO, RSPN for her constant guidance and support throughout from concept to production of the final report. We also thank Mr. Khaleel Ahmed Tetlay COO, RSPN who reviewed the draft and provided useful suggestions on improving the presentation of the report.

RSPN is also grateful to DFID for providing the financial support for undertaking the study and to some of its key staff who provided technical advice on the questionnaire, methodology and analysis.

Finally, deep appreciation is extended to Dr. Mahmood Hasan Khan for review and analysis of the tables including the write up. He provided many useful comments that helped us in improving the quality of the document.

Sarmad Khan
Ehsan-ul-Haq

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Acronyms

- DFID:** Department for International Development
- GM:** General Manager
- HCR:** Head Count Ratio
- HIES:** Household Income and Expenditure Survey
- MER:** Monitoring, Evaluation and Research
- M&E:** Monitoring and Evaluation
- MTDF:** Medium Term Development Framework
- NRSP:** National Rural Support Programme
- PCO:** Public Call Office
- PGR:** Poverty Gap Ratio
- PIHS:** Pakistan Integrated Household Survey
- PIES:** Pakistan Income and Expenditure Survey
- PRSP:** Poverty Reduction Strategy Paper
- PSLM:** Pakistan Social and Living Standards Measurement
- RSPN:** Rural Support Programmes Network
- RSPs:** Rural Support Programmes
- SRR:** Severity of Poverty Ratio
- SRSO:** Sindh Rural Support Organisation

Executive Summary

This socio economic survey provides key benchmark data for future impact assessment of SRSO's programme interventions in Kandiaro, Naushero Feroze. A Quasi-Experimental Design Treatment and Control Survey Method (Khan 2004) has been used in this survey. Sample size selected for this survey comprised of 399 households with 189 households from treatment and 210 households from control villages. Summary of the results are given as under:

Distance of Infrastructure/Services from Sample Villages: Survey results indicated that both treatment and control villages lack the facility of clean drinking water, drainage systems and paved paths, while most of the villages have been electrified. Generally treatment villages are better connected to physical and social infrastructure than that of control villages. The average distance (KM) in accessing health, education, market, and transportation services are lower in treatment villages as compared to that of control villages.

Profile of Respondents: For both participating and non-participating households, the bulk number of respondents belongs to the younger age bracket. The average age of member respondents is 36 years, less than the average age of 41 years in the non-member villages. One-third of the respondents are not-literate. The rate of not-literate respondents is even higher in control villages than that of treatment villages, which is 42.4 percent and 24.9 percent respectively. The dominant profession of the respondents is found to be labour (41 percent) followed by farming (31 percent). Nearly five percent of the respondents were reported as being unemployed.

Demographic Composition: The average household size is 9.5 persons with 11.5 persons in poor households and 7.2 persons in non-poor households. It seems that family size tends to fall as level of per capita income rises and this relationship in the sample is statistically significant. The total male-female ratio is 115:100 without any significant difference

among the sub-samples. The dependency ratio is 58 percent in the overall sample with a higher rate in non-participating households than the participating households which is 60 percent and 55 percent respectively.

Work Status of Households: In the overall sample, a higher proportion of the population is engaged in household work (47 percent) followed by the outside household work (44 percent) and 10 percent is not working at all. Women are confined to household work; 90 percent of the women are engaged in housework followed by 6 percent as not working and a very low, 4 percent work outside the household. Distribution of the working population in different farm and off-farm activities show that a higher proportion of working population is engaged in casual labour (46 percent) followed by farming (20 percent) and only 16 percent of the working population is involved in long term employment within the public and/or private sector. Only three percent of the working population is engaged in trade and business. A significantly higher proportion of women (23 percent) than men (15 percent) are engaged in multiple kinds of work.

Adult Literacy and Schooling of Children: Overall, 56 percent of adults (34 percent men and 82 percent women) are not-literate. The proportion of not-literate adults is much higher in control villages (63 percent) than that of treatment villages (49 percent). Similarly the poor households have a higher proportion of not-literate adults than that of the non-poor households for both men and women. Among the literate adults 30 percent got primary level (up to 5th grade) education while another 30 percent attended post matriculation (above 10th grade). Around 7 percent of the literate adults across the board have never attended any formal school. Around 43 percent of the school age children are not in school with a higher proportion of female children (57 percent) as compared to male children (30 percent). The proportion of not-in-schools children is even higher for the poor households

at 78 percent and difference between poor and non-poor is statistically significant. The proportion of out-of-school children is much higher in control villages as compared to treatment villages for all sub-samples of male, female and poor.

A large proportion of the households (78 percent) reported their health status as good followed by fair state (15 percent) and then poor (7 percent).

Facilities for Household Members: A higher proportion i.e. 63 percent of households have *katcha* (mud-based) structure followed by 25 percent having mixed structure, which is partly *katcha* and partly *pacca* (made of bricks and concrete) and 12 percent of houses have entirely *pacca* structure. The proportion of households having *katcha* structure is quite higher in control villages (70 percent) than that of treatment villages (54.5 percent). The average number of rooms per household is even less than 2 without any difference between control and treatment villages. More than two-third of the sample households depend on water source from hand pump and only 28 percent have access to piped water. Similarly 40 percent of the households do not have access to drainage facility with higher proportion in treatment villages as compared to control villages. Promisingly, majority of the households have electricity and in-door latrine facilities whereby 83 percent of households have in-door latrines and 82 percent of households enjoy electricity facility.

Household Incomes, Inequality and Poverty: In the overall sample, the average monthly per capita income is Rs. 839. The average per capita monthly income of member households is the highest at Rs. 915 followed by Rs. 892 in the non-members of treatment villages and Rs. 781 for the households in control villages.

With the exception of the households in control villages, the average monthly per capita income of member and non-member households in treatment villages is higher than the national poverty line income of Rs. 879. More than two-third of the population is living below the poverty line with a higher proportion of poor population found in control villages (72 percent) than in treatment villages (63 percent).

Agriculture (livestock and crops) is the single largest source of income followed by labour than services. The survey results revealed quite egalitarian distribution of income among the

households with concentration ratio of 0.25.

Household Expenditure and Consumption: The monthly per capita expenditure is Rs. 757 with higher per capita expenditure in participating households (Rs. 836) as compared to the non-participating households (Rs. 787). In poor households, the monthly per capita expenditure ranges from Rs. 695 in member households to Rs. 734 in non-member households of treatment villages. Nevertheless, across all the sub-samples the monthly per-capita expenditure of poor households is higher than their monthly per-capita income level and reverse is true in case of non-poor households. The single largest share of household expenditure is consumed by food (68 percent) followed by health care (7 percent) then clothing (6 percent) without any significant difference among the sub-samples. Education has a share of 2.3 percent in total expenditure in the overall sample. Despite high share of food expenditure in total expenditure the average calories intake per capita by the poor households is much lower ranging from 1840 calories in control villages to 2112 calories in non-member households of treatment villages. The calories intake for non-poor households is higher in the range of 2643 to 2727 calories per capita per day which is higher than the national poverty line level of calories intake (2500) defined by the government.

Household Assets, Value and Distribution: The average value of assets per household is Rs. 363,142. The number ranges from Rs. 575,013 in participating to half of that in the non-participating households. Productive assets have a share of 61 percent, followed by consumer durables (34 percent) and savings at 5 percent in the total value of assets. The average value of the assets of the poor households is just 60 percent of the value of the assets of the non-poor households.

Land and Livestock: The average size of land-holding per owner household in control villages and treatment villages is 5.3 acres and 6.9 acres respectively. The average size of land-holding is lower in poor households at 5.2 acres. Despite the fact that land is the principal productive asset, 59 percent of the sample households are landless. The proportion of landless households is much higher in control villages (70.5 percent) than that of the treatment villages (47 percent). The distribution of land is highly skewed with concentration ratio of 0.72 (including the landless) and 0.51 (excluding the landless)

illustrating an unequal distribution of land among the land holders.

Household Loan, Utilisation and Sources: The average size of loan per household is Rs. 32,464 with 46 percent of the sample households who have taken loans. Majority of the households have taken loans from informal sources (friends, relatives and shopkeepers) jointly contributing 51 percent of the loan amount, while in the formal sector, banks have a share of 40 percent in the loan amount. In the overall sample a higher proportion of loan amount is utilised on productive purposes (41 percent) followed by education and health (16 percent), and then housing (14 percent). Compared to the poor households, the non-poor households utilise a higher proportion of loan taken on productive purpose followed by loan amount spending on social-functions and then housing. In the overall sample, nearly 41 percent of the households are in debt and debt-to-assets ratio is 8 percent with an overall average net-worth of Rs. 336,178.

Perceptions on Problems and Household Level Decision Making: Men rated unemployment, followed by poverty, inaccessibility to credit and lack of saving as serious problems. On the contrary, women face serious problems in accessing fuel wood, and health care facility. Though most of the household decisions are taken by men. However, men and women do cooperate and consult with each other to take decisions regarding children's marriage and family planning.

1. Introduction

1.1 Background

The Rural Support Programmes (RSPs) endeavour to stimulate the development process through a participatory development approach. Meaningful partnerships are created by establishing development initiatives based on the needs identified by the local community. The Sindh Rural Support Organisation (SRSO) is among one of the nine RSPs in Pakistan that aspires to facilitate participatory rural development.

Established in 2003, SRSO operates in nine out of the 24 districts of Sindh province. SRSO is expanding its outreach into new districts; two of its latest additions are, Kandiaro Tehsil, District Naushero Feroze and Tehsil Ratodero, District Larkana. On the request of SRSO, the Rural Support Programmes Network's (RSPN) Monitoring, Evaluation and Research Unit (MER) has compiled and conducted the 'Socio-Economic Baseline Survey of Kandiaro Tehsil Naushero Feroze.'

The survey report begins with a profile of the Community Organisations (COs) from the sample villages followed by a description and analysis of the survey results, highlighting the difference among the sub samples of treatment and control group and poor and non-poor households.

There are three objectives for conducting this survey for SRSO;

- (i) Set a benchmark for the impact assessment of SRSO in the newly included programme districts in future.

- (ii) Provide the SRSO's MER staff with an opportunity of on-the-job capacity building in conducting quantitative surveys.
- (iii) Understand the socio-economic characteristics of the rural population for better programme design and implementation.

This survey focuses on the survey results of the various socio-economic indicators in the sample households. The various components of the analysis illustrate demographic profiles in, health, education, income, expenditures, poverty and inequality. The survey results include assets base of the sample households, access to credit and perceptions of the men and women respondents about the problems they face and their role in household decision making. Keeping in line with the cross-cutting theme of gender issues, the analysis is sex-disaggregated.

1.2 Sampling and Enumeration

A Quasi-Experimental Design¹ (treatment and control group with unequal number of respondents from each group) with quantitative methodology has been taken from Khan [2004], a practitioner's guide designed exclusively for RSPN and its member RSPs².

The sample frame is drawn from the Pakistan Census 1998 data for Naushero Feroze District. The Household sample is based on Gilroy [2001];

¹ The sample is designed into treatment and control group with unequal number of respondent households from each group.

² The treatment and control group are defined as:

Treatment Group: households that are members of community organisation also known as participating households.

Control Group: households that are not members of community organisation with further breakdown of:

- i. households in villages without community organisation
- ii. households that are not members of community organisation
- iii. households in villages without community organisation plus households that are not members of community organisation also referred as non-participating households

Methods of Assessment of Rural Poverty, Projects and Programmes Impact - A hand book for Practitioners in Rural Support Programmes (July 2004) by Mahmood Hasan Khan. (Professor Emeritus of Economics at Simon Fraser University, Canada). Readers interested in further literature may also see Baker [2000]

$$N = (Z * Cv / X)^2$$

Where,

z = Value of the confidence level

Cv = Coefficient of variation of one of the variables of interest in the case is landholding per household

X = Precision level or the acceptable amount of error (expressed in percent) or the difference between the averages calculated from the sample data and the population data

Using the above formula with 95 percent confidence level, 10 percent precision level and 100 percent coefficient of variation in average landholding per households (the 100 percent CV is usually taken in case of high variation in the characteristic of the variable of interest or in case of unavailability of data to calculate the actual CV), total sample size was calculated to be 384 households. In order to minimise the risk of lack of response during the data collection, the sample size was further increased by 8 percent and consequently 416 respondents from 23 villages were drawn as a random sample from the population in Kandiaro Tehsil of District Naushero Feroze. The random sample was drawn through computer-generated random numbers in MS Excel.

The poverty profiles of communities would allow SRSO to compare the state of absolute poverty of CO members with that of the overall community that includes both members and non-members [Khan 2004, page 6]. From a total of 414 randomly selected respondents, 111 are SRSO mobilised members and 89 non-members in the treatment group and 214 respondents in the control group. At the time of data cleaning some questionnaires did not reflect coherent data and therefore were rejected as outliers. As a consequence, an effective sample of 399 respondents with 189 respondents in the treatment and 210 in the control villages are part of the analysis.

The questionnaire used by Khan [2004] was further refined and some new parameters were added after due field testing (Annex-I). The questionnaire is divided into two parts with

part one dealing with the village level information, while the second component deals with collecting household level information. The household questionnaire is further divided into men and women components with individual set of questions. The questionnaires were then administered at household level with a male and a female respondent from each of the sample households respectively.

SRSO thus identified enumerators from amongst its staff who were further interviewed by RSPN's MER team to determine their ability in conducting this survey. A team of six male and two female enumerators were selected. An intensive orientation spread over three days was conducted at SRSO Head Office comprising both, classroom training and field testing. The first two days involved an orientation and explanation to the survey questionnaires, survey code, ethics and responsibilities of the enumerators during the entire process of field enumeration. The third day was used for field testing of the questionnaires by the enumerators for gaining hands-on experience in carrying out practical data collection from the field. The actual survey was conducted from May 19 to June 4, 2006.

2. Profile of Sample Villages

2.1 Community Organisations in the Sample Villages

Table 1 illustrates the main characteristics of the sample villages and COs. Starting in the month of January 2006, SRSO has organised a total of 187 households around 11 COs with an average membership of 17 households per CO. The total savings of the COs are Rs. 38,170, making an average saving per CO of Rs. 3470 and Rs. 209 per member household. As of April 2006, a total loan amount of Rs. 225, 236 has been disbursed to all the COs with an average amount of Rs. 20, 476 per CO and Rs.10, 000 per member household.

2.2 Distance of Sample Villages from Infrastructure

As shown in Table 2, the treatment villages are better connected to physical and social infrastructure than the control villages. However, agricultural and veterinary services are located at a closer distance to the control villages than the treatment villages. The majority of the villages with access to services such as the market, factory, post office, PCO³ and banks are located over 5 KM in the control villages and up to 5 KM in the treatment villages.

Table 1: Profile of Sample COs in Kandiaro Tehsil as of April 30, 2006

| S. No. | Indicators | Updates |
|--------|----------------------------------------------------|---------|
| 1 | Number of MCOs | 11 |
| 2 | Number of Members | 187 |
| 3 | Average Number of Members per MCO (April 30, 2006) | 17 |
| 4 | Average Number of Months | 3 |
| 5 | Minimum | 1 |
| 6 | Maximum | 4 |
| 7 | Average Number of Member at the Start | 15 |
| 8 | Total Savings on April 30 th , 2006 | 38,170 |
| 9 | Average MCO Saving | - |
| 10 | Initially (Rs.) | 1,180 |
| 11 | Currently (Rs.) | 3,470 |
| 12 | Average Savings per MCO Member | - |
| 13 | Initially(Rs.) | 71 |
| 14 | Currently (Rs.) | 209 |
| 15 | Total Amount of Loans (Rs.) | 22,5236 |
| 16 | Average Loan per MCO (Rs.) | 20,476 |
| 17 | Average Loan per MCO Member (Rs.) | 10,000 |
| 18 | CPI (Rs.) | 0 |

Source: SRSO Naushero Feroze District Programme Office.

³ Public call office (PCO)

Table 2: Physical and Social Infrastructure and Services in Sample Villages, 2006

| Infrastructure Services | Treatment Villages | | | | Average Distance (KM) | Control Villages | | | | Average Distance (KM) |
|-------------------------|--------------------|------|------|----|-----------------------|------------------|------|------|----|-----------------------|
| | up to 1 KM | >1-3 | >3-5 | >5 | | Up to 1 KM | >1-3 | >3-5 | >5 | |
| Metalled Road | 10 | 0 | 1 | 0 | 1.7 | 6 | 3 | 1 | 2 | 6.0 |
| Bus/Wagon Stop | 6 | 4 | 0 | 1 | 3.3 | 5 | 3 | 2 | 2 | 4.4 |
| Railway Station | 0 | 0 | 0 | 11 | 25.8 | 1 | 0 | 1 | 10 | 20.7 |
| Mandi/Market | 2 | 3 | 3 | 3 | 5.2 | 2 | 2 | 2 | 6 | 8.5 |
| Factory | 1 | 1 | 3 | 6 | 8.7 | 3 | 1 | 1 | 7 | 10.8 |
| Post Office | 2 | 4 | 3 | 2 | 4.4 | 3 | 2 | 3 | 4 | 8.6 |
| PCO | 3 | 2 | 5 | 1 | 4.2 | 3 | 4 | 4 | 1 | 5.3 |
| Bank | 2 | 1 | 3 | 5 | 8.2 | 2 | 3 | 3 | 4 | 7.4 |
| Agriculture Office | 2 | 4 | 3 | 2 | 4.5 | 3 | 2 | 1 | 6 | 10.7 |
| Veterinary (RHC) | 2 | 2 | 5 | 2 | 4.7 | 2 | 4 | 2 | 4 | 6.8 |
| Dispensary | 5 | 2 | 4 | 0 | 2.6 | 4 | 2 | 3 | 3 | 6.8 |
| Hospital (UHC) | 1 | 4 | 4 | 2 | 3.7 | 3 | 2 | 2 | 5 | 8.6 |
| Medical Store | 2 | 3 | 4 | 2 | 3.8 | 3 | 2 | 2 | 5 | 8.6 |
| Medical Doctor | 2 | 4 | 4 | 1 | 3.5 | 4 | 2 | 1 | 5 | 9.1 |
| Lady Health Visitor | 7 | 2 | 2 | 0 | 2.3 | 6 | 1 | 1 | 4 | 8.2 |
| Other Health Worker | 7 | 1 | 2 | 1 | 3.6 | 6 | 2 | 3 | 1 | 4.5 |
| Primary School: Male | 11 | 0 | 0 | 0 | 1.0 | 9 | 1 | 1 | 1 | 3.5 |
| Female | 10 | 0 | 0 | 1 | 2.7 | 9 | 1 | 1 | 1 | 3.5 |
| Mix | 11 | 0 | 0 | 0 | 1.0 | 9 | 1 | 1 | 1 | 3.5 |
| Middle School: Male | 5 | 2 | 3 | 1 | 3.6 | 4 | 3 | 4 | 1 | 3.8 |
| Female | 5 | 2 | 3 | 1 | 3.6 | 4 | 4 | 3 | 1 | 3.9 |
| Mix | 5 | 2 | 3 | 1 | 3.6 | 4 | 3 | 4 | 1 | 3.8 |
| High School: Male | 2 | 4 | 3 | 2 | 3.7 | 3 | 2 | 4 | 3 | 5.1 |
| Female | 2 | 4 | 3 | 2 | 3.7 | 4 | 1 | 4 | 3 | 5.4 |
| Mix | 7 | 0 | 3 | 1 | 4.0 | 5 | 1 | 4 | 2 | 5.3 |
| College: Male | 1 | 1 | 3 | 6 | 9.5 | 3 | 1 | 3 | 5 | 9.3 |
| Female | 1 | 1 | 3 | 6 | 9.5 | 2 | 1 | 3 | 6 | 9.2 |
| Mix | 5 | 1 | 2 | 3 | 6.7 | 4 | 1 | 2 | 5 | 8.8 |
| Library | 1 | 1 | 3 | 6 | 9.5 | 2 | 1 | 3 | 6 | 9.1 |

The treatment villages enjoy a significant advantage in transportation. Compared to the control villages, the treatment villages have a closer distance to metalled roads at 1.7 KM, whereas, the control villages are located at a much further distance of 6 KM. People in the treatment villages can access a bus or wagon on an average distance of 3.3 KM, while for the same facility people in control villages have to travel a longer distance of 4.4 KM. However, the average distance to the railway station is at longer distance for the people in treatment villages than control villages which is estimated to be 26 KM for the people in the former group and 21 KM for the people in the latter group.

