# **BASELINE DEMOGRAPHIC SOCIO-ECONOMIC SURVEY OF RAMPUR HYDRO ELECTRIC PROJECT**

Volume 1 (Survey conducted in April 2005)

**Study Sponsored** 

By

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## EXECUTIVE SUMMARY

### INTRODUCTION

The present study has been carried out by Agro Economic Research Centre, HP University, Shimla and has been completely funded by Sanjay Jal Vidyut Nigam, Shimla. The study aims at highlighting the socio-economic conditions of the project affected families as a result of construction of Rampur Hydro Electric Project (RHEP), as well as the families which are likely to be affected by the project activities in near future. The RHEP is proposed to be constructed on the right bank of river Satluj in district Kullu near to Rampur town. The land is to be acquired for the construction of project infrastructure and other activities.

#### METHODOLOGY

The primary and secondary data was collected on selected indicators in respect of persons living in the project vicinity who will be directly or indirectly affected as a result of project activities. The data was collected on specifically designed schedules, separately for individual families and for the villages as a whole. The project affected families (PAF) were located in villages Boyal, Kohil, Dutt Nagar and Nirmand phatti. The PAF were census surveyed. In addition to this, six villages, Boyal, Kohil, Dutt Nagar, Nirmand Phatti, Poshna and Tunan having many sub-villages were studied on the basis of primary as well as secondary data. The data collection for the study suffered from the agitation going on at that time and the fact that many respondents didn't cooperate in the task of data collection.

#### FINDINGS

The study attempted to highlight the socioeconomic conditions of the target groups on the basis of primary data collected from individual respondents and also on the basis of secondary data on the village level. The study indicated fairly high literacy rate among the sample. Most of the infrastructural facilities were present within the village and were connected with road. There were some activities like tree plantation and social activities undertaken by groups like youth and mahila mandals. Most of the economic indicators studied had highest concentration in village Nirmand and smallest in Boyal which was the result of the size of these villages. This was true for number of operational holdings and livestock resources among others. The land utilization pattern indicated a mixed picture with land not available for cultivation present in some of the villages and absence of non-agricultural uses in some others. Maize, paddy and wheat were the most important cereal crops and simultaneously many respondents also had apple and almond orchards. Kuhls were the only source of irrigation in all the villages. Banks are the important source of credit and the agricultural inputs are available from block headquarter located at Nirmand and Rampur for Dutt Nagar. Some of the inputs are also procured from private traders of Rampur. The study also included the details of economic and vegetative resources of the selected villages.

# Key Indicators of Demographic and Social Survey of RHEP.

#	Indicators	Unit	PAH*	LPAH**	Remarks			
1	Total households	No.	145	505	Calls for no comment			
2	Broken families	No.	12	54	Calls for no comment			
3	Families having land & house	No.	115	456	Calls for no comment			
4	Total population	No.	660	2533	Calls for no comment			
5	Family size	No.	4.55	5.02	Not so high but calls for concerted efforts by Health department in the			
					field of family planning			
6	Sex ratio (females per 1000 males)	No.	1037	941	Intervention by Health department in the form of education and motivation			
					in case of LPAH			
7	Literacy	%	83	80	Fairly high, still has scope for higher level			
8	Workers in total population	%	60	59	The percentage is envisaged to increase with increase in quality of life			
					which in turn is correlated with income levels			
9	Annual income/HH	Rs	1,20,648	1,07,408	Sufficient for comfortable living			
10	Share of agriculture income	%	38	19	9 Low share calls for introduction of new crops and productivit			
					enhancement programmes			
	Families below poverty line	%	2.76	0.99	Living of standard is better			
11	Families having house	%	95	99.6	Fairly high			
12	Average size of house	Ft <sup>2</sup>	578	457	Sufficient as per present living standards and requirements			
13	Households having pucca house	%	35	26	No. is strongly correlated with income level and this can go up as a result			
					of expected rise in income levels as a result of SJVN activities			
14	Households with separate kitchen	%	79	67	Again correlated with income, awareness and education levels,			
					percentage expected to rise as a result of SJVN activities			
15	Households having separate toilet	%	68	59	-do-			
16	Average No. of rooms	No.	3.7	3.65	-do-			
17	Households having business	%	12	13	The percentage might increase with the initiation of SJVN activities			
18	Families having outstanding loan	%	29	24	The percentage is high but the number of defaulters is very low			
19	Households having shops	No.	9	30	The percentage might increase with the initiation of SJVN activities			
20	Households having taxi	No.	7	6	-do-			
21	Households having general store	No.	3	7	-do-			

22	Households having TV	%	72	68	Rise in income will result in increased numbers and better qua equipments		
23	Households having Refrigerator	%	46	27	-do-		
24	Households having LPG	%	82	64	-do-		
25	Average size of land holding	Bighas	10.35	6.96	Expected to decline further as a result of family divisions		
26	Households growing wheat	%	72	78	The cropping pattern may change towards vegetables and other commercial crops as a result of profitability and availability of infrastructure facilities		
27	Households growing paddy	%	64	36	-do-		
28	Households growing maize	%	29	63	-do-		
29	Households growing apple	%	17	21	-do-		
30	Households growing almond	%	24	4	-do-		
31	Crops output/HH	Rs	48314	17979	The output may also increase if cropping pattern changes in favour of commercial crops		
32	Livestock/HH	No.	2.12	3.03	The number is expected to decline due to trend towards cross-bred animals		
33	Milch animal/HH	No.	0.99	1.26	-do-		
34	Active role in Agril Decision	%	63	67	Indicates that all the women carrying out operations are not entrusted		
35	Active role in Agril operation	%	74	79	with decision making. May be to a lesser degree the agriculture is still considered as men's domain		
36	Active role in AH Decision	%	70	77	Position is just reverse as in agriculture indicating favourable situation		
37	Active role in AH operation	%	65	70			
38	Monthly consumption/HH	Rs	4741	4469	Bound to increase in monetary as well As quality as a result of increase in income		

\* Project affected families
 \*\* Likely to be project affected families
 HH=Household, AH=Animal husbandry, Agril=Agriculture

# Chapter -1

# INTRODUCTION

### Introduction

The Rampur Hydro Electric Project (RHEP) is proposed to be constructed on the right bank of river Satluj in district Kullu near to Rampur town. The land is to be acquired for the construction of project infrastructure and other activities. This will directly or indirectly affect the population requiring the base line survey of such families for working out the future impact assessment of project activities. The present study is an attempt in this direction.

### Methodology

The scope of the study required the primary and secondary data to be collected on selected indicators in respect of persons living in the project vicinity who will be directly or indirectly affected as a result of project activities. The data was collected on specifically designed schedules, separately for individual families and for the villages as a whole. The project affected families (PAF) were located in villages Boyal, Kohil, Dutt Nagar and Nirmand phatti. The PAF were census surveyed and the village-wise details have been presented in Table-1.1. However, there were four families which had migrated out of their respective villages and only a very few information of such families could be gathered from fellow villagers and analyzed.

#	Name of Village	Sub-Village	Gen. category households	SC/ST households	Total
1.	Boyal	-	46	22	68
2	Koyal/Kohil	-	45	-	45
3.	Dutt Nagar	-	8	5	13
4.	Nirmand/ Nirmand- phatti	-	7	12	19
	Grant Total	-	106	39	145

 Table- 1.1: Details of project affected households surveyed.

In order to analyse the variables like living conditions, production activities and socio-economic variables for comparison as well as for future analysis of impact assessment, six villages, including the above, have been selected for the study. These villages are Boyal, Kohil, Dutt Nagar, Nirmand Phatti, Poshna and Tunan having many sub-villages. The details of such villages and the sample surveyed have been presented in Table-1.2.

#	Name of Village	Sub-Village	Gen. categ. households	SC/ST households	Total
1.	Boyal	-	28	35	63
2	Koyal/Kohil	Koyal	32	15	47
		Dogri	9	-	9
		Dropa	4	10	14
		Dhamota	7	6	13
		Sub-Total	52	31	83
3.	Dutt Nagar	-	8	11	19
4.	Nirmand/				
		Abery	19	26	45
		Sumair	1	-	1
		Bayal	1	-	1
		Sub-Total	21	26	47
5.	Poshna		4	46	50
		Ralu	5	-	5
		Judo	4	-	4
		Randal	46	-	46
		Kather	-	11	11
		Pangra	-	3	3
		Khadir	-	1	1
		Dev Pangra	-	3	3
		Pararsi	-	1	1
		Bajera	-	1	1
		Tihari	-	1	1
		Sub-Total	59	67	126
6.	Tunan		24	30	54
		Jagatkhana	9	3	12
		Chalati	17	16	33
		Donga	6	1	7
		Bharel	5	-	5
		Shoga	2	-	2
		Govil	7	5	12
		Kandlu	2	-	2
		Bislai	4	-	4
		Bhadgai	8	-	8
		Bhadel	2	-	2
		Tunda	1	-	1
		Ghundi	11	1	12
		Kathed	1	-	1
		Thachawa	2	1	3
		Ralu	2	-	2
		Dharmot	1	-	1
		Govir	3	1	4
		Sharshai	-	3	3
		Sub-Total	106	61	167
	All villages	Grand total	274	231	505

Table-1.2: Details of likely to be affected households surveyed.

### **Reference period**

The survey of the study was conducted during April 2005. The data collected from the households pertain to the agricultural year 2003-2004.

### Limitations of the study

Although best efforts have been put in, the study suffers from the following limitations:

- During the course of data collection, agitation against the management of the RHEP/SJVN was going on. Thus, difficulty was faced during the data collection because of non-cooperation of the target group. Certain sections of the community refused to reveal the requisite details. The data of such families is based on the responses of their neighbours, friends, relatives or other villagers.
- 2. The data collected could not be cross checked due to this fact and may have certain inconsistencies despite best efforts on the part of data collection team.
- 3. Some of the families have moved out and the details of some aspects of such families could not be ascertained from the fellow villagers. The data may also be lacking due to this reason.
- 4. As per information made available, there are 180 families, which are directly affected by the project activities. But during the course of study only 145 such families could be identified. This discrepancy has arisen due to the difference in the definition of family adopted by RHEP. Many families were identified living together and sharing a common kitchen and hence taken as single family unit for the study. But as the land has been divided among the family members and the land records show such lands on the names of different family members, these have been treated as separate families in the records.

# Chapter – 2

# **GENERAL FEATURES OF THE PROJECT AFFECTED VILLAGES**

The detailed information about the selected villages under study, viz Koyal, Boyal, Dutt Nagar, Tunan, Poshna and Nirmand have been presented in the following text.

### **Infrastructure Facilities**

Various infrastructural facilities of the village have been presented in Table-2.1. It has been analysed whether such facilities are present in the village and if not the nearest location of such facilities and the distance involved have been presented. Primary schools are present in all the villages but secondary schools are not. Similarly, the facilities of bank, post office and telephone are not available in all the villages. Most of the health related facilities are present only in Nirmand, may it be human or veterinary. The details of other facilities may be referred to from the table.

