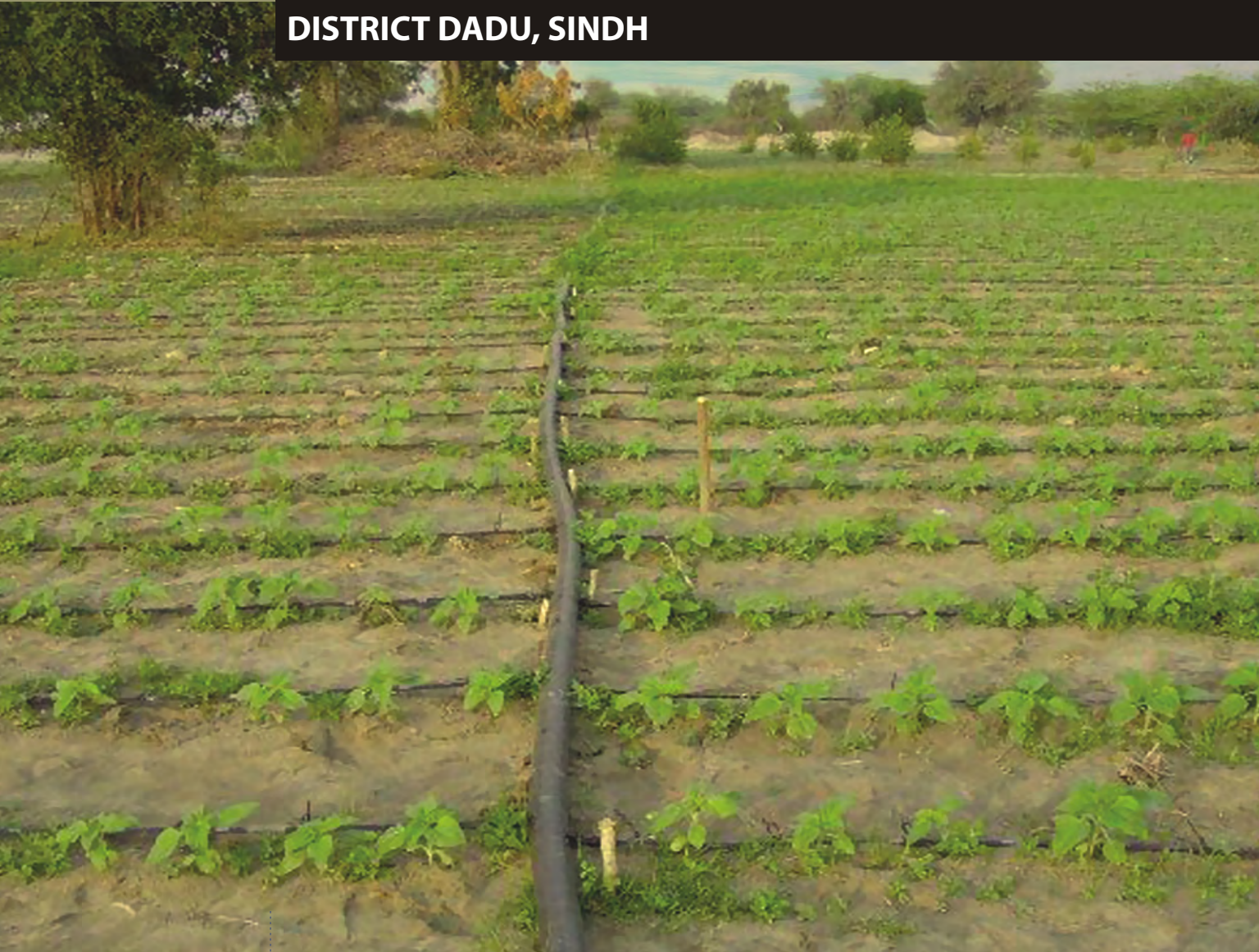


# SOCIO-ECONOMIC BASELINE SURVEY DISTRICT DADU, SINDH



Impact Assessment Unit (IAU)  
**Rural Support Programmes Network**  
Islamabad

**DFID** Department for  
International  
Development

**Socio-Economic Baseline Survey, District Dadu, Sindh**

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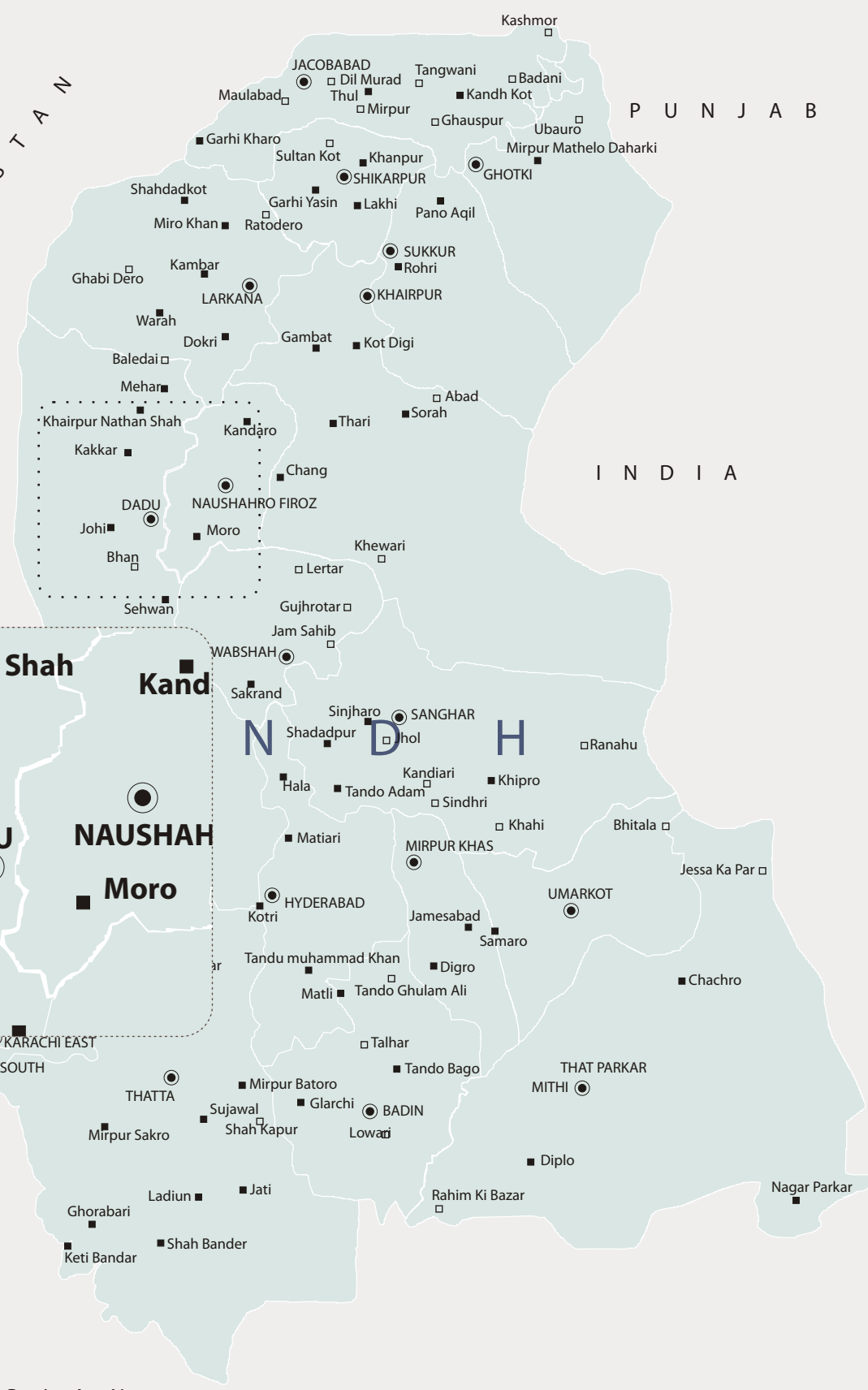
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**RSPN SOCIO-ECONOMIC SURVEY SERIES, REPORT # 4**

**THARDEEP RURAL DEVELOPMENT PROGRAMME (TRDP)**

## **SOCIO-ECONOMIC BASELINE SURVEY**

District DADU

SINDH

Sarmad Khan, *MER Specialist*  
Fazal Ali Saadi, *Rural Economist*

## 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 RSP Network to strengthen our M&E systems and processes and to assess programme impact. For this purpose, the RSPN has established an Impact Assessment Unit (IAU) with professionals possessing 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 along with on the job advice to RSP M&E staff.

This document is one of a series of 11 baseline surveys conducted by the RSPN 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 RSP 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 district Dadu, Sindh, using a sample of 400 rural respondents. This baseline will be used to carry out an impact assessment of the TRDP 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 & 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 have 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

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### ACRONYMS

<b>CEO:</b>	Chief Executive Officer
<b>DFID:</b>	Department for International Development
<b>GM:</b>	General Manager
<b>HIES:</b>	Household Income and Expenditure Survey
<b>MER:</b>	Monitoring, Evaluation and Research
<b>M&amp;E:</b>	Monitoring and Evaluation
<b>MTDF:</b>	Medium Term Development Framework
<b>NRSP:</b>	National Rural Support Programme
<b>PCO:</b>	Public Call Office
<b>PIHS:</b>	Pakistan Integrated Household Survey
<b>PIES:</b>	Pakistan Income and Expenditure Survey
<b>PRSP:</b>	Poverty Reduction Strategy Paper
<b>PSLM:</b>	Pakistan Social and Living Standards Measurement
<b>RSPN:</b>	Rural Support Programmes Network
<b>RSPs:</b>	Rural Support Programmes
<b>TRDP:</b>	Thardeep Rural Development Programme

## Acknowledgment

RSPN is pleased to present this Socio-economic Survey Report of Dadu District, Sindh for the year 2006. This report is the outcome of a joint effort of Rural Support Programmes Network (RSPN) and Thardeep Rural Development Programme (TRDP). The whole hearted support and encouragement of Sono Khangharani, CEO, TRDP and Mr. Noor Ahmed Jhangi, Programme Manager (M&E), TRDP have made this survey a success. Thanks are also due to all the enumerators, who were largely TRDP field staff for painstakingly 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. We would also like to express our gratitude to Mr. Ehsan ul Haq, former Rural Economist RSPN, who remained involved from the development of the concept paper to production of final output tables. Special thanks are due to Mr. Asif Khan for supervising data collection and initial data cleaning and Mr. Hayat Muhammad Khan for improving the presentation of the report through adding graphs in the report. The support of Mr. Mansoor Hassan Khan 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.

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

**Sarmad Khan**

**Fazal Ali Saadi**

Rural Support Programme Network (RSPN) Islamabad

## Executive Summary

This report summarises the key findings of Base Line Survey of Dadu District conducted in 2006 based on the production year 2005. This survey provides a key benchmark data for the future impact assessment of programme intervention in Dadu District for TRDP in particular and for other development stakeholders in common. A quasi-experimental design treatment and control method has been used in this survey using 400 households from twenty sample villages.

The distance of sample villages to various facilities such as social sector facilities, market, railway and bus station is almost uniform for the villages in treatment as well as for the villages in control group. Control villages are better connected to physical and social infrastructure facilities than the treatment villages. The sample control villages are situated near (less than one km) the metalled road. The high school facilities are at a much larger distance, greater than 10 km in treatment villages compared with the control villages, where the average distance is 7 km. All the control villages have primary boys' school and primary co-education schools. The distance to primary schools in treatment villages is more than 1km in case of boys and more than 3km for girls. The average distance to health facilities such a BHU, dispensary, medical store and private clinic is double in the treatment villages than the distance in the control villages.

The surveyed villages lack basic infrastructure facilities. There is a general lack of pipe water and tube well facility through out the Dadu district. In sample villages only one village has the tube well facility and that is among the treatment villages, while only 2 of the treatment villages and 1 of the control villages have access to pipe water. Almost 80% of villages do not have the facility of drainage and paved path. Only 2 villages are with drain and 3 villages are with paved path facility inside the village. Most of the villages in Dadu District have the electricity facility except 3 of the treatment villages.

The average age of the respondents is 39 year for overall sample without any significant difference among the sub-samples. A higher

proportion (31%) of respondents are in the age group of 26-36 followed by 36-45 which makes 24% of the sample households. More than one-third of the respondents are illiterate with a higher proportion (38%) of illiterate respondents in participating households and 28% from non-participating households. Adult literacy in the sample village is 40% of which 49% are from non-participating villages and 35% are from participating villages. In the sample villages, only 11% have attended matric and 8% have post-matric level education. Majority of the households (27%) area engaged in the off-farm labour followed by 19 % in the farming sector. Majority (77%) of the workers are male while female (78%) are mostly engaged in the household chores. The overall dependency ratio is around 74 % along with a higher dependency ratio (78%) among the participating households.

Based on the observation and perception of the respondents irrespective of any medical diagnoses of the households members, majority of sample population are enjoying good health. In the overall sample around 90% of the sample population are in good health. The proportion of people in poor health is higher in participating households than non-participating households. The death rate varies from 0.5% in control villages to 1.3% in treatment villages.

Clean drinking water is rarely available to the rural population in most of the rural parts of the country. Similar results were also found in this survey for Dadu district, where only 28% of the sample households have access to piped water, without a significant difference in treatment and control villages.

The average annual income of the overall sample households is Rs. 99,393, ranging from Rs. 92,186 for the non-member, Rs. 101,506 for member households of treatment villages to Rs. 100,374 for control villages. The ratio of the bottom 20 to top 20% of the income receivers is 1:9 with the concentration ratio of 0.39. The incidence of poverty is lower among the participating households (48%) than non-participating households (55%).

The average annual expenditure of sample households is Rs. 70,920 with annual expenditure of Rs.72752 in non-participating households and Rs.69686 in participating households. The largest share of household income is spent on food and beverages, ranging from 74% in non-member treatment villages to as high as 82% in control villages. Health and education jointly share 5.4% in the overall household consumption with a little difference among all other sub-samples.

The average daily per capita intake for the overall sample is 1,830 calories. However, it is higher for the non-participating households at 1,889 calories than the participating households at 1794 calories.

The assets are quite unequally distributed among the sample households. The top 20% of the asset holders hold 71% of the values of assets as compared to only 2% with the bottom 20% of the asset holders. The average value of asset is recorded as Rs. 296, 502 per household and Rs. 40784 per capita for the overall sample. The value of assets per household varies from Rs. 302,621 in treatment villages to Rs. 272,024 in control villages.

The average size of land holding per owner household is 8 acres in the overall sample with about 9 acre in households of treatment villages and 6 acres in control villages. The difference between poor and non-poor households in terms of average land holding is quite large in treatment villages (10.7 acres vs 4.7 acres) than in control villages (6.3 acres vs 5.7 acres).

The average size of loan for sample households is Rs. 20,409 with a higher average reported by households in control villages (Rs. 36,162) than households in treatment villages (Rs. 17,698). More than 40% of the loan amount was used for productive purposes followed by almost one quarter used for consumption and social functions and then 15% was used on housing. The average amount of outstanding loans (debt) per household is Rs. 18,806, with the highest level reported in households of control villages (Rs. 40,947) and the lowest amount (Rs. 14,432) in member households of treatment villages.

The perception of women about decision-making at household level provides a very interesting picture of the social dynamics in the study area. Men have dominant role in decision-making on a range of issues such as working outside the household, purchase of household assets, loan taking and loan utilisation. While it

is encouraging to note that, most of the decisions are being taken by the consensus of both genders in the households particularly decisions relating to marriages of children, education, household expenditure, child rearing and family planning.

## 1. Introduction

The Rural Support Programmes (RSPs) in Pakistan are establishing meaningful partnerships with the communities for their development, based on people's identified needs and opportunities. The Thardeep Rural Development Programme (TRDP) being one of the RSPs established in 1997 is effectively marching towards this overarching endeavour. It operates in four out of the 24 districts<sup>1</sup> of the Sindh Province. Dadu is one of the new district programmes. On the demand of TRDP, the Rural Support Programmes Network (RSPN) through its Monitoring, Evaluation and Research Unit helped the organisation in conducting Socio-Economic Baseline survey of Dadu District. The present document contains analysis of the baseline survey in District Dadu. This is the fourth of the series of basic socio-economic surveys conducted by the concerned RSP with technical assistance and support from RSPN.

There were two main objectives of conducting this survey, firstly to set a benchmark for future assessment of the TRDP's impact in the newly included districts of its programme area and secondly, to provide the staff with an opportunity of on-the-job capacity building in conducting quantitative surveys. Thereby, it is expected that TRDP will have trained staff to conduct a similar baseline survey in future. The current report presents the survey methodology and its main findings, including the socio-economic profiles of sample villages and households with focus on poverty.

### 1.2 Survey Methodology

In order to construct a socio-economic profile of the organised communities for later impact assessment, quasi-experimental design (treatment and control) survey method [Baker 2000] has been used. The poverty profiles of communities would allow TRDP 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].

#### 1.2.1 Sampling and Enumeration

The sample frame is drawn from the Pakistan Census 1998 data for Dadu district. Household sample was drawn based on Gilroy [2001].

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

Where,

z = Value of the confidence level

Cv= Coefficient of Variation in the major variable of interest (in this case land holding)

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

Using the above formula with 95% confidence level, 10% precision level and 100% coefficient variation for the landholding<sup>2</sup> variable (100% variability usually used in the absence of data to calculate coefficient of variation [Gilroy 2001]) total sample size was calculated to be 384 households. In order to minimise the risk of non-sampling errors in the data collection, the sample size was further increased by 4% and consequently, 400 respondents from 20 villages were drawn as a random sample from the population in 4 Taluka<sup>3</sup> of the target district. The random sample was drawn through computer generated random number table in excel. To begin with this we randomly selected 16 villages from the list of villages where TRDP has its interventions (treatment villages) and randomly selected 4 other villages from the list of villages where TRDP has not introduced its programme (control group). In selecting the control group village we tried to select the villages that were in close proximity of the selected treatment group villages. In the second stage, we have randomly selected 20 households from each selected village. While selecting households in treatment village, we have selected 15 CO member households and

<sup>1</sup>The other TRDP operational districts are Tharparkar, Umarkot and parts of Mirpurkhas.