Health services are located within 5 KM for most of the sample villages. Lady health workers are

located within 1 KM for all sample villages.

In terms of access to education, all the treatment villages cover primary boys schools and 90 percent have access to girls schools. On the other hand, 75 percent of the control villages have access to primary schools for boys and girls.

In terms of access to middle schools, 45 percent of the treatment villages have access to middle schools for boys and girls at a distance of 1 KM as compared to 33 percent in the control villages. However, access to college and library facilities is limited in both village categories; in majority of the villages these facilities are located at a distance greater than 5 KM.

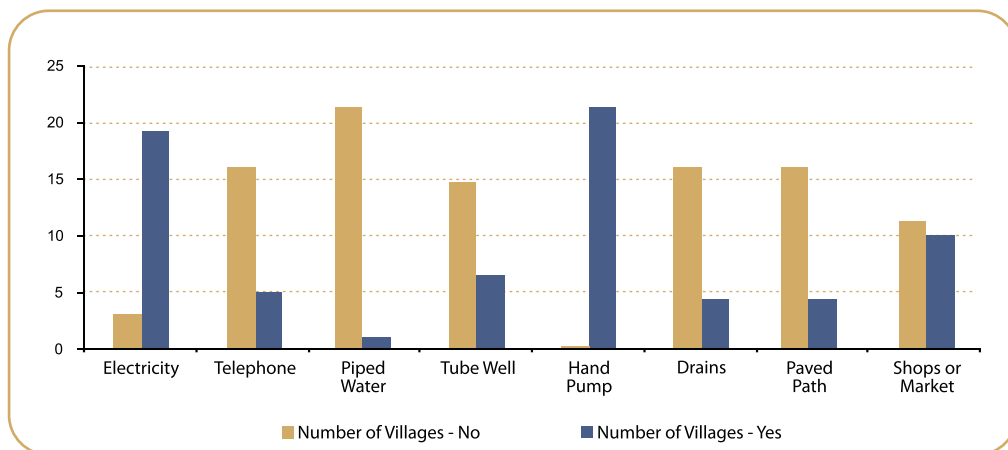
Table 3 indicates that all the sample villages have an inadequate number of drainage and portable drinking water supply facilities. Out of the 23 villages, only one of the villages has piped water and 5 villages have drains within the villages.

Fortunately, the table indicates an adequate supply of electricity, i.e. 9 out of 11 treatment villages and 11 out of 12 control villages are supplied with electricity.

Table 3: Village Infrastructure, 2006

| Infrastructure | Number of Treatment Villages | | Number of Control Villages | | Number of All Villages | |
|-----------------|------------------------------|----|----------------------------|----|------------------------|----|
| | Yes | No | Yes | No | Yes | No |
| Electricity | 9 | 2 | 11 | 1 | 20 | 3 |
| Telephone | 2 | 9 | 4 | 8 | 6 | 17 |
| Piped Water | 0 | 11 | 1 | 11 | 1 | 22 |
| Tube Well | 5 | 6 | 3 | 9 | 8 | 15 |
| Hand Pump | 11 | 0 | 12 | 0 | 23 | 0 |
| Drains | 2 | 9 | 3 | 9 | 5 | 18 |
| Paved Path | 1 | 10 | 4 | 8 | 5 | 18 |
| Shops or Market | 6 | 5 | 5 | 7 | 11 | 12 |

Figure 1: Village Infrastructure 2006 (All Villages)



3. Profile of Sample Households - Survey Results

In this section, we analyse the socio-economic characteristics of the sample households, including the profile of the respondent as a representative of the households. Here we have highlighted the difference between participating and non-participating households in the surveyed villages with respect to the socio-economic characteristics of poor and non-poor households.

3.1 Age, Education and Profession of Respondents

The sample includes 189 respondents from the treatment villages and 210 respondents from control villages. The treatment villages include 104 respondents from the CO member households and 85 respondents from those households who are not member of the CO formed in their respective villages. If we add the non-members in treatment villages and control villages, the total number of respondents from the non-participating households is 295 and 104 respondents from the participating households.

As shown in Table 4, the bulk number of respondents belongs to the younger age bracket. The average age of respondents is 40 years with 36 years for the respondents in the participating households and 41 years for the respondents in the non-participating households. Two facts are thus apparent: the members of SRSO community organisations in the study area are mostly young with an average age of 36 years, and during the survey quite a large proportion of the villagers available as respondents were as young as 16-25 years of age.

It is important to note that the custom in Sindh stresses young men to maintain a separate household after marriage; therefore the younger respondents are significantly represented in the sample.

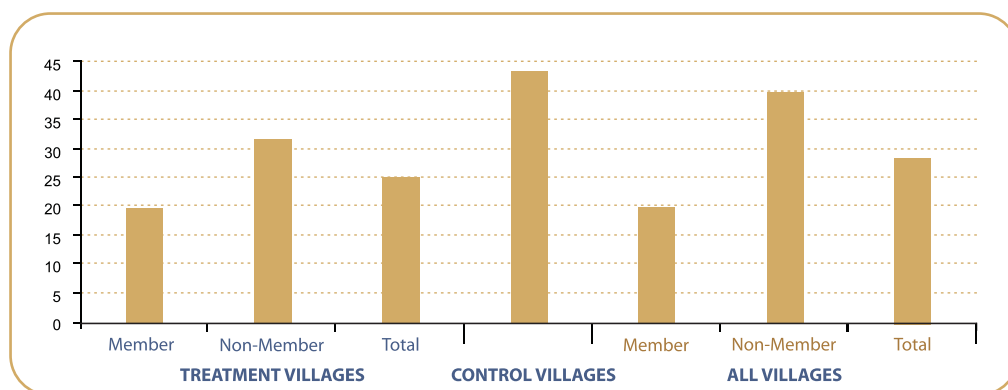
Table 4: Age of Respondents

| Respondent | Treatment Villages | | | Control Villages | All Villages | | |
|------------------------------------|--------------------|------------|------------|------------------|--------------|------------|------------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Average Age | 36 | 41 | 39 | 41 | 36 | 41 | 40 |
| Total Number of Respondents | 104 | 85 | 189 | 210 | 104 | 295 | 399 |
| Respondents % age group | | | | | | | |
| 16-25 | 24.0 | 21.2 | 22.8 | 16.7 | 24.0 | 18.0 | 19.5 |
| 26-35 | 34.6 | 27.1 | 31.2 | 28.1 | 34.6 | 27.8 | 29.6 |
| 36-45 | 23.1 | 14.1 | 19.0 | 21.9 | 23.1 | 19.7 | 20.6 |
| 46-55 | 8.7 | 17.6 | 12.7 | 15.2 | 8.7 | 15.9 | 14.0 |
| 56-65 | 4.8 | 8.2 | 6.3 | 11.9 | 4.8 | 10.8 | 9.3 |
| >65 | 4.8 | 11.8 | 7.9 | 6.2 | 4.8 | 7.8 | 7.0 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table 5: Literacy Levels of Respondents

| Respondent | Treatment Villages | | | Control Villages | All Villages | | |
|---------------------------|--------------------|------------|-------|------------------|--------------|------------|-------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Not Literate | 19.2 | 31.8 | 24.9 | 42.4 | 19.2 | 39.3 | 34.1 |
| Literate but No Schooling | 5.8 | 8.2 | 6.9 | 9.0 | 5.8 | 8.8 | 8.0 |
| Schooling | 75.00 | 60.00 | 68.25 | 48.57 | 75.00 | 51.86 | 57.89 |
| Primary | 13.5 | 18.8 | 15.9 | 24.3 | 13.5 | 22.7 | 20.3 |
| Middle | 3.8 | 10.6 | 6.9 | 6.2 | 3.8 | 7.5 | 6.5 |
| Matric | 13.5 | 15.3 | 14.3 | 4.8 | 13.5 | 7.8 | 9.3 |
| Post Matric | 44.2 | 15.3 | 31.2 | 13.3 | 44.2 | 13.9 | 21.8 |

Figure 2: Literacy Level of Respondent



The literacy rates of the respondents given in Table 5, clearly indicate that a higher proportion of respondents are found to be literate in the participating households as compared to the non-participating households. More than one-third of the respondents are not-literate in the overall sample. The difference between participating and non-participating households is quite significant. 39 percent of the respondents in non-participating households and 19 percent of respondents in the participating households are not-literate.

Among the literate respondents, the percentage of matriculate respondents in the member villages is 13.5 against 7.8 in the non-members. The percentage for post-matriculantes in member and non-member villages is 44.2 percent and 13.9 percent respectively.

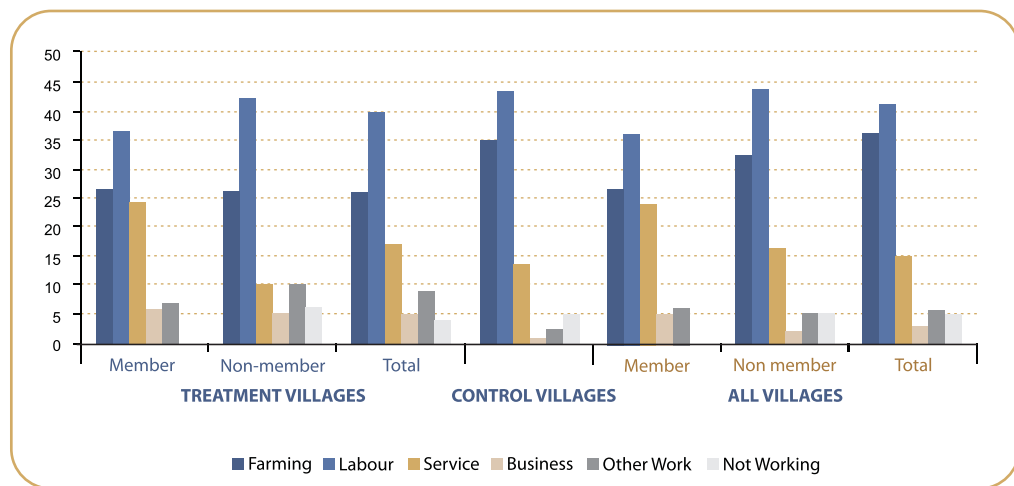
Farming and labour are the two dominant professions, whereby 43 percent of the respondents in the control villages and 39 percent in the treatment villages have reported casual labour as a profession.

The second largest occupation of the respondents is farming which is 35 percent in the control and 27 percent in the treatment villages. This is followed by employment in the service sector with 12.9 percent respondents from the control and 17.5 percent from the treatment villages. The unemployment rate is under 5 percent in all sub-samples except 1 percent for member villages.

Table 6: Profession of Respondents (Percent)

| Respondent | Treatment Villages | | | Control Villages | | | All Villages | | |
|-------------|--------------------|------------|-------|------------------|------------|-------|--------------|------------|-------|
| | Member | Non-Member | Total | Member | Non-Member | Total | Member | Non-Member | Total |
| Farming | 26.9 | 25.9 | 26.5 | 35.2 | 26.9 | 31.1 | 26.9 | 32.5 | 31.1 |
| Labour | 36.5 | 42.4 | 39.2 | 42.9 | 36.5 | 41.1 | 36.5 | 42.7 | 41.1 |
| Service | 23.1 | 10.6 | 17.5 | 12.9 | 23.1 | 15.0 | 23.1 | 12.2 | 15.0 |
| Business | 5.8 | 4.7 | 5.3 | 1.0 | 5.8 | 3.0 | 5.8 | 2.0 | 3.0 |
| Other Work | 6.7 | 10.6 | 8.5 | 2.9 | 6.7 | 5.5 | 6.7 | 5.1 | 5.5 |
| Not Working | 1.0 | 5.9 | 3.2 | 5.2 | 1.0 | 4.3 | 1.0 | 5.4 | 4.3 |

Figure 3: Profession of Respondent (Percent)

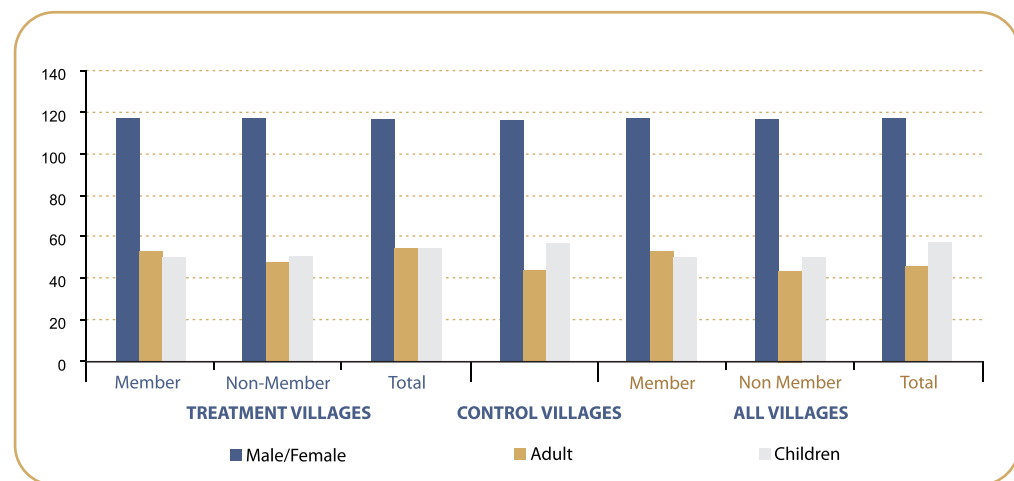


3.2 Demographic Structure and Work Status of Household Members

There are a total of 399 sample households, with a total population of 3,802. The number of adults is 1,784 (47 percent) and the number of

children is 2,018 (53 percent). The male to female ratio in the total population is 115, higher than the national trend at 109.49⁴. The higher ratio of male to female is true for both adults and children i.e. 117.03 for the former and 114.90 for the latter.

Figure 4: Key Demographic Indicators of Households



⁴ The figure is estimated as of first January 2005 (GoP: Pakistan Statistical Year Book 2005)

The average household size of 9.5 persons is higher than the national average of 6.8 for rural Pakistan and 6.84 for rural Sindh (PIES 2004-05). There is no significant difference between the household size of participating households and non-participating households. It is common for the poor to sustain a larger household size of 10.9 for member and 11.3 for non-member households.

There are a total of 229 poor households out of the total sample of 399. Their total population is 2,571. The household size of the poor⁵ is higher at 11.2 as compared to the total household size of 9.5. The difference between the household size of the poor and the non-poor is found to be statistically significant. The average size of the poor households is higher for the control villages at 12 persons, compared to 11 persons in the treatment villages.

In the member households, the population of children is less than the adults i.e. 51 percent adults and 49 percent children. Conversely, the opposite is true for the non-member households where the number of children is higher than the adults. The highest concentration of children of approximately 56 percent is seen in the households of the control villages and 55 percent for the non-member households.

Further analysis of the data confirms 58 percent of dependency ratio in the households across the board; that is, the proportion of dependent population (below 18 and above 55 years) is 55 percent in the member households, 58 percent in the non-member treatment group, and 60 percent in the control group. In addition, it is evident that over 30 percent of the population comprises children below the ages

Table 7: Demographic Composition

| Sex and Age | Treatment Villages | | | Control Villages | All Villages | | |
|--------------------------------|--------------------|------------|--------|------------------|--------------|------------|--------|
| | Member | Non-member | Total | | Member | Non-member | Total |
| Number of Households | 104 | 85 | 189 | 210 | 104 | 295 | 399 |
| Total Population | 1,009 | 751 | 1,760 | 2,042 | 1,009 | 2,793 | 3,802 |
| Male | 540 | 402 | 942 | 1,099 | 540 | 1,501 | 2,041 |
| Female | 469 | 349 | 818 | 943 | 469 | 1,292 | 1,761 |
| Male : Female | 115.14 | 115.19 | 115.16 | 116.54 | 115.14 | 116.18 | 115.9 |
| Adult | 515 | 362 | 877 | 907 | 515 | 1,269 | 1,784 |
| % | 51.0 | 48.2 | 49.8 | 44.4 | 51 | 45.4 | 46.9 |
| Male | 275 | 197 | 472 | 490 | 275 | 687 | 962 |
| Female | 240 | 165 | 405 | 417 | 240 | 582 | 822 |
| Over 55 yrs in Population (%) | (5.6) | (6.3) | (5.9) | (4.5) | (5.6) | (5) | (5.1) |
| Children | 494 | 389 | 883 | 1,135 | 494 | 1,524 | 2,018 |
| (%) | (49.0) | (51.8) | (50.2) | (55.6) | (49) | (54.6) | (53.1) |
| Male | 265 | 205 | 470 | 609 | 265 | 814 | 1,079 |
| Female | 229 | 184 | 413 | 526 | 229 | 710 | 939 |
| Up to 10 yrs in Population (%) | (32.6) | (36) | (34.0) | (38.2) | (32.6) | (37.6) | (36.3) |
| Average size of HH | 9.7 | 8.8 | 9.3 | 9.7 | 9.7 | 9.5 | 9.5 |
| Average size of Poor HH | 10.9 | 10.4 | 10.7 | 11.7 | 10.9 | 11.3 | 11.2 |
| Adult/HH | 5.0 | 4.3 | 4.6 | 4.3 | 5.0 | 4.3 | 4.5 |
| Number of Poor Households | 54 | 49 | 103 | 126 | 54 | 175 | 229 |
| Number of Poor Population | 591 | 511 | 1,102 | 1,469 | 591 | 1,980 | 2,571 |

⁵ Poor are identified with national poverty line of Rs. 879 per capita per month [Economic Survey, 2005-06].

of 10 in the overall sample with 38 percent for the control group and 34 percent in the treatment group.

In rural Pakistan, the population of 10 years and above are predominantly involved in un-skilled labour. The survey results suggest that 10 percent of the over 10 years' population is unemployed - 11 percent in the participating households and 10 percent in the non-participating households.

The total figure for unemployed women is 6 percent and 13 percent for men. Compared to the control villages, the treatment villages' unemployment rate is approximately 2 percent higher. The number of unemployment is highest for the over 55 years' age bracket and lowest for the 10-18 years' age bracket.

Overall 90 percent of women and 9 percent of men are involved in household work. The number of women falling under the household work category is 88 percent. Age-wise break-up shows that 66 percent of those performing household work are between the ages of 18-55.

Four percent of women as compared to 79 percent of men are involved in outside work.

The proportion of women working outside the house is slightly higher among the participating households as compared to the non-participating households (4 and 3 percent respectively).

The majority of men between the ages of 18-55 years work outside the household. A total of 21 percent of children, especially boys, between the ages of 10-18 years and 31 percent girls between the ages of 10-18 years are working outside their households. The working children mainly belong to the control villages and the non-member households.

The occupational distribution of work shows that casual labour - both on-farm and off-farm - jointly involves 46 percent of the working population with 40 percent in the households of treatment villages and 51 percent in the households of control villages. Farming constitutes 20 percent of working population in the sample. The proportion is much lower for farmers in control villages (14 percent) compared to the households in treatment villages (28 percent).

Figure 5: Gender-wise Work Status of Households Work in All Villages

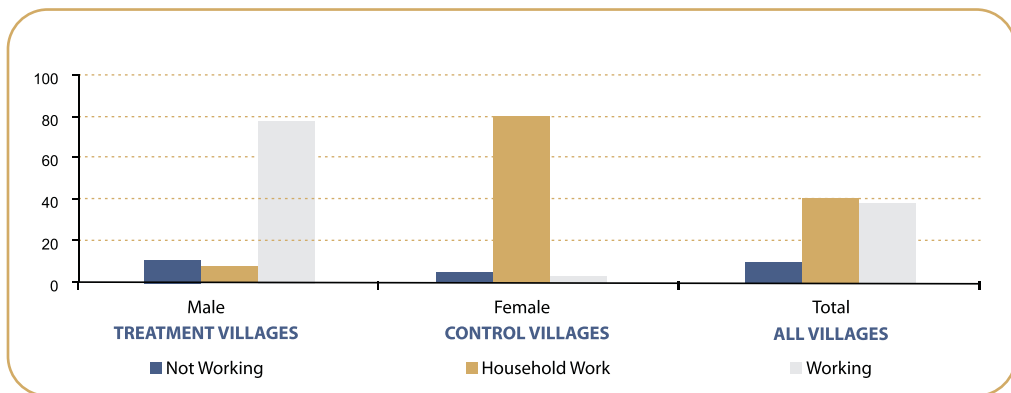


Figure 6: Distribution of Working Population.