### **Socio-Economic Features**

The socio-Economic features of selected villages based on 2001 census data have been presented in Table-2.2. The analysis reveals that village Nirmand is the largest village having a total population of 6200 and village Boyal, the smallest with a total population of 636 persons only. The table also provides the details of village wise number of males, females and children. Highest literacy percentage of about 82 per cent was found in village Poshna whereas village Tunan was at the bottom in this respect, with the literacy percentage of about 62 per cent. The table also presents the details of SC and ST population along-with families covered under the development programmes like IRDP, IAY and SJRY.

### Activities Under Community/Social Groups

The only groups formed in the selected villages are Yuvak Mandals and Mahila Mandals (Table -2.3). Yuvak Mandals are present in all the villages where they have undertaken the activities of tree plantation and others social work. On the other hand Mahila Mandals have undertaken the responsibilities of popularizing the

activities of Vermiculture, which has benefited many persons in village Boyal. In Duttnagar the Mahila Mandal has educated about 150 women for undertaking the social work. In Tunan the Mahila Mandal has established a community kitchen and in Nirmand the Mandal has constructed a community hall for organizing various social events.

### **Occupational Structure**

The analysis of occupational structure of the residents of selected villages reveals that highest number of workers are in village Nirmand, Table -2.4. The table further presents the details of sex-wise main workers, cultivators, marginal workers and non-workers. The highest numbers of these are invariably found in Nirmand and smallest in Boyal, which apparently are determined by the size of population.

### **Livestock Resources**

The information regarding livestock resources has been drawn from veterinary hospital, Nirmand (Table -2.5) and it is indicated that village Tunan has highest number of draught animals (190) followed by Nirmand and Poshna with figures of 184 and 176 respectively. Village Nirmand has highest number of cows (1883) followed by Tunan (1140) and Dutt Nagar (315). Buffaloes are reared in Boyal, Dutt Nagar, Nirmand and Poshna. The number of goat/sheep has been observed to be quite low in villages like Koyal, Boyal and Dutt Nagar. The piggery is present only in village Boyal and poultry in Koyal and Boyal.

### **Operational Holdings**

The details of operational holdings in selected villages, based on village revenue records, have been presented in Table -2.6 indicating that highest number of operational holdings, 819 covering an area of about 631 hectares was in Nirmand. This was followed by Tunan having 771 holdings spread over an area of 515 hectares and Poshna heaving 451 holdings covering an area of about 250 hectares. The lowest number of operational holdings was in Boyal with 87 holdings in an area of 43 hectares. The size-wise details about number of area of operational holdings can also be referred to from this table.

### Land Utilization Pattern

Village Nirmand is the largest village having a total geographical area, as per village papers, of 1102 hectares and this is followed by Dutt Nagar and Tunan. Village Boyal has the smallest geographical area, 76 hectares (Table-2.7). There was low area under forests in any of the villages. Except for village Koyal there was some area 'not available for cultivation' and Nirmand topped in this respect. There was no area under non-agricultural uses in Boyal and Poshna. Barren and uncultivable land was present only in Koyal, Boyal and Dutt Nagar. Dutt Nagar was only village heaving land under permanent pastures and other grazing lands, 539 hectares of land was under this category. Dutt Nagar also had 11 hectares of area under miscellaneous tree crops and groves. Fallow land was present only in Koyal and Tunan. This table also presents the details of total crop area, net area sown and irrigated area etc.

### **Cropping Pattern**

The analysis of cropping pattern (Table-2.8) reveals that maize and paddy are the most common kharif crops followed by black gram. Other crops grown in some of the villages include rajmash, potato, tomato, radish and Kulth etc. In rabi season wheat is the most common crop grown in all the villages. In some of the villages barley, peas, gram, mustard, potato and cabbage etc are grown. All the villages have orchards of apple, almond, plum etc. The villagers of Tunan have orchards, which are not recorded presently because the orchard area falls under another panchayat.

### Sources of Irrigation

Kuhls are the only source of irrigation in the selected villages, each village heaving at least one kuhl (Table-2.9). Highest number of kuhls was observed in village Tunan having three kuhls but irrigating 6 hectares of land. On the other hand Dutt Nagar has two kuhls, but has a command area of 116 hectares. Village Koyal has only one kuhl irrigating an area of 74 hectares.

### **Credit Facilities**

The residents of villages under study were reported to be availing all types of loans from banks and the rate of interest has been reported to be about 9 to 12 per cent

(Table-2.10). In addition to this the villagers are reported to be taking consumption and production loans from other sources like money lenders, traders and relatives, but no authentic data is available on such lending and hence could not be presented.

### **Sources of Agricultural Inputs**

The sources of various agricultural inputs like seed, fertilizer, implements and machinery and insecticides/pesticides, in the selected villages have been presented in Table -2.11 along-with distance of the source of procurement. The major source of all the inputs like seed, fertilizer, implement & machinery and insecticides/pesticides is the office of Block Development. In addition to this majority of the farmers also retain seed for use in the next crop. Some of the seed and insecticides/pesticides are also purchased from traders who are located at Rampur.

### **Vegetative Resources**

The initiatives taken for enhancing the vegetative resources of the villages include plantation of tree species like sheesham, eucalyptus and chil etc in villages (Table - 2.12).

### **Economic Resources**

The details of economic resources in these villages have been presented in Table 2.13 indicating that there is one tractor and trolley each in village Koyal. This village also has four threshers. The number of threshers in Boyal, Tunan and Nirmand were reported to be three, three and five respectively. Nirmand has four water flour mills and Koyal has two flour mills. There are two Khadi Gramodyog units in village Tunan and three such units are in Nirmand. Nirmand also has three cotton ginning units.

Infrastructure	Ko	yal	Bay	val	Dutt Nagar	
	Location	Distance	Location	Distance	Location	Distance
Block H.Q.	Nirmand	15 Km.	Nirmand	11 Km.	Rampur	13 Km.
District H.Q.	Kullu via Jot	154 Km.	Kullu	150 Km.	Shimla	117 Km.
Pacca Road	Kaccha	-	Up Avary	4 Km.	Pucca	With in
			Kachha			village
Nearest Railway	Shimla	130 Km.	Shimla	126 Km.	Shimla	117 Km.
Station						
Bus Station/Stop	Koyal	0	Bayal	0	Datt Nagar	0Km.
Market/Mandi	Rampur	14Km.	Rampur	12Km.	Rampur	13 Km.
Primary School	Koyal	With in village	Bayal	0	Datt Nagar	0 Km.
Secondary School	Dutt Nagar	18 Km.	Rampur	12 Km.	Datt Nagar	0 Km.
Bank	Bayal, Kangra	4Km.	Bayal, Kangra	0	Nirath	10 Km.
	,Cooperative bank		Co-operative Bank			
Post Office	Koyal	With in village	Koyal	4 Km.	Datt Nagar	0
Telephone	Nirmand	15 Km.	Nirmand	11 Km.	Rampur	13 Km.
Hospital	Rampur	15 Km.	Nirmand	11Km.	Rampur	15 Km.
Primary Health	Nirmand	15 Km.	Nirmand	11 Km.	Nirath	0
Centre						
Veterinary Hospital	Nirmand	15 Km.	Koyal	3 Km.	Nersu	3 Km.
Veterinary	Koyal	With in village	Koyal	3 Km.	Nersu	3 Km.
Dispensary	,	Ŭ	, , , , , , , , , , , , , , , , , , ,			
Input Supply point	Koyal	-do-	Bayal	0	Rampur	13 Km.
Cooperative Society	Nirmand	15 Km.	Bayal	0	Rampur	13 Km.
HQs.			-		-	
Panchayat Centre	Bayal	4 Km.	Bayal	0	Datt Nagar	0
Kisan Centre	N.A.	0	-	0	-	0
Mahila Mandal	Koyal	0	Bayal	0	Nersu	0
Youth Mandal	Koyal	1 Km.	Bayal	0	Nirath	10 Km.
Forestry Nursery	Roparu	-	Chambu	2 Km.	Talai	5 Km.
Adult Education	N.A.	-	-	-	-	0
Electrification Status	Yes	-	Yes	-	Yes	0-
Village Drainage	Yes (pucca)	-	No	-	Yes (pucca)	0-
Provision of	No	-	No	-	No	0
Sewerage						
Sources of Drinking	IPH Scheme	10Km.	Yes	0	Tap water	0
water						

# Table-2.1: Infrastructure facilities of selected villages.

Table-2.1continu
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Infrastructure	Tunan		Poshna	Poshna		
	Location	Distance	Location	Distance	Location	Distance
Block H.Q.	Nirmand	32 Km.	Nirmand	22 Km. And on foot 10 Km.	Nirmand	0 Km.
District H.Q.	Kullu	143 Km.	Kullu	224 Km. From jalori and 300 Km. From Shimla	Kullu	161 Km.
Pacca Road	Pucca	12 Km.	Chuna Ghai	4 Km.	-	0
Nearest Railway Station	Shimla	155 Km.	Shimla	150 Km.	Shimla	137 Km.
Bus Station/Stop	Rampur	12 Km.	Rampur	5 Km.	Nirmand	0 Km.
Market/Mandi	Rampur	12 Km.	Rampur	5 Km.	Rampur	18 Km.
Primary School	Tunan	0	Up to 3 <sup>rd</sup> alternative school running by SSA	With in village	Nirmand	0
Secondary School	Rampur Arsu	12 Km. 14 Km.	Middle school Kisholi	l Km.	Nirmand	0
Bank	Grameen bank	12 Km.	Jagat Khana	4 Km.	PNB, Cooperativ e bank	0
Post Office	Tunan	0 Km.	Poshna	0	Nirmand	0
Telephone	No	-	Jagat Khana	0	Nirmand	0
Hospital	Rampur	16 Km.	Rampur Nirmand	15 Km. 22Km.	Nirmand	0
Primary Health Centre	Rampur	16 Km.	Kisholi	1 Km.	Nirmand	0
Veterinary Hospital	Rampur	12 Km.	Kishali	1 Km	Nirmand	0
Veterinary Dispensary	Rampur	12 Km.	Kisholi	1Km.	Nirmand	0
Input Supply point	Nirmand	32 Km. On foot 12 Km.	Nirmand	22 Km.	Nirmand	0
Cooperative Society HQs.	Nirmand	32 Km. On foot 12 Km.	Brow	5 Km.	Nirmand	0
Panchayat Centre	Jagat Khana	12 Km.	Brow	5 Km.	Nirmand	0
Kisan Centre	-	0	Nirmand	22 Km.	-	0
Mahila Mandal	Tunan	0	Poshna	1 Km.	Nirmand	3 Km.
Youth Mandal	Tunan	0	-	0	Nirmand	3 Km.
Forestry Nursery	Pipti Seri	4 Km.	Brow	4 Km.	-	0
Adult Education	-	0	Nirmand	22 Km.	-	0
Electrification Status	Yes	0	Yes	0	Yes	0
Village Drainage	No	0	Yes (Kutcha)	0	No	0
Provision of Sewerage	No	0	No	0	No	0
Sources of Drinking water	Kandlu Nala	1 Km.	Spring	100 Meter	Nirmand	0

Features		Features Villages						
	Koyal	Bayal	Dutt	Tunan	Poshna	Nirmand		
	_	-	Nagar					
No. of Households	484	114	250	824	773	1380		
Total population	2471	636	1213	4115	3522	6200		
Male	1174	265	540	1756	1630	2864		
Female	1037	284	542	1689	471	2616		
Children	260	87	131	670	421	720		
Literacy %	65.35	66.48	77.26	61.68	81.61	74.16		
Male	74.87	78.86	88.33	75.51	89.14	85.64		
Female	54.58	54.92	66.23	47.30	73.28	61.58		
SC Population	743	299	519	2303	1368	2953		
ST Population	1	5	14	7	63	32		
SC & ST Population	744	304	533	2310	1331	2985		
IRDP families	-	26	-	112	-	120		
No. of households under	-	10	-	2	-	2		
IAY								
No. of households under SJRY	-	30	-	4	-	-		

Table-2.2: Socio-economic features of selected villages (2001).