<sup>2</sup>Landholding taken as variable of interest, so that the survey could capture households from diverse economic background

<sup>3</sup>The sample taluka includes Dadu, Mehar, K.N. Shah and Johi

5 non-member households from each selected treatment village. From a total of 400 randomly selected respondents, 239 are TRDP mobilised members, and 161 non-mobilised members with 81 non-members in the treatment group and 80 respondents in the control group. At the time of data cleaning some questionnaires did not reflect coherent data and therefore were substituted by respondents selected in subsequent visit. The total number of respondents in Treatment and Control villages is thus, 320 and 80 respectively.

### *1.2.2. Survey Questionnaire*

The questionnaire used by Khan [2004] in various similar surveys was further refined and some new parameters 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 the household level with a male and a female respondent from each of the sample households respectively.

TRDP thus identified enumerators from amongst its staff who were further interviewed by RSPN's MER team to determine their ability in conducting such surveys. A team of six male and 2 female enumerators were selected. An intensive orientation session spread over three days was conducted at TRDP Head Office comprising both, classroom training and field testing. The first two days involved sessions on conceptual framework of the survey. This involved, explaining the 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 field data collection took two weeks time, in last week of May and first week of June 2006.



## 2. Profile of Sample Villages

### 2.1 Community Organisations in the Sample Villages

TRDP started working in Dadu district since 2002 with the formation of its first CO in Dadu. The number of MCOs increased to 1059 in April 2006, organising 15317 members with an average membership of 20 per CO. The average membership per CO has increased from 15 in the start of the programme to 20 members. Total savings of MCOs in Dadu district recorded as Rs.13.48 million with an average saving of Rs.12734 per MCO and Rs.909 per CO member. The average savings per CO have increased more than five-fold with in five years, increasing from Rs. 2,250 to Rs.12,734. The total amount of credit disbursed to the MCOs in Dadu district stand at Rs.162.87 million, which is 12 times higher than the total savings of MCOs. The average loan per CO is Rs.120,000 with Rs.10,000 per CO member.

### 2.2 Distance of Infrastructures /Services from Sample Villages

The accessibility of the treatment villages (villages with COs) and control villages (non-COs villages) to basic infrastructural facilities is given in Table 2 below. It shows that the control villages are better connected to physical and social infrastructure facilities than the treatment villages. The sample control villages are situated in close proximity (less than one Km) to metalled road. The facilities such as metalled road, bus stop, bank, agriculture/ veterinary office, internet cafe` are at shorter distances in control villages as compared to the treatment villages. The distance to facilities such as railway station, bank, grain market, etc is more than 10 km for all sample villages. The high school facilities are at a much larger distance, greater than 10 km in treatment villages as compared to the control villages, where the average distance is 7 km.

**Table 1: Profile of Sample Community Organisations in District Dadu**

S.No	Indicators	Update
1	Number of MCOs	1,059
2	Number of Members	15,317
3	Average number of members per MCO (April 30th, 2006)	18-20
4	Minimum	12 months
5	Maximum	05-years
6	Average number of member at the start	15
7	Total savings on April 30th, 2006	13,485,344
8	Average MCO saving	12,734
9	At the start (Rs.)	2,250
10	At present (Rs.)	12,734
11	Average savings per MCO member	909
12	At the start (Rs.)	150
13	At present (Rs.)	909
14	Total amount of loans (Rs.)	162,876,000
15	Average loan per MCO (Rs.)	120,000
16	Average loan per MCO member (Rs.)	10,000
17	CPI Rs.	N/A

The average distance to health facilities such as a BHU, dispensary, medical store and private clinic is double in the treatment villages than the distance in the control villages. Health services of one kind or the other are located within 5 km for most of the treatment villages.

In terms of access to education, all the control villages have primary boys' school and primary co-education schools. While the distance to primary schools in treatment villages is more than 1km in case of boys and more than 3km for girls and co-ed. In both type of sample

**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	2	2	2	8.9	4	-	-	-	0.1
Bus Stop	8	5	1	2	2.2	3	-	1	-	1.0
Railway station	-	1	1	14	26.8	1	-	-	3	17.9
Local market/mandi	1	2	1	12	10.7	-	-	1	3	10.3
Factory	2	-	1	13	23.5	1	-	-	3	21.3
Post Office	-	5	2	9	10.1	2	-	1	1	5.3
PCO	4	5	2	5	4.8	3	-	1	-	1.0
Utility store	-	-	1	15	18.2	-	-	1	3	12.0
Internet cafe	-	1	2	13	14.9	-	-	1	3	12.0
Bank	-	1	1	14	15.8	-	-	1	3	10.3
NGO/MFI	1	1	1	13	11.0	1	-	1	2	7.8
Agriculture Office	-	1	1	14	15.8	-	-	1	3	10.3
Veterinary office	-	3	1	12	12.9	1	-	1	2	12.5
BHU	2	4	3	7	7.0	-	2	1	1	4.3
Dispensary	2	3	1	10	6.6	2	-	1	1	3.0
LHW/LHV	5	5	4	2	3.0	1	1	1	1	6.0
Medical store	2	4	4	6	6.8	2	1	1	-	1.5
Private doctor clinic	1	5	2	8	6.1	2	-	1	1	4.0
Govt primary school (F)	4	4	5	3	3.4	3	1	-	-	0.5
Govt primary school (M)	10	3	3	-	1.4	4	-	-	-	0.0
Govt primary school (Mix)	9	-	2	5	4.1	4	-	-	-	0.0
Govt middle school (F)	1	2	5	8	10.4	1	-	1	2	6.5
Govt middle school (M)	3	6	3	4	6.4	1	2	-	1	4.3
govt middle school (Mix)	4	3	4	5	5.8	4	-	-	-	0.0
Govt high school (F)	-	3	1	12	13.6	1	-	1	2	9.0
Govt high School (M)	-	4	3	9	11.2	1	1	1	1	5.3
Govt college (F)	-	-	1	15	15.2	-	-	1	3	12.0
Govt college (M)	-	-	1	15	16.2	-	-	1	3	12.0
Private primary school	-	1	3	13	14.9	-	-	1	3	10.3
Private middle school	-	-	1	15	16.1	-	-	-	4	12.3
Private high school	-	1	1	14	19.9	-	-	1	3	10.3
Private college	-	-	2	14	19.5	1	-	-	3	21.3
Govt library	-	-	1	15	23.9	-	-	1	3	11.5
Private library	1	1	1	13	14.1	-	-	1	3	12.0

village girls have to cover longer distance to get to primary school as compared to boys. The distance to girls' colleges is more than 15 km in treatment villages and 12 km in control villages.

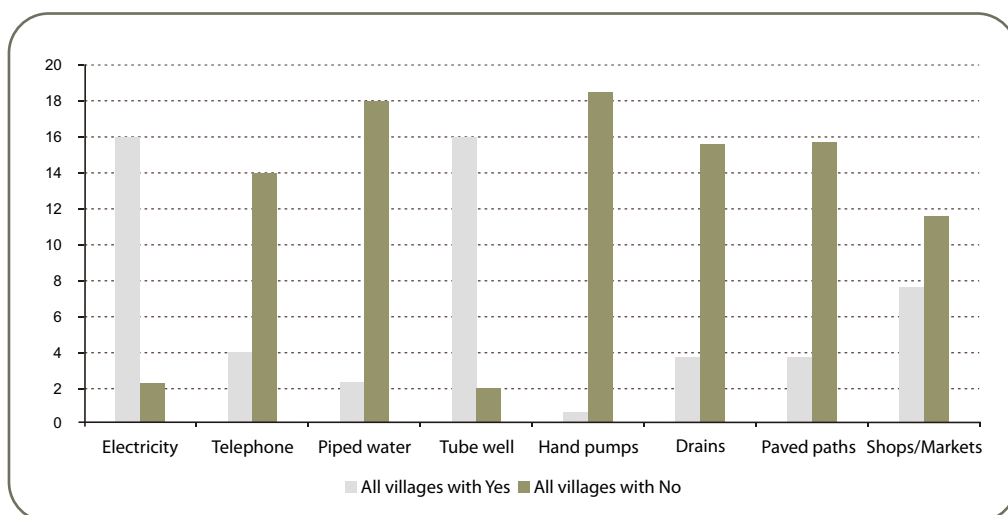
Data on infrastructure facilities for the surveyed villages is given in Table-3, which shows that the surveyed villages lack the basic infrastructure facilities. There is a general lack of pipe water and tube well facility through out the Dadu district. In sample villages only one village has the tube well facility and that is among the treatment villages, while only 2 of the treatment villages and 1 of the controlled villages have access to pipe water. This suggests that most of the population in Dadu district do not have access to safe and clean drinking water. Majority of the population is relying on hand-pump facility of water, since the groundwater in many areas contains high levels of salt and impurities (Khan 2004)

An overwhelming number (80%) of villages do not have the facility of drainage and paved path. The situation is worse in treatment villages as compared to the control villages, where only 2 villages are with drain and 3 villages are with paved path facility inside the village. Most of the control villages have at least a shop, while two-third of the villages do not have a single shop within the village. Therefore, majority of the population go to other villages for their daily consumption needs. This is also evident from table 2, where the average distance to local market is 10 km in the treatment village. This not only increases the cost of consumption for the locals but also consume their productive work-time. Most of the villages in Dadu District have electricity except 3 of the treatment villages. This shows 85% of electrification in Dadu district while 15% of the villages still lack basic facility of 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	13	3	4	0	17	3
Telephone	3	13	2	2	5	15
Piped water	2	14	1	3	3	17
Tube well	1	15	0	4	1	19
Hand pump	13	3	4	0	17	3
Drains	2	14	2	2	4	16
Paved Path	3	13	1	3	4	16
Shops or market	5	11	3	1	8	12

**Figure 1: Village Infrastructure, 2006 (all villages)**



### 3. Profile of Sample Households Survey Results

#### 3.1 Age, Education and Profession of Respondents

We have interviewed one male respondent and one female respondent from each sampled households with different set of questionnaires. The female questionnaire includes questions

The average age of respondent is 39 years for the overall sample without any significant difference among the sub-samples. A higher proportion of respondents are in the age group of 26-35 years (31%) followed by 24% in age group of 36-45 years, and only 12% of respondents are above 55 years.

**Table 4: Age of Respondents**

Respondent	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average Age	39	37	39	41	39	39	39
Total Number of Respondents	239	81	320	80	239	161	400
Respondents % age group:							
16-25	17.2	22.2	18.4	12.5	17.2	17.4	17.3
26-35	33.1	32.1	32.8	25.0	33.1	28.6	31.3
36-45	22.2	23.5	22.5	28.8	22.2	26.1	23.8
46-55	14.2	17.3	15.0	20	14.2	18.6	16.0
56-65	8.8	2.5	7.2	8.8	8.8	5.6	7.5
>65	4.6	2.5	4.1	5.0	4.6	3.7	4.3
Total	100	100	100	100	100	100	100

related to major constraints faced by women, women's credit need and the role of women in decision making. While all other questions related to household socio-economic conditions were targeted at male respondents. The major part of the survey was restricted to male population because of resource constraints and the fact that generally in rural areas of Pakistan men dominate the income-generation and decision making process. In this section we present the data and its interpretation specifically to men respondents. We have tried to interview the household head but in case of unavailability of the household head we interviewed a well-informed or educated member of the household. Therefore a reasonable number of respondents found to be quite young and educated.

Table 5 presents data on literacy rate and level of respondents. More than one-third of the respondents are illiterate with a higher proportion in participating households (38%) than non-participating households (28%). Among the literate<sup>4</sup> population more than one-quarter (26%) attended primary level education, 11% attended education upto matric level and nearly 6% have post matric level education. including 53.8% with schooling and 12.5% without any formal schooling. A higher percentage of respondents (35.9%) in the treatment villages as compared to (25%) in control villages were reported as illiterate. In the overall sample households, among the literate respondents, 26% attended primary level education, 11% of the respondents attended matric level education and only 8% of the literate respondents attended post matric level education. The level of education among the

<sup>4</sup>Literate is a person who could write his/her name and could read a news paper in any language

literate respondents is quite high in all the categories of education for control villages as compared to treatment villages except for the respondents who are literate but not received any formal schooling. The results of higher proportion of literate respondents in the control villages may be attributed to the easier access to education facilities (schools and colleges) in control villages as compared to the treatment villages. (see Table 2)

A close look into Table 6 further reveals that respondents in treatment villages highly depend on on-farm activities, while in control villages higher proportion of respondents are engaged in off-farm activities like labour, services and business. The accumulative figure for farming and labour (on-farm) is 11% for the control villages as compared to 34% for treatment villages, and on the other hand in control villages the respondents working in service, business and labour (off-farm) is nearly

**Table 5: Literacy level of respondents**

Respondent	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Not Literate	37.7	30.9	35.9	25.0	37.7	28.0	33.8
Literate but no schooling	12.1	14.8	12.8	11.3	12.1	13.0	12.5
Schooling	50.2	54.3	51.3	63.8	50.2	59.0	53.8
Primary	27.2	28.4	27.5	32.0	27.2	30.2	28.7
Middle	7.9	9.9	8.4	10.0	7.9	9.9	8.8
Matric	10.5	8.6	10.0	15.0	10.5	11.8	11.0
Post Matric	4.6	7.4	5.3	6.8	4.6	7.0	5.8

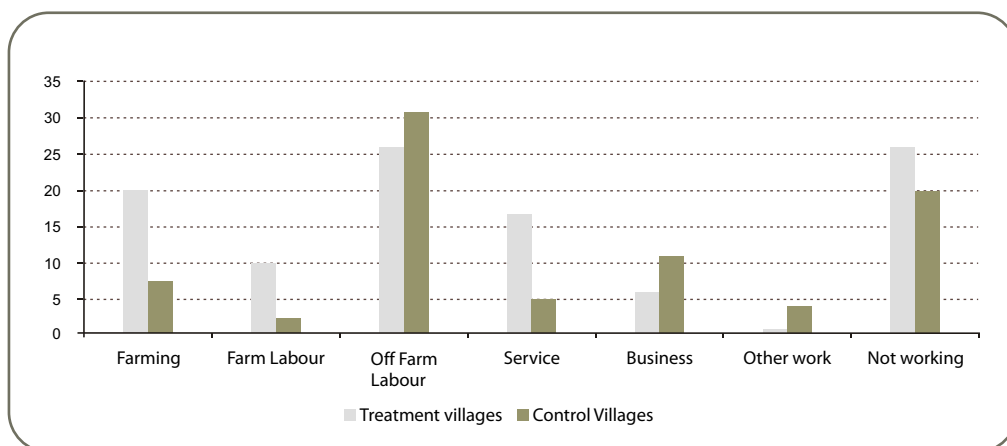
Data presented in Table 6 depicts that a higher proportion of respondents are working as casual labour (38%) followed by one-quarter of respondents who are not-working (this category includes students, old age citizens, unemployed and those who cannot work due to sickness or any disability) and nearly one-fifth of the respondents are engaged in farming activities. Only 9% of the total respondents are engaged in public or private services. Similarly a very small percentage of the respondents (8%) are earning their income from small enterprises/businesses.

double than treatment villages; 64% and 39% respectively. As mentioned in section 2, the control villages are comparatively better connected to the physical and social infrastructures and thereby the local population has a greater opportunity to diversify their professions in different on-farm and off-farm activities.

**Table 6: Profession of Respondents (percent)**

Respondent	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Farming	20.9	25.9	22.2	8.8	20.9	17.4	19.5
Farm Labour	13.0	8.6	11.9	2.50	13.0	5.6	10.0
Off Farm Labour	28.0	18.5	25.6	32.5	28.0	25.5	27.0
Service	5.9	7.4	6.3	18.8	5.9	13.0	8.8
Business	6.7	8.6	7.2	12.5	6.7	10.6	8.3
Other Work	0.0	0.0	0.0	3.8	0.0	1.9	0.8
Not Working	25.5	30.9	26.9	21.3	25.5	26.1	25.8

**Figure 2: Profession of Respondents (%) in Treatment and Control Villages**



### 3.2 Demographic Structure of Households and Work Status of Household Members

In this section we provide information on household demographic structure and work status of household members. Table (7) presents the demographic composition in sample household. This survey includes a total of 400 sample households, with a population of 3,150 individuals including 50.2% of adults and 49.8% of children. The sex ratio (male:female) is 111 which is slightly higher than the national ratio of 109.49<sup>5</sup>. Similarly the male to female ratio is higher in the participating households (115) than the non-participating (109). Various studies suggest that the higher male to female ratio in Pakistan is due to high mortality rate in Pakistan.

Six percent of the population of sample households fall in above 55 years of age and 36.4% of the population in our survey fall under 10 years of age. The figures for all other sub-samples are nearly invariant in the series of 34 to 36.

The overall dependency ratio<sup>6</sup> is around 74%, with a higher dependency ratio among the participating households (77%) as compared to the non-participating households (67%). Similarly the percentage of dependent population is higher (43) in treatment villages and (38) in control villages.

The average household size is 7.9 persons with slightly higher (8.0) for treatment villages than the control villages (7.4). Similarly the household size for the poor households is higher at (8.6) than the non-poor households at (7.3) in all the sub-sample figures for household size are higher than the national average of 6.8 for rural Pakistan and 6.84 for rural Sindh (PIES 2004-05).

The number of Poor<sup>7</sup> households are 187 (46.75%) with a population of 1,603 individuals. The non-poor households are 213 (53.25%) with population of 1,547 individuals.

<sup>5</sup>The figure is estimated as of first January 2005 (GoP: Pakistan Statistical Year Book 2005)

<sup>6</sup>Dependency ratio is the ratio of population in the age groups of up to 10 years plus over 55 years to the population of those in the age groups of over 10 to 55 years.