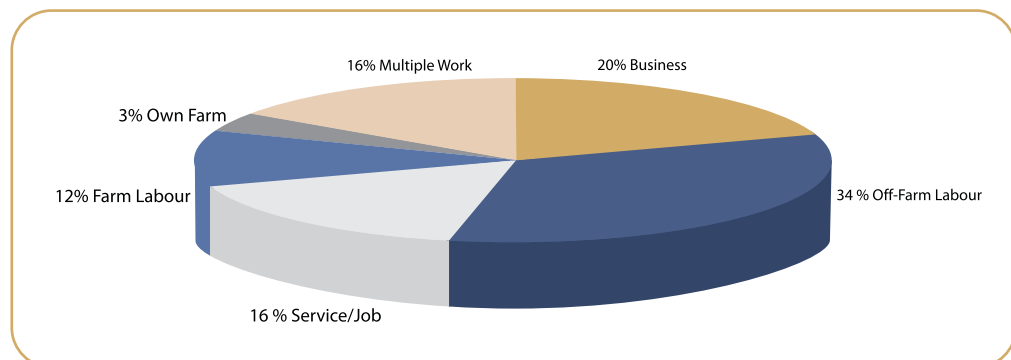


Table 8: Work Status of Households

| Sex and Age | Treatment Villages | | | | | | | | | Control Villages | | |
|-----------------------|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------------|------------|------------|
| | Member | | | Non-Member | | | Total | | | M | F | T |
| | M | F | T | M | F | T | M | F | T | | | |
| All Over 10 Years | 357 | 323 | 680 | 266 | 215 | 481 | 623 | 538 | 1161 | 670 | 591 | 1261 |
| Not Working | 49 | 24 | 73 | 39 | 13 | 52 | 88 | 37 | 125 | 79 | 34 | 113 |
| | (14) | (7) | (11) | (15) | (6) | (11) | (14) | (7) | (11) | (12) | (6) | (9) |
| >55 Years | 13 | 16 | 29 | 13 | 9 | 22 | 26 | 25 | 51 | 30 | 25 | 55 |
| >18-55 | 20 | 5 | 25 | 12 | 4 | 16 | 32 | 9 | 41 | 30 | 7 | 37 |
| >10-18 | 16 | 3 | 19 | 14 | | 14 | 30 | 3 | 33 | 19 | 2 | 21 |
| Household Work | 31 | 283 | 314 | 26 | 198 | 224 | 57 | 481 | 538 | 54 | 538 | 592 |
| | (9) | (88) | (46) | (10) | (92) | (47) | (9) | (89) | (46) | (8) | (91) | (47) |
| >55 Years | 1 | 11 | 12 | 2 | 10 | 12 | 13 | 11 | 24 | | 11 | 11 |
| >18-55 | 13 | 195 | 208 | 11 | 140 | 151 | 206 | 153 | 359 | 13 | 362 | 375 |
| >10-18 | 17 | 77 | 94 | 13 | 48 | 61 | 90 | 65 | 155 | 41 | 165 | 206 |
| Working | 277 | 16 | 293 | 201 | 4 | 205 | 478 | 20 | 498 | 537 | 19 | 556 |
| | (78) | (5) | (43) | (76) | (2) | (43) | (77) | (4) | (43) | (80) | (3) | (44) |
| >55 Years | 15 | 0 | 15 | 13 | 0 | 13 | 28 | 0 | 28 | 26 | 0 | 26 |
| >18-55 | 213 | 13 | 226 | 146 | 2 | 148 | 359 | 15 | 374 | 391 | 12 | 403 |
| >10-18 | 49 | 3 | 52 | 42 | 2 | 44 | 91 | 5 | 96 | 120 | 7 | 127 |
| % Own Farm | 27 | 62 | 29 | 25 | 25 | 25 | 26 | 55 | 28 | 14 | 0 | 14 |
| % Farm Labour | 24 | 12 | 24 | 37 | 0 | 37 | 30 | 10 | 29 | 38 | 47 | 39 |
| % Service/Job | 20 | 13 | 20 | 11 | 25 | 11 | 16 | 15 | 16 | 16 | 11 | 16 |
| % Off-Farm Labour | 11 | 13 | 11 | 10 | 0 | 10 | 11 | 10 | 11 | 13 | 5 | 12 |
| % Business | 4 | 0 | 4 | 3 | 0 | 3 | 4 | 0 | 4 | 1 | 0 | 1 |
| % Multiple Work | 13 | 0 | 12 | 14 | 50 | 15 | 13 | 10 | 13 | 18 | 37 | 18 |

Table 8 (A): Work Status of Households

| Sex and Age | All Villages | | | | | | | | |
|-----------------------|--------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|
| | Member | | | Non-Member | | | Total | | |
| | M | F | T | M | F | T | M | F | T |
| All Over 10 Years | 357 | 323 | 680 | 936 | 806 | 1742 | 1293 | 1129 | 2422 |
| Not Working | 49 | 24 | 73 | 118 | 47 | 165 | 167 | 71 | 238 |
| | (14) | (7) | (11) | (13) | (6) | (10) | (13) | (6) | (10) |
| >55 Years | 13 | 16 | 29 | 43 | 34 | 77 | 56 | 50 | 106 |
| >18-55 | 20 | 5 | 25 | 42 | 11 | 53 | 62 | 16 | 78 |
| >10-18 | 16 | 3 | 19 | 33 | 2 | 35 | 49 | 5 | 54 |
| Household Work | 31 | 283 | 314 | 80 | 736 | 816 | 111 | 1019 | 1130 |
| | (9) | (88) | (46) | (9) | (91) | (47) | (9) | (90) | (47) |
| >55 years | 11 | 1 | 12 | 2 | 21 | 23 | 3 | 32 | 35 |
| >18-55 | 195 | 13 | 208 | 24 | 502 | 526 | 37 | 697 | 734 |
| >10-18 | 77 | 17 | 94 | 54 | 213 | 267 | 71 | 290 | 361 |
| Working | 277 | 16 | 293 | 738 | 23 | 761 | 1015 | 39 | 1054 |
| | (78) | (5) | (43) | (79) | (3) | (44) | (79) | (4) | (44) |
| >55 Years | 15 | 0 | 15 | 39 | 0 | 39 | 54 | 0 | 54 |
| >18-55 | 213 | 13 | 226 | 537 | 14 | 551 | 750 | 27 | 777 |
| >10-18 | 49 | 3 | 52 | 162 | 9 | 171 | 211 | 12 | 223 |
| % Own Farm | 27 | 63 | 29 | 17 | 4 | 17 | 20 | 28 | 20 |
| % Farm Labour | 24 | 13 | 24 | 38 | 39 | 38 | 34 | 28 | 34 |
| % Service/Job | 20 | 13 | 20 | 15 | 13 | 15 | 16 | 13 | 16 |
| % Off-Farm Labour | 11 | 13 | 11 | 12 | 4 | 12 | 12 | 8 | 12 |
| % Business | 4 | 0 | 4 | 2 | 0 | 2 | 3 | 0 | 3 |
| % Multiple Work | 13 | 0 | 12 | 17 | 39 | 17 | 15 | 23 | 16 |

Note: Figures in parenthesis are percentages

3.3 Adult Literacy and Schooling of Children

The results in Table 9 depict the picture of adult literacy levels in the area under study. The analysis is undertaken for households in different socio-economic categories falling under different sub-samples. In the overall sample, only 44 percent of the adults are literate, with only 37 percent of them in control villages. As expected, the proportion of literate adults is higher among the non-poor households than the poor households across the boards - one-half for the non-poor and 40

percent for the poor households. However, the difference is more visible in participating households than non-participating households.

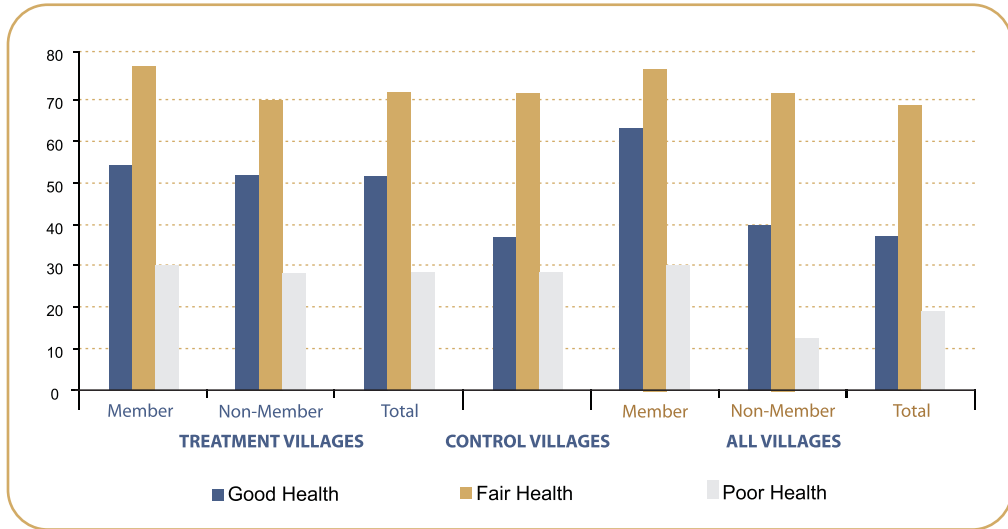
Literacy among the female adults is far lower than male adults irrespective of their poverty status. In the sample household, only 18 percent of the female adults are literate with 13 percent of them in poor households and 25 percent in the non-poor households. In the overall sample, two-third of the adults are literate, with 72 percent of male adults in the non-poor households and 63 percent of male adults in poor households.

Table 9: Adult Literacy in Households

| Literacy Level | Treatment Villages | | | Control Villages | | | All Villages | | |
|-----------------------------------------|--------------------|-------------|-------------|------------------|-------------|-------------|--------------|------------|-------|
| | Member | Non-Member | Total | Member | Non-Member | Total | Member | Non-Member | Total |
| Not Literate Adults | | | | | | | | | |
| All Households | 235 (46) | 190 (53) | 425 (49) | 574 (63) | 235 (46) | 764 (60) | 999 (56) | | |
| Non-Poor Households | 86 (36) | 67 (49) | 153 (41) | 185 (61) | 86 (36) | 252 (58) | 338 (50) | | |
| Poor Households | 149 (54) | 123 (54) | 272 (54) | 389 (64) | 149 (54) | 512 (62) | 661 (60) | | |
| Male Adults | | | | | | | | | |
| All Households | 66 (24) | 60 (31) | 126 (27) | 198 (40) | 66 (24) | 258 (38) | 324 (34) | | |
| Non-Poor Households | 18 (14) | 16 (23) | 34 (17) | 67 (41) | 18 (14) | 83 (35) | 101 (28) | | |
| Poor Households | 48 (32) | 44 (35) | 92 (34) | 131 (40) | 48 (32) | 175 (39) | 223 (37) | | |
| Female Adults | | | | | | | | | |
| All Households | 169 (70) | 130 (79) | 299 (74) | 376 (90) | 169 (70) | 506 (87) | 675 (82) | | |
| Non-Poor Households | 68 (60) | 51 (79) | 119 (67) | 118 (86) | 68 (60) | 169 (83) | 237 (75) | | |
| Poor Households | 101 (80) | 79 (79) | 180 (79) | 258 (93) | 101 (80) | 337 (89) | 438 (87) | | |
| Literate Adults (All Households) | | | | | | | | | |
| Percent of Literate | | | | | | | | | |
| Primary School | 22.5 | 30.2 | 25.4 | 36.4 | 22.5 | 34.3 | 30.1 | | |
| Middle School | 7.9 | 22.1 | 13.3 | 12.7 | 7.9 | 15.8 | 13.0 | | |
| High School | 21.4 | 20.3 | 21.0 | 16.0 | 21.4 | 17.4 | 18.9 | | |
| Post Matriculation | 41.4 | 19.2 | 33.0 | 27.7 | 41.4 | 25.0 | 30.8 | | |
| No Schooling | 6.8 | 8.1 | 7.3 | 7.2 | 6.8 | 7.5 | 7.3 | | |

Note: Figures in parenthesis indicate percentage.

Figure 7: Adult Literacy of Household Members



Among the literate adults, 31 percent in the sample households have achieved post matriculation, but their proportion is much higher in the member households (41 percent) than non-member households (19 percent) of the treatment villages. Similarly 30 percent of the literate adults have completed primary education, with one-third of them in non-participating households and 22 percent in the participating households. Further, approximately seven percent of adult literates across the samples have never attended formal schooling.

The total number of children out of school is 43 percent with 48 percent in the non-participating households and 27 percent in the participating households. The percentage of children out of school is 58 percent for girls and 30 percent for boys. The situation is only slightly better in participating households, whereby 34 percent boys and 65 percent girls in the non-participating household and, 20 percent of boys and 35 percent of girls in the participating households, are out of school.

Figure 8: Education Attainment of Literate Adults (percent)

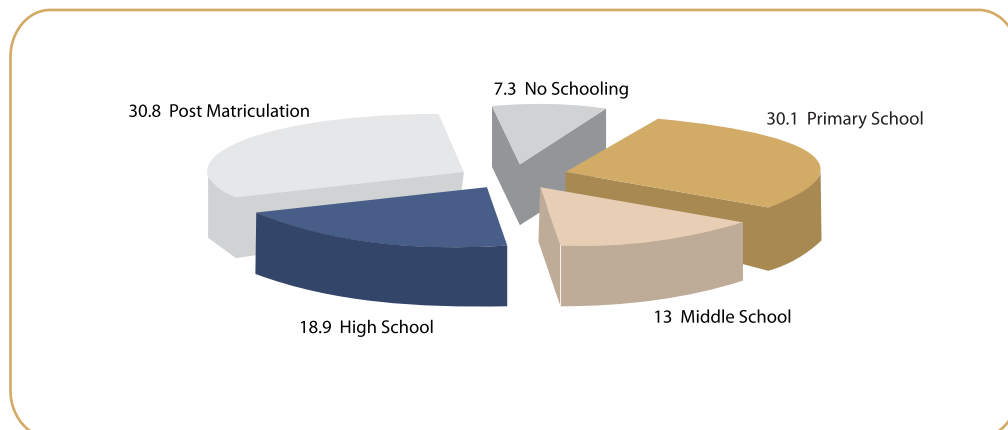
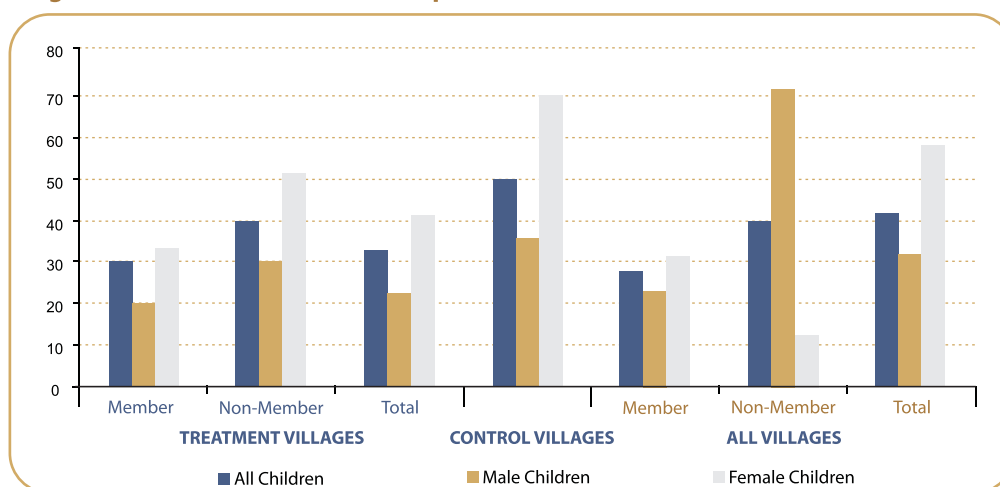


Table 10: Schooling of Children

| Children in School | Treatment Villages | | | Control Villages | All Villages | | |
|-------------------------------------------------------------|--------------------|------------|------------|------------------|--------------|------------|-------------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| All Children (School Age) | 323 | 227 | 550 | 720 | 323 | 947 | 1270 |
| Male | 176 | 129 | 305 | 376 | 176 | 505 | 681 |
| Female | 147 | 98 | 245 | 344 | 147 | 442 | 589 |
| All Children Not-in-School | 86 | 90 | 176 | 368 | 86 | 458 | 544 |
| % Of All Children Not-in-School | 26.6 | 39.6 | 32.0 | 51.1 | 26.6 | 48.4 | 42.8 |
| Male Children Not-in-School | 35 | 39 | 74 | 130 | 35 | 169 | 204 |
| % Of Male Children Not-in-School | 19.9 | 30.2 | 24.3 | 34.6 | 19.9 | 33.5 | 30.0 |
| >5-10 Years | 45.7 | 46.2 | 45.9 | 60 | 45.7 | 56.8 | 54.9 |
| >10-18 Years | 54.3 | 53.8 | 54.1 | 40 | 54.3 | 43.2 | 45.1 |
| Female Children Not-in-School | 51 | 51 | 102 | 238 | 51 | 289 | 340 |
| % Of Female Children Not-in-School | 34.7 | 52 | 41.6 | 69.2 | 34.7 | 65.4 | 57.7 |
| >5-10 years | 49.0 | 49.0 | 49 | 45 | 49 | 45.7 | 46.2 |
| >10-18 years | 51.0 | 51.0 | 51.0 | 51.0 | 51.0 | 54.3 | 53.8 |
| % Share of Poor Households of Children Not-in-School | | | | | | | |
| All children | 66.3 | 83.3 | 75.0 | 80.4 | 66.3 | 81.0 | 78.7 |
| Male children | 60.0 | 82.1 | 71.6 | 84.6 | 60.0 | 84.0 | 79.9 |
| Female children | 70.6 | 84.3 | 77.5 | 78.2 | 70.6 | 79.2 | 77.9 |

Figure 9: Not-in-Schools Children (percent)



In the ages of 5-10 years, the total percentage of boys attending schools is 46 percent in the participating and 57 percent in the non-participating households. The percentage of girls attending schools within the age group of 5-10 years is 49 percent in the participating and 46 percent in non-participating households.

Therefore, in all the sub sample villages, more than half of the categories up to the ages of 5 to 18 years' children are not attending school.

In the poor households, a total of 79 percent of children are not attending schools which is

66 percent in the participating and 81 percent for the non-participating households.

Within the treatment villages, the situation for poor member households is better than the non-member poor households. From the poor households, a total number of 80 percent of boys and 78 percent of girls are out of school which is 60 percent of boys in the participating households and 84 percent from the non-participating households; 71 percent females from participating and 78 percent from non-participating households.

3.4 State of Health and Physical Environment

In order to assess the health status of household members in the sample, we gave the respondents three categories and asked them to place each household member in one of these categories. The first two “good” and “fair”, are regarded as healthy states, and the third one, labelled as “poor”, indicates chronic and acute ailments. According to the respondents' perceptions, shown in Table 11, nearly 80 percent of the population enjoys good health with very little difference between the participating and non-participating households. However, a higher proportion of males than females, and children than adults, are in good health; the difference between male and female is more visible in the participating households than non-participating households. People in fair health make up 15 percent of the population, without any difference between the sub-samples. However, a higher proportion of adults (16 percent) are in fair health than children (14 percent), while the difference between male and female reporting fair state of health is negligible. Around 7 percent of the

people are suffering from poor health. The proportion of people suffering from poor health ranges from 6 percent in the households of control villages to 9 percent in the non-member households of treatment villages. A higher proportion of male than female and adults than children are in poor state of health. We have also recorded the number of deaths by gender and age reported by respondents in the last one year. Less than one percent of deaths were reported during 2006. The same pattern is observed in all the sub-samples.

There is a general conception that financial security leads to better health. However, our survey demonstrated the opposite results. Comparing the poor and the non-poor households, the results indicate that the non-poor are worse off in health - 80 percent of males and 78 percent of females from the non-poor families are of poor health, compared to 78 percent of males and 76 percent of females in the poor households. Around 11 percent of adults and 3 percent of children in the non-poor households are of poor health, as compared to 9 percent of adults and 4 percent of children in the poor households.