Source: Department of Census, Shimla.

Group/Activities	Koyal	Bayal	Dutt Nagar	Tunan	Poshna	Nirmand
Yuvak Mandal			Hugui			
Activities	Plantation work done	Plantation work done	Plantation work done	Plantation on Govt. land and look after the plots	Plantation on Govt land done	Social work
Progress	25% plantation success	Plantation done in forest land	30% plantation matured	-	20% plantation matured	Play ground
No. of beneficiaries	53	65	93	110	90	80
Mahila Mandal						
Activities	To conduct the meetings for social works	Vermiculture and meetings for various social works	To educate the women for social work	Community Kitchen and to educate the women for social work	To conduct the meetings for social works	Construction of community hall
Progress		-		-		
No. of beneficiaries	60	40	75	70	30	130
Kisan Sabha						
Activities		-		-		-
Progress		-		-		-
No. of beneficiaries		-		-		-
N.G.O.						
Activities		-		-		-
Progress		-		-		-
No. of beneficiaries		-		-		-

# Table- 2.3: Community/ Social group, activities & progress in selected villages (2003-04).

Source: Village Panchayat Records.

Occupation	Koyal	Bayal	Dutt	Tunan	Poshna	Nirmand
			Nagar			
Total Worker	1638	318	675	2148	1564	3436
Male	858	147	339	1095	907	1805
Female	780	171	336	1053	657	1631
Main Worker	1289	312	659	1984	1321	2848
Male	667	141	329	1038	853	1643
Female	622	171	330	946	468	1205
Cultivator	1184	300	562	1548	681	1955
Male	574	131	252	625	380	856
Female	610	169	310	923	301	1099
Main other workers	105	12	97	436	640	893
Male	93	10	77	413	473	787
Female	12	2	20	23	167	106
Marginal worker	349	6	16	164	243	588
Male	191	6	10	57	54	162
Female	158	0	6	107	189	426
Non-Worker	833	318	538	1967	1958	2764
Male	457	168	278	1004	941	1423
Female	376	150	260	963	1017	1341

 Table- 2.4: Occupational structure of selected villages (2001).

Source: Department of Census, Shimla.

(Number)

Type of livestock	Koyal	Bayal	Dutt Nagar	Tunan	Poshna	Nirmand
Draught Animal	120	90	46	190	176	184
Cows	122	240	315	1140	218	1883
Buffaloes	-	15	12	-	4	14
Young Stock	60	65	120	440	90	564
Goat/Sheep	20	10	30	390	229	457
Horse/ponies	-	4	8	38	22	18
Poultry	100	150	-	-	-	300
Pig	-	28	-	-	-	-
Total						

Source: Veterinary Hospital, Nirmand

									(Area	a in Hect	ares)	
Size of	Ко	yal	Bayal		Dutt Nagar		Tunan		Poshna		Nirmand	
holdings	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Marginal	145	40	75	23.91	184	78	616	253	371	97.91	568	144.12
Small	11	15	9	11.85	49	65	128	183	42	45.08	208	258.26
Medium	5	22	3	7.24	24	39	23	60	33	87.25	37	97.80
Large	1	8	-	-	8	53	4	18	5	26.93	6	31.06
Total	162	85	87	43.0	265	236	771	515	451	257.75	819	631.24

## Table- 2.6: Operational holdings in selected villages (2003-04).

Source: Village revenue records

## Table-2.7: Land utilization pattern in selected Villages(2003-04)..

Land use	Koyal	Bayal	Dutt Nagar	Tunan	Poshna	Nirmand
1. Total geographical area	159	76	851	510	293	1102
according to village papers						
2. Area Under Forests	-	-	-	-	-	-
3. Area not available for cultivation	-	13	83	107	49	246
<ol> <li>Land put to non agricultural</li> </ol>	9	-	66	12	-	132
use:						
ii. barren and uncultivable land	20	2	17	95	-	114
Total	29	15	83	107	49	246
4. Other uncultivated land	114	-	-	-	-	-
excluding fallow land						
i. Permanent pastures and other	-	-	536	-	-	-
grazing lands						
ii. miscellaneous tree crops &	-	-	11	-	-	-
groove included in net area sown						
iii. Culturable waste	15	-	-	-	-	-
Total	15	-	547	-	-	-
5. Fallow Lands	1	4	-	23	22	71
i. Current fallows	-	-	-	-	-	-
ii. Fallow land other than current	-	-	-	-	-	-
fallow						
Total	1	4	-	23	22	71
6. Total Cropped Area	316	63	-	731	391	785
i. Net Area sown	114	56	221	380	222	785
ii. Area sown more than once	202	58	9	351	169	768
Total	316	114	230	731	391	1553
7. Total Cultivable Area	-	57	-	-	244	856
i. Irrigated area	74	35	-	6	7	41
ii. un-irrigated area	59	22	-	-	49	815
8. Village Common Lands	-	-	-	-	-	-
9. Land put to other use	-	-	-	-	-	-
(a) Industry	-	-	-	-	-	-
(b) Community House	-	-	-	-	-	-
10 Area under ponds for	-	-	-	-	-	-
Agriculture						

Source: Village revenue records

																(Hectare	es)	
Name of crops	Koyal			Bayal			Dutt N	lagar		Tunan	l		Poshna			Nirmand		
Kharif.	Total	IR	UIR	Total	IR	UIR	Total	IR	UIR	Total	IR	UIR	Total	IR	UIR	Total	IR	UIR
Maize.	2.0	-	2.0	12	-	12	-	-	-	228	-	228	148	-	148	631	-	631
Paddy	66	66	-	36	36	-	14	14	-	-	-	-	7	7	-	55	40	15
Black Gram	12	-	12	5	-	5	-	-	-	36	-	36	14	-	14	43	-	43
Rajmash	-	-	-	-	-	-	-	-	-	40	-	40	-	-	-	6	-	6
Rongy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3
Potato	1.0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3
Kachalu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Other vegetable	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Tomato	-		-	-	-	-	3	3	-	2	2	-	-	-	-	-	-	-
Radish	-		-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-
Kulath	-		-	-	-	-	-	-	-	-	-	-	8	-	8	-	-	-
Total	82	68	12	53	36	17	17	17	-	308	4	304	177	7	170	747	40	707
Rabi																		
Wheat	90	72	18	49	40	9	25	12	13	304	-	304	161	-	161	608	38	570
Barley	-	-	-	2	-	2	-	-	-	19	-	19	30	-	30	11	-	11
Peas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1
Gram	2	-	2	1	-	1	1	-	1	-	-	-	-	-	-	12	-	12
Mustard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Potato	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3
Other vegetable	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	2	-	2
Cabbage	-	-	-	-	-	-	3	3	-	-	-	-	-	-	-	-	-	-
Total	92	72	20	52	40	12	29	15	14	325	2	323	191	-	191	640	39	601
Apple	-	-	-	-	-	-	-	-	-		Villager	s have	-	-	-	-	-	-
Almond	-	-	-	2	-	2	-	-	-		ard, which	n is not	-	-	-	11	-	11
Plum	-	-	-	1	-	1	-	-	-	ree	corded be	ecause	-	-	-	9	-	9
Other	2	1	1	-	-	-	171	73	98		this area ther panc		15	-	15	5	-	5

## Table- 2.8: Cropping pattern in selected villages (2003-04).

Source: Village revenue records

Koyal	Bayal	Dutt Nagar	Tunan	Poshna	Nirmand
1	1	2	3	2	1
74	35	116	6	7	41
No	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
	1 74 No -	1 1 74 35 No - - 	Nagar           1         1           74         35           No         -           -         -           -         -           -         -           -         -	Nagar           1         1         2         3           74         35         116         6           No         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -	Nagar         Nagar           1         1         2         3         2           74         35         116         6         7           No         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -

Table- 2.9: Sources of	irrigation in selected	d villages (2003-04)

Source: Village revenue records

Institution	Koyal	Bayal	Dutt Nagar	Tunan	Poshna	Nirmand
Banks						
Type of loan	All	All	All	All	All	All types
	types	types	types of	types of	types of	of loans
	of	of	loans	loans	loans	
	loans	loans				
Interest rate	9 to	9 to	9 to	9 to	9 to	9 to 12%
	12%-	12%	12%-	12%	12%-	
Money lender						
Type of loan	-					
Interest rate	-					
Traders						
Type of loan	-					
Interest rate	-					
Relatives	-					
Type of loan	-					
Interest rate						

# Table-2.11: Source of agriculture inputs in selected villages.

Inputs	Koyal	Bayal	Dutt Nagar	Tunan	Poshna	Nirmand
Seed						
Source	BDO Office	BDO Office	BDO Office	BDO Office	BDO	BDO Office
	and Private	and Private	and Private	and Private	Office	and Private
					and	
					Private	
Distance	13 km	11km.	13 km	32 Km.	30 km	0
Fertilizer					-	
Source	Cooperative	Cooperativ	Cooperative	Cooperativ	Cooperati	Cooperativ
	store	e store	store	e store	ve store	e store
Distance	0 km	0 km	0 km	0 km	0 km	0 km
Implements/machinery						0
Source	BDO Office	BDO Office	BDO Office	BDO Office	BDO	BDO Office
	and Private	and Private	and Private	and Private	Office	and Private
					and	
					Private	
Distance	13 km	11km.	13 km	32 Km.	30 km	0
Insecticides/pesticides						
Source	BDO Office	BDO Office	BDO Office	BDO Office	BDO	BDO Office
	and Private	and Private	and Private	and Private	Office	and Private
					and	
					Private	
Distance	13 km	11km.	13 km	32 Km.	30 km	0