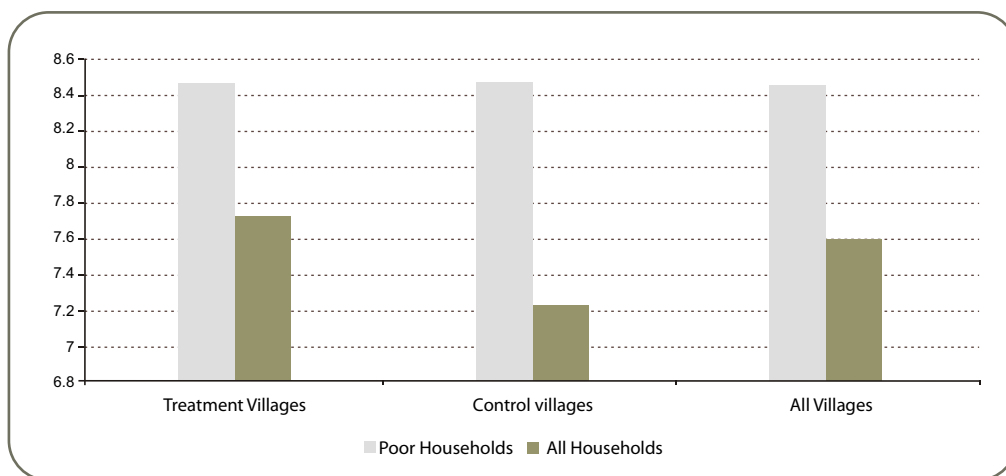
<sup>7</sup>Poor is one who has per capita per month income below poverty line i.e. Rs. 879 per capita per month [Economic Survey, 2005-06].



Table 7: Demographic Composition of Households

Sex and Age	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
household	239	81	320	80	239	161	400
Total Population	1,953	603	2,556	594	1,953	1,197	3,150
Male	1,020	320	1,340	320	1,020	640	1,660
Female	933	283	1,216	274	933	557	1,490
Male : Female	109	113	110	117	109	115	111
<b>Adult</b>	970	297	1,267	313	970	610	1,580
	(49.7)	(49.3)	(49.6)	(52.7)	(49.7)	(51.0)	(50.2)
Male	515	161	676	171	515	332	847
Female	455	136	591	142	455	278	733
Over 55 Years in Population (%)	6.3	4.8	6.0	5.9	6.3	5.3	6.0
<b>Children</b>	983	306	1,289	281	983	587	1,570
	(50.3)	(50.7)	(50.4)	(47.3)	(50.3)	(49.0)	(49.8)
Male	505	159	664	149	505	308	813
Female	478	147	625	132	478	279	757
Upto 10 Years in Population (%)	37.3	37.3	37.3	32.5	37.3	34.9	36.4
Average Size of household	8.2	7.4	8.0	7.4	8.2	7.4	7.9
Adult / household	4.1	3.7	4.0	3.9	4.1	3.8	4.0
<b>Poor Household</b>							
Number of household	108	42	150	37	108	79	187
Total Population	946	337	1,283	320	946	657	1,603
Average Size of household	8.8	8.0	8.6	8.6	8.8	8.3	8.6
<b>Non Poor Household</b>							
Number of household	131	39	170	43	131	82	213
Total Population	1007	266	1,273	274	1007	540	1,547
Average Size of household	7.7	6.8	7.5	6.4	7.7	6.6	7.3

**Figure 3: Average size of the poor and all households in the villages**



In this survey, we classified the work status of households into three major categories; 'not-working', 'household-work' and 'working-outside-the-household'. In each category, we classified the data into three age groups (above 55 years, 18-55 years and 10-18 years) to see the concentration of different age groups' working status in the household. The survey results show that an overwhelming majority of the male population (77%) fall in the working category, while majority of the female population (78%) fall under the category of household-work that relates to the day to day household chores. This trend is true for both the treatment and control villages as well as for the members and non-members in the treatment villages. In the overall sample, a higher proportion of male (21%) as compared to female (11.7%) population are in the 'not-working' category, out of which 11% male and 4.4% female population are students. Similar trends are also true in all sub-samples. In the 'not-working' category, the concentration of not-working population lies in age bracket of ">10-18" years where most of not-working population are students. The population of not-working in the older age bracket (above 55 years) are not-working either due to old age, sickness or enjoying retirement life while the not-working population in the active age group of (>18-55 years) are unemployed or voluntarily unemployed.

Those engaged in household work are 37% of the working age population with engaging majority of female (78%) as compared to abysmal low proportion of male (2%) population in the daily chores of household. Similar results are also true for all other sub-samples of participating and non-participating households.

In the overall sample, more than 46% of the working population are 'working-outside-the-households' without any significant difference between participating and non-participating households. Not surprisingly, most of 'working-outside-the-households' are those of male working population with 77% male and only 10% female in the working population. In the overall population, a higher proportion of male population in age group of 18-55 years is engaged in 'outside-the-household' work is followed by 'not-working' than 'household-work'. But for female population a higher proportion of female population in age group of 18-55 years is engaged in 'household-work' followed by 'working-outside-household' and then 'not-working'. In the above 55 years population the difference between male and female working categories is interesting. In the above 55 years male population almost equal number of males are in 'not-working' category and 'working' category and none of the males in this age bracket are in the 'household-work' category. But if we look into the female population in the age bracket of above 55 years, it shows a higher proportion of female in 'not-working' category followed by 'household-work' and then working. A higher proportion of male population in age group of 11-18 years are engaged in 'outside-the-household-work' and female are in 'household-work' followed by 'not-working' category where majority is from students.

In the last part of Table 8, we presented data on occupational distribution of the working population. The casual-labour involves nearly two-third (64.4%) of the workers with 39.4% as off-farm labour and one-quarter of the workers as farm-labour. Interestingly the proportion of farm labour is high in treatment villages (27.3%)

as compared to control villages (14.5%). The proportion of off-farm labour is slightly higher in control villages than treatment villages; 42% and 39% respectively. Around 17 per cent of the workers are cultivating on their own-farm with 19% in treatment villages and nearly 6% in control villages. Only 9.5% of the working population are involved in long-term employment. This includes both private and public sector services where the proportion is almost three times higher in control villages (21%) as compared to treatment villages (7%). Similarly, a low proportion of workers are involved in business with 5.5% in treatment villages and 9% in control villages, constituting 6% of working population in the overall sample. If we compare the male and female workers

according to their occupational engagements, it shows a higher proportion of male workers are involved in off-farm labour followed by farm labour, own farming, then services and business. It is pertinent to mention here that only 95 (10%) female out of 923 female populations are 'working-outside-the-household'. Among this an overwhelming majority of the female workers (73%) or in other words 68 female workers out of 95 are involved in off-farm labour followed by 13% farm labour. This shows that even the working female is engaged in unskilled low paid work. The proportion of working women is higher in treatment villages (11%) as compared to the control villages (6%).

**Table 8: Work Status of Households**

Sex and Age	Treatment Villages									Control Village		
	Member			Non-member			Total			M	F	T
	M	F	T	M	F	T	M	F	T			
All over 10 years	661	563	1224	206	172	378	867	735	1602	213	188	401
<b>Not working</b>	<b>125</b>	<b>63</b>	<b>188</b>	<b>52</b>	<b>19</b>	<b>71</b>	<b>177</b>	<b>82</b>	<b>259</b>	<b>49</b>	<b>26</b>	<b>75</b>
	(18.9)	(11.2)	(15.4)	(25.2)	(11.0)	(18.8)	(20.4)	(11.2)	(16.2)	(23.0)	(13.8)	(18.7)
>55 years	35	33	68	10	7	17	45	40	85	8	10	18
>18-55	28	10	38	12	2	14	40	12	52	14	6	20
>10-18	62	20	82	30	10	40	92	30	122	27	10	37
<b>Household work</b>	<b>12</b>	<b>441</b>	<b>453</b>	<b>4</b>	<b>129</b>	<b>133</b>	<b>16</b>	<b>570</b>	<b>586</b>	<b>4</b>	<b>150</b>	<b>154</b>
	(1.8)	(78.3)	(37.0)	(1.9)	(75.0)	(35.2)	(1.8)	(77.6)	(36.6)	(1.9)	(79.8)	(38.4)
>55 years	0	14	14	0	3	3	0	17	17	0	5	5
>18-55	7	330	337	1	102	103	8	432	440	2	107	109
>10-18	5	97	102	3	24	27	8	121	129	2	38	40
<b>Working</b>	<b>524</b>	<b>59</b>	<b>583</b>	<b>150</b>	<b>24</b>	<b>174</b>	<b>674</b>	<b>83</b>	<b>757</b>	<b>160</b>	<b>12</b>	<b>172</b>
	(79.3)	(10.5)	(47.6)	(72.8)	(14.0)	(46.0)	(77.7)	(11.3)	(47.3)	(75.1)	(6.4)	(42.9)
>55 years	37	5	42	6	3	9	43	8	51	11	1	12
>18-55	372	40	412	122	14	136	494	54	548	125	8	133
>10-18	115	14	129	22	7	29	137	21	158	24	3	27
% own farm	19.3	11.9	18.5	21.3	16.7	20.7	19.7	13.3	19.0	5.6	8.3	5.8
% farm labour	30.0	11.9	28.1	27.3	8.3	24.7	29.4	10.8	27.3	15.6	0.0	14.5
%service/job	5.9	0.0	5.3	13.3	4.2	12.1	7.6	1.2	6.9	21.3	16.7	20.9
% off-farm labour	35.3	74.6	39.3	32.0	70.8	37.4	34.6	73.5	38.8	40.0	66.7	41.9
% business	6.3	1.7	5.8	5.3	0.0	4.6	6.1	1.2	5.5	10.0	0.0	9.3
% multiple work	3.2	0.0	2.9	0.7	0.0	0.6	2.7	0.0	2.4	7.5	8.3	7.6

Note: Figures in parenthesis indicate percentage.

**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	661	563	1224	419	360	779	1080	923	2003
<b>Not working</b>	<b>125</b>	<b>63</b>	<b>188</b>	<b>101</b>	<b>45</b>	<b>146</b>	<b>226</b>	<b>108</b>	<b>334</b>
	(18.9)	(11.2)	(15.4)	(24.1)	(12.5)	(18.7)	(20.9)	(11.7)	(16.7)
>55 years	35	33	68	18	17	35	53	50	103
>18-55	28	10	38	26	8	34	54	18	72
>10-18	62	20	82	57	20	77	119	40	159
<b>Household work</b>	<b>12</b>	<b>441</b>	<b>453</b>	<b>8</b>	<b>279</b>	<b>287</b>	<b>20</b>	<b>720</b>	<b>740</b>
	(1.8)	(78.3)	(37.0)	(1.9)	(77.5)	(36.8)	(1.9)	(78.0)	(36.9)
>55 years	0	14	14	0	8	8	0	22	22
>18-55	7	330	337	3	209	212	10	539	549
>10-18	5	97	102	5	62	67	10	159	169
<b>Working</b>	<b>524</b>	<b>59</b>	<b>583</b>	<b>310</b>	<b>36</b>	<b>346</b>	<b>834</b>	<b>95</b>	<b>929</b>
	(79.3)	(10.5)	(47.6)	(74.0)	(10.0)	(44.4)	(77.2)	(10.3)	(46.4)
>55 years	37	5	42	17	4	21	54	9	63
>18-55	372	40	412	247	22	269	619	62	681
>10-18	115	14	129	46	10	56	161	24	185
% own farm	19.3	11.9	18.5	13.2	13.9	13.3	17.0	12.6	16.6
% farm labour	30.0	11.9	28.1	21.3	5.6	19.7	26.7	9.5	25.0
% service/job	5.9	0.0	5.3	17.4	8.3	16.5	10.2	3.2	9.5
% off-farm labour	35.3	74.6	39.3	36.1	69.4	39.6	35.6	72.6	39.4
% business	6.3	1.7	5.8	7.7	0.0	6.9	6.8	1.1	6.2
% multiple work	3.2	0.0	2.9	4.2	2.8	4.0	3.6	1.1	3.3

Note: Figures in parenthesis indicate percentage.

### 3.2 Adult Literacy and Schooling of Children

This section presents the literacy rate and level among the adult population in the sample households. In the overall sample 40% of the adult population is literate with a higher proportion of literate adults in non-participating households (49%) than participating households (35%). The proportions of literate adults are 56 and 36% in control villages and treatment villages, respectively. Not surprisingly, a higher proportion of poor (64%) than non-poor (56%) adults are illiterate. The proportion of illiterate adult in poor households varies from 70% in member household of treatment villages to 48% in control villages. While for the non-poor household the proportions of illiterate adults

ranges from 61% in member households of treatment villages to 41% in control villages. The low female adult literacy is true even in non-poor households where only one-fifth of the non-poor female adults are literate.

In the overall sample, 38.5 of the literate adults attended primary school with 41% in participating households and 36% cent in non-participating households. Interestingly, quite high proportion of the literate adults acquired education up to high school and post matriculation. More than 30% of the overall sample with one-quarter in participating and more than one-third in non-participating households attended education up to matric and above. Similarly, around one-fifth of the literate adults did not attend any formal school.

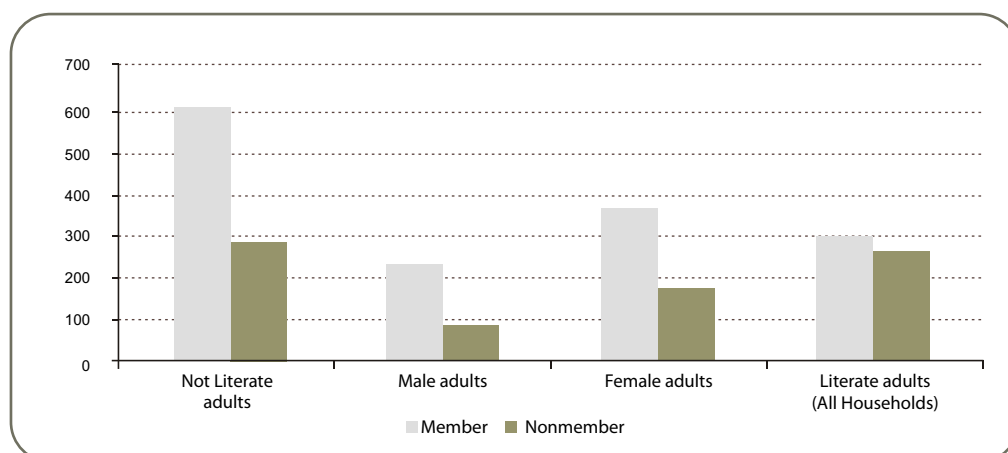
The difference between control villages and treatment villages is quite high with the proportion of 22 and 13 per cent of non-schooling literate adults in treatment villages and control villages respectively.

Data presented in Table 10 shows that majority of the children up to 18 years old are not in schools with almost three-fourth of the children in participating households and more than two-third in non-participating households but these

**Table 9: Adult Literacy in Households**

Literacy Level	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Illiterate Adults	634	174	808	139	634	313	947
<b>% of adult population:</b>							
All households	65.4	58.6	63.8	44.4	65.4	51.3	59.9
Poor households	70.2	63.9	68.5	48.0	70.2	56.1	64.4
Non-poor households	61.4	52.8	59.6	41.2	61.4	46.6	56.0
Male adults	245	57	302	39	245	96	341
<b>% of male adult population</b>							
All households	47.6	35.4	44.7	22.8	47.6	28.9	40.3
Poor households	51.3	43.4	49.2	28.2	51.3	36.0	44.9
Non-poor households	44.7	26.9	40.9	18.3	44.7	22.2	36.4
Female adults	389	117	506	100	389	217	606
<b>% of female adult population</b>							
All households	85.5	86.0	85.6	70.4	85.5	78.1	82.7
Poor households	89.8	87.5	89.2	70.0	89.8	78.9	85.4
Non-poor households	81.7	84.4	82.2	70.8	81.7	77.2	80.1
Literate adults (all Households)	336	123	459	174	336	297	633
<b>Per cent of literate</b>							
Primary school	41.1	37.4	40.1	34.5	41.1	35.7	38.5
Middle school	10.1	13.8	11.1	11.5	10.1	12.5	11.2
High school	14.3	15.4	14.6	17.8	14.3	16.8	15.5
Post matriculation	11.3	13.0	11.8	23.0	11.3	18.9	14.8
No schooling	23.2	20.3	22.4	13.2	23.2	16.2	19.9

**Figure 4: Literacy level in members and non-members**



figures also include the children even below school age. Four interesting features are prominently apparent from the data presented in Table 9. Firstly, the disparity between the girls and boys is staggeringly high. In the overall sample only one-fifth of girls and more than one-third of the boys are attending school. This disparity between girls and boys is also true for all other sub-samples. Secondly, if we look into the school age children, higher proportion of boys are in school than girls. In the overall sample one-quarter of the boys in 5-10 years age and 64 per cent in 10-18 years age group are not in schools. There is no significant difference among the sub-sample in case of 5-10 years of the boys not-in-schools, but in age group 10-18 years there is huge difference among the sub-sample. The highest proportion of boys no- in-schools for the age group of 10-18 years is in member household (82 %) of treatment villages and lowest in non-member households (47%) of treatment villages. Thirdly,

among the school age girls 58% in age group of 5-10 years and 82 per cent of the 10-18 years age group are not enrolled in schools. There is a visible difference between participating and non-participating households in both age groups. For the age group of 5-10 years the proportion of not-in-school girls are 63 and 51% in participating and non-participating households respectively, while for the age group of 10-18 years the proportion of not-in-schools girls is 85% and 78% respectively. Finally, among the not-in-school children the proportion of children from poor households is around 54% in the overall sample without any significant difference among the sub-samples.