Figure 10: Health Status of Households (percent)

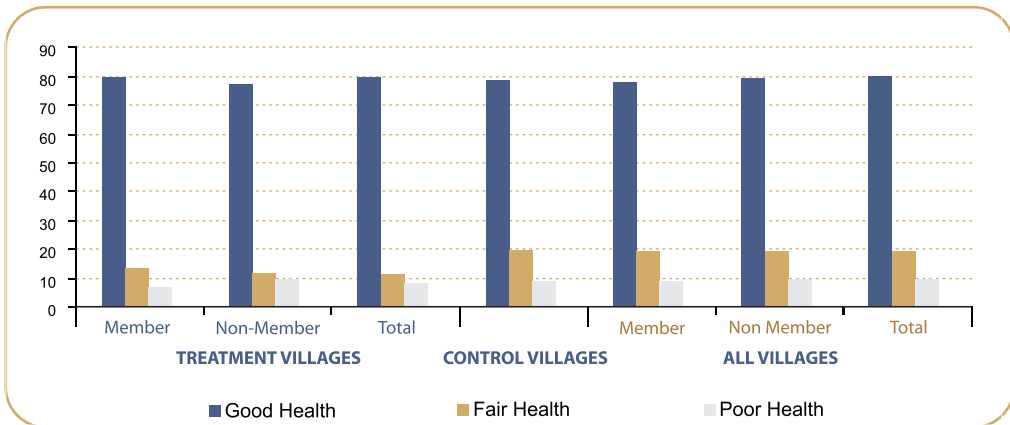


Table 11(A): Health Status of Household Members (All Households)

| Health Status of Household Members | Treatment Villages | | | Control Villages | All Villages | | |
|------------------------------------|--------------------|-------------|-------------|------------------|--------------|-------------|-------------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Percent in Good Health | 78.4 | 76.7 | 77.7 | 78.3 | 78.4 | 77.8 | 78.0 |
| Male | 80.4 | 77.6 | 79.2 | 78.7 | 80.4 | 78.4 | 78.9 |
| Female | 76.1 | 75.6 | 75.9 | 77.7 | 76.1 | 77.2 | 76.9 |
| Adults | 73.0 | 71.3 | 72.3 | 75.3 | 73.0 | 74.2 | 73.8 |
| Children | 84.0 | 81.7 | 83 | 80.6 | 84.0 | 80.9 | 81.7 |
| Percent in Fair Health | 15.3 | 14.5 | 14.9 | 15.8 | 15.3 | 15.5 | 15.4 |
| Male | 14.4 | 14.9 | 14.6 | 15.2 | 14.4 | 15.1 | 14.9 |
| Female | 16.2 | 14.0 | 15.3 | 16.5 | 16.2 | 15.9 | 16.0 |
| Adults | 17.1 | 18.5 | 17.7 | 15.0 | 17.1 | 16.0 | 16.3 |
| Children | 13.4 | 10.8 | 12.2 | 16.5 | 13.4 | 15.0 | 14.6 |
| Percent in Poor Health | 6.3 | 8.8 | 7.4 | 5.9 | 6.3 | 6.7 | 6.6 |
| Male | 5.2 | 7.5 | 6.2 | 6.1 | 5.2 | 6.5 | 6.1 |
| Female | 7.7 | 10.3 | 8.8 | 5.7 | 7.7 | 7.0 | 7.2 |
| Adults | 9.9 | 10.2 | 10.0 | 9.7 | 9.9 | 9.9 | 9.9 |
| Children | 2.6 | 7.5 | 4.8 | 2.9 | 2.6 | 4.1 | 3.7 |
| Percent Died (2006) | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.4 | 0.4 |
| Male | 0.4 | | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 |
| Female | 0.2 | 0.6 | 0.4 | 0.6 | 0.2 | 0.6 | 0.5 |
| Adults | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 |
| Children | 0.2 | 0.3 | 0.2 | 0.5 | 0.2 | 0.5 | 0.4 |

Table 11(B): Health Status of Household Members (Poor Households)

| Health Status of Household Members | Treatment Villages | | | Control Villages | All Villages | | |
|------------------------------------|--------------------|-------------|-------------|------------------|--------------|-------------|-------------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Percent in Good Health | 77.7 | 75.1 | 76.5 | 78.1 | 77.7 | 77.4 | 77.4 |
| Male | 80.3 | 77.9 | 79.2 | 77.8 | 80.3 | 77.8 | 78.4 |
| Female | 74.7 | 71.9 | 73.4 | 78.6 | 74.7 | 76.8 | 76.4 |
| Adults | 69.8 | 68.6 | 69.3 | 75.9 | 69.8 | 73.9 | 72.9 |
| Children | 84.5 | 80.4 | 82.5 | 79.7 | 84.5 | 79.9 | 80.9 |
| Percent in Fair Health | 25.4 | 23.3 | 24.4 | 19.9 | 25.4 | 20.8 | 21.8 |
| Male | 16.6 | 15.2 | 15.9 | 15.9 | 16.6 | 15.8 | 15.9 |
| Female | 18.4 | 16.2 | 17.4 | 17.0 | 18.4 | 16.8 | 17.1 |
| Adults | 21.8 | 21.2 | 21.6 | 15.2 | 21.8 | 16.8 | 18.1 |
| Children | 28.5 | 24.9 | 26.8 | 23.1 | 28.5 | 23.6 | 24.6 |
| Percent in Poor Health | 4.9 | 9.2 | 6.9 | 5.4 | 4.9 | 6.4 | 6.1 |
| Male | 3.2 | 6.9 | 4.9 | 6.3 | 3.2 | 6.4 | 5.7 |
| Female | 6.9 | 11.9 | 9.2 | 4.5 | 6.9 | 6.4 | 6.5 |
| Adults | 8.4 | 10.2 | 9.2 | 8.9 | 8.4 | 9.3 | 9.0 |
| Children | 1.9 | 8.4 | 5.0 | 3.0 | 1.9 | 4.4 | 3.8 |
| Percent Died (2006) | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 |
| Male | 0.3 | 0.0 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 |
| Female | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Adults | 0.4 | 0.4 | 0.4 | 0.2 | 0.4 | 0.2 | 0.3 |
| Children | 0.3 | 0.0 | 0.2 | 0.5 | 0.3 | 0.3 | 0.3 |

Table 11 (C): Health Status of Household Members (Non-Poor Households)

| Health Status of Household Members | Treatment Villages | | | Control Villages | All Villages | | |
|------------------------------------|--------------------|------------|-------|------------------|--------------|------------|-------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Percent in Good Health | 79.4 | 80.0 | 79.6 | 78.5 | 79.4 | 79 | 79.1 |
| Male | 80.5 | 77.0 | 79.3 | 81.1 | 80.5 | 79.9 | 80.1 |
| Female | 78.1 | 83.3 | 80.1 | 75.6 | 78.1 | 77.9 | 78.0 |
| Adults | 76.7 | 75.7 | 76.3 | 74.2 | 76.7 | 74.7 | 75.4 |
| Children | 83.1 | 85.6 | 84.0 | 83.4 | 83.1 | 84.0 | 83.7 |
| Percent in Fair Health | 12.2 | 12.1 | 12.2 | 14.3 | 12.2 | 13.7 | 13.2 |
| Male | 11.5 | 14.3 | 12.5 | 13.2 | 11.5 | 13.6 | 12.8 |
| Female | 13.0 | 9.6 | 11.8 | 15.5 | 13.0 | 13.8 | 13.5 |
| Adults | 11.7 | 14 | 12.5 | 14.6 | 11.7 | 14.4 | 13.4 |
| Children | 12.9 | 9.6 | 11.7 | 14.0 | 12.9 | 12.8 | 12.8 |
| Percent in Poor Health | 8.4 | 7.9 | 8.2 | 7.2 | 8.4 | 7.4 | 7.7 |
| Male | 8.0 | 8.7 | 8.2 | 5.6 | 8.0 | 6.5 | 7.0 |
| Female | 8.9 | 7.0 | 8.2 | 8.9 | 8.9 | 8.3 | 8.5 |
| Adults | 11.7 | 10.3 | 11.2 | 11.3 | 11.7 | 11.0 | 11.2 |
| Children | 3.9 | 4.8 | 4.3 | 2.6 | 3.9 | 3.2 | 3.4 |
| Percent Died (2005) | 0.2 | 0.0 | 0.2 | 0.5 | 0.2 | 0.4 | 0.3 |
| Male | 0.4 | 0.0 | 0.3 | 0.3 | 0.4 | 0.2 | 0.3 |
| Female | 0.0 | 0.9 | 0.3 | 0.7 | 0.0 | 0.8 | 0.5 |
| Adults | 0.4 | 0.0 | 0.3 | 1.0 | 0.4 | 0.7 | 0.6 |
| Children | 0.0 | 1.0 | 0.4 | 0.0 | 0.0 | 0.3 | 0.2 |

The proportion of children, who are in poor health, is 1 percent higher in the poor households. A total of 6 percent of the members of the poor households and approximately 8 percent of the members of the non-poor households have reported to be in poor health.

Housing structures, access to potable water and sanitation services is a standard and integral to the quality of life for any household. Kandiaro is in a dire need of these basic services.

Firstly, a large number of households have *katcha* (mud-based) housing structure. The proportion of households residing in *katcha* structures ranges from 52 percent in the member households of treatment villages to 58 percent in the non-member households of treatment villages and 70 percent in the households of control villages.

One-fourth of the households in the sample are mixed structure (partly *pucca* and partly *katcha*), with around one-third in the participating households and 23 percent in the non-participating households.

Figure 11: Household Structure (All Households)

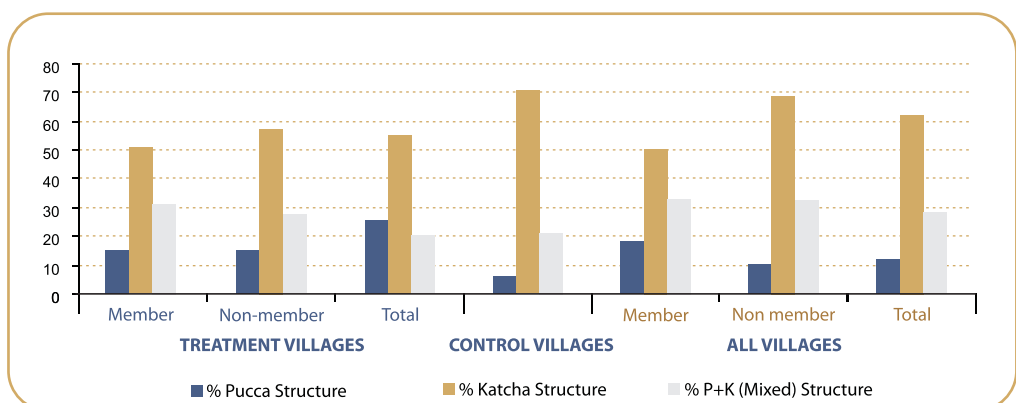


Table 12 (A): Facilities for Household Members (All Households)

| Housing Facilities | Treatment Villages | | | Control Villages | All Villages | | |
|--------------------------------|--------------------|------------|------------|------------------|--------------|------------|------------|
| | Member | Non-member | Total | | Member | Non-member | Total |
| All households | 104 | 85 | 189 | 210 | 104 | 295 | 399 |
| % Pucca structure | 15.4 | 15.3 | 15.3 | 8.6 | 15.4 | 10.5 | 11.8 |
| % Katcha structure | 51.9 | 57.6 | 54.5 | 70 | 51.9 | 66.4 | 62.7 |
| % P+K (Mixed) structure | 32.7 | 27.1 | 30.2 | 21.4 | 32.7 | 23.1 | 25.6 |
| Average number of rooms | 1.8 | 1.3 | 1.6 | 1.3 | 1.8 | 1.3 | 1.5 |
| % households with: | | | | | | | |
| Up to 2 rooms | 46.5 | 56.6 | 50.3 | 58.7 | 46.5 | 58.1 | 54.4 |
| 3-4 rooms | 40.5 | 43.4 | 41.6 | 37.1 | 40.5 | 38.9 | 39.4 |
| 5 or more rooms | 13.0 | 0.0 | 8.1 | 4.2 | 13.0 | 3.0 | 6.2 |
| Water supply: | | | | | | | |
| % Piped | 24.0 | 23.5 | 23.8 | 31.9 | 24.0 | 29.5 | 28.1 |
| % Canal | 4.8 | 5.9 | 5.3 | 2.9 | 4.8 | 3.7 | 4.0 |
| % Well | 0.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 |
| % hand pump | 71.2 | 70.6 | 70.9 | 64.3 | 71.2 | 66.1 | 67.4 |
| Latrine: | | | | | | | |
| % inside | 88.5 | 90.6 | 89.4 | 77.6 | 88.5 | 81.4 | 83.2 |
| % outside | 11.5 | 9.4 | 10.6 | 22.4 | 11.5 | 18.6 | 16.8 |
| Drainage: | | | | | | | |
| % yes | 45.2 | 45.9 | 45.5 | 34.3 | 45.2 | 37.6 | 39.6 |
| % no | 54.8 | 54.1 | 54.5 | 65.7 | 54.8 | 62.4 | 60.4 |
| Electricity: | | | | | | | |
| % yes | 82.7 | 89.4 | 85.7 | 78.1 | 82.7 | 81.4 | 81.7 |
| % no | 17.3 | 10.6 | 14.3 | 21.9 | 17.3 | 18.6 | 18.3 |
| Fuel used: | | | | | | | |
| % wood | 99.0 | 98.8 | 98.9 | 88.6 | 99.0 | 91.5 | 93.5 |

Only 12 percent of households live in *pucca* (brick or concrete) structures. The difference between the households in treatment villages and control villages seems to be wide. 15 percent in the former and almost 9 percent of the households in the latter group have *pucca* structure of houses.

Given the large average household size and low number of rooms per household, families in the sample have congested space for living. The average number of rooms per household is less than 2 rooms. 54 percent of the households have 1-2 rooms per household. Just over 6 percent of the sample households with 13 percent of them in participating households and just 3 percent of them in non-participating households have more than 4 rooms.

According to the survey, 28 percent of the households have access to piped drinking water. A better figure is illustrated for the non-participating households at 30 percent and 24 percent for member households. A large proportion of the households in all the sub-

samples have reported to have sources of potable water supply other than pipes, canals and wells. Other sources include hand-pumps in the village, fetching water from rivers or pipe located outside the village.

The PSLM (2004-5) reports 29 percent of the overall rural households used tap water in Naushero Feroze district. One-fourth of the poor and one-third of the non-poor households have access to piped drinking water; 72 percent of the poor and 62 percent of the non-poor households have other sources of drinking water, i.e. hand pump, electric pump, river and lake, etc. Further, 82 percent of the poor households and around 85 percent of the non-poor households have latrines inside their houses and 18 percent of the poor and 15 percent of the non-poor households have latrines outside or use open field for defecation. The situation is better for the treatment villages as compared to the control villages.

Among the poor households, around 15 percent in the treatment villages and ouses.

Table 12 (B): Facilities for Household Members (Poor Households)

| Housing Facilities | Treatment Villages | | | Control Villages | All Villages | | |
|--------------------------------|--------------------|------------|-------|------------------|--------------|------------|-------|
| | Member | Non-member | Total | | Member | Non-member | Total |
| All households | 54.0 | 49.0 | 103 | 126 | 54.0 | 175 | 229 |
| % Pucca structure | 13.0 | 12.2 | 12.6 | 5.6 | 13.0 | 7.4 | 8.7 |
| % Katcha structure | 61.1 | 61.2 | 61.2 | 73.0 | 61.1 | 69.7 | 67.7 |
| % P+K (Mixed) structure | 25.9 | 26.5 | 26.2 | 21.4 | 25.9 | 22.9 | 23.6 |
| Average number of rooms | 1.7 | 1.5 | 1.6 | 1.3 | 1.7 | 1.4 | 1.4 |
| % households with: | | | | | | | |
| Up to 2 rooms | 52.2 | 58.3 | 54.9 | 61.1 | 52.2 | 60.3 | 58.0 |
| 3-4 rooms | 33.7 | 41.7 | 37.2 | 38.9 | 33.7 | 39.7 | 38.1 |
| 5 or more rooms | 14.1 | 0.0 | 7.9 | 0.0 | 14.1 | 0.0 | 3.9 |
| Water supply: | | | | | | | |
| % Piped | 22.2 | 22.4 | 22.3 | 26.2 | 22.2 | 25.1 | 24.5 |
| % Canal | 5.6 | 2.0 | 3.9 | 3.2 | 5.6 | 2.9 | 3.5 |
| % Well | .00 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 |
| % hand pump | 72.2 | 75.5 | 73.8 | 69.8 | 72.2 | 71.4 | 71.6 |
| Latrine: | | | | | | | |
| % inside | 85.2 | 85.7 | 85.4 | 79.4 | 85.2 | 81.1 | 82.1 |
| % outside | 14.8 | 14.3 | 14.6 | 20.6 | 14.8 | 18.9 | 17.9 |
| Drainage: | | | | | | | |
| % yes | 50.0 | 44.9 | 47.6 | 39.7 | 50.0 | 41.1 | 43.2 |
| % no | 50.0 | 55.1 | 52.4 | 60.3 | 50.0 | 58.9 | 56.8 |
| Electricity: | | | | | | | |
| % yes | 87.0 | 91.8 | 89.3 | 78.6 | 87.0 | 82.3 | 83.4 |
| % no | 13.0 | 8.2 | 10.7 | 21.4 | 13.0 | 17.7 | 16.6 |
| Fuel used: | | | | | | | |
| % wood | 100.0 | 98.0 | 99.0 | 88.9 | 100.0 | 91.4 | 93.4 |

approximately 21 percent of the households in control villages do not have latrines inside the premises of their houses.

PSLM (2004-05) reports 81 percent houses in the district without the flush facility while only 18.7 percent have flush facilities in their houses. Outside the house, drainage is a serious problem in the sample villages. Consequently, 60 percent of the sample households suffer as a result of it. Also, 57 percent of the poor households as compared to 65 percent of the non-poor have no drainage system available to them. In case of both poor and non-poor, the situation is slightly better in the treatment villages as compared to the control villages.

Electricity is available to majority of the households without any significant variation between sub samples. There are 21 percent non-poor and 17 percent poor households without electricity. Among the poor, 11 percent in the treatment as compared to 21 percent in the control villages and among non-poor 19 percent in the treatment and 23 percent in the

control villages have reported no electricity available to them.

A vast majority of the sample households use firewood for cooking. A total of 94 percent have reported using wood as the chief source of fuel, i.e. 92 percent of the non-participating and 99 percent participating households. For the poor, 100 percent of the participating and 91 percent of the non-participating households use wood for cooking purposes. Similarly, for the non-poor, 98 percent of the participating and 92 percent for the non-participating households have reported fuel-wood as their main source of cooking.

Table 12 (C): Facilities for Household Members (Non-Poor Households)

| Housing Facilities | Treatment Villages | | | Control Villages | All Villages | | |
|--------------------------------|--------------------|------------|-------|------------------|--------------|------------|-------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| All Households | 50 | 36 | 86 | 84 | 50 | 120 | 170 |
| % Pucca Structure | 18.0 | 19.4 | 18.6 | 13.1 | 18 | 15.0 | 15.9 |
| % Katcha Structure | 42.0 | 52.8 | 46.5 | 65.5 | 42.0 | 61.7 | 55.9 |
| % P+K (Mixed) Structure | 40.0 | 27.8 | 34.9 | 21.4 | 40.0 | 23.3 | 28.2 |
| Average Number of Rooms | 1.9 | 1.1 | 1.6 | 1.4 | 1.9 | 1.3 | 1.5 |
| % Households with: | | | | | | | |
| Up to 2 Rooms | 40.9 | 53.7 | 44.8 | 55.2 | 40.9 | 54.8 | 49.6 |
| 3-4 Rooms | 47.3 | 46.3 | 47.0 | 34.5 | 47.3 | 37.6 | 41.2 |
| 5 or More Rooms | 11.8 | 0.0 | 8.2 | 10.3 | 11.8 | 7.6 | 9.2 |
| Water supply: | | | | | | | |
| % Piped | 26 | 25.0 | 25.6 | 40.5 | 26.0 | 35.8 | 32.9 |
| % Canal | 4 | 11.1 | 7.0 | 2.4 | 4.0 | 5.0 | 4.7 |
| % Well | 0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 |
| % Hand Pump | 70 | 63.9 | 67.4 | 56.0 | 70.0 | 58.3 | 61.8 |
| Latrine: | | | | | | | |
| % Inside | 92 | 97.2 | 94.2 | 75.0 | 92.0 | 81.7 | 84.7 |
| % Outside | 8 | 2.8 | 5.8 | 25.0 | 8.0 | 18.3 | 15.3 |
| Drainage: | | | | | | | |
| % Yes | 40 | 47.2 | 43.0 | 26.2 | 40.0 | 32.5 | 34.7 |
| % No | 60 | 52.8 | 57.0 | 73.8 | 60.0 | 67.5 | 65.3 |
| Electricity: | | | | | | | |
| % Yes | 78 | 86.1 | 81.4 | 77.4 | 78.0 | 80.0 | 79.4 |
| % No | 22 | 13.9 | 18.6 | 22.6 | 22.0 | 20.0 | 20.6 |
| Fuel used: | | | | | | | |
| % Wood | 98 | 100.0 | 98.8 | 88.1 | 98.0 | 91.7 | 93.5 |

3.5 Household Incomes, Inequality and Poverty

The average annual per household income for the overall sample is Rs. 95,880 which is Rs. 106,530 in the participating and Rs. 92,126 in the non-participating households. Similar to our result, the Household Income and Expenditure Survey (HIES, 2004-05) of the Government of Pakistan estimates the national average annual per household income in rural areas at Rs. 95,148.