Particulars	Koyal	Bayal	Dutt Nagar	Tunan	Poshna	Nirmand
Type of vegetation	Five hundred trees planted by the school children	Eucalyp tus and Chill	Eucaly ptus and Chill	Sheesham eucalyptus Chie, Kail, Mrina,	Eucalyptu s , Kail and Chill	Eucalyptu s and Chill
Social forestry	-	-	-	- -	-	-
Area						
Species	-	-	-	-	-	-
Agro-forestry						
No. of farmers	-	-	-	-	-	-
Area plated						
Species	-	-	-	-	-	-
No. of trees						
Pastoral forestry	-	-	-	-	-	-
No. of farmers						
Species	-	-	-	-	-	-
Grazing growers						
No.	-	-	-	-	-	-
Area						

# Table-2.13: Economic resources in selected villages.

				(Nı	umber)	
Resources	Koyal	Bayal	Dutt Nagar	Tunan	Poshna	Nirmand
Tractors	1	-	-	-	-	-
Trollys	1	-	-	-	-	-
Threshers	4	3	-	3	-	5
Small Floor Mills	2	-	-	-	-	4
Paddy ponding units	2	2	-	-	-	4
Khadi Gramodyog	N.A.	-	-	2	-	3
Units						
Cotton Ginning Units	N.A.	-	-	-	-	3
Oil Extractor	N.A.	-	-	-	-	-
Gobar Gas plants	-	-	-	-	-	-
Agro-Processing Units	-	-	-	-	-	-
Hand Pumps	-	-	-	-	-	4
Seri Culture Units	-	-	-	-	-	-
Piggery Units	-	-	-	-	-	-
Poultry Units	1	-	-	-	-	-

## Chapter - 3

# **PROFILE OF PROJECT AFFECTED HOUSEHOLDS**

### **General Information**

In all the selected villages there were 145 households, which are directly affected by the project activities. All these households have been selected and census surveyed for the detailed study. Out of these 39 households belong to SC/ST category and the rest 106 belong to general category (Table -3.1). All these households belong to Hindu religion. Although, all the households speak Hindi but 36 percent of the SC/ST and seven percent households of general category insisted that Pahari should be recorded as their mother tongue along-with Hindi. Majority of the families have been reported to be consisted of single unit and only about eight per cent families were found to be broken families.

### **Assets in Possession**

It was envisaged important to analyse the structure of landed property owned by the project affected households and the results have been presented in Table -3.2. It may be seen from the table that about 14 per cent of the families have only land whereas about three percent have only house. If such families have land in addition to house it is very insignificant in quantity. Majority of the families, about 80 percent have both house and land and about three per cent families have shop, land and house.

### **Demographic Profile**

The demographic profile of the project affected households has been presented in Table-3.3 wherein it may be seen that total population of the project affected households was 660 at the time when survey was conducted and of these 192 belonged to SC/ST category. The total number of males and females have also been presented in this table. The analysis indicates that average family size of SC/ST category was 4.92 persons per family whereas this figure for general category was 4.42 and for all sample it was 4.55. The sex ratio in case of SC/ST population was 939, for general category families it was 1086 and for overall sample

the sex ratio was found to be 1037 females per thousand of male. About half of the sample was that of married persons.

### **Educational Status**

The analysis of educational levels of the persons of sampled household indicated that about 17 per cent of the persons were illiterate and about 19 percent had studied up to primary level (Table-3.4). About 11 per cent persons had attained the educational level of Senior Secondary level. About 10 per cent of the persons had completed their graduation level studies and about four percent had completed their post graduation level studies. About two percent of the persons had obtained some technical diplomas or other technical qualification.

### Literacy Level

The literacy level among the sampled population was found to be 83 percent (Table-3.5). The literacy among males was high (91%) as compared with females of whom 76 per cent were literate. The literacy level of general category persons was higher than SC/ST, and it was true for both males and females.

### **Workers Population**

The analysis indicated that about 55 per cent of the SC/ST, 63 per cent of the general category and about 60 per cent persons at overall level could be classified as workers (Table-3.6). The percentage of male workers was higher than females in case of general category whereas in SC/ST it was just reverse. At overall level also the number of male workers (59.25 %) was marginally lower than number of female workers (61.45%). This analysis led to conclusion that in case of SC/ST category the dependency ratio was 0.82, which was higher than general category (0.60). At overall level the dependency ratio was found to be 0.66.

### **Occupational Pattern**

The occupational pattern of the workers has been presented in Table-3.7. It is possible that some of the persons may have more than one occupation but for the present purpose the main occupation has been considered. The analysis has been conducted separately for males and females. The analysis indicates that the percentage of males who have agriculture as their main occupation was lower than that of females. About two percent of the males and 1.5 per cent of the females

worked as agricultural labour and this percentage for non-agricultural labour was higher in case of males but lower for females. Service was the main occupation of about 17 per cent of the males whereas only about two percent of the females were in service. About six per cent of the males were engaged in business but this figure was almost insignificant for females. The number of male students was higher than females. None of the males were solely engaged in household chores.

### Sources of Income

Like foregoing analysis, each family can have more than one source of income but all of these have considered in present analysis. It is indicated that about 90 per cent of the households at overall level were deriving income from agriculture and the next in importance was wage labour, about 41 per cent families getting some income from this source (Table-3.8). About 39 percent of the households were getting income from service.

### Annual Income of Households

It has been found out that agriculture is the major source of family income, about 38.48 per cent of the income being derived from this source (Table-3.9). Agriculture is closely followed by service accounting for 37.7 percent of total. Business contributed about 9.85 per cent and wage labour about 12.12 per cent of the family income. About 1.85 per cent of the income was being generated from sources other than listed above (pension etc.).

### **Families Below Poverty Line**

The Planning Commission, GOI has recommended the poverty line to be Rs. 289.31 per month per capita. This has been taken to be the poverty line in the present study. On this basis there was no family identified below poverty line among all the project affected households (Table-3.10)

### **Particulars of Houses**

About 95 per cent of the project affected households owned the houses with an average plinth area of about 578 ft<sup>2</sup> (Table -3.11). About 35 per cent of the houses were pucca, about 43 per cent kutcha and the rest about 17 per cent were semi pucca houses. About 79 per cent of the houses had separate kitchen, about 68 per cent separate toilet and about 71 per cent had separate animal sheds. The average

number of rooms per house at overall level were 3.7; this figure was 2.8 for SC/ST and 4.4 for general category families.

### **Business Details**

The business details of the project affected households have been presented in Table-3.12 revealing that about 12 per cent of the families have some sort of business. About 15 per cent of the general category and about three per cent of the SC/ST households had some business. The average investment of the business was Rs. 1,04,312 at overall level of which Rs. 89,315 was invested from own sources. About 29 per cent of the families who had invested in business had outstanding loans at the time when the survey was conducted. There were five families belonging to general category that had outstanding loans and the average amount of the outstanding loans was Rs. 81,000. Main source of credit was commercial banks.

### Particulars of Shops

There were nine households that had shops (Table-3.13), only one family of SC/ST category had shop. The average area of the shop was about 222 ft<sup>2</sup> with an average investment of Rs. 64,778. Of these nine shops two each were of tailoring and provision store, one was workshop and there were four general stores.

### Impact of SJVN Activities

Out of 17 households having the business, 15 were of the view that there will be some impact on the business activities as a result of SJVN activities (Table-3.14). All of these respondents were of the view that the business will definitely increase as a result of SJVN activities in the area.

### Households having Commercial Assets

The commercial assets included in the present analysis are the assets like taxi, car, pick-up van etc, Table-3.15 presents the details. There were 4.83 per cent families owning taxi used for commercial purposes. General stores were owned by 2.07 per cent families and there was one family having auto repair shop.

### Number of Commercial Assets

Table-3.16 presents the details of number of commercial assets owned by the households detailed in Table-3.15. It is indicated that each of the family having commercial assets has one such asset per household.

### Monthly Income from Commercial Assets

Each family having taxi was earning on an average Rs. 12,150 per month from this asset (Table-3.17). The monthly income from general store was Rs. 9,833. The auto repair shop generated the income of Rs. 5,000 per month.

#### **Modern Durables**

The presence of modern durables was analyzed in order to have an idea about the living standard of the project affected households. First of all it was seen that how many households possess some of the modern durables listed in the questionnaire, the results are presented in Table-3.18, indicating that about 72 per cent of the households, at overall level, have television sets and about 10 per cent in addition also have the VCD players. Refrigerators were present in about 46 per cent of the households. Most commonly present modern durable was observed to be LPG gas stove, which was present in about 82 per cent of the households. Further, it was observed that majority of the modern durables were present with the general category households (Table-3.19). About 80 per cent of TV sets and VCD players were with the general category households was about 88 per cent. Simultaneously, the value of modern durables present was also analyzed and results presented in Table-3.20 indicating the per household value of such assets.

### Land Resources

The land resources of the project affected households have been presented in Table-3.21 wherein it may be seen that per household irrigated land was higher in case of general category whereas the amount of unirrigated land was higher in case of SC/ST households. Total land with the general category household was also observed to be higher. On an average each beneficiary household owns 6.75 bighas of land of which 4.69 bighas was irrigated and the rest unirrigated. There was also some horticultural land present which was about 34 per cent of the total

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average land holding. In addition to this each household owned 0.01 bighas of grass land and 0.77 bighas of waste land.

### **Cropping and Production Pattern**

Cropping pattern is the mix of crops grown by different farmers and all the farmers don't necessarily grow the same crops. It is because of this fact that the number of farmers growing different crops has been analyzed and the result presented in Table-3.22. The analysis is of multiple responses in nature as each farmer grows more than one crop. It may be seen from the table that most number of farmers were growing wheat, 72 per cent, followed by paddy, 64 per cent. Maize, cabbage and pulses etc were the other crops grown. Among the horticultural crops, apples were grown by 17 per cent and almonds by 24 per cent households. Two per cent of the households were cultivating pears. The next stage of analysis pertains to the area put under different crops by the households. The cropping pattern has been presented in Table-3.23 depicting exact area put under the crops during the crop year 2003-04. It is clearly indicated that the emphasis is on the cereal crops followed by horticultural particularly apples and almond. The resultant production pattern has been presented in Table-3.24. The horticultural crops had highest per household production. Among the field crops, maximum production is of paddy, followed by wheat and among the vegetable crops maximum production was of cabbage followed by tomatoes and peas. The next stage of analysis pertains to working out the value of farm output. The output has been valued at the going market prices; Table-3.25 presents the details of the value. It is clear that the maximum share of output is constituted by the horticultural crops followed by paddy and wheat crops.

### Livestock Resources

The number of households owning livestock has been presented in Table-3.26 and the number of livestock owned by the project affected households have been presented in Table-3.27 depicting that on an average each household has 0.5 head of draught animals, 0.99 cow, 0.45 young stock and 0.17 sheep and goats. Only one household reared sheep/goats. Number of cows and young stock is higher with the SC/ST households. The value of livestock owned has been presented in Table-3.29. It

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may be seen from the table that among the SC/ST households only five households have crossbred cows and none has crossbred draught animals. Among the general category households 61 had crossbred cows and 37 crossbred young stock. Six households also had crossbred draught animals.