**Table 10: Schooling of Children**

Children in School	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
<b>All Children</b>	1042	321	1363	297	1042	618	1660
Children not in school	767	212	979	203	767	415	1182
% of all children not in school	73.6	66.0	71.8	68.4	73.6	67.2	71.2
% of male children not in school	65.6	56.8	63.5	58.1	65.6	57.4	62.5
Up to 5 years	91.4	90.6	91.2	91.2	91.4	90.9	91.2
>5-10 years	26.1	24.0	25.6	26.0	26.1	25.0	25.7
>10-18 years	72.5	47.3	66.7	52.8	72.5	50.0	64.1
% of female children not in school	82.2	76.3	80.9	80.3	82.2	78.2	80.8
Up to 5 years	95.3	100.0	96.3	100.0	95.3	100.0	96.9
5-10 years	62.7	50.0	59.5	52.8	62.7	51.1	58.5
>10-18 years	84.7	75.6	82.6	80.4	84.7	78.3	82.1
<b>Children not in school in poor households %of:</b>							
All children	52.9	54.7	53.2	56.4	52.9	55.6	53.8
Male children	42.9	32.7	40.8	43.9	42.9	38.5	41.3
Female children	57.1	67.3	59.2	56.1	57.1	61.5	58.7



### 3.5 State of Health and Physical environment

To assess the health status of the members of households, we asked the respondent to place the status of each member of household in one of the three given categories, good, fair and poor. The respondents were further explained to place those members in good state who have no health problem at all, those members in fair health who have minor problems and those in poor health state who have chronic and acute ailment at the time of the survey. It is pertinent to mention here that response or based on the observation and perception of the respondent irrespective of any medical diagnoses of the households members. As shown in table 11, majority of the sample population are enjoying good health. In the overall sample around 90 per cent of the sample population are in good health without any significant difference among the sub-samples of treatment and control villages. However, a higher proportion of children (95%) than adults (83%) and male (91%) than females (88%) are in good health; the difference in both categories are statistically significant. Similar differences are true in all

sub-samples of participating and non-participating households. According to the perception of respondents 7.5% of the over population with a higher proportion of people in non-participating households (8.4%) than participating households (7%) are in fair health state. A higher proportion of female than male and adults than children are in fair health state. Though the differences in both categories are statistically significant but are more visible between children and adults (12 and 3% respectively) than female and male (8.4% and 6.7% respectively). The proportion of people in fair health state are higher in non-participating households than participating households in all sub-samples of male, female, children and adults. Around three per cent of the sample population are suffering from poor health (chronic and acute ailment). The proportion of people in poor health is higher in participating households than non-participating households for all sub-samples of male, female, children and adults. A significantly higher proportion of adults (4.4%) than children (1.3%) and female (3.6%) than male (2.2) are in poor state of health. These differences are statistically

**Table 11: Health Status of Household Members (All households)**

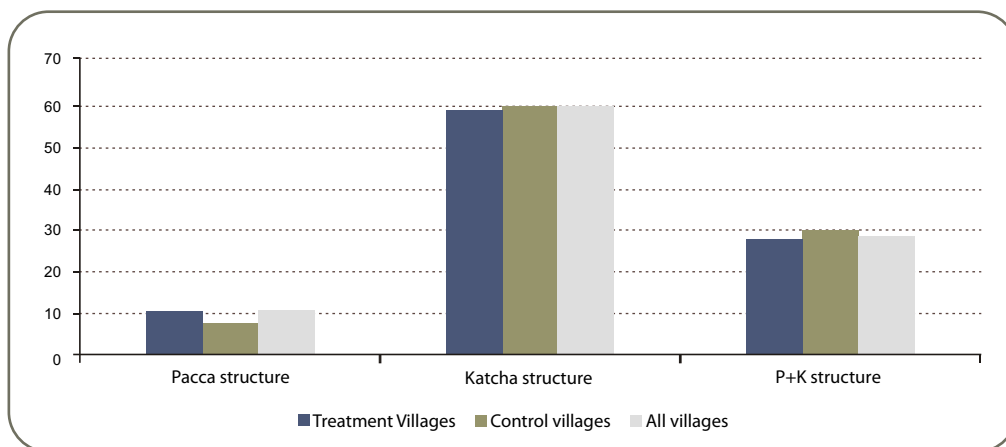
Health Status of HH Members	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
<b>Percent in Good Health</b>	89.7	88.9	89.5	89.9	89.7	89.4	89.6
Male	91.1	90.6	91.0	91.3	91.1	90.9	91.0
Female	88.2	86.9	87.9	88.3	88.2	87.6	88.0
Adults	83.5	81.5	83.0	85.6	83.5	83.6	83.5
Children	95.8	96.1	95.9	94.7	95.8	95.4	95.7
<b>Percent in Fair Health</b>	7.0	8.6	7.4	8.1	7.0	8.4	7.5
Male	6.2	7.8	6.6	7.5	6.2	7.7	6.7
Female	7.9	9.5	8.3	8.8	7.9	9.2	8.4
Adults	11.4	13.8	12.0	12.1	11.4	13.0	12.0
Children	2.6	3.6	2.9	3.6	2.6	3.6	3.0
<b>Percent in Poor Health</b>	3.3	2.5	3.1	2.0	3.3	2.3	2.9
Male	2.7	1.6	2.5	1.3	2.7	1.4	2.2
Female	3.9	3.5	3.8	2.9	3.9	3.2	3.6
Adults	5.1	4.7	5.0	2.2	5.1	3.4	4.4
Children	1.5	0.3	1.2	1.8	1.5	1.0	1.3
<b>Percent Died</b>	1.3	1.3	1.3	0.5	1.3	0.9	1.2
Male	1.2	0.6	1.0	0.3	1.2	0.5	0.9
Female	1.5	2.1	1.6	0.7	1.5	1.4	1.5
Adults	1.1	1.1	1.1	0.3	1.1	0.7	0.9
Children	1.5	1.6	1.5	0.7	1.5	1.1	1.4

significant. The respondents were also asked to record the number of deaths during the year 2005-06. The death rate varies from 0.5 per cent in control villages to 1.3 per cent in treatment villages. In the overall sample the proportion of death is higher for children (1.4 per cent) than adults (0.9 per cent) and female (1.5 per cent) than male (0.9 per cent).

The result presented in Table 12 show that there

survey for Dadu district where only twenty eight percent of homes have piped water, without a significant difference in treatment and control villages, while rest of the 72% of house depends on other insecure source of water including largely depending on hand/motor pumps, then wells and canals. The proportion of house using hand pumps is significantly high in participating households (69.5 per cent) than non-participating

**Figure 5: Housing structure in treatment and control villages**



is a general lack of basic amenities of life for the sample households. In the overall sample only 14.5 per cent of the households have pucca (brick or concrete) structure of living space, with even lower proportion of 12.5 per cent of households in control villages and 15 per cent of households in treatment villages. Majority of the families (over 63 per cent) live in Katcha (mud-based) structures with proportions of 65 and 61% in participating and non-participating households respectively. Around one-quarter of non-participating and one-fifth of the participating households live in mixed structures (partly pucca and partly Katcha) of living spaces. The living space is quite congested with average numbers of 2 rooms per household given the average household size of 8, thereby accommodating more than 4 persons in one room on average. Nearly, 85% of the houses are making up of up to 2 rooms, followed by 14.5% of houses with 3-4 rooms and even less than one per cent of the houses have 5 or more rooms.

The improved quality of health largely depends upon the availability of clean drinking water, proper drainage and sewerage systems available to the household members. Unfortunately in most of the rural parts of the country it is rarely available to the rural population. Similar results were found in this

households (56.5 per cent). Another acute problem faced by majority of the households is unavailability of drainage facility for waste disposal, with as few as 20 per cent of the house have drainage facility with even lower proportion of 17 per cent of participating households and 25 per cent of non-participating households have access to drainage facility. The worsen situation of sanitary is reflected by the fact that 41 per cent of the houses not have indoor latrines and majority of population use open-defecation. The proportions of houses with out latrine are higher in participating households than non-participating households and the difference is statistically significant. About 80% of houses are electrified in the surveyed villages with a slightly higher percentage (83.8) in control villages as compared with the treatment villages (79.7%) in other words a sizeable number of households (19.5%) still do not have access to electricity. The locals are predominantly dependent upon fuel wood with 93 per cent of households in treatment villages and 84 per cent of households in controls villages using wood as fuel in absence and/or high cost of alternative energy sources.

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

Housing Facilities	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
<b>All Households</b>	<b>239</b>	<b>81</b>	<b>320</b>	<b>80</b>	<b>239</b>	<b>161</b>	<b>400</b>
% Pucca Structure	14.2	17.3	15.0	12.5	14.2	14.9	14.5
% Katcha Structure	64.9	58.0	63.1	63.8	64.9	60.9	63.3
% P+K Structure	20.9	24.7	21.9	23.8	20.9	24.2	22.3
Avg. No Of Rooms	2	2	2	2	2	2	2
<b>% Household With:</b>							
Up to 2 Rooms	81.6	90.1	83.8	88.8	81.6	89.4	84.8
3 – 4 Rooms	17.2	9.9	15.3	11.3	17.2	10.6	14.5
5 or more rooms	1.3	0.0	0.9	0.0	1.3	0.0	0.8
<b>Water Supply:</b>							
% Piped	25.5	35.8	28.1	27.5	25.5	31.7	28.0
% Canal	0.4	0	0.3	12.5	0.4	6.2	2.8
% Well	4.6	8.6	5.6	2.5	4.6	5.6	5
% hand/motor pump	69.5	55.6	65.9	57.5	69.5	56.5	64.3
<b>Latrine:</b>							
% Inside	56.5	61.7	57.8	63.8	56.5	62.7	59
% Outside	43.5	38.3	42.2	36.3	43.5	37.3	41
<b>Drainage:</b>							
% Yes	16.7	22.2	18.1	28.8	16.7	25.5	20.3
% No	83.3	77.8	81.9	71.3	83.3	74.5	79.8
<b>Electricity:</b>							
% Yes	79.5	80.2	79.7	83.8	79.5	82	80.5
% No	20.5	19.8	20.3	16.3	20.5	18	19.5
<b>Fuel Used:</b>							
% Wood	92.5	93.8	92.8	83.8	92.5	88.8	91
% Other	7.5	6.2	7.2	16.3	7.5	11.2	9

### 3.6 Household Incomes, Inequality and Poverty

Table 13 presents the data on household income, its distribution and sources. The average annual income of the overall sample households is Rs. 99,393, ranging from Rs. 92,186 for the non-member, Rs. 101,506 for member households of treatment villages to Rs. 100,374 for control villages. There is little difference in average income of households in treatment village and control villages which is

statistically insignificant. Similar results also found after adjusting the household size and calculating for per capita per month income. The average per capita per month income ranges from Rs. 1,032 for non members and Rs. 1,035 in member households of treatment villages to Rs. 1,127 for households in control villages. The difference between the participating and non-participating households is statistically insignificant. The monthly per capita income is Rs. 1052 for the overall sample is higher than the national poverty line<sup>8</sup> income

<sup>8</sup> Rs.879 per capita per month (Economic Survey of Pakistan 2005-06)

of Rs. 879. But for the poor households the per capita income is far below the poverty line with Rs.562 in overall sample. In case of the poor households there is a little difference between the per capita per month income of the poor households in treatment villages and control villages but in case of non-poor households the difference is quite high. The income level in non-poor households is ranging from Rs. 2,177 in member and Rs.2, 238 in non-member households of treatment villages to Rs. 3,324 in households of control villages. This difference in income of the non-poor households between treatment and control villages is statistically significant.

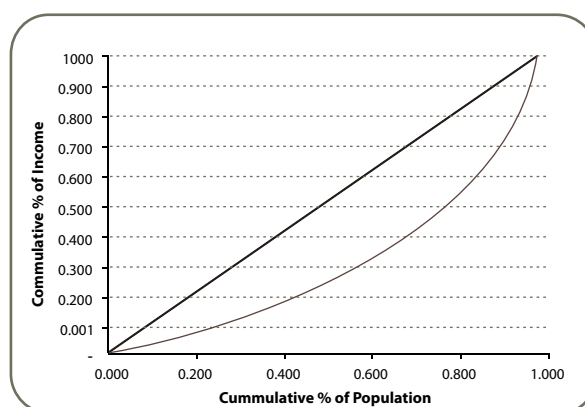
Quintile analysis of the income distribution in the survey area illustrates a high level of inequality in the distribution of income. The ratio of the bottom 20 to top 20 percent of the income receivers is 1:9 with the concentration ratio of 0.39.

Income Quintiles	Percentage Share
Bottom 10%	1.89 %
Bottom 20%	5.07 %
Middle 60%	48.23%
Top 10%	29.57%
Top 20%	46.70%

The income distribution in different quintiles show that, the bottom 10% of the households hold even less than two per cent of the total income, as compared to around 30% of the income held by the highest 10% of the households. Similarly, the bottom 20% of the population holds 5 per cent of the total income, as compare to 47 per cent of the income is held by the top 20% of the households. The middle 60% of the sample households have a share of 48% in total income. The livelihood of the rural communities is predominantly dependent on natural resources as shown in table 13. Crops and livestock are the chief sources of household

income. The combined share of crops and livestock in the overall sample household income is approximately 48 per cent. The share of crops and livestock in total income is 31% in the control villages and significantly higher at 52% for the treatment villages. Crops alone contribute more than one-third of the total household income; that is, 37 per cent for participating and 24 per cent for non-participating households. Further, livestock is responsible for 13.5 per cent of the household income in the overall sample. The share of livestock in household income is quite high at 15 per cent in households of treatment villages as compared to the control villages at 7 percent. The second largest source of household income comes from casual labour. In the overall households 28 per cent of households' income is derived from casual labour. The share of labour in household income is higher in non-participating households (30 per cent) than that

Figure 1: Income Lorenz Curve

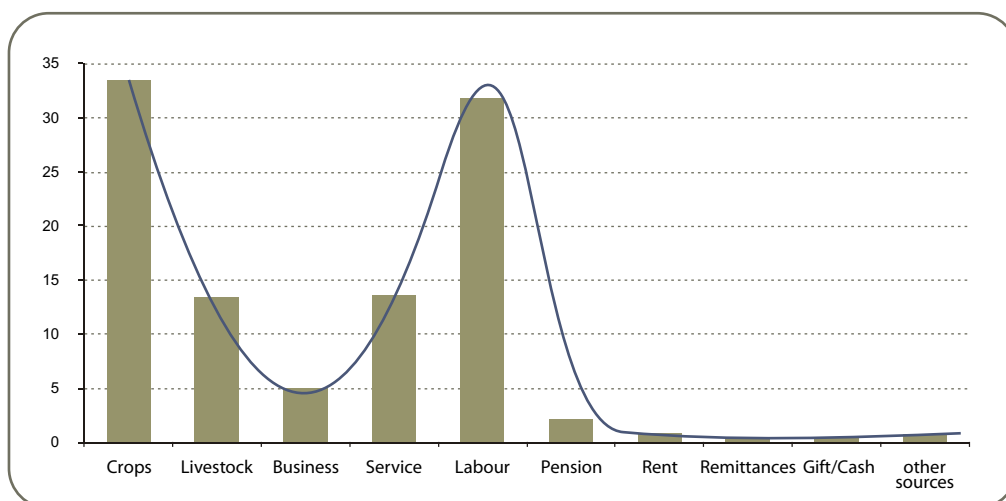


of participating households (27%). Long term employment (services) contribute around 14% in the overall sample households income with one-quarter in households of control villages and just 12% in households of treatment villages. Similarly, business makes up a higher share in households' income in control villages (8 %) than treatment villages (5%). In a nutshell we may safely say that in treatment villages the households drive a large share of their income from farm sector, while in control village the larger share of income comes from off-farm sources.

Table 13: Household Income 2005-06

Household Income	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average household (Rs.)	101,506	92,186	99,147	100,374	101,506	96,255	99,393
Average/ Capita (Rs.)	12,422	12,383	12,413	13,518	12,422	12,947	12,621
Per Capita/Month (Rs.) All HHs	1,035	1,032	1,034	1,127	1,035	1,079	1,052
Per Capita/Month (Rs.) Poor HHs	571	553	566	544	571	549	562
Per Capita/Month (Rs.) Non-poor HHs	2177	2238	2191	3324	2177	2808	2420
<b>% household with per capita/month income of:</b>							
Above 1757 (Non Poor)	18.4	12.3	16.9	5.0	18.4	8.7	14.5
1099 – 1757 (Transitory Non-poor)	24.7	19.8	23.4	23.8	24.7	21.7	23.5
880 - 1098 (Transitory Vulnerable)	11.7	16.0	12.8	25.0	11.7	20.5	15.3
660 – 879 (Transitory poor)	15.1	19.8	16.3	15.0	15.1	17.4	16.0
440 – 659 (Chronically poor)	15.9	13.6	15.3	16.3	15.9	14.9	15.5
Up to 439 (Very Poor)	14.2	18.5	15.3	15.0	14.2	16.8	15.3
<b>% Share in Income:</b>							
Crops	37.5	35.0	36.9	23.5	37.5	29.0	34.2
Livestock	16.0	12.0	15.0	7.4	16.0	9.6	13.5
Business	5.3	3.8	4.9	7.6	5.3	5.7	5.5
Service	9.7	17.8	11.6	24.7	9.7	21.4	14.2
Labour	27.1	27.2	27.1	32.2	27.1	29.8	28.1
Pension	1.9	0.7	1.6	1.6	1.9	1.2	1.6
Rent	1.0	2.7	1.4	0.7	1.0	1.7	1.3
Remittance	0.8	0.8	0.8	1.1	0.8	1.0	0.8
Gift/Cash	0.1	0.0	0.1	0.9	0.1	0.5	0.2
Other Sources	0.7	0.0	0.6	0.4	0.7	0.2	0.5

**Figure 6: Constituents of household income**



Results in Table-14 illustrate three main measure of poverty <sup>9</sup>including; the incidence (Head Count RatioHCR), depth (Poverty Gap RatioPGR) and severity of poverty in the study area. According to the findings of the survey, more than one-half of the population live under the poverty line. In absolute numbers 1603 persons are poor out of 3150 people. The incidence of poverty is lower among the member households population (48%) than in non-member households (55%). The treatment villages exhibited a similar lower rate of poverty (50%) as compared with the control villages (54 %). The poverty rate in this survey is significantly higher than that of the poverty reported by Govt for rural areas. According to the Economic Survey of Pakistan 2005-06 the head count index for rural population of Pakistan is 28.10% while in this survey it is 51%.