There is a variation in average income among the sub-samples. The highest average annual household income of Rs. 106,530 is observed in the member households followed by Rs. 94,569 in the non-members households of the treatment group and Rs. 91,137 in the control group.

The difference between average incomes of participating and non-participating households is statistically insignificant⁶. However, when the differences in per capita incomes are tested, it is found that the per capita income of the participating households is significantly different from that of the non-participating households. The average per capita monthly income of member households is the highest at Rs. 915 followed by Rs. 892 in the non-member households of treatment villages and Rs. 781 for the households in control villages.

With the exception of the control group, the average monthly per capita income of members and non-members is higher than the national poverty line income. However, the average monthly per capita income reported for rural Pakistan is Rs. 1,166 [HIES 2004-05] which is higher than our survey figures.

⁶ This is also corroborated with lower income inequality analysis given further below

Table 13: Household Income 2005-06

| Household Income | Treatment Villages | | | Control Villages | All Villages | | |
|----------------------------------------------------------------|--------------------|---------------|---------------|------------------|---------------|--------------|---------------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Average/ (HH Rs.) | 106,530 | 94,569 | 101,151 | 91,137 | 106,530 | 92,126 | 95,880 |
| Average/Capita (Rs.) | 10,980 | 10,704 | 10,862 | 9,373 | 10,980 | 9,730 | 10,062 |
| Per Capita/Month (Rs.) | 915 | 892 | 905 | 781 | 915 | 811 | 839 |
| Percent Household with Per Capita per Month Income of : | | | | | | | |
| Up to Rs.500 | 8.7 | 8.2 | 8.5 | 16.7 | 8.7 | 14.2 | 12.8 |
| Rs. 501-600 | 10.6 | 18.8 | 14.3 | 15.7 | 10.6 | 16.6 | 15.0 |
| Rs. 601-700 | 11.5 | 10.6 | 11.1 | 11.9 | 11.5 | 11.5 | 11.5 |
| Rs. 701-800 | 13.5 | 15.3 | 14.3 | 6.7 | 13.5 | 9.2 | 10.3 |
| Rs. 801-879 | 7.7 | 4.7 | 6.3 | 9.0 | 7.7 | 7.8 | 7.8 |
| % Poor Households | 51.9 | 57.6 | 54.5 | 60.0 | 51.9 | 59.3 | 57.4 |
| Rs. 880-980 | 9.6 | 7.1 | 8.5 | 7.6 | 9.6 | 7.5 | 8.0 |
| Rs. 981-1080 | 6.7 | 5.9 | 6.3 | 7.1 | 6.7 | 6.8 | 6.8 |
| Rs. 1,081-1,180 | 5.8 | 3.5 | 4.8 | 2.4 | 5.8 | 2.7 | 3.5 |
| Rs. 1,181-1,280 | 3.8 | 3.5 | 3.7 | 3.3 | 3.8 | 3.4 | 3.5 |
| Rs. 1281 or over | 22.1 | 22.4 | 22.2 | 19.5 | 22.1 | 20.3 | 20.8 |
| % Non-Poor Households | 48.1 | 42.4 | 45.5 | 40.0 | 48.1 | 40.7 | 42.6 |
| % Very Poor Households | 13.5 | 7.1 | 10.6 | 21.9 | 13.5 | 17.6 | 16.5 |
| Percent Share in Income: | | | | | | | |
| Crops | 23.2 | 28.9 | 25.6 | 27.8 | 23.2 | 28.1 | 26.7 |
| Livestock | 15.6 | 20.2 | 17.5 | 14.9 | 15.6 | 16.4 | 16.2 |
| Business | 2.9 | 2.6 | 2.8 | 1.1 | 2.9 | 1.5 | 1.9 |
| Service | 30.4 | 16 | 24.4 | 19.3 | 30.4 | 18.3 | 21.8 |
| Labour | 20.3 | 23.9 | 21.8 | 29.7 | 20.3 | 28.0 | 25.8 |
| Pension | 1.2 | 1.4 | 1.3 | 0.4 | 1.2 | 0.7 | 0.9 |
| Rent | 0.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 |
| Remittances | 1.2 | 2.7 | 1.9 | 2.0 | 1.2 | 2.2 | 1.9 |
| Gift/Cash | 1.1 | 0.0 | 0.6 | 0.7 | 1.1 | 0.5 | 0.7 |
| Other Sources | 3.5 | 3.5 | 3.5 | 3.6 | 3.5 | 3.6 | 3.6 |

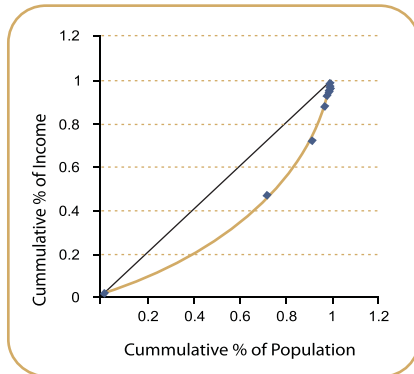
The highest proportion of the poor is concentrated in the income bracket of Rs. 501-600 per capita per month income; the percentage of the groups belonging to this category is 11 percent for participating and 17 percent for non-participating households.

However, 21 percent of the non-poor are concentrated in the income bracket of Rs 1,281 and over. The least proportion of poor households (8 percent) belongs to the income bracket of Rs. 801-879. Only 10 percent of the non-poor fall in the income bracket of Rs. 880-Rs.980.

A total of 17 percent of the households are living below half of poverty line income, at Rs. 439 per capita per month. For the purpose of further analysis we have defined those who live below half of the poverty line as the "very poor". Therefore, 14 percent of the participating and 18 percent of the non-participating households fall under very poor category.

The sample data in our survey illustrates a low level of inequality in the distribution of income as the concentration ratio measured through Gini Coefficient is 0.2539. The Consumption Gini coefficient is, however, 0.22 which is slightly less than that of the national figure of 0.25 (see the Lorenz Curve below) approximately 4 percent of the total income, compared to 23 percent of the income held by the highest 10 percent of the

Figure 12: Lorenz Curve for HH Income

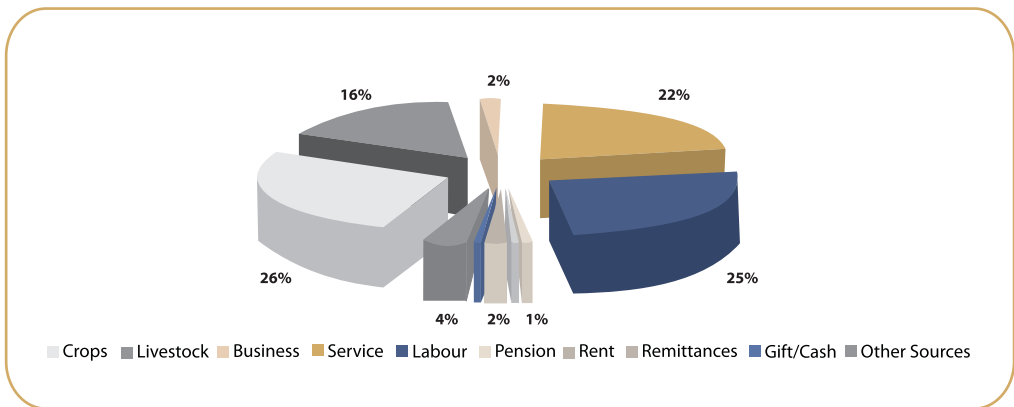


population. Similarly, the bottom 20 percent of the population holds 9 percent of the total income, while 38 percent of the income is held by the top 20 percent of the population. The rest of the 53 percent of the income is held by the middle 60 percent of the population; thus, demonstrating diminutive inequality in the distribution of income.

The two major sources of household income are farm and off-farm economic activities. The livelihood of the rural communities is predominantly dependent on natural resources. Various activities in farming, such as crops and livestock are the chief sources of household income. The combined share of crops and livestock in the total household income is approximately 43 percent in the overall sample households and 49 percent for the non-member households in treatment villages. Crops alone provide 27 percent of the total household income i.e, 23 percent for participating and 28 percent for non-participating households. Further, livestock is responsible for 16 percent of the household income in the overall sample. This is true for both participating and non-participating households. However, the share of livestock in total income is considerably higher at 20 percent for the non-member households and lower at 16 percent for member households of treatment villages.

| Income Quintiles | Percentage Share |
|------------------|------------------|
| Bottom 10% | 4 % |
| Bottom 20% | 9 % |
| Middle 60% | 53% |
| Top 10% | 38 % |
| Top 20% | 23 % |

Figure 13: Composition of Household Income (All Households)



After farming activities, the service and labour sector are the chief contributors to household incomes. Analysis of different sources of income underlines interesting dynamics of the rural livelihoods. As compared to member households, casual employment is more predominant in non-member households. The proportion of income from casual work in the control group is approximately 30 percent and 22 percent in the control group.

It is apparent that the member households have more regular sources of income, while the non-member households are prone to seasonal variations in income. Such a pattern can be attributed to the increase in off-farm employment opportunities for the educated sections of the member households.

A comparison of the treatment and the control groups indicates that 24 percent of the household income in the treatment group and 19 percent in the control group comes from services, whereas within the treatment group, the income from services of the member households is almost twice as high as the non-member households.

Remittances are 2 percent in the household income; 1.2 percent for the participating and 2.2 percent in the non-participating

households. This indicates more members of the non-participating households are employed abroad or in other parts of the country.

Share of rental incomes is 0.5 percent in the total household income across the board in the sub-samples with a slight difference of 0.7 percent in the case of non-members treatment group. Business, pension, rent, remittances, gifts, cash and other sources of incomes together constitute less than 10 percent of household income, with little difference among all sub-samples.

The results in Table 14 illustrates the incidence⁷ (Head Count Ratio - HCR), depth⁸ (Poverty Gap Ratio - PGR) and severity⁹ of poverty in the study area. A comparison of average income per capita in the sections of the poor, non-poor and the overall sample households has been undertaken. According to the findings of the survey, 57 percent of the sample households fall under the poverty line. The situation deteriorates further for the households in control villages where 60 percent of the households are poor. Within the treatment group, the prevalence of poverty in the non-member households is higher at 58 percent as compared to 52 percent in the member households.

Table 14: Incidence, Depth and Severity of Poverty in Households

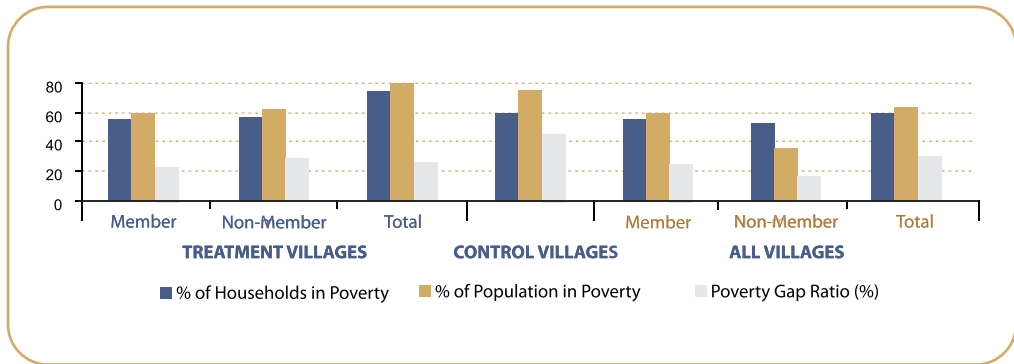
| Poverty Status | Treatment Villages | | | Control Villages | All Villages | | |
|-----------------------------------------|--------------------|------------|--------|------------------|--------------|------------|--------|
| | Member | Non-member | Total | | Member | Non-member | Total |
| All Households | 104 | 85 | 189 | 210 | 104 | 295 | 399 |
| Poor Households | 54 | 49 | 103 | 126 | 54 | 175 | 229 |
| Total Population | 1009 | 751 | 1760 | 2042 | 1009 | 2793 | 3802 |
| Poor Population | 591 | 511 | 1102 | 1469 | 591 | 1980 | 2571 |
| % of Households in Poverty | (51.9) | (57.6) | (54.5) | (60) | (51.9) | (59.3) | (57.4) |
| Poverty Gap Ratio (%) | (26.6) | (28.4) | (27.4) | (32.2) | (26.6) | (31.1) | (30.1) |
| Severity of Poverty | 0.099 | 0.101 | 0.1 | 0.138 | 0.099 | 0.128 | 0.121 |
| % of Population in Poverty | (58.6) | (68) | (62.6) | (71.9) | (58.6) | (70.9) | (67.6) |
| Average Per Capita/Month Income: | | | | | | | |
| Poor Households (Rs.) | 631 | 616 | 624 | 582 | 631 | 590 | 600 |
| Non-Poor Households (Rs.) | 1317 | 1481 | 1377 | 1292 | 1317 | 1348 | 1337 |
| All Households (Rs.) | 915 | 892 | 905 | 781 | 915 | 811 | 839 |

⁷ Incidence of poverty measured through Head Count Ratio (percentage of population/households with per capita income below the national poverty line, i.e., Rs.879)

⁸ Depth of poverty measured through PGR-ratio of the average income of the poor to the poverty line

⁹ Severity of Poverty Income distribution among the poor measured through Sen-poverty coefficient

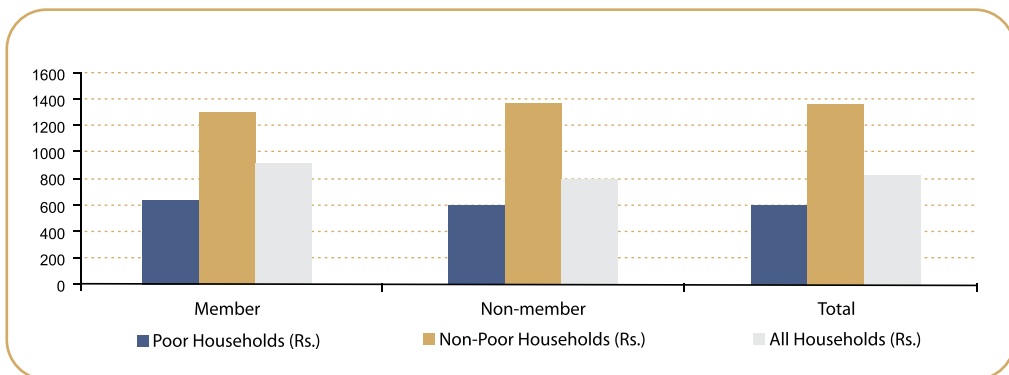
Figure 14 (A): Incidence and Depth of Poverty in Households



The incidence of poverty has been measured against the national poverty line of Rs. 879 per capita per month (Economic Survey of Pakistan {005-06}). The other two indicators of PGR and SPR are aggregate measures of the spread between the poor and the non-poor. If we lower the value of PGR and SPR to HCR, the poor are more concentrated nearer the poverty line. The PGR for the overall household sample is 30 percent and SPR is 0.12 percent. Vulnerability is a phenomenon associated with groups that are either, just above the poverty line. Those closer to the poverty line are therefore vulnerable to external shocks.

A comparison of the average per capita income between the poor and the non-poor households shows interesting results. The average monthly per capita income of the poor households is less than one-half of the income level of the non-poor households. The difference is much wider in case of non-participating households than participating households.

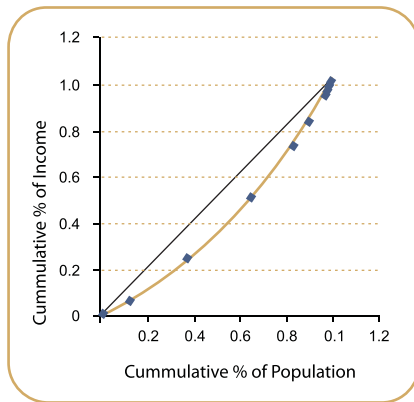
Figure 15: Per-Capita Monthly Income of Poor and Non-Poor Households



3.6 Household Expenditure and Consumption

Table 15 illustrates that the average annual per household expenditure in the sample is Rs. 86,571 with Rs. 97,325 for the participating households and Rs. 82,779 for the non-participating households. The Household Income and Expenditure Survey (HIES, 2004-05) shows a higher average annual expenditure of Rs. 92,544 for rural Pakistan.

Figure 16: Expenditure Lorenz Curve



According to the quintile analysis of the distribution of household expenditures, the bottom 10 percent of the population has a share of approximately 4 percent of the total expenditures, compared to 19 percent of the top 10 percent of the population. Similarly, the bottom 20 percent of the population has 10 percent of the total expenditures in comparison with 33 percent share of the top 20 percent of the population.

By correcting the household size, the per capita expenditure does not demonstrate a striking difference between the overall sample and that of the poor households. The per capita expenditure for overall sample households is Rs. 757, while for the poor it is Rs. 710, with a visible difference in participating households at Rs. 836 and Rs. 695 and in non-participating households at Rs. 787 and Rs. 715.

In comparison with the non-poor, the monthly per capita expenditure of the poor is much lower for the participating households. In the

control group, the monthly per capita expenditure of the poor is just over one-half of the non-poor; in the case of the treatment group there is a negligible difference between member and non-member households. In all the sub-samples the average household expenditure is less than the average household income. In the case of the poor households, the monthly per capita expenditures are higher than the monthly per capita incomes across the board.

Table 14 (B): Quintile Distribution of Income 2006

| Income Quintiles | Percentage Share |
|------------------|------------------|
| Bottom 10% | 4 % |
| Bottom 20% | 10 % |
| Middle 60% | 57% |
| Top 10% | 33 % |
| Top 20% | 19 % |

Approximately, 68 percent of the household expenditures go to the food consumption in all sub-samples. The Household Income and Expenditure Survey (HIES) reported 54 percent household expenditures on food in rural areas of Pakistan.

The percentage share of clothes, health care and education form 15 percent in household expenditure with little difference in all the sub-samples. Housing, social functions and transport encompass the second highest set of household expenditures which is at 13 percent. The share of remittances and other purpose compose less than 4 percent of the household expenditures. Very little difference in percentage is noted in all the three sets of household expenditures.