### **Role of Women in Economic Activities**

The role of women in various economic activities like agriculture and animal husbandry has been analysed and presented in Tables 3.30 to 3.32. Separate analysis has been carried out for role in decision-making and operations of such activities. The analysis of role of women in agriculture has been presented in Table-3.30 indicating that about 63 per cent of women engaged in decision making at overall level, are actively involved in it and about 36 per cent had supportive role. Similarly, about 74 per cent women were actively engaged in carrying out different agricultural operations and about 23 per cent had the supportive role.

Out of the total number of women engaged in decision making in animal husbandry, about 70 per cent were actively engaged in it and about 26 per cent had supporting role in decision making. About 65 per cent of the women engaged in carrying out various operations of animal husbandry were actively engaged and about 27 per cent had supportive role, at overall level (Table-3.31).

The role of women in household chores has been elicited in Table-3.32 wherein it may be seen that about 91 per cent of women were actively engaged and about 8 percent had supportive role. There were 41 women of general category households who were somehow concerned with carrying out the business. Out of these about 66 percent were actively engaged and about 32 per cent had supportive role.

### **Consumption Pattern**

The analysis of consumption pattern has been split into three parts. As all the families don't consume same food and non-food articles, first of all number of families consuming various articles have been worked out and presented in Table-3.33. It is indicated that the articles like rice, wheat, pulses, vegetables, milk, sugar, salt and tea are being consumed by majority of the families. The average quantity of such articles being consumed has been presented in table-3.34 and the value of such articles, based on the actual market prices has been presented in Table-3.35.

### Prevalence of Diseases

The analysis in this respect revealed that at overall level seven persons were suffering from chronic diseases like asthma etc and 52 persons suffered from common diseases like cold, fever, cough and cold during the last one year (Table-3.36).

Particulars	Ν	umber		P	•	
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
1. Total Household	39	106	145	100	100	100
2. Religion						
Hindu	39	106	145	100	100	100
Others	0	0	0	0	0	0
3. Mother tongue						
Hindu	25	99	124	64	93	86
Pahari & Hindu	14	7	21	36	7	14
4. Broken families	2	10	12	5	9	8

### Table-3.1: General information of Project Affected Households.

### Table-3.2: Assets in possession of Household.

Particulars	I	Number		Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
1. Only Land	4	16	20	10.25	15.10	13.79
2. Only House	3	1	4	7.70	0.94	2.76
3. Only Shop	0	1	1	0	0.94	0.69
4. Land & house	31	84	115	79.49	79.25	79.31
5. Shop, Land,	1	4	5	2.56	3.77	3.45
house						
Total Household	39	106	145	100	100	100

Particulars	Number			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
Total population	192	468	660	-	-	-	
Male	99	225	324	-	-	-	
Female	93	243	336	-	-	-	
Family size	4.92	4.42	4.55	-	-	-	
Sex ratio	939	1086	1037	-	-	-	
Marital statues	95	268	363	-	-	-	
Married male	46	131	177	48.42	48.88	48.76	
Married female	49	137	186	51.58	51.12	51.24	

 Table-3.3: Demographic profile of Project Affected Households.

Table-3.4: Educational statues of Project Affected H	louseholds.
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Particulars		Number		Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Illiterate	43	67	110	23.12	14.41	16.90
Primary	42	83	125	23.58	17.85	19.20
Middle	47	67	114	25.27	14.41	17.51
Matriculation	27	100	127	14.52	21.50	19.51
Senior secondary	14	59	73	7.53	12.69	11.21
Graduate	8	58	66	4.30	12.47	10.14
Post Graduate	5	19	24	2.68	4.09	3.69
Tech Diploma	0	12	12	0	2.58	1.84
Total	186	465	651	100	100	100

	(Percentage)							
Particulars	Number							
	SC/ST	Gen.	Total					
Male	85	93	91					
Female	68	78	76					
Total	77	86	83					

# Table-3.5: Literacy level in Project Affected Households. (Percentage)

Table-3.6:	Workers & non-workers in Project Affected Households.
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Particulars	N	umber		Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Total population	186	465	651	100	100	100
Male	96	223	339	100	100	100
Female	90	242	332	100	100	100
Workers	102	291	393	54.84	62.58	60.37
Male	48	141	189	50.00	63.23	59.25
Female	54	150	204	60.00	61.98	61.45
Non-workers	84	174	258	45.16	37.42	39.63
Male	48	82	130	50.00	36.77	40.75
Female	36	92	128	40.00	38.02	38.55
Dependency ratio				0.82	0.60	0.66

Particulars	1	lumber		Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
Agriculture							
Male	27	64	91	28.12	28.70	28.54	
Female	42	102	144	46.67	42.15	43.37	
Agriculture labour							
Male	4	3	7	4.17	1.34	2.19	
Female	1	4	5	1.11	1.65	1.52	
Non-agril. labour							
Male	10	3	13	10.42	1.34	4.07	
Female	3	1	4	3.33	0.41	1.20	
Service							
Male	7	47	54	7.29	21.07	16.93	
Female	0	7	7	0.00	2.89	2.10	
Business							
Male	-	20	20	-	8.98	6.27	
Female	-	2	2	-	0.83	0.60	
Rural Artisan							
Male	-	2	2	-	0.90	0.63	
Female	-	0	0	-	0.00	0.00	
Student							
Male	37	72	109	38.54	32.29	34.18	
Female	25	65	90	27.78	26.86	27.10	
Household							
Male	0	0	0	-	0	0.00	
Female	8	34	42	8.89	14.05	12.65	
Infants							
Male	10	10	20	10.42	4.48	6.27	
Female	9	22	31	10.00	9.09	9.34	
Un-employed							
Male	0	2	2	0	0.90	0.63	
Female	0	0	0	0	0.00	0.00	
Non workers							
Male	1	0	1	1.04	0.00	0.31	
Female	2	5	7	2.22	2.06	2.10	
Total							
Male	96	223	319	100	100	100	
Female	90	242	332	100	100	100	

 Table- 3.7: Occupational pattern of Workers of Project Affected Households.

Source	Num	ber of H	.H.	Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Service	9	47	56	23.07	44.33	38.62
Agriculture	35	95	130	89.74	89.62	89.65
Business	1	17	18	2.56	16.03	12.41
Wage labour	28	32	60	71.79	30.18	41.38
Other	0	4	4	-	3.77	2.75
No. of households	38	106	145	100	100	100

 Table-3.8:
 Source of Income of Project Affected Households.

 Table-3.9:
 Extent of income of Project Affected Households.

Source	Rs/H.H.			Percentages		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Service	23285	53658	45488	26.41	40.46	37.70
Agriculture	51372	44597	46420	58.28	33.63	38.48
Business	308	16150	11880	0.35	12.18	9.85
Wage labour	13182	15150	14621	14.96	11.42	12.12
Other	0	3051	2230	0	2.31	1.85
Total income	88144	132606	120648	100	100	100

Particulars	Number			Percentage		
	SC	GEN	TOTAL	SC	GEN	TOTAL
Total HH	39	106	145	100	100	100
HH Blow poverty line	0	0	0	0	0	0

Particulars	Num	nber of H.	H.	Ре	rcentage	9
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Families owning	39	99	138	100.00	93.39	95.17
house						
Average size of house	385.46	653.48	578.2			
Sq.ft			8			
Household having						
Pucca house	7	44	51	17.95	41.50	35.17
Kutcha house	26	37	63	66.67	34.90	43.44
Semi pucca house	6	18	24	15.38	16.98	16.55
Household having						
separate						
Kitchen	28	86	114	71.79	81.13	78.62
Toilet	21	78	99	53.85	73.58	68.27
Animalshed	23	80	103	58.97	75.47	71.03
Average no. of rooms	2.8	4.4	3.7			_
No. of H.H.	39	106	145	100	100	100

## Table- 3.11: Houses in possession of Project Affected Households.

Particulars	Nur	nber/amo	unt	Ре	rcentag	е
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
No. of Household	1	16	17	2.56	15.09	11.72
having business						
Average	300	110813	104312			
investment						
Own source	300	94688	89135			
Loan	-	12500	11765			
Other source	-	2500	2353			
Total	300	110813	104312			
No. of families	0	5	5	-	31.25	29.41
having out						
standing loan						
Average amount of	0	81000	81000			
out standing loan						
Source of loan						
Banks	0	4	4			
Relatives	0	1	1			
Money lender	0	-	-			
Net profit from	2000	110188	103824			
business						
Total H.H.	39	106	145			

Particulars	Number/Amount			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
No. of Household having Shop	1	8	9	100.00	100.00	100.00	
Area of shops (ft <sup>2</sup> )	100	237	222				
Av. investment(Rs)	3000	72,500	64,778				
Type of shop							
Tailoring	1	1	2	100.00	12.50	22.22	
Workshop	-	1	1	-	12.50	11.11	
Provision store	-	2	2	-	25.00	22.22	
General store	-	4	4	-	50.00	44.45	

## Table-3.13: Particulars of shop with Project Affected Households.

### Table-3.14: Particulars of impact of SJVN on Business.

Particulars	Number			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
No. of Business H.H.	1	16	17	100	100	100	
Impact	1	14	15	100	88	88	
Impact	0	2	2	0	12	12	
Respondents							
expecting							
Positive impact	1	14	15	100	100	100	
Negative impact	0	0	0	0	0	0	

## Table-3.15: Number of Households having commercial assets.

Assets	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Taxi	1	6	7	2.56	5.66	4.83
Pick up van						
Truck						
Photostat						
STD booth						
Tea stall						
Dhaba						
General store		3	3		2.83	2.07
Guest house						
Vegetable shop						
Commission Agent						
Auto repair shop		1	1		0.94	0.69
Other						
Total H.H.	39	106	145	100	100	100

Assets	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Taxi	1	5	6	100	45.45	50.00
Pick up van		1	1		9.09	8.33
Truck						
Photostat						
STD booth						
Tea stall						
Dhaba						
General store		4	4		36.36	33.33
Guest house						
Vegetable shop						
Commission Agent						
Auto repair shop		1	1		9.09	8.33
Other						
Total assets	1	11	12	100	100	100

 Table-3.16:
 Number of Commercial assets with Project Affected Households.

Table-3.17: Average monthly income from commercial assets with
Project Affected Households.

FIOJECI Allecteu Housenolus.									
-		(Rs	. Per household						
Assets	SC/ST	Gen.	Total						
Taxi	8000	15600	14333						
Car	0	10000	10000						
Pick up van									
Truck									
Photostat									
STD booth									
Tea stall									
Dhaba									
General store	0	9833	9833						
Guest house									
Vegetable shop									
Commission Agent									
Auto repair shop	0	5000	5000						
Other									

Durables	Number			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
TV	20	85	105	51.28	80.19	72.41	
VCD	3	12	15	7.69	11.32	10.32	
Refrigerator	6	60	67	15.38	56.60	46.21	
M. Cycle	0	7	7	-	6.60	4.83	
Car	2	15	17	5.13	14.15	11.72	
LPG	26	93	119	66.67	87.73	82.03	
Bio gas	0	1	1	-	0.94	0.69	
Other	0	3	3	-	2.83	2.07	
Total H.H.	39	106	145	100	100	100	

## Table-3.18: Number of Households having Modern durables.

Table-3.19:	Total Number of Modern durables with Project Affected
	Households.