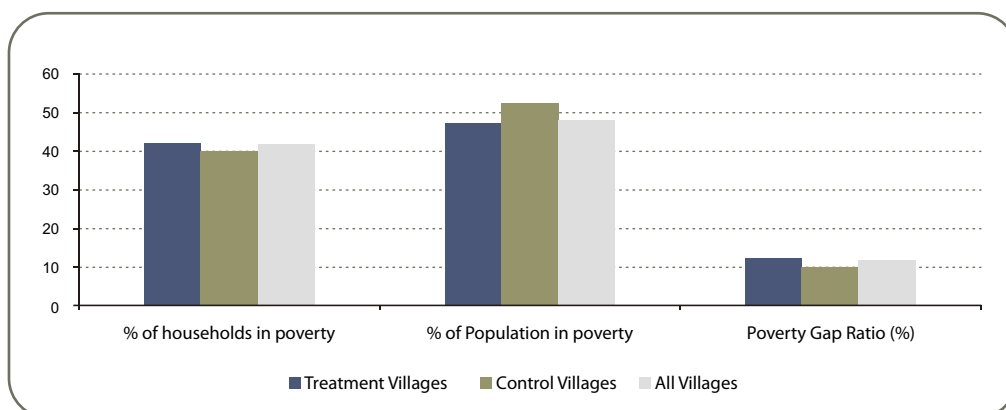
The other two indicators PGR and SPR are aggregate measures of the spread of the poor below the poverty line. A lower value indicates most of the poor gathered around the poverty line. In this survey the PGR for the overall household sample is 18.4% and SPR is 0.1, the PGR is 3 times higher than the national rural PGR (5.64) reported in Economic Survey of Pakistan 2005-06. Vulnerability is a phenomenon associated with groups that are either, just below or above the poverty line. Those closer to the poverty line are vulnerable to external shocks. The PGR and SPR indicate sizeable figures, thus implying that the poor population is far below the poverty line.

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

Poverty Status	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
All Households	239	81	320	80	239	161	400
Poor Households	108	42	150	37	108	79	187
Total Population	1953	603	2556	594	1953	1197	3150
Poor Population	946	337	1283	320	946	657	1603
% of Households in Poverty	<b>45.2</b>	<b>51.9</b>	<b>46.9</b>	<b>46.3</b>	<b>45.2</b>	<b>49.1</b>	<b>46.8</b>
Poverty Gap Ratio (%)	17.5	22.2	18.7	17.2	17.5	19.7	18.4
Severity Of Poverty	0.09	0.13	0.1	0.08	0.09	0.11	0.1
% of Population in Poverty	<b>48.4</b>	<b>55.9</b>	<b>50.2</b>	<b>53.9</b>	<b>48.4</b>	<b>54.9</b>	<b>50.9</b>

<sup>9</sup> In this study, three measures of poverty have been utilised:

- (i) Incidence of poverty/Head Count Ratio (percentage of population/households with per capita income below the national poverty line, i.e., Rs.879);
- (ii) Depth of Poverty/Poverty Gap Ratio Ratio of the average income of the poor to the poverty line;
- (iii) Severity of Poverty/Income distribution among the poor.

**Figure 7: Incidence and Depth of Poverty**

### 3.7 Household Expenditure & Consumption

The household expenditure and consumption is known to be one of the good measures of the standard of living and poverty level of the households. Table-15 provides information about household expenditures and the share of different categories of household consumption in it. The average annual expenditure of sample households is turn out to be at Rs. 70,920 with annual expenditure of Rs. 72752 in non-participating households and Rs.69686 in participating households. The per capita per month expenditure is higher in non-

participating households (Rs. 815) than participating households (Rs. 711) and the difference is statistically significant. Similar difference was also recorded between control and treatment villages, with per capita expenditures of Rs. 831 and Rs. 732 respectively. The per capita expenditure across the board is far below than the per capita income in all sub-samples and for the over all sample. The expenditure is just 69% of the income in participating households and three-fourth of the income levels in non-participating households.

**Table 15 (A): Household Expenditures (All Households)**

Expenditures	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average/household (Rs.)	69686	71511	70148	74008	69686	72752	70920
Average/Capita (Rs.)	8528	9606	8782	9967	8528	9785	9006
Per Capita/month (Rs.)	711	801	732	831	711	815	751
<b>% Share of household Expenditure</b>							
Food	78.9	73.6	77.6	82	78.9	77.9	78.5
Clothing	4.1	4.5	4.2	3.7	4.1	4.1	4.1
Housing	0.6	0.9	0.7	0.4	0.6	0.7	0.7
Health Care	4.5	4.1	4.4	3.4	4.5	3.8	4.2
Education	1.2	1.2	1.2	1.0	1.2	1.1	1.2
Social Function	2.8	2.5	2.7	1.8	2.8	2.1	2.5
Transport	2.8	8.6	4.3	2.3	2.8	5.4	3.9
Remittances	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Utilities	2.6	1.8	2.3	2.4	2.6	2.1	2.4
Cash/Gifts	0.9	0.7	0.8	0.4	0.9	0.5	0.7
Other Purpose	1.6	2.0	1.7	2.5	1.6	2.3	1.9



The largest share of household income constitutes of food and beverages, ranging from 74% in non-member treatment villages to as high as 82% in control villages. Needless to say, the share of food in this survey is strikingly higher than the national average of 54% of household expenditure on food in rural Pakistan reported in the Household Income and Expenditure Survey (HIES) 2004-05. One probable reason for such huge difference may be high food inflation in the year 2006 that not only increase the cost of food but also reduced the share of other items in the consumption basket of majority of rural population. Health and education jointly share 5.4% in the overall household consumption with a little difference among all other sub-samples. The percentage share of clothes, social function and gifts form 7% in the overall household expenditure. Housing, utilities and transportation shares 7% in the overall household expenditures. The share of remittances and other purposes have just 2% share in the total expenditure. Very little difference in percentage terms is noted in various sets of household expenditures for the treatment and control villages.

Table 15 (B&C) gives a comparison between the household expenditures of poor and non-poor households and indicates how poorly the poor lives. The average household annual

expenditure for poor households is less at Rs. 65,409 against Rs. 75,758 for the non-poor households. The difference in per capita consumption is significantly high owing to varying household income and higher family size in poor households. Per capita consumption is Rs. 7,630 for the poor households against Rs. 10,431 for the non-poor. The monthly per capita expenditure for poor is about 13% higher than its per capita monthly income while for the non-poor the average monthly income is almost 3 times higher than their average monthly expenses (see table 14 and table 15(B, C) for comparison). The expenditure on food as percentage of total income for the poor households is nearly 81% (Table 15-B) against 77 per cent for the non-poor (Table 15-C). The food expenditure for non-participating households belonging to non-poor households is 67% against an overall figure of 75% for the treatment villages. No conspicuous difference in expenditure amongst various items is visible except for transport expenses. The expenditure on this item is over 2 per cent for the poor households compared with 5 per cent for the non-poor households.

For further in depth analysis of share of different expenditure groups with the Lorenz Curve is given in figure 8.

**Table: 15(B) Household Expenditures (Poor Households)**

Expenditures	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average/household (Rs)	64520	62513	63958	71290	64520	66624	65409
Average/Capita (Rs)	7366	7791	7478	8243	7366	8011	7630
Per Capita/month (Rs)	614	649	623	687	614	668	636
Monthly Per Capita Food Expenditures (Rs)	494	529	503	550	494	539	513
<b>% Share of household Expenditure</b>							
Food	80.5	81.5	80.8	80.0	80.5	80.7	80.6
Clothing	3.9	4.5	4.1	4.1	3.9	4.3	4.1
Housing	0.6	0.7	0.6	0.3	0.6	0.5	0.6
Health Care	4.7	3.5	4.4	4.6	4.7	4.1	4.5
Education	0.7	1.4	0.9	1.2	0.7	1.4	1.0
Social Function	2.5	2.0	2.3	1.9	2.5	2.0	2.2
Transport	2.5	2.1	2.4	2.6	2.5	2.3	2.4
Remittances	0.1	0.0	0.1	0.0	0.1	0.0	0.1
Utilities	2.4	2.2	2.4	2.2	2.4	2.2	2.3
Cash/Gifts	0.6	0.5	0.6	0.2	0.6	0.4	0.5
Other Purpose	1.4	1.8	1.5	2.9	1.4	2.3	1.8

**Table: 15 (C) Household Expenditures (Non-Poor Households)**

Expenditures	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average/household (Rs)	73945	81201	75610	76347	73945	78656	75758
Average/Capita (Rs)	9619	11905	10097	11981	9619	11944	10431
Per Capita/month (Rs)	802	992	841	998	802	995	869
Monthly Per Capita Food Expenditures (Rs)	623	666	632	836	623	752	668
<b>% Share of household Expenditure</b>							
Food	77.8	67.1	75.2	83.7	77.8	75.6	76.9
Clothing	4.3	4.5	4.3	3.4	4.3	3.9	4.1
Housing	0.7	1.1	0.8	0.5	0.7	0.8	0.7
Health Care	4.4	4.5	4.4	2.5	4.4	3.5	4.0
Education	1.6	1.1	1.5	0.9	1.6	1.0	1.3
Social Function	3.0	2.9	3.0	1.7	3.0	2.3	2.7
Transport	3.0	14.1	5.8	2.0	3.0	7.9	5.0
Remittances	0.0	0.1	0.0	0.1	0.0	0.1	0.1
Utilities	2.6	1.4	2.3	2.5	2.6	2.0	2.4
Cash/Gifts	1.0	0.9	1.0	0.5	1.0	0.7	0.9
Other Purpose	1.7	2.2	1.8	2.2	1.7	2.2	1.9

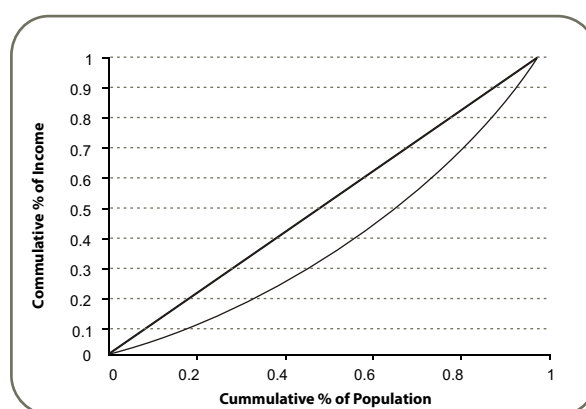
According to the quintile analysis of the distribution of household expenditures, the bottom 10% of the population has a share of approximately 4% of the total expenditures,

population have 55% share in total expenditure of the sample households.

In order to calculate the food consumption and

**Figure 8: Expenditure Lorenz Curve**

Income Quintiles	Percentage Share
Bottom 10%	4 %
Bottom 20%	10%
Middle 60%	55%
Top 10%	35%
Top 20%	14%



compared to 14% of the top 10% of the population. Similarly, the bottom 20% of the population has 10% of the total expenditures in comparison with 35% share of the top 20% of the population. While middle 60% of

its calories intake, we collected data on weekly food consumption 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 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 calorie content<sup>10</sup>) 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 1,830 calories. However, it is higher for the non-

participating households at 1,889 calories than the participating households at 1794 calories. Similarly, the per capita calories intakes are 1725 and 1848 calories in treatment and control villages respectively. Given the desired calorie intake for poverty level one can safely suggest majority of population face under-nourishment among in the sub samples and in overall sample. Over two-third of the daily calories intake is from grains. Fats and sugar add another 16% of calories to the average daily calorie intake. The daily per capita expenditure

**Table 16 (A): Daily Consumption of Food in Households (All Households)**

	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Daily per capita intake:							
Grains (Grams)	357	387.9	364.3	352.5	357	370.3	362.1
<b>Calories</b>	<b>1221</b>	<b>1326.6</b>	<b>1245.9</b>	<b>1205.4</b>	<b>1221</b>	<b>1266.5</b>	<b>1238.3</b>
Pulses (Grams)	13.6	11.9	13.2	11.1	13.6	11.5	12.8
<b>Calories</b>	<b>46</b>	<b>40.2</b>	<b>44.6</b>	<b>37.5</b>	<b>46</b>	<b>38.8</b>	<b>43.3</b>
Vegetables (Grams)	72.1	88.6	76	81.7	72.1	85.2	77.1
<b>Calories</b>	<b>43.3</b>	<b>53.2</b>	<b>45.6</b>	<b>49</b>	<b>43.3</b>	<b>51.1</b>	<b>46.3</b>
Fruits (Grams)	13	11.7	12.7	18.4	13	15	13.7
<b>Calories</b>	<b>11</b>	<b>9.9</b>	<b>10.8</b>	<b>15.6</b>	<b>11</b>	<b>12.7</b>	<b>11.7</b>
Meat (Grams)	22.8	22.9	22.9	24.9	22.8	23.9	23.2
<b>Calories</b>	<b>32</b>	<b>32.1</b>	<b>32</b>	<b>34.8</b>	<b>32</b>	<b>33.5</b>	<b>32.5</b>
Eggs (numbers)	0.04	0.04	0.04	0.05	0.04	0.04	0.04
<b>Calories</b>	<b>4.1</b>	<b>4.2</b>	<b>4.1</b>	<b>4.7</b>	<b>4.1</b>	<b>4.5</b>	<b>4.2</b>
Milk (Grams)	146.9	144.5	146.3	133.4	146.9	139	143.9
<b>Calories</b>	<b>156</b>	<b>153.4</b>	<b>155.4</b>	<b>141.7</b>	<b>156</b>	<b>147.6</b>	<b>152.8</b>
Sugar (Grams)	28	31.3	28.7	32.2	28	31.8	29.4
<b>Calories</b>	<b>104.8</b>	<b>117.4</b>	<b>107.8</b>	<b>120.9</b>	<b>104.8</b>	<b>119.2</b>	<b>110.3</b>
Fats (Grams)	19.9	21.7	20.4	27	19.9	24.3	21.6
<b>Calories</b>	<b>176.1</b>	<b>191.8</b>	<b>179.8</b>	<b>238.1</b>	<b>176.1</b>	<b>214.8</b>	<b>190.8</b>
<b>Total calories/capita/day</b>	<b>1794.3</b>	<b>1928.8</b>	<b>1724.64</b>	<b>1847.7</b>	<b>1794.3</b>	<b>1888.7</b>	<b>1830.2</b>
% from grains	68.0	68.8	72.2	65.2	68.0	67.1	67.7
% from grains + oils	77.9	78.7	82.7	78.1	77.9	78.4	78.1
Daily/capita food expenditure (Rs.)	18.7	19.6	18.9	22.7	18.7	21.2	19.6

<sup>10</sup> We use 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).

on food is Rs. 19 in the overall sample with Rs. 21 in non-participating households and Rs.18 in participating households.

The calorie intake for the poor and non-poor is 1,678 and 1,988 respectively. The share of grains in total calorie intake is high for the poor households (70%) than for the non-poor households as given in table 16 B and C. The share of other items like milk, sugar or fats is less for the poor compared with the non-poor. This is primarily attributed to inelastic demand of necessities especially the grains. Daily per capita expenditure on food is Rs. 17 for the poor

households against Rs. 22 for the non-poor households. In both poor and non-poor sub-samples, figures for calories intake and per-capita food expenditures are higher in non-participating households than the participating households. The difference in non-poor is high than in case of poor households.

**Table: 16 (B) Daily Consumption of Food in Households (Poor Households)**

	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Daily per Capita intake:							
Grains (Grams)	347	368.4	352.7	305.8	347	337.9	343.3
<b>Calories</b>	<b>1187</b>	<b>1260.1</b>	<b>1206.1</b>	<b>1046.0</b>	<b>1187</b>	<b>1155.8</b>	<b>1174.1</b>
Pulses (Grams)	11.9	12.5	12.1	13.2	11.9	10.5	11.3
<b>Calories</b>	<b>40</b>	<b>42.3</b>	<b>40.9</b>	<b>44.5</b>	<b>40</b>	<b>35.3</b>	<b>38.3</b>
Vegetables (Grams)	64.3	74.6	67	67.2	64.3	71.0	67.0
<b>Calories</b>	<b>38.6</b>	<b>44.7</b>	<b>40.2</b>	<b>40</b>	<b>38.6</b>	<b>42.6</b>	<b>40.2</b>
Fruits (Grams)	11	10.6	11.2	14.9	11	13	11.9
<b>Calories</b>	<b>10</b>	<b>9</b>	<b>9.5</b>	<b>12.7</b>	<b>10</b>	<b>10.8</b>	<b>10.1</b>
Meat (Grams)	17.5	18.1	17.6	17.9	17.5	18.0	17.7
<b>Calories</b>	<b>25</b>	<b>25.3</b>	<b>25</b>	<b>25.1</b>	<b>25</b>	<b>25.2</b>	<b>24.8</b>
Eggs (numbers)	0.03	0.02	0.03	0.03	0.03	0.03	0.03
<b>Calories</b>	<b>3.0</b>	<b>2.5</b>	<b>2.8</b>	<b>3.6</b>	<b>3.0</b>	<b>3.0</b>	<b>3.0</b>
Milk (Grams)	120.9	122.5	121.3	89.2	120.9	106	114.9
<b>Calories</b>	<b>128</b>	<b>130.0</b>	<b>128.8</b>	<b>94.7</b>	<b>128</b>	<b>112.8</b>	<b>122.0</b>
Sugar (Grams)	25	30.2	26.4	29.3	25	29.8	27
<b>Calories</b>	<b>94.0</b>	<b>113.1</b>	<b>99.1</b>	<b>110.0</b>	<b>94.0</b>	<b>111.6</b>	<b>101.2</b>
Fats (Grams)	17.8	19.3	18.2	20	17.8	19.7	18.6
<b>Calories</b>	<b>156.9</b>	<b>170.3</b>	<b>160.4</b>	<b>178.4</b>	<b>156.9</b>	<b>174.3</b>	<b>164.0</b>
<b>Total Calories/per capita</b>	<b>1682.4</b>	<b>1797.3</b>	<b>1622.43</b>	<b>1555.3</b>	<b>1682.4</b>	<b>1671.4</b>	<b>1677.7</b>
% from Grains	70.5	70.1	74.3	67.3	70.5	69.2	70.0
% from Grains + Oils	79.9	79.6	84.2	78.7	79.9	79.6	79.8
Daily/Capita Food)Expenditure (Rs.)	16.5	17.6	16.8	18.3	16.5	18.0	17.1