The data on weekly food consumption was collected for each sample household. Given the size of the household, the daily per capita food intake is estimated separately for each category of food. Using the price data for food items

Figure 17: Constituents of Households Expenditure

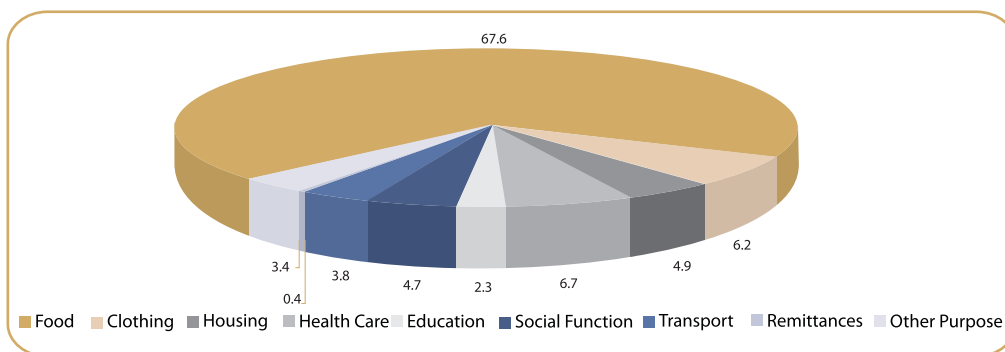


Table 15: Household Expenditures

| Expenditures | Treatment Villages | | | Control Villages | All Villages | | |
|------------------------------------------|--------------------|------------|--------|------------------|--------------|------------|--------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Average/ HH (Rs.) | 97,325 | 83,445 | 91,083 | 82,509 | 97,325 | 82,779 | 86,571 |
| Average/Capita (Rs.) | 10,032 | 9,445 | 9,781 | 8,485 | 10,032 | 8,743 | 9,085 |
| Per Capita/Month (Rs.) | 836 | 787 | 815 | 707 | 836 | 787 | 757 |
| % Share of Household Expenditure: | | | | | | | |
| Food | 67.6 | 68.4 | 67.9 | 67.4 | 67.6 | 67.7 | 67.6 |
| Clothing | 6.2 | 5.8 | 6.0 | 6.4 | 6.2 | 6.2 | 6.2 |
| Housing | 4.3 | 5.1 | 4.6 | 5.1 | 4.3 | 5.1 | 4.9 |
| Health care | 6.4 | 7.2 | 6.8 | 6.6 | 6.4 | 6.8 | 6.7 |
| Education | 3.1 | 2.2 | 2.7 | 1.9 | 3.1 | 2.0 | 2.3 |
| Social Function | 4.9 | 3.8 | 4.5 | 5.0 | 4.9 | 4.6 | 4.7 |
| Transport | 4.3 | 3.4 | 3.9 | 3.7 | 4.3 | 3.6 | 3.8 |
| Remittances | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 |
| Other Purpose | 2.8 | 3.7 | 3.2 | 3.5 | 2.8 | 3.6 | 3.4 |
| On Food by Poor Hhs | 75.1 | 69 | 72.3 | 72.5 | 75.1 | 71.5 | 72.4 |
| Per Capita/Month Expenditure: | | | | | | | |
| Poor HHs (Rs.) | 695 | 734 | 713 | 708 | 695 | 715 | 710 |
| Non-Poor HHs (Rs.) | 1,043 | 1,135 | 1,077 | 1,352 | 1,043 | 1,288 | 1,205 |

collected in each sample village, the average daily expense for food consumed on per capita basis is estimated. Finally, the daily per capita calories intake, using the estimated value of food item in terms of its calories content is estimated.

The estimates of the daily per capita food consumption (with calories) and expenditure on food are presented in Table 16. The average daily per capita intake for the overall sample is 2,166 calories. However, it is lower for the non-participating households at 2,125 calories and slightly higher for the participating households at 2,279 calories. Lower calories intake in the non-participating households is due to extremely low calories intake in the control

villages at 2,067 calories, compared to 2,280 calories in the treatment villages. Consequently, it seems that a substantial proportion of the sample population suffers from malnutrition.

Over three-quarters of the daily calories intake is from grains and oils with very little difference between the sub-sample households. The daily per capita expenditure on food in the poor households is half the average for all household sup-samples.

The daily per capita intake of calories of the poor households is approximately three quarter of the non-poor households. The difference between the poor and the non-poor households' daily calories intake is highest in e.

Table 16: Daily Consumption of Food in Households

| Housing Facilities | Treatment Villages | | | Control Villages | All Villages | | |
|-----------------------------------------------------|---------------------|------------|-------|------------------|--------------|------------|-------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Daily Per Capita Intake: | | | | | | | |
| Grains (Grams) | 411.6 | 411.2 | 411.4 | 384.1 | 411.6 | 391.4 | 396.8 |
| Calories | 1,408 | 1,406 | 1,407 | 1,314 | 1,408 | 1,339 | 1,357 |
| Pulses (Grams) | 18.0 | 18.6 | 18.3 | 18.5 | 18.0 | 18.6 | 18.4 |
| Calories | 61.0 | 64.0 | 62.0 | 63.0 | 61.0 | 63.0 | 63.0 |
| Vegetables (Grams) | 93.3 | 90.5 | 92.1 | 90 | 93.3 | 90.1 | 91.0 |
| Calories | 56.0 | 54.0 | 55.0 | 54.0 | 56.0 | 54.0 | 55.0 |
| Fruits (Grams) | 17.6 | 10.9 | 14.7 | 7.9 | 17.6 | 8.7 | 11.0 |
| Calories | 15.0 | 9.0 | 13.0 | 7.0 | 15.0 | 7.0 | 9.0 |
| Meat (Grams) | 35.9 | 34.7 | 35.4 | 27.8 | 35.9 | 29.6 | 31.3 |
| Calories | 50.0 | 49.0 | 50.0 | 39.0 | 50.0 | 42.0 | 44.0 |
| Eggs (numbers) | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 |
| Calories | 2.0 | 2.0 | 2.0 | 1.0 | 2.0 | 2.0 | 2.0 |
| Milk (Grams) | 153.1 | 149.9 | 151.7 | 141.1 | 153.1 | 143.5 | 146 |
| Calories | 163 | 159 | 161 | 150 | 163 | 153 | 155 |
| Sugar (Grams) | 46.6 | 53.5 | 49.6 | 39.4 | 46.6 | 43.2 | 44.1 |
| Calories | 176 | 202 | 187 | 149 | 176 | 163 | 167 |
| Fats (Grams) | 39.8 | 38.5 | 39.2 | 33.2 | 39.8 | 34.6 | 36 |
| Calories | 348 | 336 | 343 | 289 | 348 | 302 | 314 |
| Total Cal. Per Capita Per Day | | | | | | | |
| % From Grains | 2,279 ¹⁰ | 2,282 | 2,280 | 2,067 | 2,279 | 2,125 | 2,166 |
| % From Grains + Oils | 61.8 | 61.6 | 61.7 | 63.6 | 61.8 | 63.0 | 62.7 |
| Total Cal. Per Capita Per Day (Poor Hhs) | | | | | | | |
| % From Grains | 77.0 | 76.3 | 76.7 | 77.6 | 77.0 | 77.2 | 77.2 |
| % From Grains + Oils | 1,963 | 2,112.20 | 2,032 | 1,840 | 1,963 | 1,910 | 1,922 |
| Total Cal. Per Capita Per Day | | | | | | | |
| % From Grains | 62.6 | 65.7 | 64.1 | 65.8 | 62.6 | 65.8 | 65.0 |
| % From Grains + Oils | 2,727 | 2,643 | 2,696 | 2,649 | 2,727 | 2,647 | 2,674 |
| Total Cal. Per Capita Per Day (Non-Poor HHs) | | | | | | | |
| % From Grains | 60.9 | 54.6 | 58.7 | 59.5 | 60.9 | 58.1 | 59.1 |
| % From Grains + Oils | | | | | | | |
| Daily Per Capita Food Expenditure (Rs.): | | | | | | | |
| All Households | | | | | | | |
| Poor Households | 21.0 | 20.0 | 21.0 | 19.0 | 21.0 | 19.0 | 20.0 |
| Non-Poor Households | | | | | | | |

the control group and lowest in the non-member treatment group. In the overall sample the daily per capita calories intake of the poor is 72 percent of what the non-poor households receive.

Furthermore, poor households receive 65 percent of their daily calories from grains and close to 79 percent jointly from grains and oil; whereas the non-poor receive 59 percent of

their daily calories from grains and 75 percent from grains and oil together. Therefore, two-thirds of the total calories per day of the poor households comes from grains that is a higher proportion, compared to the non-poor households.

¹⁰ The average number of calories per kg of food eaten, except for eggs: grains (3420), pulses (3380), fats/oils (8829), vegetable (600), fruits (850), meat (1400), milk (1062), sugar (3750), and eggs (105 per egg). [Khan, 2004]

3.7 Household Assets, Value and Distribution

The value of assets per household is Rs. 363,142. The number ranges from Rs. 575,013 in participating to half of that in the non-participating households. We have classified assets into three categories: productive assets, consumer durables and savings. Productive assets account for 61 percent of the total value of the households assets. The share of productive assets is much higher in the participating households as compared to the non-participating households. 66.5 percent in the former group and 57 percent in the latter group.

Within the productive assets, land is the dominant asset with share of 49 percent, followed by trees (fruit and forest) with 8 percent and livestock with 2.5 percent. The highest share of land is in the member households (55 percent) of treatment villages and lowest is recorded in the households of control villages (40 percent). The value of land asset is higher in the participating households. According to our data, average land-holding for all households is 6.3 acres and for poor households is 5.2 acres. However, 59 percent of all the households and 62 percent of the poor do not own any land.

Table 17: Assets of Households

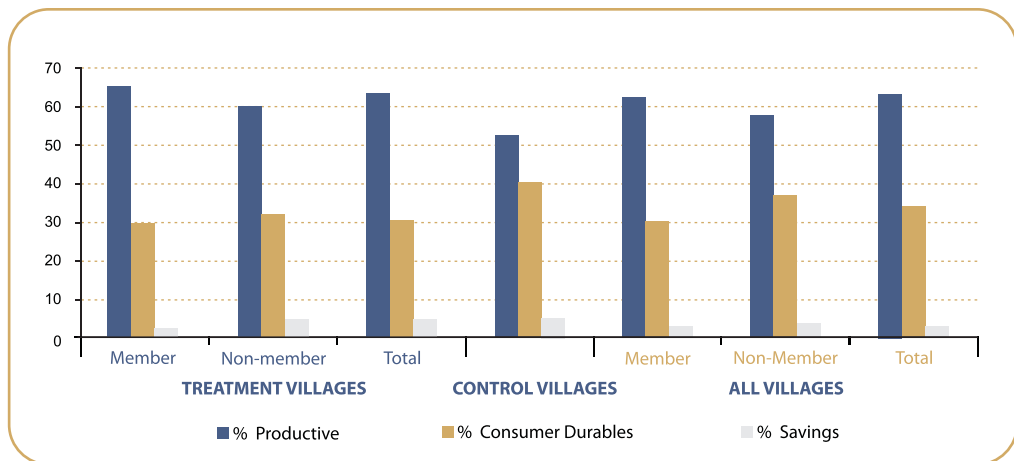
| Assets | Treatment Villages | | | Control Village | All Villages | | |
|----------------------------------------|--------------------|-------------|-------------|-----------------|--------------|-------------|-------------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Value of Assets(Rs.): | | | | | | | |
| Per HH | 575,013 | 376,142 | 485,574 | 252,953 | 575,013 | 288,448 | 363,142 |
| Per Capita | 59,268 | 42,573 | 52,144 | 26,014 | 59,268 | 30,466 | 38,110 |
| Constituents of Assets: | | | | | | | |
| % Productive | 66.5 | 61.4 | 64.7 | 54.3 | 66.5 | 56.9 | 60.9 |
| Land | 54.8 | 51.8 | 53.7 | 40 | 54.8 | 44.5 | 48.7 |
| Trees | 5.0 | 6.6 | 5.6 | 11.1 | 5.0 | 9.4 | 7.6 |
| Livestock | 3.4 | 0.7 | 2.5 | 2.4 | 3.4 | 1.8 | 2.5 |
| Machinery | 1.8 | 0.2 | 1.3 | 0.0 | 1.8 | 0.1 | 0.8 |
| Business | 1.5 | 2.0 | 1.7 | 0.7 | 1.5 | 1.2 | 1.3 |
| % Consumer Durables | 29.5 | 33.8 | 31 | 39.4 | 29.5 | 37.3 | 34.1 |
| House and other | 27.4 | 31.7 | 28.9 | 37.3 | 27.4 | 35.2 | 32.0 |
| Others | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 |
| % Savings | 4.0 | 4.8 | 4.2 | 6.3 | 4.0 | 5.7 | 5.0 |
| Cash/Account | 1.0 | 1.4 | 1.2 | 2.6 | 1.0 | 2.2 | 1.7 |
| Loans Given | 2.0 | 2.7 | 2.2 | 2.7 | 2.0 | 2.7 | 2.4 |
| Jewellery | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Other | 0.6 | 0.4 | 0.5 | 0.7 | 0.6 | 0.6 | 0.6 |
| Purchase/Sale of Assets: | | | | | | | |
| % of HHs Purchased | 14.4 | 5.9 | 10.6 | 5.7 | 14.4 | 5.8 | 8.0 |
| % of HHs Sold Assets | 14.4 | 11.8 | 13.2 | 8.6 | 14.4 | 9.5 | 10.8 |
| Value of Assets Purchased/Sold: | | | | | | | |
| Purchased (Rs./HH) | 8,872 | 6,577 | 4,479 | 1,603 | 8,872 | 1,356 | 1,638 |
| Sold (Rs./HH) | 5,511 | 2,375 | 2,283 | 431 | 5,511 | 437 | 721 |
| Value of Assets per Household: | | | | | | | |
| Assets of Poor HHs (Rs./HH) | 367,785 | 329,332 | 349,492 | 239,852 | 367,785 | 265,050 | 289,382 |
| Assets of Non-Poor HHs (Rs./HH) | 815,122 | 452,424 | 663,998 | 275,461 | 815,122 | 327,509 | 469,729 |

Consumer durables - house and associated structures - constitute 34 percent of the value of household assets. The share of consumer durable ranges from 29.5 percent in member households of treatment villages to 39.4 percent in the households of control villages. There is little evidence of a savings culture in the sample households. Savings share is just 5 percent in the overall sample with 4 percent among the participating households and 5.7 percent among the non-participating households. A significant reason for low savings is the high level of poverty rate. Also, respondents were unwilling to disclose the facts about their savings in cash.

The average size of land per owner household is 6.3 acres, with 7 acres in households of treatment villages and 5 acres in the households of control villages. Among the 40 percent of the land owner households, 25 percent of the households own up to 5 acres of land, 9 percent of the households own 5-12.5 acres and 1.3 percent of the households own more than 25 acres of land.

The participating households as compared to non-participating households are better off in all the categories of land holdings. Interestingly, with the exception of the households in control group, there is little difference between the average size of

Figure 18: Constituents of Households Asset (All Households)



The average value of assets owned by the poor households is Rs. 289,382 per household as compared to Rs. 469,729 per household in the non-poor households.

Table 18 illustrates the economic effect of land and its various aspects on rural life, especially for the poor. Despite the fact that land is the principal productive asset, 59 percent of the sample households are landless. The proportion of landless households is much higher in control villages (70.5 percent) than that of the treatment villages (47 percent).

land-holding between all households and the poor households category. The measure of distribution of land in the study area is extremely disappointing as the concentration ratio is as high as 0.723 (including the landless) and 0.51 (excluding the landless), showing highly skewed distribution of land not only in the overall sample but also among the land owners.

Table 18: Land and Livestock Holdings of Households

| Landholdings and Livestock | Treatment Villages | | | Control Villages | All Villages | | |
|----------------------------------------------------|--------------------|------------|-------|------------------|--------------|------------|-------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Percent of Households Not Owning Land: | | | | | | | |
| All Households | 41.3 | 54.1 | 47.1 | 70.5 | 41.3 | 65.8 | 59.4 |
| Poor Households | 51.9 | 55.1 | 53.4 | 69.0 | 51.9 | 65.1 | 62.0 |
| Percent of Owner Households: | | | | | | | |
| Up to 1.0 acre | 14.4 | 14.1 | 14.3 | 6.2 | 14.4 | 8.5 | 10.0 |
| >1.0 to 2.0 | 10.6 | 1.2 | 6.3 | 3.8 | 10.6 | 3.1 | 5.0 |
| >2.0 to 5.0 | 16.3 | 10.6 | 13.8 | 8.6 | 16.3 | 9.2 | 11.0 |
| >5.0 to 12.5 | 5.8 | 12.9 | 9.0 | 9.0 | 5.8 | 10.2 | 9.0 |
| >12.5 to 25.0 | 9.6 | 3.5 | 6.9 | 1.9 | 9.6 | 2.4 | 4.3 |
| >25.0 acres | 1.9 | 3.5 | 2.6 | | 1.9 | 1.0 | 1.3 |
| Average Size of Land Holding Per Owner: | | | | | | | |
| All Households | 6.7 | 7.3 | 6.9 | 5.3 | 6.7 | 6.0 | 6.3 |
| Poor Households | 6.2 | 6.3 | 6.2 | 3.9 | 6.2 | 4.8 | 5.2 |
| Percent of Households Not Owning Livestock: | | | | | | | |
| All Households | 60.6 | 63.5 | 61.9 | 66.7 | 60.6 | 65.8 | 64.4 |
| Poor Households | 59.3 | 63.3 | 61.2 | 62.7 | 59.3 | 62.9 | 62 |
| Average Number of Livestock/Household: | | | | | | | |
| All Household | 10.3 | 9.2 | 9.8 | 9.9 | 10.3 | 9.7 | 9.9 |
| Poor Households | 10.0 | 9.4 | 9.8 | 9.9 | 10.0 | 9.8 | 9.9 |

Majority of the sample households do not own livestock. This explains the 7 percent share of livestock assets in the total value of the productive assets of the households in Table 17. It is, however, interesting that among the poor a smaller proportion of 62.4 percent, as compared to the overall households at 64.4 percent, do not own livestock. There is no difference between the household average livestock inventory for the overall sample and the poor households in the sample.

3.8 Household Loans, Utilisation and Sources

In Kandiaro Taluka a sizeable number and amount of loans have been taken by households in order to meet the demands of their social and economic life. Close to 46 percent of the sample households have taken an average loan amount of Rs. 32,464 during the period 2005-06; whereas, 40 percent of the households have taken a higher loan of Rs. 50,917 and 48 percent of the non-participating households have taken a loan for Rs. 26,968. A comparison of the treatment and control group reveals a lower percentage of households with a higher average loan for the former and lower average loan for the latter. Having a close look at the break up of sources of loans, one can see that 59 percent of the member households are borrowing from banks and 30 percent are borrowing from friends, relatives, and other sources.

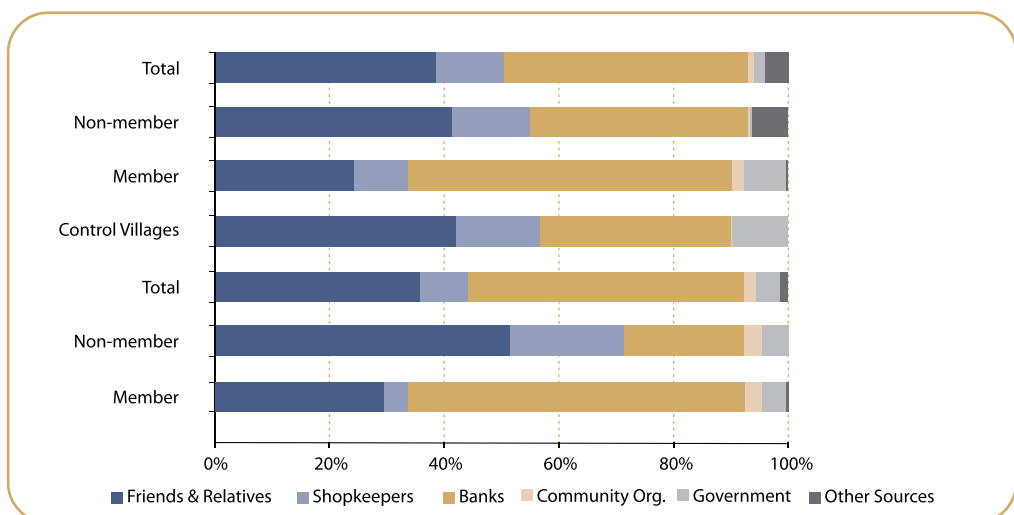
Whilst among the non-member households, a higher proportion of non-members have borrowed loans from friends, relatives and other sources. Borrowing from shop keepers is a normal source of seeking household loans in rural Pakistan, but is carried out by 11 percent of the households in Kandiaro. Only 6 percent in the participating and 14 percent of non-participating households seek loans through shops.

As the process of social mobilisation and community need identification is recent in Kandiaro, only 1.9 percent of member households have borrowed loans from the community organisations. It is encouraging to note that 4 percent of the poor and 1.3 percent of the non-poor member households receive loan from the COs. Close to 6 percent of the non-participating households are borrowing from sources other than indicated in Table 19.