Durables	Number			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
TV	22	87	109	20.18	79.82	100	
VCD	3	12	15	20.00	80.00	100	
Refrigerator	9	61	70	12.86	87.14	100	
M. Cycle	0	7	7	-	100.00	100	
Car	2	17	19	10.53	89.47	100	
LPG	28	95	123	22.76	77.24	100	
Bio gas	0	1	1	0	100.00	100	
Other	0	3	3	0	100.00	100	

			(RS/HH)			
Durables	Rupees per Household					
	SC/ST	Gen.	Total			
TV	6060	7355	7109			
VCD	2667	4792	4368			
Refrigerator	8957	7855	7970			
M. Cycle	0	41143	41143			
Car	375000	280600	291706			
LPG	1998	2336	2261			
Bio gas	0	25000	25000			
Other	0	3100	3100			

Table-3.20: Value of Modern durables with Project Affected House	olds .
(Rs/HH)	

	(In Bighas)					
Type of land	Area per HH			P	•	
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Agricultural land						
IR	1.87	5.73	4.69	23.67	50.98	45.31
UIR	2.33	1.96	2.06	29.49	17.44	19.90
Total	4.20	7.69	6.75	53.16	68.42	65.21
Horticultural land						
IR	2.21	2.60	2.50	27.97	23.13	24.15
UIR	1.49	0.83	1.01	18.86	7.38	9.75
Total	3.70	3.43	3.51	46.83	30.52	33.91
Grass land	0	0.02	0.01	0	0.17	0.97
Waste land	0	0.1	0.08	0	0.89	0.77
Total land	7.90	11.24	10.35	100	100	100

## Table-3.21: Land Resources of Project Affected Household.

# Table-3.22: Number of Project Affected Farm households Growing Different Crops.

Crops	No. of HH			P	ercentage	;
-	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Maize	17	25	42	44	24	29
Paddy	17	76	93	44	72	64
Wheat	20	85	105	51	80	72
Barley	2	5	7	5	5	5
Pulses	6	8	14	15	8	10
Cabbage	19	18	37	49	17	26
Peas	1	3	4	3	3	3
Tomato	12	9	21	31	8	14
Potato	5	2	7	13	2	4
Apples	2	23	25	5	22	17
Almond	5	30	35	13	28	24
Pears	1	2	3	3	2	2
Others	8	11	19	21	10	13
Total HH	39	106	145	100	100	100

	(In Bighas)					
Crops		Area per Hl	Η	Pe	rcentage	е
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Maize	64.26	94.25	158.51	15.22	5,51	7.43
Paddy	117.71	528.2	645.91	27.87	30.86	30.27
Wheat	74.60	615.4	690.00	17.66	35.96	32.34
Barley	2.0	15.00	17.00	0.47	0.88	0.80
Pulses	5.7	20.48	26.18	1.35	1.20	1.23
Cabbage	26.6	22.14	48.74	6.30	1.29	2.28
Peas	0.1	3.99	4.09	0.02	0.23	0.19
Tomato	15.00	9.63	24.63	3.55	0.56	1.15
Potato	4.5	2.00	6.5	1.07	0.12	0.30
Apples	115.00	127.42	242.42	27.23	7.44	11.36
Almond	22.00	96.00	118.00	5.21	5.61	5.53
Pears	1.00	6.5	7.5	0.24	0.38	0.35
Others	23.84	170.5	194.34	5.65	9.96	9.11
Total cropped area	422.31	1711.51	2133.82	100	100	100

 Table-3.23: Cropping pattern of Project Affected farm households.

 (In Picker)

## Table-3.24: Production of crops grown by Project Affected households.

			(Qtls./ H.F
Crops	Qua	antity per HH	,
•	SC/ST	Gen.	Total
Maize	2.60	1.43	1.71
Paddy	3.96	13.91	11.22
Wheat	2.43	8.42	6.81
Barley	0.03	0.07	0.06
Pulses	0.55	0.33	0.39
Cabbage	12.67	2.89	5.36
Peas	0.04	0.59	0.44
Tomato	3.69	1.27	1.88
Potato	1.67	0.22	0.61
Apples	0.85	51.64	220.3
Almond	5.02	5.01	5.02
Pears	1.08	0.46	0.63
Others	69.12	2.42	32,89

(Rs./ H.H.)						
Crops	Va	alue per H	IH	Percentage		9
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Maize	1524	857	1037	3.19	1.77	2.15
Paddy	2675	8713	7089	5.59	17.97	14.67
Wheat	1701	5278	4316	3.56	10.88	8.93
Barley	13	33	28	0.03	0.06	0.06
Pulses	70	144	124	0.15	0.29	0.26
Cabbage	4923	1293	2269	10.28	2.67	4.69
Peas	51	359	276	0.11	0.74	0.57
Tomato	2618	760	1260	5.47	1.57	2.61
Potato	1049	113	365	2.19	0.23	0.76
Apples	21795	15106	16905	45.55	31.16	34.99
Almond	5808	6509	6321	12.14	13.43	13.08
Pears	105	47	63	0.22	0.09	0.13
Others	5513	9264	8255	11.52	19.11	17.09
All Crops	47845	48476	48314	100.00	100.00	100.00

 Table-3.25: Per household value of crop out put.

## Table-3.26: Number of Project Affected households having Livestock.

Type of livestock	Number of HH			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
Draught Animals	8	32	40	20.51	30.19	27.59	
Milch Animals	24	75	99	61.50	70.80	68.30	
Young stock	11	44	50	28.20	41.50	34.50	
Sheep & goats	1	0	1	2.56	0	0.70	
Total HH	39	106	145	100	100	100	

### Table-3.27: Number of Livestock owned by Project Affected households.

Type of livestock	Numb	Number per Household				
	SC/ST	Gen.	All			
Draught Animals	0.35	0.56	0.50			
Milch Animals	0.99	0.98	0.99			
Young stock	0.44	0.54	0.46			
Sheep & goats	0.64	0	0.17			
Total	2.42	2.08	2.12			

Type of livestock	Rs./ Farm					
	SC/ST	Gen.	Total			
Draught Animals	2425	2478	2468			
Milch Animals	4854	8599	7619			
Young stock	536	1722	1533			
Sheep & goats	30000	-	30000			

### Table-3.28: Value of Livestock owned by Project Affected households.

 Table-29: Number of Project Affected households owning Cross breed Livestock.

Type of livestock	Number of HH			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Draught Animals	0	6	6	0	5.66	4.14
Milch Animals	5	61	66	12.82	57.55	45.52
Young stock	5	37	42	12.82	34.91	28.96
Sheep & goats	0	0	0	0	0	0
Total Households	39	106	145	100	100	100

### Table-3.30: Role of women in Agriculture.

Particulars	N	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
No. of women in decisions	42	116	158	100	100	100	
Active	23	76	99	54.76	65.52	62.66	
Supporting	19	38	57	45.24	32.76	36.07	
No. role	0	2	2	0	1.72	1.27	
Operation	51	133	184	100	100	100	
Active	35	102	137	68.63	58.96	74.46	
Supporting	16	26	42	31.73	15.03	22.83	
No. role	0	45	45	0	26.01	24.46	

Particulars	Number			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
No. of women in decisions	43	121	164	100	100	100	
Active	30	84	114	69.77	69.42	69.51	
Supporting	12	30	42	27.91	24.79	25.61	
No. role	1	7	8	2.32	5.79	48.78	
Operation	46	118	164	100	100	100	
Active	36	71	107	78.26	60.17	65.24	
Supporting	10	34	44	21.74	28.81	26.83	
No. role	0	13	13	0	11.01	7.93	

## Table-3.31: Role of women in Animal Husbandry.

Table-3.32: Role of women in household chores.

Particulars	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
No. of women in	51	117	168	100	100	100
decisions						
Active role	48	105	153	94.12	89.74	91.07
Supporting role	3	11	14	5.88	9.40	8.33
No Role	0	1	1	0	8.55	0.60
Role of women in						
Business						
No. of women	0	41	41	100	100	100
Active	0	27	27	0	65.85	65.85
Supporting	0	13	13	0	31.71	31.71
No role	0	1	1	0	2.44	2.44

Items	Number			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
Rice	39	100	139	100.00	94.34	95.86	
Wheat	39	98	137	100.00	92.45	94.48	
Maize	12	16	28	30.77	15.09	19.31	
Barley	1	0	1	2.56	0	6.90	
Pulses	39	100	139	100	94.34	95.86	
Vegetables	39	99	138	100	93.40	95.17	
Mutton	34	71	105	87.18	66.98	72.41	
Fruit	14	74	88	35.90	69.81	60.69	
Edible oil	39	100	139	100	94.34	95.86	
Milk	38	100	138	94.44	94.34	95.17	
Sugar	39	100	139	100	94.34	95.86	
Salt	39	100	139	100	94.34	95.86	
Tea	39	100	139	100	94.34	95.86	
Tobacco	23	34	57	58.97	32.07	39.31	
Liquor	22	42	64	56.41	39.62	44.14	
Clothes	39	100	139	100	94.34	95.86	
Footwear	39	100	139	100	94.34	95.86	
Education	31	64	95	79.49	60.38	65.52	
Medicines	33	86	119	84.61	81.13	82.07	
Marriage etc.	19	76	95	48.72	71.70	65.52	
No. of Household	39	106	148	100	100	100	

# Table-3.33: Number of families consuming various food and<br/>non-food articles.

Table-3.34:	Monthly Household consumption	۱ pattern.
		(Ka/HH)

			(Kg./HH)
Items		Quantity	
	SC/ST	Gen.	Total
Rice	28.21	34.47	32.71
Wheat	26.51	34.07	31.92
Maize	20.33	9.69	14.25
Barley	50.0	0	50.0
Pulses	3.92	5.17	4.82
Vegetables	22.66	24.91	24.28
Fruit	15.21	16.45	16.25
Edible oil	2.88	3.17	3.09
Milk	39.11	56.74	51.88
Sugar	4.12	5.67	5.23
Salt	1.45	1.76	1.67
Теа	0.34	2.94	2.20

	, ,	•	(Rs./Month/HH)
Items		Value/HH	
	SC/ST	Gen.	Total
Rice	385.6	394.1	391.7
Wheat	209.9	329.2	295.2
Maize	121.0	65.69	89.39
Barley	250.0	0	250.0
Pulses	103.44	155.49	140.88
Vegetables	191.03	216.41	209.24
Mutton	239.56	227.32	231.29
Fruit	196.43	193.38	193.86
Edible oil	157.31	196.49	185.50
Milk	366.16	613.85	545.65
Sugar	79.92	114.31	104.66
Salt	10.72	21.56	18.52
Tea	43.85	74.78	65.88
Tobacco	27.00	238.97	251.49
Liquor	216.36	282.14	259.53
Clothes	337.10	423.14	399.0
Footwear	126.05	241.81	209.33
Education	436.12	499.68	478.95
Medicines	63.30	226.45	181.21
Marriage etc.	87.89	277.10	239.26
Total	3648.74	4791.87	4740.54

 Table-3.35:
 Monthly consumption Expenditure of Household.