**Table 16 (C): Daily Consumption of Food in Households (Non-Poor Households)**

	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
<b>Daily per Capita intake:</b>							
Grains (Grams)	366	412.5	376.0	406.9	366	409.7	381.5
<b>Calories</b>	<b>1253</b>	<b>1410.9</b>	<b>1286.1</b>	<b>1391.7</b>	<b>1253</b>	<b>1401.1</b>	<b>1304.8</b>
Pulses (Grams)	15.2	11.1	14.3	14.4	15.2	12.7	14.3
<b>Calories</b>	<b>51</b>	<b>37.5</b>	<b>48.4</b>	<b>48.5</b>	<b>51</b>	<b>43.1</b>	<b>48.4</b>
Vegetables (Grams)	79.5	106.4	85	98.7	79.5	102.5	87.5
<b>Calories</b>	<b>47.7</b>	<b>63.8</b>	<b>51.1</b>	<b>59</b>	<b>47.7</b>	<b>61.5</b>	<b>52.5</b>
Fruits	15	13.1	14.2	22.4	15	18	15.6
<b>Calories</b>	<b>12</b>	<b>11.1</b>	<b>12.1</b>	<b>19.0</b>	<b>12</b>	<b>15.1</b>	<b>13.3</b>
Meat	27.9	29.1	28.1	33.0	27.9	31.1	29.0
<b>Calories</b>	<b>39</b>	<b>40.7</b>	<b>39</b>	<b>46.2</b>	<b>39</b>	<b>43.5</b>	<b>40.6</b>
Eggs (number)	0.05	0.06	0.05	0.06	0.05	0.06	0.05
<b>Calories</b>	<b>5.2</b>	<b>6.4</b>	<b>5.5</b>	<b>6.1</b>	<b>5.2</b>	<b>6.2</b>	<b>5.6</b>
Milk (Grams)	171.3	172.4	171.5	185.0	171.3	179	173.9
<b>Calories</b>	<b>182</b>	<b>183.1</b>	<b>182.2</b>	<b>196.5</b>	<b>182</b>	<b>189.9</b>	<b>184.7</b>
Sugar	31	32.8	31.1	35.6	31	34.2	31.9
<b>Calories</b>	<b>115.0</b>	<b>122.9</b>	<b>116.6</b>	<b>133.7</b>	<b>115.0</b>	<b>128.4</b>	<b>119.6</b>
Fats (Grams)	22.0	24.8	22.6	35	22.0	29.9	24.8
<b>Calories</b>	<b>194.2</b>	<b>219.1</b>	<b>199.4</b>	<b>307.7</b>	<b>194.2</b>	<b>264.1</b>	<b>218.6</b>
<b>Total Calories/ Capita/day</b>	1899.7	2095.5	1827.85	2208.6	1899.7	2152.9	1988.1
% from Grains	66.0	67.3	70.4	63.0	66.0	65.1	65.6
% from Grains + Oils	76.2	77.8	81.3	76.9	76.2	77.3	76.6
Daily/Capita/Food Expenditure (Rs.)	20.8	22.2	21.1	27.9	20.8	25.1	22.3

### 3.8 Household Assets, Value and Distribution

The asset distribution (in value) is quite unequally distributed among the sample households. The top 20% of the asset holders hold 71% of the values of assets as compared to only 2% with the bottom 20% of the asset holders. The distribution of assets (in value) is more unequal than that of income as the ratio of the bottom 20 to top 20% of the income receivers is 1:9 compared with 1:31 in asset holdings for the overall sample. Similarly the asset concentration ratio is significantly high at 0.62 as compared to the income concentration ratio of 0.39. The average value of asset is

productive assets and 26% consumer durables while the later have 63% share of productive assets and 34% share of consumer durables. Land is one of the leading assets in the list of productive assets with a share of one-half in overall sample - a higher share in treatment villages (52%) as compared to the control villages (50%). The reason for low share of land in control group may be attributed to the higher proportion (76%) of landless households in control group. Savings include the most liquid assets like jewellery, cash in-hand or in bank and/or loans given have a very small share (2.2%) in the household assets with out

**Table 16 (D): Quintile Distribution of Assets**

Asset Quintiles	Percentage Share
Bottom 10%	1%
Bottom 20%	2%
Middle 60%	27%
Top 10%	71%
Top 20%	58%
Gini Coefficient	0.62

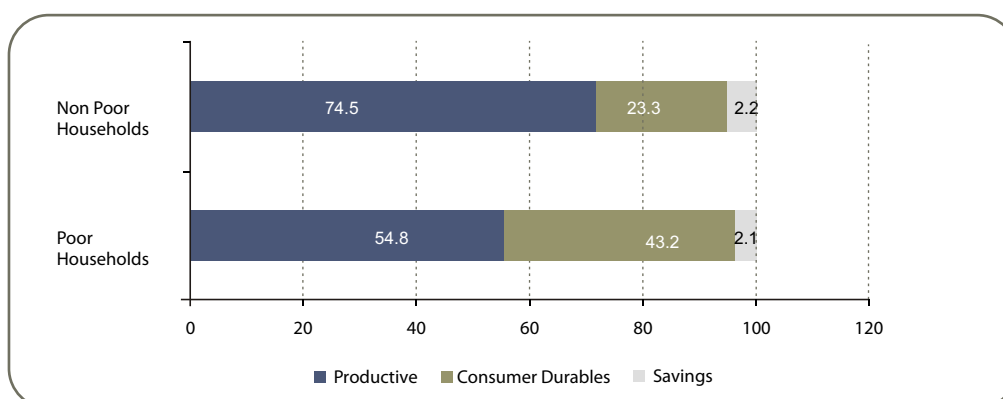
recorded as Rs. 296, 502 per household and Rs. 40784 per capita for the overall sample. The value of assets per household varies from Rs. 302,621 in treatment villages to Rs. 272024 in control villages. By adjusting for household size the value of average per-capita asset is slightly higher in control villages as compared to the treatment villages (Rs. 41648 and Rs. 40568 respectively), but the difference among these values are statistically insignificant.

The household assets are further classified into three categories: productive assets, consumer durables and savings. In the overall sample productive assets account for 70% of total assets followed by consumer durables 27.5 % and then savings at 2%. But the difference between the treatment and control villages are quite large, the former have 72 percent share of

difference between participating and non-participating households.

In the previous year, 19.5% of the sample households purchased and 17% sold some of their assets. A higher proportion of member households in treatment group purchased and sold (22% and 19% respectively) assets than other households purchased and sold assets. In the overall sample the average value of assets sold and purchased are Rs. 4545 and Rs. 4399 respectively. The values of asset purchased are higher for households in treatment villages than in control villages while the reverse is true in case of asset sold during the year.

**Figure 9A: Constituents of household assets in poor and non-poor households**



**Table 17 (A): Assets of Households (All Households)**

	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Values of assets (Rs.)							
Per household	311921	275180	302621	272024	311921	273612	296502
Per Capita	39864	42643	40568	41648	39864	42149	40784
<b>Values Of Assets:</b>							
<b>% Productivity</b>	<b>71.1</b>	<b>74.4</b>	<b>71.8</b>	<b>63.4</b>	<b>71.1</b>	<b>68.9</b>	<b>70.3</b>
Land	52.9	50.7	52.4	49.9	52.9	50.3	51.9
Trees	0.3	0.2	0.3	0.5	0.3	0.4	0.3
Livestock	14.6	13.6	14.4	6.2	14.6	10.0	12.9
Machinery	2.7	8.3	4.0	6.0	2.7	7.2	4.4
Business	0.6	1.6	0.9	0.7	0.6	1.2	0.8
<b>% Consumer durables</b>	<b>26.8</b>	<b>23.6</b>	<b>26.1</b>	<b>34.0</b>	<b>26.8</b>	<b>28.7</b>	<b>27.5</b>
House & Other Struc.	22.1	18.4	21.3	28.1	22.1	23.2	22.5
Others	4.7	5.2	4.8	5.9	4.7	5.5	5.0
<b>% Saving</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1</b>	<b>2.6</b>	<b>2.1</b>	<b>2.3</b>	<b>2.2</b>
Cash/Account	0.4	0.7	0.4	0.6	0.4	0.6	0.5
Loan Given	0.5	0.0	0.4	0.4	0.5	0.2	0.4
Jewellery	1.3	1.4	1.3	1.6	2.1	2.3	2.2
<b>Percent Households:</b>							
Purchased Assets	22.2	16.0	20.6	15.0	22.2	15.5	19.5
Sold Assets	19.7	14.8	18.4	12.5	19.7	13.7	17.3
Value of Assets Per Household							
Purchased (Rs)	5424	4268	5131	2201	5424	3241	4545
Sold (Rs)	4515	3407	4234	5056	4515	4228	4399

A comparison of data presented in Table 17(B) and (C) identifies three important features of assets in poor and non-poor households. First, the value of assets in the non-poor households is three times higher than the value of assets in poor households. Second, non-poor households have predominant share of productive assets (land in particular) in households' assets while the poor household's assets are dominated by consumer durables (house in particular). Third, both poor and non-poor households have equal proportion of savings as their asset. Fourth, in the preceding year a higher proportion of non-poor

households purchased (23%) and lower proportion of households sold (17%) assets than the poor households purchased and sold (15% and 17.6% respectively) and the value of assets purchased in non-poor households were much higher than that of poor households. Finally, a higher proportion of households in treatment villages, compared with the control villages, have reported purchasing and selling of assets and this difference is equally true for both poor and non-poor households.



Table: 17(B) Assets of Households (Poor Households)

	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
<b>Values of assets (Rs.)</b>							
Per household	130825	112355	125548	179592	130825	144292	136649
Per Capita	15575	16622	15874	18236	15575	17389	16359
<b>Values Of Assets:</b>							
<b>% Productivity</b>	<b>53.7</b>	<b>50.7</b>	<b>52.9</b>	<b>59.7</b>	<b>53.7</b>	<b>56.0</b>	<b>54.8</b>
Land	24.5	30.5	26.0	35.2	24.5	33.3	28.5
Trees	0.5	0.3	0.5	0.0	0.5	0.1	0.4
Livestock	24.7	14.0	22.0	9.2	24.7	11.2	18.5
Machinery	2.9	3.2	3.0	15.1	2.9	10.2	6.2
Business	1.1	2.5	1.5	0.3	1.1	1.2	1.2
<b>% Consumer durables</b>	<b>43.8</b>	<b>48.3</b>	<b>44.9</b>	<b>38.4</b>	<b>43.8</b>	<b>42.4</b>	<b>43.2</b>
House & Other Struc.	34.6	40.1	36.0	31.1	34.6	34.8	34.7
Others	9.2	8.2	8.9	7.2	9.2	7.7	8.5
<b>% Saving</b>	<b>2.5</b>	<b>1.0</b>	<b>2.1</b>	<b>1.9</b>	<b>2.5</b>	<b>1.6</b>	<b>2.1</b>
Cash/Account	0.6	0.6	0.6	0.4	0.6	0.5	0.5
Loan Given	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Jewellery	1.9	0.4	1.6	1.5	1.9	1.1	1.5
<b>Percent Households:</b>							
Purchased Assets	18.5	11.9	16.7	8.1	18.5	10.1	15.0
Sold Assets	22.2	11.9	19.3	10.8	22.2	11.4	17.6
<b>Value of Assets Per Household</b>							
Purchased (Rs)	2563.0	1809.5	2352.0	364.9	2563.0	1132.9	1958.8
Sold (Rs)	4172.2	2178.6	3614.0	8054.1	4172.2	4930.4	4492.5

**Table: 17 (C) Assets of Households (Non-Poor Households)**

	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
<b>Values of assets (Rs.)</b>							
Per household	453825	450529	453082	355654	453825	401335	434050
Per Capita	58897	70667	61551	62830	58897	66603	61800
<b>Values Of Assets:</b>							
<b>% Productivity</b>	<b>75.0</b>	<b>80.7</b>	<b>76.3</b>	<b>65.1</b>	<b>75.0</b>	<b>73.5</b>	<b>74.5</b>
Land	59.3	56.2	58.6	56.6	59.3	56.4	58.3
Trees	0.2	0.2	0.2	0.8	0.2	0.4	0.3
Livestock	12.3	13.5	12.6	4.9	12.3	9.5	11.3
Machinery	2.7	9.6	4.2	1.9	2.7	6.1	3.8
Business	0.5	1.3	0.7	0.9	0.5	1.1	0.7
<b>% Consumer durables</b>	<b>23.0</b>	<b>16.9</b>	<b>21.6</b>	<b>32.0</b>	<b>23.0</b>	<b>23.8</b>	<b>23.3</b>
House & Other Struc.	19.3	12.6	17.8	26.7	19.3	19.1	19.2
Others	3.7	4.3	3.9	5.2	3.7	4.7	4.1
<b>% Saving</b>	<b>2.0</b>	<b>2.3</b>	<b>2.1</b>	<b>3.0</b>	<b>2.0</b>	<b>2.6</b>	<b>2.2</b>
Cash/Account	0.3	0.7	0.4	0.7	0.3	0.7	0.4
Loan Given	0.6	0.0	0.5	0.7	0.6	0.3	0.5
Jewellery	1.1	1.6	1.2	1.6	1.1	1.6	1.3
<b>Percent Households:</b>							
Purchased Assets	25.2	20.5	24.1	20.9	25.2	20.7	23.5
Sold Assets	17.6	17.9	17.6	14.0	17.6	15.9	16.9
<b>Value of Assets Per Household</b>							
Purchased (Rs)	7782.4	6915.4	7583.5	3781.4	7782.4	5272.0	6816.0
Sold (Rs)	4796.9	4730.8	4781.8	2477.0	4796.9	3548.8	4316.4

Agriculture land plays pivotal role in economic, social and political life of those who own it, but the distribution of land (area) is highly skewed in the sample with a concentration ratio of 0.89 including landless households and 0.58 excluding landless households. As shown in Table 18, nearly three-fourth of the overall sample do not own land without any significant difference among the sub-samples. The incidence of landlessness is even higher among the poor households: 82% of the poor households are landless with 84% among the member households in treatment village and 79% among the non-member households of treatment villages. The difference between participating and non-participating households is quit small; with 84% in former and 80% households in the latter group are landless. Share cropping and tenancy is a common phenomenon among the sample households:

as shown in Table 13, the major source of income of the sample households is derived from agriculture and livestock but at the same time a high proportion of the households are landless.

The average size of land holding per owner household is 8 acres in the overall sample with about 9 acre in households of treatment villages and 6 acres in control villages. The difference between participating and non-participating households is quite high, 9.6 acre per household in the former and 6.5 acres in the later group. In the overall sample, the average landholding for poor households (5 acres) is just one-half of the non-poor households (10 acres). The difference between poor and non-poor households in terms of average land holding is quite large in treatment villages (10.7 acres vs 4.7 acres) than in case of control villages (6.3 acres vs 5.7 acres).

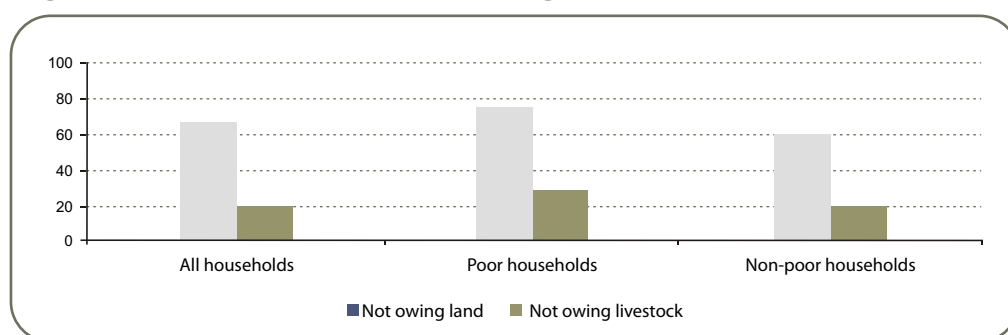
The second important component of rural communities' livelihood depends on livestock farming. Nearly two-third of the sample households and 61% of the poor households own livestock. A quite higher proportion of households in treatment villages than in control villages own livestock; about 72% of households in the former and only 41% of households in latter group own livestock, the number of livestock owner households even

drops to just 38% in case of non-poor households in control group. The average number of livestock per owner households is 4 in sample households with a lower average (3.2) in households of control villages. In terms of average livestock holding the difference between poor and non-poor households is very small; households in former group own 3.7 and 4.2 heads of livestock in the latter group.

**Table 18: Land and Livestock Holdings of Households**

Landholdings and Livestock	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
<b>% of Households not owning land</b>							
All Households	74.5	72.8	74.1	76.3	74.5	74.5	74.5
Poor Households	83.8	78.6	82.3	81.6	83.8	80.0	82.2
Non-Poor Households	67.2	66.7	67.1	71.4	67.2	69.1	67.9
<b>% of owner Households</b>							
Up to 1.0 acres	2.1	3.7	2.5	3.8	2.1	3.7	2.8
>1.0 to 2.0	3.8	3.7	3.8	1.3	3.8	2.5	3.3
>2.0 to 5.0	9.2	16	10.9	11.3	9.2	13.7	11.0
>5.0 to 12.5	5.9	2.5	5.0	5.0	5.9	3.7	5.0
>12.5 to 25.0	2.9	0.0	2.2	2.5	2.9	1.2	2.3
> 25 acres	1.7	1.2	1.6	0.0	1.7	0.6	1.3
<b>Average size of holding per owner</b>							
All Households	6.8	9.6	8.8	6.1	9.6	6.5	8.3
Poor Households	5.5	3.2	4.7	5.7	5.5	4.3	4.9
Non-Poor Households	11.2	9.2	10.7	6.3	11.2	7.8	10.0
<b>% of household not owning livestock</b>							
All Households	26.8	33.3	28.4	58.8	26.8	46.0	34.5
Poor Households	31.4	42.9	34.7	55.3	31.4	48.8	38.9
Non-Poor Households	23.1	23.1	23.1	61.9	23.1	43.2	30.7
<b>Average number of Livestock/household</b>							
All Households	4.2	3.6	4.1	3.2	4.2	3.4	4.0
Poor Households	4.1	2.9	3.8	3.1	4.1	3.0	3.7
Non-Poor Households	4.3	4.1	4.3	3.3	4.3	3.8	4.2

**Figure 9(B): Percent of household not owning land and livestock**



### 3.9 Household Loans: Sources and Uses

The average size of loan for sample households is Rs. 20,409 with a higher average reported by households in control villages (Rs. 36,162) than households in treatment villages (Rs. 17,698). Given the low amount and proportion of loan taken the loan to income ratio is 5 percent in the overall sample with slightly higher ratio for non-participating households than participating households; 5.5% for the former and 4.6% for the later one. The proportion of households taken loan varies from 26% in control villages to 39% for member-households in treatment villages and overall 36% of the sample households have accessed loans in the year 2005-06.