Table 19 (A): Loan Taken by All Households (2005/2006)

| Loans | Treatment Villages | | | Control Villages | All Villages | | |
|-------------------------------|--------------------|------------|--------|------------------|--------------|------------|--------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Average Loan per HH (Rs.) | 50,917 | 21,805 | 37,282 | 28,805 | 50,917 | 26,968 | 32,464 |
| % HH taken loans | 40.38 | 43.53 | 41.8 | 49.52 | 40.38 | 47.8 | 45.86 |
| % of Loan Amount from: | | | | | | | |
| Friends & Relatives | 29.6 | 56.6 | 37.0 | 43.0 | 29.6 | 45.9 | 40.1 |
| Shopkeepers | 6.2 | 15.1 | 8.6 | 13.4 | 6.2 | 13.7 | 11 |
| Banks | 59.2 | 24.8 | 49.7 | 36.8 | 59.2 | 34.3 | 43.2 |
| Community Org. | 1.9 | 1.2 | 1.7 | | 1.9 | 0.3 | 0.8 |
| Government | 2.9 | | 2.1 | 0.1 | 2.9 | 0.1 | 1.1 |
| Other Sources | 0.2 | 2.2 | 0.8 | 6.7 | 0.2 | 5.7 | 3.8 |
| Loan to Income Ratio | 48% | 23% | 37% | 32% | 48% | 29% | 34% |

Figure 21: Constituents of Households Expenditure



Further analysis of the data shows that average amount of loan per household of the poor is around Rs. 25,000 against Rs. 44,000 of the non-poor. A total of 48 percent of the poor and 43 percent of the non-poor households have taken loans. Among the participating households, the proportion of the poor is lower than the non-poor households, and vice versa is

true in case of non-participating households. In the treatment group, almost equal proportions at 42 percent of the poor and non-poor households have taken loans. In the control group, 53 percent of the poor and 44 percent of the non-poor households have been accessing loans from various sources.

Figure 19: Loan Taken by Poor and Non-poor Households

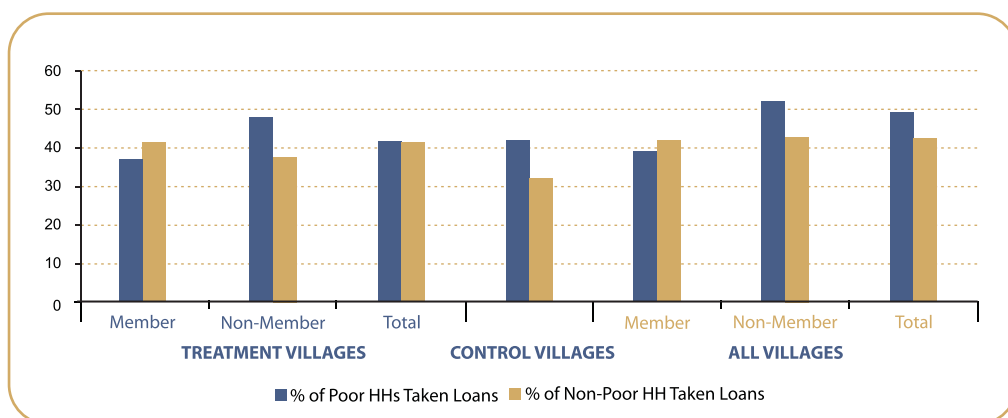


Table 19 (B): Loan Taken by Poor Households (2005/2006)

| Loans | Treatment Villages | | | Control Villages | All Villages | | |
|-------------------------------|--------------------|------------|--------|------------------|--------------|------------|--------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Average Loan per HH (Rs.) | 27,400 | 20,687 | 23,809 | 25,782 | 27,400 | 24,480 | 25,011 |
| % HH Taken Loans | 37.0 | 46.9 | 41.7 | 53.2 | 37.0 | 51.4 | 48.0 |
| % Of Loan Amount from: | | | | | | | |
| Friends & Relatives | 66.8 | 75.0 | 70.6 | 51.5 | 66.8 | 56.5 | 58.6 |
| Shopkeepers | 11.9 | 21.2 | 16.2 | 12.4 | 11.9 | 14.3 | 13.8 |
| Banks | 5.5 | 0.0 | 2.9 | 24.6 | 5.5 | 19.3 | 16.5 |
| Community Org. | 3.6 | 0.0 | 2.0 | 0.0 | 3.6 | 0.0 | 0.7 |
| Government | 11.3 | 0.0 | 6.1 | 0.0 | 11.3 | 0.0 | 2.3 |
| Other Sources | 0.9 | 3.8 | 2.2 | 11.6 | 0.9 | 9.9 | 8.1 |
| Loan to Income Ratio | 33% | 27% | 30% | 32% | 33% | 31% | 31% |

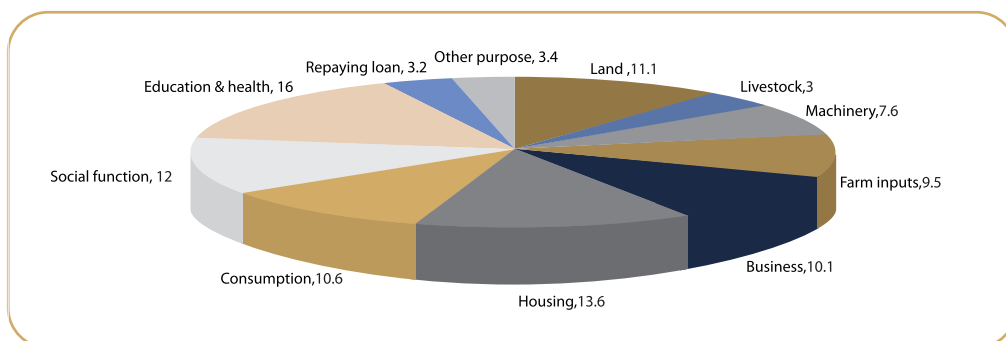
Table 19 (C): Loan Taken by Non-Poor Households (2005/2006)

| Loans | Treatment Villages | | | Control Villages | All Villages | | |
|-------------------------------|--------------------|------------|--------|------------------|--------------|------------|--------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Average Loan per HH (Rs.) | 72,295 | 23,643 | 53,375 | 34,278 | 72,295 | 31,359 | 43,696 |
| % HH Taken Loans | 44.0 | 38.9 | 41.9 | 44.0 | 44.0 | 42.5 | 42.9 |
| % Of Loan Amount from: | | | | | | | |
| Friends & Relatives | 16.9 | 30.2 | 19.2 | 31.5 | 16.9 | 31.2 | 24.1 |
| Shopkeepers | 4.2 | 6.3 | 4.6 | 14.8 | 4.2 | 13 | 8.6 |
| Banks | 77.6 | 60.4 | 74.7 | 53.5 | 77.6 | 54.9 | 66.2 |
| Community Org. | 1.3 | 3.0 | 1.6 | 0.0 | 1.3 | 0.6 | 0.9 |
| Government | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.2 | 0.1 |
| Other Sources | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Loan to Income Ratio | 55% | 20% | 42% | 32% | 55% | 29% | 38% |

The data in Table 20 (A) shows the use of loans by all households. According to the results, the loans have been used for productive purposes at 41 percent, followed by consumption & social function at 24 percent, education & health at 16 percent, housing at 12 percent and, repaying loans and loans for other purposes is less than 4 percent. A comparison of participating and non-participating households shows productive

land is just 11 percent with 7 percent in the participating households and 13 percent in non-participating households. Livestock consumes the lowest share (3 percent) of loan in the productive purpose category of loan utilisation. Education and health make up of 16 percent of the loan amount with 21 percent in the participating households and 13 percent in the non-participating households.

Figure 20: Use of Loan amount by all Households (percent)



loans almost twice as high in the case of the former than the latter. Except for education & health, and “other” purposes, participating households utilise the loan facility more frequently. Within the productive purposes category, land at 11 percent has the highest proportion, followed by business at 10 percent, farm inputs at 10 percent, machinery 8 percent and livestock surprisingly is the lowest ranked category. The highest proportion at 24 percent of loans acquired by member households is for business purposes.

This opens up new avenues of enterprise development among the members that SRSO needs to explore further during the course of programme implementation. Despite land being the most productive asset, borrowing for

According to Table 20 (B), the poor utilise 30 percent of the loans for productive purposes with 41 percent by participating and 27 percent by the non-participating households. Among participating households, the highest proportion of loans is used on health and education at 46 percent, followed by 41 percent on productive purposes and 21 percent in business. While in the non-participating households, 27 percent of the loan amount is used on productive purposes followed by 23 percent on business and 16 percent on health and education. In the overall sample, 12 percent of the loans are used for consumption purposes with 15 percent in the participating and 0.8 percent in the non-participating households.

Table 20 (A): Use of Loan by All Households

| Use of Loans | Treatment Villages | | | Control Villages | All Villages | | |
|-------------------------------|--------------------|------------|-------|------------------|--------------|------------|-------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| % of Loan Amount used: | | | | | | | |
| Productive Purpose | 55.4 | 33.4 | 49.3 | 33.5 | 55.4 | 33.4 | 41.2 |
| Land | 7.2 | 28.7 | 13.1 | 9.1 | 7.2 | 13.2 | 11.1 |
| Livestock | 1.3 | 0.0 | 1.0 | 4.9 | 1.3 | 3.9 | 3.0 |
| Machinery | 16.7 | 0.1 | 12.1 | 3.3 | 16.7 | 2.6 | 7.6 |
| Farm Inputs | 5.9 | 2.8 | 5.0 | 13.7 | 5.9 | 11.4 | 9.5 |
| Business | 24.4 | 1.8 | 18.1 | 2.5 | 24.4 | 2.4 | 10.1 |
| Housing | 5.8 | 21.2 | 10.1 | 17.0 | 5.8 | 17.8 | 13.6 |
| Consumption | 0.3 | 10.8 | 3.2 | 17.7 | 0.3 | 16.2 | 10.6 |
| Social Function | 10.3 | 8.4 | 9.8 | 14.1 | 10.3 | 12.9 | 12.0 |
| Education & Health | 21.1 | 10.2 | 18.1 | 14.0 | 21.1 | 13.2 | 16.0 |
| Repaying Loan | 1.7 | 9.7 | 3.9 | 2.4 | 1.7 | 3.9 | 3.2 |
| Other Purpose | 5.3 | 6.3 | 5.6 | 1.3 | 5.3 | 2.4 | 3.4 |

Table 20 (B): Use of Loan by Poor Households

| Loans | Treatment Villages | | | Control Villages | All Villages | | |
|-------------------------------|--------------------|------------|-------|------------------|--------------|------------|-------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| % Of Loan Amount Used: | | | | | | | |
| Productive Purpose | 40.8 | 26.8 | 35.3 | 27.4 | 40.8 | 27.2 | 30.3 |
| Land | 4.7 | 24.3 | 12.4 | 8.5 | 4.7 | 11.5 | 9.9 |
| Livestock | 1.6 | 0.0 | 1.0 | 5.7 | 1.6 | 4.6 | 3.9 |
| Machinery | 5.5 | 0.0 | 3.3 | 4.5 | 5.5 | 3.7 | 4.1 |
| Farm inputs | 7.8 | 2.4 | 5.7 | 7.2 | 7.8 | 6.3 | 6.7 |
| Business | 21.2 | 0.0 | 12.9 | 1.4 | 21.2 | 1.1 | 5.7 |
| Housing | 8.6 | 34 | 18.6 | 20.3 | 8.6 | 22.9 | 19.7 |
| Consumption | 0.8 | 6.3 | 3.0 | 16.6 | 0.8 | 14.7 | 11.5 |
| Social Function | 3.9 | 4.6 | 4.2 | 11.9 | 3.9 | 10.5 | 9.0 |
| Education & Health | 45.9 | 9.8 | 31.8 | 17.9 | 45.9 | 16.4 | 23.1 |
| Repaying Loan | 0.0 | 12.2 | 4.8 | 3.8 | 0.0 | 5.4 | 4.2 |
| Other Purpose | 0.0 | 6.3 | 2.5 | 2.1 | 0.0 | 2.9 | 2.2 |

As shown in Table 20(C), the non-poor utilise 53 percent of the loans for productive purposes; 66 percent by participating and 44 percent by non-participating households. Around 10 percent of the loans are used for consumption. It is interesting to find that poor use a considerable proportion of loans on health and education as compared to the non-poor (23 percent and 8 percent respectively).

It is, however, important to note here that a high proportion of both poor and non-poor member households use their loan for business or small village level enterprises followed by machinery, which means that microfinance can be one of the relevant and effective packages for the communities in SRSO programme area.

Table-20 (C): Use of Loan by Non-Poor Households

| Loans | Treatment Villages | | | Control Villages | All Villages | | |
|-------------------------------|--------------------|------------|-------|------------------|--------------|------------|-------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| % Of Loan Amount Used: | | | | | | | |
| Productive Purpose | 63.0 | 42 | 58.8 | 44.4 | 63.0 | 43.8 | 53.2 |
| Land | 8.4 | 34.4 | 13.6 | 10.2 | 8.4 | 16.0 | 12.3 |
| Livestock | 1.2 | 0.0 | 1.0 | 3.5 | 1.2 | 2.6 | 1.9 |
| Machinery | 22.4 | 0.3 | 18.0 | 1.0 | 22.4 | 0.8 | 11.4 |
| Farm inputs | 4.9 | 3.2 | 4.5 | 25.2 | 4.9 | 19.9 | 12.5 |
| Business | 26 | 4.1 | 21.6 | 4.6 | 26.0 | 4.5 | 15.0 |
| Housing | 4.4 | 4.5 | 4.4 | 10.9 | 4.4 | 9.3 | 6.9 |
| Consumption | 0.0 | 16.6 | 3.3 | 19.5 | 0.0 | 18.8 | 9.6 |
| Social Function | 13.6 | 13.4 | 13.6 | 18.1 | 13.6 | 16.9 | 15.3 |
| Education & Health | 8.5 | 10.8 | 8.9 | 7.1 | 8.5 | 8.0 | 8.2 |
| Repaying Loan | 2.6 | 6.4 | 3.3 | 0.0 | 2.6 | 1.5 | 2.0 |
| Other Purpose | 8.0 | 6.4 | 7.7 | 0.0 | 8.0 | 1.5 | 4.7 |

3.9 Household Debt

The average amount of debt in sample households is Rs 29,715, ranging from Rs. 19,535 in non-member households to Rs. 42,267 in the member households of treatment villages and Rs. 28,268 in the households of control villages.

The average debt levels for the sub-samples have the same pattern for loans shown in Table 19 (A). The debt-assets ratio is 8 percent for the overall sample of the household, slightly higher

at 9 percent for the non-participating households and, lower at 7 percent for the participating households. This ratio is highest in the control villages at 11 percent and lowest among non-member households of the treatment villages at 5 percent.

The total net worth of all households in the overall sample is Rs. 336, 178 with Rs. 538, 329 of the participating and Rs. 264, 441 of the non-participating households. The net worth of the households in the control villages is the lowest at Rs. 225, 895.

Figure 21: Use of Loan Amount by all Households (percent)

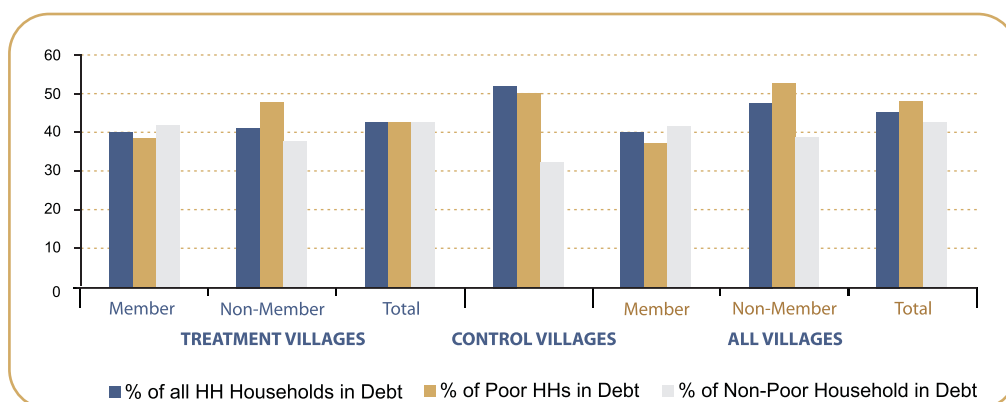


Table 21 (A): Current Debt of All Households

| Loans | Treatment Villages | | | Control Villages | All Villages | | |
|---------------------------------|--------------------|------------|---------|------------------|--------------|------------|---------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Average Amount of Debt/HH (Rs.) | 42,267 | 19,535 | 31,620 | 28,268 | 42,267 | 25,977 | 29,715 |
| % Of Household in Debt | 40.4 | 43.5 | 41.8 | 49.5 | 40.4 | 47.8 | 45.9 |
| % Of Debt to: | | | | | | | |
| Friends & Relatives | 30.2 | 58.1 | 38.3 | 43.1 | 30.2 | 46.1 | 40.9 |
| Shopkeepers | 6.6 | 17.3 | 9.7 | 13.4 | 6.6 | 14.1 | 11.7 |
| Banks | 58.4 | 20.8 | 47.5 | 36.6 | 58.4 | 33.5 | 41.6 |
| Community Org. | 2.5 | 1.4 | 2.2 | 0.0 | 2.5 | 0.3 | 1.0 |
| Government | 2.0 | 0.0 | 1.4 | 0.1 | 2.0 | 0.1 | 0.7 |
| Other Sources | 0.3 | 2.5 | 0.9 | 6.8 | 0.3 | 6.0 | 4.1 |
| Net Worth (Rs.) | 538,329 | 361,085 | 459,147 | 225,895 | 538,329 | 264,441 | 336,178 |
| Debt to Assets Ratio | 7% | 5% | 6% | 11% | 7% | 9% | 8% |

The average amount of debt is Rs.23, 777 in the poor households and Rs. 38,663 in the non-poor households. Not surprisingly, a higher proportion of households among the poor than the non-poor are in debt (48 percent and 43 percent respectively). Similarly, the net-worth of the poor household is 62 percent of the net-

worth of the non-poor households. The difference between poor and non-poor is more visible among the participating households as compared to the non-participating households. The net-worth of poor households is just 45 percent of the non-poor households among the member households.

Table 21 (B): Current Debt of Poor Households

| Loans | Treatment Villages | | | Control Villages | All Villages | | |
|---------------------------------|--------------------|------------|---------|------------------|--------------|------------|---------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Average Amount of Debt/HH (Rs.) | 24,456 | 19,730 | 21,928 | 24,964 | 24,456 | 23,627 | 23,777 |
| % Of Household in Debt | 37.0 | 46.9 | 41.7 | 53.2 | 37.0 | 51.4 | 48.0 |
| % Of Debt to: | | | | | | | |
| Friends & Relatives | 61.5 | 73.1 | 67.1 | 52.0 | 61.5 | 56.5 | 57.4 |
| Shopkeepers | 11.7 | 22.9 | 17.1 | 12.5 | 11.7 | 14.7 | 14.1 |
| Banks | 14.3 | 0.0 | 7.4 | 23.6 | 14.3 | 18.6 | 17.8 |
| Community Org. | 4.3 | 0.0 | 2.2 | 0.0 | 4.3 | 0.0 | 0.8 |
| Government | 7.2 | 0.0 | 3.7 | 0.0 | 7.2 | 0.0 | 1.3 |
| Other Sources | 1.0 | 4.0 | 2.4 | 12 | 1.0 | 10.3 | 8.5 |
| Net Worth (Rs.) | 343,329 | 309,601 | 327,563 | 214,887 | 343,329 | 241,423 | 265,605 |
| Debt to Assets Ratio | 7% | 6% | 6% | 10% | 7% | 9% | 8% |

Table 21 (C): Current Debt of Non-Poor Households

| Loans | Treatment Villages | | | Control Villages | All Villages | | |
|---------------------------------|--------------------|------------|---------|------------------|--------------|------------|---------|
| | Member | Non-Member | Total | | Member | Non-Member | Total |
| Average Amount of Debt/HH (Rs.) | 58,459 | 19,214 | 43,197 | 34,251 | 58,459 | 30,124 | 38663 |
| % Of Household in Debt | 44.0 | 38.9 | 41.9 | 44.0 | 44.0 | 42.5 | 42.9 |
| % Of Debt to: | | | | | | | |
| Friends & Relatives | 18.4 | 32.7 | 20.8 | 31.5 | 18.4 | 31.7 | 25.6 |
| Shopkeepers | 4.6 | 7.8 | 5.2 | 14.6 | 4.6 | 13.4 | 9.4 |
| Banks | 75.2 | 55.8 | 71.8 | 53.7 | 75.2 | 54.0 | 63.7 |
| Community Org. | 1.9 | 3.7 | 2.2 | 0.0 | 1.9 | 0.7 | 1.2 |
| Government | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.2 | 0.1 |
| Other Sources | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Net Worth (Rs.) | 756,663 | 433,209 | 620,800 | 241,210 | 756,663 | 297,386 | 431,066 |
| Debt to Assets Ratio | 7% | 4% | 7% | 12% | 7% | 9% | 8% |

3.10 Perceptions on Problems and Household Level Decision Making

The perceptions of women and men have been established at the village level problems. The problems have been rated from 0-4. The value of "0" indicates no problem, "1" slight problem, "3" very serious problem and "4" not sure. The analysis shows contrasting responses on various issues between women and men.