## Table-3.36: Prevalence of disease in Project Affected households.

Diseases	Number							
	SC/ST	Gen.	Total					
Chronic diseases	1	6	7					
No. of person	1	6	7					
Adult	-	-	-					
Children								
Common								
diseases								
No. of person	15	37	52					
Adult	3	28	31					
Children	12	9	21					

## Chapter – 4

## PROFILE OF LIKELY TO BE PROJECT AFFECTED HOUSEHOLDS

#### Introduction

This chapter pertains to the area and population, which is not directly affected by the project activities presently but may be directly or indirectly affected in future. Thus, it was considered pertinent to carryout the base line survey of such population located in the vicinity of the project area. Such a study is important not only for the sake of population residing in such areas but also for the future impact evaluation of the likely to be project affected households families, by acting as a control sample. The present study is an attempt in this direction.

#### Methodology

The study has been conducted in the villages suggested by the RHEP for evaluation. The details of the villages and the sample taken for the study has been presented in Table-1.2. The sample comprises of 505 households of which 274 belonged to general category and the rest 231 to SC/ST category. The sample has been taken from the villages Boyal, Kohil, Dutt Nagar, Nirmand and Tunan. The table also provides the details of sub-villages and sample taken from each of the sub-villages.

#### General information of likely to be project affected households

Majority of the households (about 98% of the SC/ST and cent percent of the general category) belong to Hindu religion. Only five households of SC category belong to other religion (Muslim). All the households could speak and understand Hindi but about 16 per cent of these wanted Pahari to be recorded as their mother tongue alongwith Hindi. About 11 per cent of the families were observed to be broken families, this percentage was higher in case of general category households. The details have been presented in Table-4.1.

#### Assets in possession of households

This analysis pertains to the assets like land, house, shop etc. owned by the likely to be project affected households and details have been presented in Table- 4.2. It may be seen from the table that more than 90 per cent of the households had land and house. About four per cent of the households had only house and about one per cent only land. About two per cent of the families had land, house and shop. The category wise details may also be referred from this table.

#### Demographic profile

The total sampled population residing in 505 households was 2533 of which 51.5 per cent were male (Table-4.3). The average family size at overall level was 5.02 persons per family and the sex ratio was observed to be 941 females for every 1000 males. In total 1497 persons were married. The percentage of married males was higher (55.85%) and this figure for females was 44.15 per cent.

#### **Educational status**

The education status of the persons living in the sampled households has been presented in Table-4.4, which indicates that about 22 per cent of the persons were illiterate whereas about 28 per cent had studied up to primary level. The percentage of illiterates among the SC/ST category was higher. The number and percentage of persons who had attained various levels of education like matriculation, senior secondary level, graduation, post-graduation etc. may also be referred from this table.

#### Literacy level

At overall level the literacy level was about 80 per cent (Table- 4.5). The literacy among males was higher in total sample and general category households whereas in SC/ST category the literacy among females was higher. The literacy in general category was observed to be marginally higher.

#### Workers and non-workers

Among the sampled households about 59 per cent of the population was that of workers (Table- 4.6). This percentage was slightly lower for males in the total sample. Rest of the population comprised of non-workers. As such the dependency ratio at overall level was 0.69 and it was 0.72 for SC/ST and 0.67 for general category households.

#### Occupation pattern of workers

The occupational pattern of workers has been presented in Table-4.7. The table indicates that the largest percentage of the persons belongs to the category of students. Apart from students, the largest number of males is engaged in service and females have agriculture as most popular occupation. About five percent of males and three percent of females work as agricultural labours, this percentages for non-agricultural labour were about nine and two per cent respectively. The analysis also takes into account the unemployed and non-worker categories also.

#### Annual income

The analysis indicates that annual income of the sampled households from different sources, at overall level was Rs. 1,07,408 per annum (Table-4.8), which was Rs. 77,351 for SC/ST and 1,32,748 for general category. The largest share of the total income was generated from employment including service and wage labour. This was followed by agriculture, accounting for 18.61 per cent and other sources, 17.71 per cent. Business was observed to be the last in this respect and generated only .98 per cent of the total household income at overall level.

#### **Families Below Poverty Line**

There were only five families among the SC/St category, which were below the poverty line. No such family existed among the general category of farmers (Table-4.9)

#### Particulars of houses

This section is intended to provide information on type of houses and size of houses etc, Table-4.10 provides the details. The size of houses belonging to general category was generally larger with the average size of house being 531 ft<sup>2</sup> in comparison to average size of 369ft<sup>2</sup> in case of SC/ST. At overall level the average size of houses was 457ft<sup>2</sup>. About 26 per cent of the houses were pucca and 58 per cent were kutcha houses, rest being semi-pucca houses. About 67 per cent of the houses had separate kitchen and 59 per cent separate toilets. About 57 per cent of the houses also had separate animal shed. Each house on an average had 3.65 rooms, which figure was 3.09 for SC/ST and 4.12 for general category.

#### **Business details**

In total 68 households were observed to be having some type of business of which 40 belonged to general category (Table-4.11). The average investment put in by

the entrepreneurs was Rs. 33672 which comprised of money put in from own sources and loans. The averages worked out here are from respective numbers to provide the picture of only those who have used a particular source of finance. There were 16 families who had outstanding loans at the time present survey was conducted and the average amount of loan outstanding was Rs. 31,750. Of the total persons who had availed loans for financing the business 16 had availed the loans from banks and three from relatives and friends. There was only one person who had taken loan from the moneylender. The average profit from the business was observed to Rs. 61,422 per year.

#### Particulars of shops

There were 30 households who had shops (Table-4.12) and the average area of the shop was found to be 191 ft<sup>2</sup> and the average investment being Rs. 49,142. The shops were predominantly general stores followed by the provision stores, however it was very difficult to make a clear-cut distinction as the shops in the rural areas are normally multipurpose stores selling everything.

#### Impact of SJVN on business

Out of the total 68 households who had business activities 88 per cent were of the view that the SJVN activities will have some definite impact on their business (Table-4.13) and all of these were of the view that their business will flourish due increasing influx of people resulting in rising demand for almost everything.

#### Households having commercial assets

There were six households operating taxis (Table-4.14) and one household had pickup van. Other commercial assets included STD booths tea stall and auto repair shop etc, the details may be referred from the table.

#### Number of commercial assets

This part of the analysis pertains to the number of commercial assets with the sampled households (Table-4.15). The number of taxes was six and one each of pickup van and truck was present with the sampled households households. The number of other commercial assets have also been presented in this table.

#### Average monthly income from commercial assets

At overall level, each household owning taxes could generate an income of Rs. 11,250/- per month (Table- 4.16). Pickup van generated an income of Rs.4000 per

month and truck Rs.12000 per month. The income from general store was observed to be Rs.8572 per month per family.

#### Number of households having modern durables

The largest number of households (67.52 %) were observed to be having television sets (Table-4.17). This was followed by LPG stoves, which were owned by about 64 per cent families. About 27 per cent families also had refrigerators. Other modern durables present in the sampled households included VCD players, motor cycle etc.

#### Number of modern durables

In total there were 350 television sets present in the sampled households (Table-4.18). In addition to this there were 349 LPG connections, 139 refrigerators, 39 VCD players etc.

#### Value of modern durables

The value of television sets per household was observed to be Rs.4726 and that of LPG stove etc. Rs.2226 per households owning (Table-4.19). The highest value was that of car, about Rs.4 lacs per family. The value of refrigerators was Rs.7957 and that of VCD players Rs.4719 per owning household.

#### Land resources

Each sampled household was observed to be having 6.96 bighas of land of which about 78 per cent was under agriculture (Table-4.20). Majority of the agricultural land was observed to be un-irrigated. In addition to agricultural land about 14 per cent of the total land was under horticulture. About one and six per cent of the land was grass land and waste land respectively.

#### Number of farmers growing different crops

Wheat was the most popular crop grown by about 78 per cent of the farmers followed by maize, which was grown, by about 63 per cent farmers (Table-4.21). Other popular crops included paddy. Pulses and cabbage grown by about 36, 28 and 19 per cent farmers respectively. Apple was the most popular horticultural crop, about 21 per cent of the households had apple orchards. Other crops like barley, peas, tomato etc. were being grown by varying number of farmers, but not by majority of the farmers.

#### **Cropping pattern**

The number of farmers growing different crops is entirely different concept than the cropping pattern. Although, about 78 per cent of the households were growing wheat but only about 38 per cent of the area was allocated for this crop (Table-4.22). Maize was the next important crop occupying about 27 per cent of a total cropped area and paddy occupied about 12 percent of the total cropped area. The area allocation for barley, pulses and cabbage was in the range of 3-5 per cent. Apple orchards occupied about 6 per cent of the total cropped area followed by almond, about 1 per cent and other miscellaneous fruits occupying less than 1 per cent of the total cropped area.

#### **Production pattern**

The average production of different crops grown has been presented in table-4.23 and it may be seen that average production of maize was 3.56 qtls per households and these figures for paddy, wheat, barley and pulses were 2.81, 4.37, 0.18 and 0.17 qtls per households. The production of cabbage and cauliflower were 2.04 and 0.08 qtls per farm. Each apple orchard produced an average of about 14 qtls of fruit whereas the production of almonds was about 0.49 qtl per farm.

#### Value of output

The value of output of different crops has been calculated on the basis of actual sale price of such commodities irrespective of the fact whether such commodities have been sold by a particular household or not. The per household value of crops output on this consideration have been presented in Table-4.24 indicating that maximum value is that of horticultural crops followed by cereal crops and vegetable crops have lowest value.

#### Households having livestock

The majority of households were observed to be having some sort of livestock the details of which have been presented in table-4.25. The majority of households (about 80 %) have milch animals and about 46 per cent also have young stock. This is followed by draught animals, which are reared by about 37 per cent households sheep, and goat are present in about six per cent of the households. Three households of general category were also rearing other than this livestock, like ponies etc.

#### Number of livestock owned

On in average each household having 1.26 heads of milch animals and the 0.63 head of draught animals (Table-4.26). The average number of young stock was 0.66 and that of sheep and goats, 0.48 head.

#### Value of livestock

The average value livestock owned by each household has been presented in table-4. 27 indicating that the average value of milch animals was Rs.6358, which was the highest for all types of livestock. This was followed by draught animals and young stock. Although the value of sheep and goat was highest, Rs.8585 per household but only 32 households were having these.

#### **Cross bred livestock**

Among the total livestock the cross bred draught animals were present with 1.78 per cent of the households whereas about 38 per cent of the households had cross bred milch animals (Table-4.28). Cross bred young stock was present in about 18 per cent of the households. None of the respondents had cross bred sheep and goat.