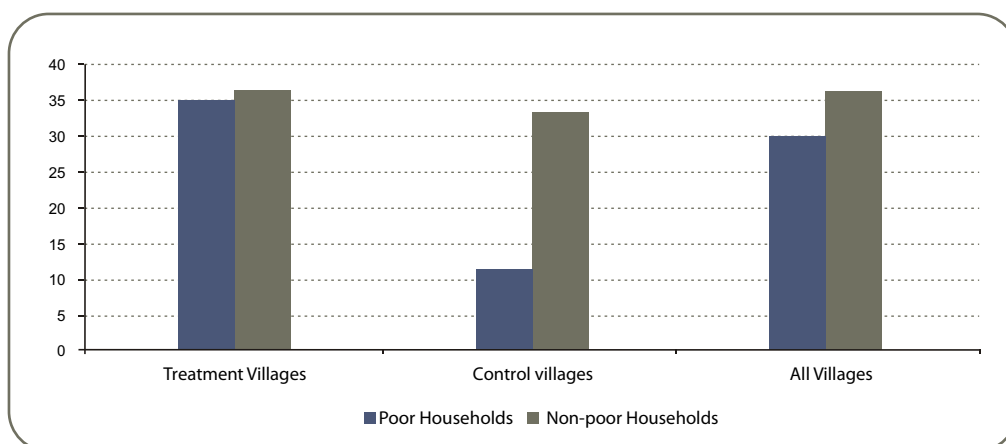
If we look into the source of loan, in the overall sample nearly one-third of the loan amount was taken from friend and relatives followed by more than one-quarter from NGOs and then 23% from banks. But in control villages, banks appear to be the single largest source of loans, with a contribution of 56% in the loan amount, while in treatment villages the highest share comes from NGOs accounting for 40% of the loan amount. Community organisations has not started lending yet, as most of them formed recently. A much high share of loan amount was reported from unspecified sources, may be from moneylenders and friends; more than 12% in member-households of treatment villages and more than 3 percent in control villages reported loans from unspecified sources.

A comparison of loan data for poor and non-poor households presented in table 19 (B) and (C) reveals the following important features:

- The average amount of loan per household is quite higher in non-poor households than poor households; accounting for Rs. 23,529 in former group and Rs. 16,215 for the later group of households. The average loan amount for households in control villages is equally higher than households in treatment villages for both poor and non-poor households.
- Given the low level of income of the poor households the loan to income ratio for poor households is as high as 10% as compared with 4% for the non-poor households in the overall sample. Similarly the proportion of households taken loan is higher (38%) in non-poor households than poor households (33%).
- Finally, in the overall sample for the poor households the highest share of loan amount is contributed from NGOs (29%), followed by friends and relatives (24%) and then Banks (21%), while for the non-poor households friends and relative made up the higher shares with 37% followed by one-quarter from NGOs and then 23% from banks. But in both cases for poor and non-poor households in control villages the highest share of loan come from banks; 59% for the non-poor households and 46% for the poor households.

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

Loans	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average amount of loan per HH(Rs.)	17,372	18,741	17,698	36,162	17,372	26,058	20,409
Loan to income ratio	4.6	5.1	4.7	5.8	4.6	5.5	5.0
% HH taken loans	38.9	35.8	38.1	26.3	38.9	31.1	35.8
<b>% of loan amount from:</b>							
Friends & relatives	34.5	38.5	35.5	23.5	34.5	29.8	32.4
Shopkeepers	8.9	3.7	7.6	17.3	8.9	11.6	10.1
Banks	8.4	18.4	10.9	55.7	8.4	40.1	22.6
NGOs	35.6	36.8	35.9	0.0	35.6	15.4	26.6
Community org.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other sources	12.6	2.6	10.1	3.6	12.6	3.1	8.4

**Figure 10: Percent of Household Taken Loan****Table 19(B): Loan Taken by Poor Households (2005/2006)**

Loans	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average amount of loan per HH(Rs.)	15,740	11,200	14,502	31,917	15,740	17,119	16,215
Loan to income ratio	10.9	8.8	10.4	8.5	10.9	8.6	10.0
% HH taken loans	38.1	35.7	37.4	15.8	38.1	26.3	33.0
<b>% of loan amount from:</b>							
Friends & relatives	25.5	30.9	26.6	11.2	25.5	20.4	23.7
Shopkeepers	10.8	12.0	11.0	42.8	10.8	28.4	17.2
Banks	19.1	0.0	15.0	46.0	19.1	24.5	21.0
NGOs	32.1	48.8	35.6	0.0	32.1	22.8	28.7
Community org.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other sources	12.5	8.3	11.7	0.0	12.5	3.9	9.4

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

Loans	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average amount of loan per HH(Rs.)	18,604	26,821	20,321	37,860	18,604	32,531	23,529
Loan to income ratio	3.4	4.2	3.6	5.2	3.4	4.8	4.0
% HH taken loans	39.6	35.9	38.7	35.7	39.6	35.8	38.1
<b>% of loan amount from:</b>							
Friends & relatives	40.2	41.9	40.7	27.6	40.2	33.3	36.8
Shopkeepers	7.7	0.0	5.6	8.6	7.7	5.2	6.5
Banks	1.6	26.6	8.5	59.0	1.6	46.1	23.4
NGOs	37.8	31.4	36.1	0.0	37.8	12.5	25.4
Community org.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other sources	12.7	0.0	9.2	4.8	12.7	2.9	7.9

Table-20 (A) presents data on utilisation of loan. In this study the loan utilisation is categories into five main components; loan used for productive purpose, housing, consumption and social functions, education and health, repaying loan and others (unspecified) purposes. In the overall sample more than 40% of the loan amount were used for productive purposes followed by almost one-quarter used for consumption and social functions and then 15% were used on housing. But the households in control villages use a higher proportion of their loan amount on housing (40%), consumption and social function and then productive purposes, while households in treatment villages used the highest proportion of their loan amount on productive purposes (48%), followed by consumption and social functions (23%) and then education and health (16%). Loans taken for the consumption and social functions, mostly used for purchase of foods, fulfil marriage expenses, and some times religious obligations and to cover the expenses of rituals after the death of relatives. The non-participating households rarely used the loan money for repayment of loan while the participating households used 1.4% of their loan money to repay their outstanding debts.

Education and health are the less preferred avenues for the households in the control villages than the treatment villages; where households in the former group used five percent of their loan amount and 16% in case of the households in the later group for health and education.

Comparison of the loan utilisation data for poor non-poor households reveals three main characteristics: First, compared to the poor households non-poor households use a high proportion of their loan on productive purposes. In the overall sample non-poor households used 48% and poor households used 32% of their loan amount on productive purposes. Among the list of productive assets poor households used higher proportion of the loan amount on livestock and the non-poor households used higher proportion of their loan amount on farm input. Second, poor households compare with non-poor households used a higher proportion of their loan amount on consumption and social function; households in poor category use 27% and non-poor category used 23% of their loan amount on consumption and social functions. Non-poor households in treatment group use as low as 13% of their loan amount on consumption and social function. Third, in case of utilising loan money for health and education; the poor households utilise a higher amount (17%) of loan money for health and education than non-poor households (11 %). Moreover this is significantly high in the participating households than the non-participating households in both poor and non-poor households and thereby may reflecting the increase awareness about the importance of education and health in participating households as a result of the TRDP interventions.

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

Use of Loans	Treatment Villages			Control Village	All Villages		
	Member	N-Mem	Total		Member	N-Mem	Total
% of loan amount used:							
<b>productive purpose</b>	<b>43.6</b>	<b>48.1</b>	<b>44.7</b>	<b>28.0</b>	<b>43.6</b>	<b>36.6</b>	<b>40.5</b>
Land	2.8	0.0	2.1	17.5	2.8	10.0	5.9
Livestock	11.8	22.0	14.3	4.2	11.8	11.8	11.8
Machinery	0.8	0.0	0.6	0.0	0.8	0.0	0.5
farm inputs	17.3	14.0	16.5	0.5	17.3	6.3	12.5
Business	11.0	12.1	11.2	5.8	11.0	8.4	9.9
<b>Housing</b>	<b>11.5</b>	<b>4.7</b>	<b>9.9</b>	<b>30.9</b>	<b>11.5</b>	<b>19.7</b>	<b>15.1</b>
<b>consumption &amp; social functions</b>	<b>18.2</b>	<b>38.8</b>	<b>23.3</b>	<b>28.7</b>	<b>18.2</b>	<b>33.0</b>	<b>24.6</b>
<b>education &amp; health</b>	<b>19.8</b>	<b>2.6</b>	<b>15.6</b>	<b>5.3</b>	<b>19.8</b>	<b>4.2</b>	<b>13.0</b>
<b>repaying loan</b>	<b>1.8</b>	<b>1.9</b>	<b>1.9</b>	<b>0.0</b>	<b>1.8</b>	<b>0.8</b>	<b>1.4</b>
<b>Other purpose</b>	<b>5.0</b>	<b>3.9</b>	<b>4.7</b>	<b>7.1</b>	<b>5.0</b>	<b>5.7</b>	<b>5.3</b>

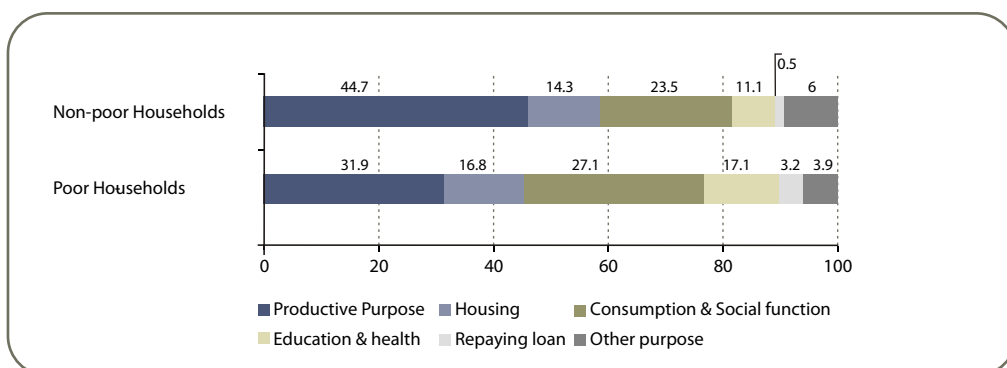
Table: 20 (B) Use of Loan by Poor Households

Use of Loans	Treatment Villages			Control Village	All Villages		
	Member	N-Mem	Total		Member	N-Mem	Total
% of loan amount used:							
<b>productive purpose</b>	<b>31.3</b>	<b>42.8</b>	<b>33.6</b>	<b>23.1</b>	<b>31.3</b>	<b>33.3</b>	<b>31.9</b>
Land	0.0	0.0	0.0	17.2	0.0	8.3	2.7
Livestock	15.3	27.0	17.6	3.4	15.3	15.6	15.4
Machinery	0.0	0.0	0.0	0.0	0.0	0.0	0.0
farm inputs	6.4	9.3	6.9	2.4	6.4	6.0	6.2
Business	9.7	6.4	9.0	0.0	9.7	3.3	7.6
<b>Housing</b>	<b>16.9</b>	<b>0.0</b>	<b>13.6</b>	<b>34.5</b>	<b>16.9</b>	<b>16.6</b>	<b>16.8</b>
<b>consumption &amp; social functions</b>	<b>25.7</b>	<b>35.4</b>	<b>27.6</b>	<b>24.1</b>	<b>25.7</b>	<b>30.0</b>	<b>27.1</b>
<b>education &amp; health</b>	<b>19.1</b>	<b>9.0</b>	<b>17.1</b>	<b>17.2</b>	<b>19.1</b>	<b>13.0</b>	<b>17.1</b>
<b>repaying loan</b>	<b>3.1</b>	<b>6.4</b>	<b>3.8</b>	<b>0.0</b>	<b>3.1</b>	<b>3.3</b>	<b>3.2</b>
<b>Other purpose</b>	<b>3.9</b>	<b>6.4</b>	<b>4.4</b>	<b>1.0</b>	<b>3.9</b>	<b>3.8</b>	<b>3.9</b>

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

Use of Loans	Treatment Villages			Control Village	All Villages		
	Member	N-Mem	Total		Member	N-Mem	Total
% of loan amount used:							
<b>productive purpose</b>	51.4	50.3	51.1	<b>29.2</b>	<b>51.4</b>	<b>37.6</b>	<b>44.7</b>
Land	4.6	0.0	3.3	17.6	4.6	10.6	7.5
Livestock	9.5	20.0	12.4	4.4	9.5	10.6	10.1
Machinery	1.3	0.0	1.0	0.0	1.3	0.0	0.7
farm inputs	24.2	16.0	22.0	0.0	24.2	6.4	15.5
Business	11.8	14.4	12.5	7.2	11.8	10.1	10.9
<b>Housing</b>	<b>8.1</b>	<b>6.7</b>	<b>7.7</b>	<b>29.9</b>	<b>8.1</b>	<b>20.7</b>	<b>14.3</b>
<b>consumption &amp; social functions</b>	<b>13.4</b>	<b>40.2</b>	<b>20.8</b>	<b>29.9</b>	<b>13.4</b>	<b>34.0</b>	<b>23.5</b>
<b>education &amp; health</b>	<b>20.3</b>	<b>0.0</b>	<b>14.7</b>	<b>2.3</b>	<b>20.3</b>	<b>1.4</b>	<b>11.1</b>
<b>repaying loan</b>	<b>1.0</b>	<b>0.0</b>	<b>0.7</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.5</b>
<b>Other purpose</b>	<b>5.7</b>	<b>2.8</b>	<b>4.9</b>	<b>8.6</b>	<b>5.7</b>	<b>6.3</b>	<b>6.0</b>

Figure 11: Loan Utilisation





### 3.9 Household Debt

As shown in Table 21 (A) the average amount of outstanding loans (debt) per households is Rs. 18,806, with the highest level reported in households of control villages (Rs. 40,947) and the lowest amount (Rs. 14,432) in member households of treatment villages. The debt-income ratio is 3.6% for the overall sample with highest rate of 5.3% for households in control villages and lowest at 2.9% for member households in treatment villages. The net-worth<sup>11</sup> is Rs. 277,695 for the overall sample, with 25% higher value for households in treatment villages as compared to the control villages. The former have a net-worth of Rs. 287,819 and household in the later group have net-worth of Rs. 231,077.

Almost twenty-eight percent of the sample households are in debt, with a higher proportion of households in treatment villages as compared to control villages. Twenty-nine percent of the households in the former group and 21 percent in the later group are in debt. In the overall sample the highest proportion of the

debt is owed to banks (32 %) followed by friends and relatives (30 %) and NGOs (25 %). But there is a much high difference between households in treatment and control villages in terms of the share of debt owed to different sources. In case of households in treatment villages the highest share of debt owed to NGOs (37%) is followed by friend and relatives (34%) and then banks (17%), while in case of households in control villages the single largest source is bank (61%) followed by friend and relatives (20%) and the shopkeepers (19 %).

Table 21(B and C) presents the current debt situation in poor households and non poor households. The average debt per households is lower for the poor households as compared to the non-poor households - Rs. 15,384 and Rs. 21,229 respectively. But the debt-income ratio is more than two times higher in the poor households as compared to the non-poor households. Similarly, the average net-wealth of the non-poor is almost 4 times higher than the net-wealth of poor households.

**Table 21 (A): Current Debt of All Households**

Current Debt	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average amount of debt/household (Rs.)	14,432	15,944	14,802	40,947	14,432	26,570	18,806
Debt to Income Ratio	2.9	3.4	3.1	5.3	2.9	4.5	3.6
% of household in debt	29.7	28.4	29.4	21.3	29.7	24.8	27.8
<b>% of debt to:</b>							
friends & relatives	31.5	42.8	34.5	20.4	31.5	28.2	29.8
Shopkeepers	14.1	4.7	11.6	18.8	14.1	13.9	14.0
Banks	13.3	27.3	17.0	60.8	13.3	49.2	31.6
NGOs	41.2	25.2	37.0	0.0	41.2	8.7	24.6
Community org.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other sources	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net worth/Household	297,489	259,236	287,819	231,077	297,489	247,042	277,695

<sup>11</sup> Net worth is defined as the value of all assets minus the amount of outstanding debt of sample households.

**Table 21 (A): Current Debt of All Households**

Current Debt	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average amount of debt/household (Rs.)	13,997	9,312	12,625	38,000	13,997	17,750	15,384
Debt to Income Ratio	7.0	5.9	6.8	8.0	7.0	7.2	7.1
% of household in debt	27.6	28.6	27.9	13.2	27.6	21.3	24.9
<b>% of debt to:</b>							
friends & relatives	22.9	44.4	27.5	10.5	22.9	23.1	23.0
Shopkeepers	16.8	15.3	16.4	43.2	16.8	32.8	23.6
Banks	29.6	0.0	23.2	46.3	29.6	29.2	29.4
NGOs	30.8	40.3	32.8	0.0	30.8	14.9	24.0
Community org.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other sources	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net worth/Household	116,828	121,513	118,199	92,825	116,828	113,075	115,441

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

Current Debt	Treatment Villages			Control Village	All Villages		
	Member	Non-member	Total		Member	Non-member	Total
Average amount of debt/household (Rs.)	14,733	23,178	16,486	42,175	14,733	33,089	21,229
Debt to Income Ratio	2.1	2.9	2.3	4.7	2.1	3.9	2.8
% of household in debt	31.3	28.2	30.6	28.6	31.3	28.4	30.2
<b>% of debt to:</b>							
friends & relatives	37.1	42.2	38.6	24.1	37.1	30.2	33.3
Shopkeepers	12.3	0.0	8.7	9.7	12.3	6.4	9.1
Banks	2.6	39.2	13.3	66.2	2.6	57.1	32.7
NGOs	48.0	18.6	39.4	0.0	48.0	6.2	25.0
Community org.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other sources	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net worth/Household	439,092	430,647	437,339	411,650	439,092	420,736	432,597

### 3.11 Perceptions of Men and Women about Problems and Roles in Decision-Making

Regarding the perceptions of men and women on their perception of problems an equal number of males and females belonging to the same household were interviewed. We have asked one male and one female from each household to rate a given list of problems from 0-4. The value of "0" indicates no problem, "1" slight problem, "2" serious problem, "3" very serious problem and "4" not sure. The results in Table 22, shows contrasting responses on various issues between women and men.