Education, healthcare, drainage, street pavement, transport, fuel supply rated as serious problems by women. Very serious problems confronted by the women were fuel wood, drainage, health care, street pavement,

access to credit, transport and education. Interestingly, women argue that fuel wood is a serious problem for a majority of respondents while it is the least or no problem for the majority of men. It seems collecting fuel wood is the responsibility of women. On the other hand, the serious problems faced by majority of the male respondents include access to credit, healthcare, street pavement, drainage, and then transport.

In the case of electricity, 53 percent of men and 63 percent of women argue that it is the most serious problem. Both men and women suggest that water supply and social cohesion are not problems at all.

Table 22: Perceptions of Respondents about Household Facilities

| Problem | 22.1 All Villages | | | | | | | | | | | |
|------------------|---------------------|-----|------|------|---|-----------|-------------------|-----|------|------|-----|-----------|
| | Women's Perceptions | | | | | | Men's Perceptions | | | | | |
| | 0 | 1 | 2 | 3 | 4 | Responses | 0 | 1 | 2 | 3 | 4 | Responses |
| Education | 143 | 42 | 82 | 132 | 0 | 399 | 134 | 66 | 94 | 99 | 6 | 399 |
| Healthcare | 91 | 3 | 48 | 257 | 0 | 399 | 61 | 69 | 101 | 135 | 33 | 399 |
| Water Supply | 312 | 15 | 21 | 51 | 0 | 399 | 254 | 49 | 81 | 14 | 1 | 399 |
| Drainage | 107 | 8 | 12 | 272 | 0 | 399 | 125 | 69 | 51 | 112 | 42 | 399 |
| Street Pavement | 95 | 23 | 79 | 202 | 0 | 399 | 63 | 45 | 113 | 131 | 47 | 399 |
| Transport | 139 | 14 | 75 | 171 | 0 | 399 | 106 | 79 | 90 | 100 | 24 | 399 |
| Fuel Supply | 63 | 0 | 5 | 331 | 0 | 399 | 233 | 80 | 59 | 24 | 3 | 399 |
| Electricity | 150 | 71 | 115 | 63 | 0 | 399 | 210 | 63 | 61 | 53 | 12 | 399 |
| Income (Poverty) | 208 | 73 | 111 | 7 | 0 | 399 | 29 | 53 | 165 | 151 | 1 | 399 |
| Job/Employment | 209 | 37 | 147 | 6 | 0 | 399 | 46 | 35 | 119 | 158 | 41 | 399 |
| Lack of Savings | 201 | 65 | 125 | 8 | 0 | 399 | 36 | 64 | 122 | 141 | 36 | 399 |
| Access to Credit | 12 | 105 | 85 | 191 | 6 | 399 | 57 | 52 | 99 | 144 | 47 | 399 |
| Social Cohesion | 245 | 0 | 126 | 28 | 0 | 399 | 309 | 78 | 6 | 6 | 0 | 399 |
| Organisation | 153 | 127 | 45 | 74 | 0 | 399 | 218 | 39 | 43 | 10 | 89 | 399 |
| Total Responses | 2128 | 583 | 1076 | 1793 | 6 | 5586 | 1881 | 841 | 1204 | 1278 | 382 | 5586 |

Table 23: Perceptions of Women about Decision-Making at Household Level

| Decisions on | All Villages | | | | | Responses |
|---------------------------|--------------|------------|------------|--------------|--------------|-----------|
| | Men Only | Mainly Men | Women Only | Mainly Women | Both Equally | |
| Household Expenditures | 323 | 3 | 2 | | 71 | 399 |
| Children's Education | 280 | 1 | | | 118 | 399 |
| Children's Marriages | 80 | 1 | 2 | | 316 | 399 |
| Assets Purchase/Sale | 376 | | 2 | 1 | 20 | 399 |
| Loan Taking | 360 | | | | 39 | 399 |
| Loan Utilisation | 337 | 1 | | | 61 | 399 |
| Family Planning | 196 | | | 1 | 202 | 399 |
| Working Outside Household | 374 | 6 | | | 19 | 399 |
| Child Rearing | 63 | | 202 | 1 | 133 | 399 |

The perceptions of women about the decision making at household level provide a very interesting picture of the social dynamics of the study area. Nearly two-thirds of the responses illustrated in Table 23, confirm that the men take decisions on a range of issues as listed in the table, particularly for purchase of household assets, working outside the home, taking loans, and household expenditure. Women therefore play a small role independently of men.

It is encouraging to see that in many cases at the household level, the decisions are taken together by men and women. For example the responses show that the majority of the women are of the view that women and men make decisions together, especially in matters regarding children's marriages, child rearing and family planning. The one surprising finding seems to be that men play a more important role in child rearing than women. In the control group the decisions on children's education and family planning are taken jointly by women and men. The same pattern is observed in the case of treatment villages as well.

Annex 1: Questionnaires

1. HOUSEHOLD QUESTIONNAIRE (for men)

| | |
|-----------------------------------------------------------------------------------------------------------------|--------------|
| Respondent _____ | Number _____ |
| 101 Age____(yrs) 102 Not Lit.____ 103 Lit____ 104 Primary____ 105 Middle____ 106 Matric____ 107 Post-Matric____ | |
| 108 Farming____ 109 Labour____ 110 Service____ 111 Business____ 112 Other Work____ 113 Not Working____ | |

200 Household Composition

| | | | |
|--------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| up to one year M____F____ 201__202__ | over 1 to 5 M____F____ 203__204__ | over 5 to 10 M____F____ 205__206__ | over 10 to 18 M____F____ 207__208__ |
| Over 18 to 24 M____F____ 209__210__ | over 24 to 55 M____F____ 211__212__ | over 55 to 65 M____F____ 213__214__ | over 65 years M____F____ 215__216__ |

300 Work Status 400 Adult Literacy

| | | | | |
|-----------------|---------------------------------|------------------------|----------------------------|----------------------------------|
| | over 10 to 18over M____F____ | 18 to 55 M____F____ | over 55years M____F____ | M____F____ |
| Household Work | 301__302__ | 303__304__ | 305__306__ | Not Literate 401__402__ |
| Own Farming | 307__308__ | 309__310__ | 311__312__ | Literate 403__404__ |
| Farm Labour | 313__314__ | 315__316__ | 317__318__ | Primary 405__406__ |
| Off-Farm Labour | 319__320__ | 321__322__ | 323__324__ | Middle 407__408__ |
| Service/ Job | 325__326__ | 327__328__ | 329__330__ | Matric 409__410__ |
| Business | 331__332__ | 333__334__ | 335__336__ | Intermediate 411__412__ |
| Other | 337__338__ | 339__340__ | 341__342__ | Degree 413__414__ |
| Not Working | 343__344__ | 345__346__ | 347__348__ | Diploma 415__416__ |
| | | | | In School/ College 417__418__ |

500 Children in School

| | | | |
|---------------------|-----------------------------|----------------------------------|-----------------------------------|
| | Up to 5 years M____F____ | over 5 to 10 years M____F____ | over 10 to 18 years M____F____ |
| Not in School | 501__502__ | 503__504__ | 505__506__ |
| Primary School(1-5) | 509__510__ | 511__512__ | 513__514__ |
| Middle School(6-8) | 517__518__ | 519__520__ | 521__522__ |
| High School(9-10) | 525__526__ | 527__528__ | 529__530__ |
| College(11-14) | 533__534__ | 535__536__ | 537__538__ |

600 (a) Health Status

| | | | | | | |
|-------|------------------------------|---------------------------|----------------------------|-----------------------------|-----------------------------|---------------------------|
| | up to one Year M____F____ | over 1 to 5 M____F____ | over 5 to 10 M____F____ | over 10 to 18 M____F____ | over 18 to 55 M____F____ | over 55 yrs M____F____ |
| Good | 601__602__ | 603__604__ | 605__606__ | 607__608__ | 609__610__ | 611__612__ |
| Fair | 613__614__ | 615__616__ | 617__618__ | 619__620__ | 621__622__ | 623__624__ |
| Poor | 625__626__ | 627__628__ | 629__630__ | 631__632__ | 633__634__ | 635__636__ |
| Death | 637__638__ | 639__640__ | 641__642__ | 643__644__ | 645__646__ | 647__648__ |

700 Household Food Consumption (in kg per week)

701 Wheat____ 702 Rice____ 703 Millets____ 704 Maize____ 705 Pulses____ 706 Vegetables____ 707 Fruits____
 708 Beef____ 709 Mutton____ 710 Poultry____ 711 Fish____ 712 Eggs (No)____ 713 Milk____
 714 Sugar____ 715 Fat/Oils____

800 Annual Household Income (Rs. in last 12 months)

801 Crops____ 802 Livestock____ 803 Business____ 804 Service____
 805 Labour____ 806 Pension____ 807 Rents____ 808 Remittances____
 809 Gift/ Cash____ 810 Other____

900 Household Expenditure (Rs.)

901 Food____ 902 Clothing____ 903 Housing____
 904 Health Care____ 905 Education____ 906 Social Functions____
 907 TransPort____ 908 Remittances____ 909 Other Expenses____

1000 Household Assets

| | Number | Value (Rs.) | | Number | Value (Rs.) |
|----------------|--------|-------------|-------------------|--------|-------------|
| Land (acres) | 1001 | 1002 | House1 | 0190 | 1020 |
| Trees | 1003 | 1004 | Other Structure | 1021 | 1022 |
| LiveStock | 1005 | 1006 | Motorcycle | 1023 | 1024 |
| Poultry | 1007 | 1008 | Bicycle1 | 1025 | 1026 |
| Tractor | 1090 | 1010 | Sewing Machine | 1027 | 1028 |
| ThreSher | 1011 | 1012 | TV/ Radio | 1029 | 1030 |
| Cart/ Trolley | 1013 | 1014 | Savings cash, etc | 1031 | 1032 |
| Tubewell/ Pump | 1015 | 1016 | Loans Given | 1033 | 1034 |
| Shop/ Business | 1017 | 1018 | Jewellery | 1035 | 1036 |
| Other Assets | 1037 | 1038 | | | |

1100 Assets Acquired and Disposed or Sold (in the last 12 months)

1101 Assets Purchased (Rs.)____ 1102 Loan____ 1103 Cash/Saving____ 1104 Gift____
 1105 Assets Sold (Rs.)____ 1106 Meet Expenditure____ 1107 Repay Loan____

1200 Loans Taken and Outstanding Debt (Rs.)

| | Amount Taken | Amount Owed | | Amount Taken | Amount Owed |
|--------------------|--------------|-------------|-------------|--------------|-------------|
| Friends/ Relatives | 1201 | 1202 | Shopkeepers | 1203 | 1204 |
| Banks | 1205 | 1206 | Government | 1207 | 1208 |
| Community Org. | 1209 | 1210 | Others | 1211 | 1212 |

1300 Use of Loans

1301 Land____ 1302 Livestock____ 1303 Machinery____
 1304 Farm Inputs____ 1305 Business____ 1306 Housing____
 1307 Consumption____ 1308 Social Functions____ 1309 Health Care____
 1310 Education____ 1311 Repay Loans____ 1312 Other Uses____

1400 Housing Facilities

| House Structure | Water Supply | Latrine | Drainage | Electricity | Fuel/Energy |
|----------------------|----------------|------------------|--------------|--------------|-------------------|
| 1401 Pucca____ | 1405 Piped____ | 1409 Inside____ | 1411 Yes____ | 1413 Yes____ | 1415 Gas____ |
| 1402 Katcha____ | 1406 Canal____ | 1410 Outside____ | 1412 No____ | 1414 No____ | 1416 Wood____ |
| 1403 P&K____ | 1407 Well____ | | | | 1417 Kerosene____ |
| 1404 Rooms (No.)____ | 1408 Other____ | | | | 1418 Other____ |

1500 Major Constraints/Problems

Constraint/Problem 1502 Health care____ 1503 Water Supply____ 1504 Drainage____
 1501 Education____ 1506 Transport____ 1507 Fuel Supply____ 1508 Electricity____
 1505 Street Pavement____ 1510 Jobs/Employment____ 1511 Savings____ 1512 Access to Credit____
 1509 Income Poverty____ 1514 Organisation____
 1513 Social Cohesion____

Note: Rank each problem from 0 to 4, where 0=no problem; 1=slight problem; 2=serious problem; 3=very serious problem and 4= not sure.

2. HOUSEHOLD QUESTIONNAIRE (for women)

| Respondent _____ | Household Head _____ | Number _____ |
|---------------------|----------------------|--------------------|
| 101 Age____(yrs) | 102 Not Lit.____ | 103 Lit _____ |
| 104 Primary____ | 105 Middle _____ | 106 Matric _____ |
| 107 Post-Matric____ | 108 Farming____ | 109 Labour____ |
| 110 Service____ | 111 Business____ | 112 Other Work____ |
| 113 Not Working____ | | |

600 (b) Infant and Maternal Mortality

| | Birth M _____ F _____ | up to one yr M _____ F _____ | over 1 to 5 M _____ F _____ | 14 to 45 Females only |
|---------------------------------------------------------------------|--------------------------|---------------------------------|--------------------------------|--------------------------|
| Live Birth | 637__638__ | _____ | _____ | _____ |
| HH members | _____ | 639__640__ | 641__642__ | 643__ |
| Death | _____ | 644__645__ | 646__647__ | 648__ |
| Death during pregnancy | _____ | _____ | _____ | 649__ |
| Death during delivery | _____ | _____ | _____ | 650__ |
| Death after delivery (within 42 | _____ | _____ | _____ | 651__ |
| Death during breast feeding period (with two years of giving birth) | _____ | _____ | _____ | 652__ |

1500 Major Constraints/Problems

Constraint/ Problem

| | | | |
|----------------------------|---------------------------|------------------------|----------------------------|
| 1501 Education ____ | 1502 Health Care ____ | 1503 Water Supply ____ | 1504 Drainage ____ |
| 1505 Street Pavement ____ | 1506 Transport ____ | 1507 Fuel Supply ____ | 1508 Electricity ____ |
| 1509 Income (Poverty) ____ | 1510 Jobs/Employment ____ | 1511 Savings ____ | 1512 Access to Credit ____ |
| 1513 Social Cohesion ____ | 1514 Organisation ____ | | |

Note: Rank each problem from 0 to 4, where 0=no

problem; 1 = slight problem; 2 = serious problem; 3 = very serious problem and 4 = not sure.

1600 Decision Making at Household Level

Decisions on

| | | |
|---------------------------------|-----------------------------------|---------------------------------|
| 1601 HH Expenditures _____ | 1602 Children's Education _____ | 1603 Children's Marriages _____ |
| 1604 Assets Purchase/Sell _____ | 1605 Take Loans _____ | 1606 Utilise Loans _____ |
| 1607 Family Planning _____ | 1608 Work Outside Household _____ | 1609 Child Rearing _____ |

Note: Put appropriate code in the above, i.e., 1 = men only 2 = mainly men 3 = women only
4 = mainly women 5 = both men and women equally

3. VILLAGE QUESTIONNAIRE

1800 VILLAGE INFRASTRUCTURE

| | | | | | |
|-------------|--------------|-------------|--------------|--------------|-------------|
| Electricity | Yes 1801____ | No 1802____ | Hand Pump | Yes 1809____ | No 1810____ |
| Telephone | Yes 1803____ | No 1804____ | Drains | Yes 1811____ | No 1812____ |
| Piped Water | Yes 1805____ | No 1806____ | Cobbled Path | Yes 1813____ | No 1814____ |
| Tubewell | Yes 1807____ | No 1808____ | Shops/Market | Yes 1815____ | No 1816____ |

1900 DISTANCE TO INFRASTRUCTURE AND SERVICES (KM)

| | | | | | |
|-----------------|----------|---------------------|----------|----------------------|----------|
| Metalled Road | 1901____ | Agriculture Office | 1909____ | Primary School (M) | 1917____ |
| Bus/Wagon Stop | 1902____ | Veterinary Office | 1910____ | Primary School (F) | 1918____ |
| Railway Station | 1903____ | Dispensary (RHC) | 1911____ | Primary School (Mix) | 1919____ |
| Mandi/Market | 1904____ | Hospital (UHC) | 1912____ | Middle School (M) | 1920____ |
| Factory | 1905____ | Medical Store | 1913____ | Middle School (F) | 1921____ |
| Post Office | 1906____ | Medical Doctor | 1914____ | Middle School (Mix) | 1922____ |
| PCO | 1907____ | Lady Health Visitor | 1915____ | High School (M) | 1923____ |
| Bank | 1908____ | Other Health Worker | 1916____ | High School (F) | 1924____ |
| | | | | High School (Mix) | 1925____ |
| | | | | College (M) | 1926____ |
| | | | | College (F) | 1927____ |
| | | | | College (Mix) | 1928____ |
| | | | | Library | 1929____ |

2000 VILLAGE PRICES (RATES)

| | | | | | |
|------|------------|----------------|------|---------|-----------------|
| 2001 | Wheat | Rs._____per kg | 2009 | Beef | Rs._____per kg |
| 2002 | Rice | Rs._____per kg | 2010 | Mutton | Rs._____per kg |
| 2003 | Maize/Corn | Rs._____per kg | 2011 | Poultry | Rs._____per kg |
| 2004 | Millets | Rs._____per kg | 2012 | Eggs | Rs._____per egg |
| 2005 | Pulses | Rs._____per kg | 2013 | Fish | Rs._____per kg |
| 2006 | Fat/Oils | Rs._____per kg | 2014 | Milk | Rs._____per kg |
| 2007 | Vegetables | Rs._____per kg | 2015 | Sugar | Rs._____per kg |
| | | | 2008 | Fruits | Rs._____per kg |

2100 COMMUNITY ORGANISATION STATISTICS

| | | | | | | |
|---------------------------|----------|--------------------|----------|----------|------------------|----------|
| Started (months) | 2101____ | Number of Members: | At start | 2102____ | At present | 2103____ |
| | | CO Savings Rs.): | at start | 2104____ | At present (Rs.) | 2105____ |
| Loans Disbursed: Number | 2106____ | Amount Rs.) | 2107____ | | | |
| Loans Outstanding: Number | 2108____ | Amount Rs.) | 2109____ | | | |
| PSI: Number | 2110____ | Value Rs.) | 2111____ | | | |
| Training: Number | 2112____ | | | | | |

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About the Authors

Sarmad Khan has a diverse experience with public sector organisations and with RSPs. He started his professional career with Govt of Pakistan in 1987. He had served in various capacities in Planning and Development Department (P&D). He then went on to head the MER section of Sarhad Rural Support Programme (SRSP) for eight years. In addition to this, Mr. Khan has also provided consulting services to different organisations with special focus on strategy formulation for poverty targeting and programme evaluations. He also served as the MER specialist of Rural Support Programme Network (RSPN). His academic qualifications include a degree in Development Economics from University of Leeds, UK (1993-4) and a Master's degree in Economics from Peshawar University Pakistan (1984-5).

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About Sindh Rural Support Organisation (SRSO)

Sindh Rural Support Organisation (SRSO) is dedicated to reducing poverty in Rural Sindh through its tested model of participatory community driven rural development model. Established in 2003 it operates in 9 districts of Sindh with the objective to foster a framework of broad-based grassroots institutions in the form of viable Community Organisations (COs) so that these Community Organisations (COs) are able to undertake various development activities for improving the quality of life of people. Communities would become involved with needs assessment, prioritisation of micro projects and creation of community based action plans. As of June 2007, Sindh Rural Support Programme Organisation (SRSO) has been able to organise up to 11,000 women and 30,000 men around 2,425 Community Organisations (COs).

About the Rural Support Programmes Network

The RSP Network (RSPN) was registered in 2001 under Pakistan's Companies Ordinance (1984) as a non-profit company by the Rural Support Programmes (RSPs) of Pakistan. RSPN is a network of ten RSPs. The RSPs involve poor communities (mainly but not exclusively rural) in improved management and delivery of basic services through a process of social mobilisation. RSPN is a strategic platform for the RSPs, providing them with capacity building support and assisting them in policy advocacy and donor linkages. Currently, the RSPs have a presence in 93 of the country's 140 districts, stretching from the mountainous north to the central plains and down to the southern coastline. (Including FATA/FANA) The RSPs collectively work with a rural membership of community organisations of 1.2 million rural households.



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