For majority of the women and men the lake of health care, street payment and draining facilities are among the serious and very serious problems. But a high proportion of women consider lake of water supply and fuel supply as serious to very serious problems, followed by lack of transport and access to credit. Surprisingly, a high proportion of men as

compared to women showed concern about lack of social cohesion as serious and very serious problems and lake of organisation for majority of the respondents both males and females is not among their problems.

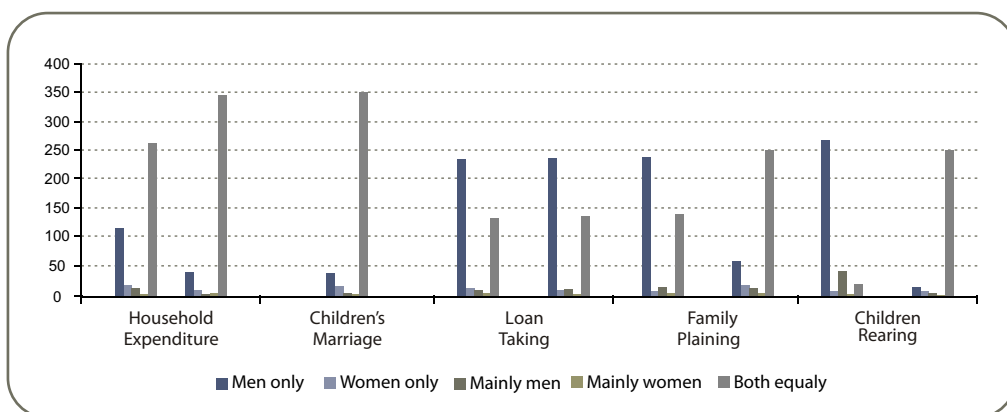
The perception of women about the decision making at household level provides a very interesting picture of the social dynamics in the study area. Nearly two-thirds of the responses illustrated in Table 23 confirms that men has the dominant role in decision making on a range of issues listed in the table, particularly for working outside household purchase of household assets, loan taking and loan utilization. While it is encouraging to note that, most of the decisions are being taken by the consensus of both genders in the households particularly decisions relating to marriages of the children, education, household expenditure, child rearing and importantly family planning.

**Table: 22 Ranking of Problems by Men and Women**

Problem	Women's Perceptions					All Villages							Responses
	0	1	2	3	4	0	1	2	3	4	Responses		
Education	95	58	70	173	4	400	159	75	95	48	23	400	
Healthcare	79	63	95	163	0	400	46	52	145	153	4	400	
Water Supply	216	42	32	110	0	400	187	77	81	45	10	400	
Drainage	53	74	99	173	1	400	69	74	99	85	73	400	
Street pavement	57	93	106	143	1	400	50	50	207	82	11	400	
Transport	174	48	88	90	0	400	140	87	119	38	16	400	
Fuel Supply	89	109	91	110	1	400	173	92	99	26	10	400	
Electricity	320	25	13	42	0	400	217	59	79	45	0	400	
Access to Credit	254	37	26	57	26	400	173	57	77	68	25	400	
Social cohesion	336	15	1	48	0	400	238	96	17	49	0	400	
Organisation	335	48	3	1	13	400	284	51	8	3	54	400	
Total Responses	2008	612	624	1110	46	4400	1736	770	1026	642	226	4400	

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

Decisions on	All Villages					Responses
	Men only	Women only	Mainly men	Mainly women	Both equally	
Household Expenditures	116	16	6	1	261	400
Children's education	42	10	2	2	344	400
Children's marriages	41	8	2	0	349	400
Assets purchase/sale	250	12	5	1	132	400
Loan taking	255	7	9	2	127	400
Loan utilization	244	5	9	0	142	400
Family Planning	69	11	3	1	316	400
Working outside household	326	2	43	0	29	400
Child rearing	11	6	2	0	381	400
Total Responses	1354	77	81	7	2081	3600

**Figure 12: Decision making at household level**



**700 Household Food Consumption per month**

Item		quantity (Kg)	Item		Quantity (Kg/#)
Flour	<b>701</b>		Mutton	<b>709</b>	
Rice	<b>702</b>		Poultry	<b>710</b>	
Millet	<b>703</b>		Fish	<b>711</b>	
Maize	<b>704</b>		Eggs	<b>712</b>	
Pulses	<b>705</b>		Milk	<b>713</b>	
Vegetables	<b>706</b>		Sugar	<b>714</b>	
Fruits	<b>707</b>		Fats/Oil	<b>715</b>	
Beef	<b>708</b>		Tea	<b>716</b>	

**800 (A) Annual household Crops Production/Income (Rs. in last 12 months)**

Farm Area (acres) \_\_\_\_\_  
 Owned (acres) \_\_\_\_\_ Sharecropping (acres) \_\_\_\_\_ Leased (acres) \_\_\_\_\_

S.#	Crops/Vegetables	Area cropped (acres)	Production	
			Main produce	By-products (in maunds)
1	Wheat			
2	Rice			
3	Cotton			
4	Sugarcane			
5	Barley			
6	Maize			
7	Millet			
8	Pulses			
9	All vegetables			
10	Fodder (all types)			

**800 (B) Annual Household Fruits/Forests Production/Income (Rs. in last 12 months)**

S.#	Fruits and Forest trees and their production	Area cultivated (acres)	Number of trees	Production
				(Petti/carton)
1	Mango			
2	Banana			
3	Lemon			
4	Oranges/other			
5	Guava			
6	Peaches			
7	Grapes			
8	Walnuts			
9	Apples			
10	Persimmon			
11	Pomegranates			
12	Apricots			
13	Pears			
14	Any other			
15	Forest trees for timber			
16	Trees for fuelwood			

Note: write the production of Fuel wood in maunds and timber in number of trees

**800 (C) Annual Household Livestock/Poultry Production/Income (Rs. in last 12 months)**

Livestock animals/ poultry birds	Total # of milking animals and eggs giving birds	Total milk/eggs per day (kg/#)	# of months animals/bird gave milk/eggs	# of Animals & birds slaughtered	Value of meat
Cows					
Buffaloes					
Goats					
Sheep					
Camel					
Poultry birds					
Ducks					
Honeybee hives (#)		_____kgs produced last year			
<b>Total of Table 800 (C) = Total of column #5, 7 and 8 (Rs.)</b>					

**800 (D) Annual household Off farm Incomes (Rs. in last 12 months)**

Off-farm Income Sources	Males	Annual income(Rs.)	Females		Total Income (Rs.)
	(#)		(#)	Annual Income (Rs.)	
Govt. Service					
Private job					
Pension					
Skilled labour					
Unskilled labour					
Small enterprise at household/village level					
Retail shop (in the local market)					
Remittances from abroad					
Remittances from w					
Shop/house rent (Rs.)					
Land/livestock/machinery leased/rented out (Rs.)					
Govt. Social Protection(Rs.)					
Local Philanthropy (Rs.)					
Relief/Reconstruction compensation (Rs.) provided					
Any other source (Rs.)					

**900 Household Expenditure (Rs. in last 12 months)**

901Food	902Clothing/shoes	903Housing (rent/maintenance)	906Utilities	904Healthcare	905Education
907Social Functions	908Transport	909Remittances	910Cash/Gifts <sup>15</sup>	911Other	

**1000 Household Assets (write number and value)**

Ref.#	Assets	#	Value in (Rs.)	Ref.#	Assets	#	Value in (Rs.)
1001	Land (acres)			1018	Computer (#)		
1002	Fruits trees (#)			1019	Mobile phone (#)		
1003	Forest trees (#)			1020	House		
1004	Large animals (#)			1021	Animal Sheds		
1005	Small animals			1022	Other structure		
1006	Poultry birds (#)			1023	Sewing machine		
1007	Tractor (#)			1024	TV		
1008	Thresher (#)			1025	VCR/CD Player		
1009	Car/jeep			1026	Refrigerator		
1010	Motorcycle			1027	Washing machine		
1011	Bicycle			1028	Generator		
1012	Cart/Trolley			1029	Fans		
1013	Radio/Tap Recorder etc.			1030	Shop/business		
1014	Tube well/pump			1031	Jewellery		
1015	Total values of other electrical appliances (iron, toaster etc) (Rs.)			1032	Savings (Rs.) in banks		
1016	Total value of farming tools (Rs.)			1033	Loans given to others (Rs.)		
1017	Total value of furniture (Rs.)			1034	Total cash in hand (Rs.)		
				1035	Other assets		

<sup>15</sup> Money given to other as gift or support in time of needs (not included loans given to others)



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

1101 Assets Purchased (Rs.) _____			1105 Assets Sold (Rs.) _____		
1102 Loan	1103 Cash/Saving	1104 Gift	1106 Meet Expenditure	1107 Repay Loan	1108 purchase other asset /any other

**1200 Loans Taken (in last 12 months) and Outstanding Debt (Rs.)**

Friends/Relatives (Rs.)		Shopkeepers (Rs.)		Banks (Rs.)	
1201 Amount taken	1202 Amount owed	1203 Amount taken	1204 Amount owed	1205 Amount taken	1206 Amount owed
NGOs (Rs.)		Community Org. (Rs.)		Others (Rs.)	
1207 Amount taken	1208 Amount owed	1209 Amount taken	1210 Amount owed	1211 Amount taken	1212 Amount owed

**1300 Use of Loans (Rs.)**

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 (put X where appropriate)**

House Structure	Water Supply	Latrine	Drainage	Electricity	Fuel/Energy
1401 Pucca ___	1405 Piped ___	1409 Inside ___	1412 Yes ___	1414 Yes ___	1416 Gas ___
1402 Katcha ___	1406 Canal ___	1410 Outside ___	1413 No ___	1415 No ___	1417 Wood ___
1403 P&K ___	1407 Well ___	1411 Open field			1418 Kerosene ___
1404 Rooms (No.) ___	1408 Other (specify) ___				1419 Other ___

**1500 Major Constraints/Problems (appropriate code)**

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 Credit Requirement next year**

Required (put X)	Purpose (put X)	Amount Required (Rs.)		Preferred provider (put X)
1601 Yes ___	1603 Farm inputs ___	1610		1616 Friends/relatives ___
1602 No ___	1604 Business ___	1611		1617 Shopkeeper ___
	1605 Assets purchase ___	1612		1618 Bank ___
	1606 Consumption ___	1613		1619 NGOs ___
	1607 Education ___	1614		1620 Community Org. ___
	1608 Social Functions ___	1614		1621 Other (specify) ___
	1609 other (specify) ___	1615		

## 2. HOUSEHOLD QUESTIONNAIRE (for Women)

Name of Enumerator : \_\_\_\_\_  
Name of UC : \_\_\_\_\_

Date of enumeration \_\_\_\_\_  
Name of Ghot/Village \_\_\_\_\_

### 100 Identification of the Respondent

101 household Number	102 Name of male respondent	103 Relationship with male respondent	104 Age (years)	105 Literacy	106 Primary activity	107 Secondary activity
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Note: Write the appropriate code under 105 to 107

**Literacy Code: Not Literate = 1; Literate = 2; Primary = 3; Middle = 4; Matric = 5 Post-Matric = 6**  
**Work Status/Occupation/Activity Code: Own Farming = 1; Farm Labour = 2;**  
**Off-farm skilled labour = 3; Off-farm unskilled labour = 4**  
**Govt. Job = 5; Pvt. Job = 6; Business = 7; Student = 8;**  
**Other work = 9; Unemployed = 10 Old/handicap = 11, Household Work = 12, Child/infant (under 5 years) = 13**

### 1500 Major Constraints/Problems (appropriate code)

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 (CO) ____		

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 Credit Requirement next year

Required (put X)	Purpose (put X)	Amount Required (Rs.)	Preferred provider (put X)
1601 Yes ____	1603 Farm inputs ____	1610	1616 Friends/relatives ____
1602 No ____	1604 Business ____	1611	1617 Shopkeeper ____
	1605 Assets purchase ____	1612	1618 Bank ____
	1606 Consumption ____	1613	1619 Projects/NGOs ____
	1607 Education ____	1614	1620 Community Org. ____
	1608 Social Function ____	1614	1621 Other (specify) ____
	1609 other (specify) ____	1615	

### 1700 Decision Making at Household Level (write appropriate code)

1701 household expenditures ____	1702 Children's education ____	1703 Children's marriages ____	1704 Assets purchase ____
1704 Assets sale ____	1705 Take loan(s) ____	1706 Utilize loan (s) ____	1707 Family Planning ____
1708 Work outside household ____	1709 Child rearing ____	1710 Access to Health ____	1711 CO membership

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

Name of Enumerator : \_\_\_\_\_

Date of enumeration \_\_\_\_\_

Name of UC : \_\_\_\_\_

Name of Ghot/Village \_\_\_\_\_

#### 1800 VILLAGE INFRASTRUCTURE

Infrastructure	Yes	No	Infrastructure	Yes	No	Infrastructure	Yes	No
Electricity	1801__	1802__	Piped Water	1809__	1810__	Drains	1815__	1816__
Telephone	1803__	1804__	Tubewell	1811__	1812__	Cobbled Path	1817__	1818__
Mobile	1805__	1806__	Hand Pump	1813__	1814__	Shops/Market	1819__	1820__
Internet	1807__	1808__						

#### 1900 DISTANCE TO INFRASTRUCTURE AND SERVICES (KM)

Infrastructure /Service	Code	Distance (KM)	Infrastructure/Service	Code	Distance (KM)
Metalled Road	1901		Govt Primary School (M)	1918	
Bus/Wagon Stop	1902		Govt Primary School (F)	1919	
Railway Station	1903		Govt Primary School (Mix)	1920	
Local Mandi/Market	1904		Govt Middle School (M)	1921	
Factory	1905		Govt Middle School (F)	1922	
Post Office	1906		Govt Middle School (Mix)	1923	
PCO	1907		Govt High School (M)	1924	
Bank	1908		Govt High School (F)	1925	
Agriculture Office	1909		Govt College (M)	1926	
Veterinary Office	1910		Govt College (F)	1927	
Dispensary	1911		Govt Library	1928	
BHU/RHC	1912		Private Primary School	1929	
Medical Store	1913		Private Middle School	1930	
Private Doctor's clinic	1914		Private High School	1931	
Lady Health Worker/Visitor	1915		Private College	1932	
NGO/MFI	1916		Private Library	1933	
Utility Store	1917		Internet café	1934	

#### 2000 VILLAGE NATURAL RESOURCES

2001 Maj Cereal Crops	2002 Maj Fodder crops	2003 Major Vegetables	2004 Major Fruits	2005 Forest Trees
1: _____	1: _____	1: _____	1: _____	1: _____
2: _____	2: _____	2: _____	2: _____	2: _____
3: _____	3: _____	3: _____	3: _____	3: _____
4: _____	4: _____	4: _____	4: _____	4: _____
5: _____	5: _____	5: _____	5: _____	5: _____
2006 Major Livestock	2007 Irrigation water	2008 Drinking water	2009 Common land	2010 Any other (specify)
1: _____	1: _____	1: _____	1: _____	1: _____
2: _____	2: _____	2: _____	2: _____	2: _____
3: _____	3: _____	3: _____	3: _____	3: _____

### 3000 Village Prices (rates)

	1	2	
Code	Item	Local unit of measurement	Price per local unit (Rs.)
3001	Wheat grain		
3002	Wheat Flour		
3003	Rice		
3004	Rice Flour		
3005	Maize/Corn		
3006	Pulses (average price of different pulses in the area)		
3007	Millets		
3008	Barley		
3009	Wheat/barley straw		
3011	Rice Straw		
3012	Maize Straw		
3013	Vegetables (average price of all different vegetables)		
3014	Cotton		
3015	Cotton Straw		
3016	Green Fodder		
3017	Sugarcane		
3018	Mango		
3019	Banana		
3020	Lemon		
3021	Oranges		
3022	Guava		
3023	Date Palms		
3024	Grapes		
3025	Apple		
3026	Apricots		
3027	Persimmon		
3028	Pomegranate		
3029	Peaches		
3030	Walnuts		
3031	Pears		
3032	Other fruits		
3033	Beef		
3034	Mutton		
3034	Poultry		
3035	Eggs		
3036	Fish		
3037	Oil/Fats		
3038	Milk		
3039	Sugar		
3040	Tea		
3041	Firewood/fuelwood		
3042	Timber		

### 4000 Community Organisations Statistics

Men CO(s)	Women CO(s)	Men CCBs	Women CCBs	Other Welfare Society
4001Yes___	4004Yes___	4016Yes___	4019Yes___	4010Yes___
4002No___	4005No___	4017No___	4020No___	4011No___
4003Member Households___	4006Member Households	4018Member Households	4021Member Households	4012Member Households

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## About the Authors

**Sarmad Khan** has a diverse working 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 organizations with special focus on strategy formulation for poverty targeting and programme evaluations. Currently he serves 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 degree in Economics from Peshawar University Pakistan (1984-5).

**Fazal Ali Saadi** acquired a Master's degree in Economics from the University of Karachi in (2002). He started his career as lecturer in Karakoram International University (KIU) Gilgit, worked with Pakistan Bait ul Mal (PBM) and then worked for Aga Khan Rural Support Programme (AKRSP). He joined Rural Support Programme Network (RSPN) in 2007 as Rural Economist. He has extensive experience of working in Socio-Economic Baseline and Impact Assessment Studies. He also co-authored a number of socio-economic baseline surveys for different RSPs in Pakistan.

## About Thardeep Rural Development Programme (TRDP)

Thardeep Rural Development Programme (TRDP) is a non-profit organisation working in the arid areas of Sindh. TRDP implements its programme in about 5,784 villages in five districts of Sindh, including Thar, Dadu, Jamshero, Khairpur and Umerkot districts.

TRDP aims to enlarge the choices of the people of the arid zones, especially women and the poor, by empowering them to secure their rights with command over resources and capabilities to successfully manage the process of sustainable development. TRDP makes this possible by providing the community access to capacity building, training, new markets, new, low-cost and relevant technologies, increased livelihood options, schemes for water and food security and by introducing approaches for natural resource management. TRDP also leads the critical field of Disaster Preparedness and Management in these disaster-prone arid areas of Sindh

## About the Rural Support Programme 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 mobilization. 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 worked with a rural membership of community organizations of 1.2 million rural households.











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