#### Role of women in agriculture

Of the total women engaged in decision making in agriculture, about 67 per cent were actively engaged whereas about 29 per had supportive role in this respect (Table-4.29). About 79 per cent of those engaged in operations of agriculture were actively engaged.

#### Role of women in animal husbandry

There were 520 women engaged in decision making in respect of animal husbandry and of these about 77 per cent had active role and about 20 per cent played a sportive role in this respect (Table-4.30). The number of women who were engaged in carrying out various operations related to animal husbandry was observed to be 505 and of these 70 per cent were playing active role in this respect. The percentage of women who were observed to be having supportive role was 27.72 per cent.

#### Role of women in household chores and business

Majority of women were observed to be engaged in carrying out various household chores (Table-4.31) and among these also about 89 per cent were actively engaged in carrying out such chores. Other about 10 per cent had supportive role in this respect. There were only 32 women who were playing some role in carrying out the

household business activities. Only about 28 per cent women had active role in this respect and rest about 72 per cent were having only a supportive role.

#### Profile of consumption of food and non-food articles

All the sample families were observed to be consuming rice, wheat, and salt (Table-4.32). Maize was consumed by only about 46 per cent families. The consumption of pulses and vegetables was observed to be by almost 100 and 97 per cent households. The edible oil and milk was also been consumed by almost all families. The percentages of families consuming other food articles and spending on other non food consumables and education, medicines and marriage etc. have also been presented in this table.

#### Household consumption pattern

The average monthly household consumption pattern has been presented in table 4.33 were in it may be seen that average monthly consumption of rice was about 34 kg. and that of wheat about 36 kg. per household. The quantity of vegetables and fruits have not been presented here because of problem in aggregation of quantities of various fruits and vegetables and hence only their values have been presented subsequently. Each household was observed to be consuming about 45 liters of milk per month. The consumption of sugar, salt and tea were 5, 1.6 and 0.37 kg. per household per month.

#### Value of consumption

The values of consumption of various food and non-food articles and other expenses like education, marriage etc have been presented in Table-4.34. The value of cereals was found to be about Rs. 389, 285 and 88 for rice, wheat and maize respectively. The consumption of pulses and vegetables was worth Rs.132 and 212 per month. About Rs.232 were spent by each family on consumption of mutton, chicken and eggs etc. The expenses on tobacco and liquor were about Rs.186 and Rs.275 per month respectively. The value of consumption of other articles may also be referred from this table.

#### Prevalence of diseases

There were 20 persons in total who were suffering from some chronic diseases like asthma etc. and 39 persons suffered from common diseases like cough, cold and fever etc. during the last one year (Table-4.35).

Particulars	Ν	lumber		Percentage			
	SC/ST Gen.		Total	SC/ST	Gen.	Total	
1. Total Households	231	274	505	100	100	100	
2. Religion							
Hindu	226	274	500	97.83	100.0	99.00	
Others	5	0	5	2.17	0	1.00	
3. Mother tongue							
Hindi	162	264	426	70.12	96.35	84.36	
Pahari & Hindi	69	10	79	29.88	3.65	15.64	
4. Broken families	10	44	54	4.33	16.05	10.69	

 Table-4.1:
 General information of indirectly project affected households.

Particulars	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
1. Only Land	4	2	6	1.73	0.73	1.18
2. Only House	14	7	21	6.06	2.56	4.16
3. Only Shop	0	1	1	-	0.36	0.20
4. Land & house	205	251	456	88.74	91.61	90.30
5. Shop, Land	1	10	11	0.43	3.65	2.18
6.House +Shop	2	3	5	0.87	1.09	0.99
7.Shop, land &	2	-	2	0.87	-	0.40
house						
8. Other	3		3	1.30	-	0.59
Total Household	231	274	505	100	100	100

Table- 4.3: Demographic profile of indirectly project affected household
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Particulars	Number			Percentage		
	SC/S T	Gen.	Total	SC/ST	Gen.	Total
Total population	1150	1383	2533	100.0	100.0	100.0
Male	586	719	1305	50.9	51.9	51.5
Female	564	664	1228	49.1	48.1	48.5
Family size	4.98	5.05	5.02			
Sex ratio	962	924	941			
Marital statues	579	918	1497	100	100	100
Married male	283	553	836	48.88	60.24	55.85
Married female	296	365	661	51.12	39.76	44.15

Particulars	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Illiterate	301	256	557	26.17	18.51	21.98
Primary	351	363	714	30.52	26.24	28.18
Middle	282	299	581	24.52	21.62	22.93
Matriculation	141	263	404	12.26	19.02	15.95
Senior secondary	52	100	152	4.52	7.23	6.00
Graduate	21	71	92	1.82	5.13	3.63
Post Graduate	2	18	20	0.19	1.30	1.03
Tech Diploma	0	13	13	-	0.95	0.30
Total	1150	1383	2533	100	100	100

 Table
 4.4: Educational status of indirectly project affected households.

Table 4. 5: Literacy level in indirectly project affected households.(%)

	(%)							
Particulars	Number							
	SC/ST Gen. Total							
Male	73.8	86.5	80.7					
Female	81.5	75.5	78.2					
Total	78.0	81.5	79.9					

Particulars	Number			Percentage			
	SC/S T	Gen.	Total	SC/ST	Gen.	Total	
Total population	1150	1383	2533	100.00	100.00	100.00	
Male	586	719	1305	100.00	100.00	100.00	
Female	564	664	1228	100.00	100.00	100.00	
Workers	670	828	2498	58.3	59.9	59.1	
Male	344	415	759	58.7	57.7	58.2	
Female	326	413	739	57.8	62.2	60.2	
Non-workers	480	555	1035	41.7	40.1	40.9	
Male	242	304	546	41.3	42.3	41.8	
Female	238	251	489	42.2	37.8	39.8	
Dependency ratio	-	-	-	0.72	0.67	0.69	

Particulars	Number			Pe	ercentage	e
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Agriculture						
Male	59	96	155	10.07	13.35	11.88
Female	199	238	437	35.28	35.84	35.59
Agriculture labour						
Male	33	26	59	5.63	3.62	4.52
Female	25	17	42	4.43	2.56	3.42
Non-agril. labour						
Male	73	45	118	12.46	6.26	9.04
Female	13	7	20	2.30	1.05	1.63
Service						
Male	77	174	251	13.14	24.20	19.23
Female	9	18	27	1.60	2.71	2.20
Business						
Male	29	42	71	4.94	5.84	5.44
Female	2	1	3	3.43	0.27	0.23
Rural Artisan						
Male	62	7	69	10.58	1.00	5.29
Female	2	-	2	3.43	-	0.17
Student						
Male	188	239	427	32.08	33.24	32.72
Female	205	198	403	36.35	29.82	32.81
Household						
Male	-	1	1	-	0.23	0.16
Female	52	107	159	9.22	16.11	12.95
Infants						
Male	55	65	120	9.38	9.04	9.19
Female	41	53	94	7.26	7.98	7.65
Un-employed						
Male	1	3	4	0.19	0.30	0.24
Female	2	4	6	3.43	0.50	0.50
Non workers						
Male	9	21	30	1.53	2.92	2.29
Female	14	21	35	2.48	3.16	2.85
Total						
Male	586	719	1305	100	100	100
Female	564	664	1228	100	100	100

# Table- 4.7: Occupational pattern of workers of indirectly project affected households.

Source	Rs/H.H.			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
Employment	27254	87294	59830	35.23	65.76	55.70	
Agriculture	18547	21209	19991	23.98	15.98	18.61	
Business	6429	10371	8568	8.31	7.81	7.98	
Other	25121	13874	19019	32.48	10.45	17.71	
Total	77351	132748	107408	100.00	100.00	100.00	
Total households	231	274	505	100	100	100	

#### Table- 4.8: Annual income of indirectly project affected households from different occupations.

#### Table 4.9: Families below poverty line among sampled households.

Particulars	Number			Percentage		
	SC GEN TOTAL			SC	GEN	TOTAL
Total HH	231	274	505	100	100	100
HH Blow poverty line	5	0	5	2.16	0	0.99

## Table- 4.10: Particulars of houses in possession of indirectly<br/>project affected households.

Particulars	Num	ber of H	.Н.	P	ercentage	
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Families owning house	231	272	503	100.00	99.27	99.60
Average size of house Sq.ft	369	531	457			
Household having						
Pucca house	64	65	129	27.71	23.90	25.65
Kutcha house	145	148	293	62.77	54.41	58.25
Semi pucca house	22	59	81	9.52	21.69	16.10
Household having separate						
Kitchen	150	186	336	64.93	67.88	66.53
Toilet	137	163	300	59.31	59.49	59.41
Animalshed	158	129	287	68.40	47.08	56.83
Average no. of rooms	3.09	4.12	3.65			
No. of H.H.	231	274	505	100	100	100

Particulars	Number/amount			Pe	ercentage	•
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
No. of Household	28	40	68	12.12	14.60	13.47
having business						
Average	21114	55762	33672			
investment						
Own source	20628	40530	32335			
Loan	16778	113786	73842			
Other source	7000	138500	84353			
Total	21114	64687	33672			
No. of families	7	9	16	25.0	22.5	23.5
having outstanding						
loan						
Average amount of	9000	49444	31750			
out standing loan						
Source of loan						
Banks	5	11	16			
Relatives	1	2	3			
Money lender	-	1	1			
Net profit from	49640	69670	61422			
business						
Total H.H.	231	274	505	100	100	100

Table- 4.11 Business details of indirectly project	affected households.
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Particulars	Number/Amount			P	ercentage	)
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
No. of Household having Shop	11	19	30	100	100	100
Area of shop (Sq. feet)	184	195	191			
Average investment (Rs)	29667	60417	49142			
Type of shop						
Tailoring	2	-	2	18.18		6.67
Workshop	1	-	1	9.09		3.33
Provision store	4	5	9	36.36	26.32	30.00
General store	2	13	15	18.18	68.42	50.00
Tea stall	1	-	1	9.09		3.33
Barber shop	1	-	1	9.09		3.33
Flour mill	-	1	1	-	5.26	3.33

Particulars	Number			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
No. of Business H.H.	28	40	68	100	100	100	
Impact	26	34	60	93	85	88	
No Impact	2	6	12	7	15	12	
Respondents expecting							
Positive impact	26	34	60	100	100	100	
Negative impact	0	0	0	0	0	0	

## Table 4.13: Particulars of impact of SJVN on business.

Table 4.14:Number of households having commercial assets.

Assets	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Taxi	3	3	6	1.30	1.09	1.19
Pick up van		1	1	-	0.36	0.20
Truck	1	-	1	0.43	-	0.20
STD booth	2	1	3	0.87	0.36	0.59
Tea stall	1	-	1	0.43	-	0.20
General store	1	6	7	0.43	2.19	1.39
Guest house		1	1		0.36	0.20
Auto repair shop		1	1		0.36	0.20
Total H.H.	231	274	505	100	100	100

Table-4.15:	Number of commercial assets with indirectly
	project affected households.

Assets	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Taxi	3	3	6	23	13	17
Pick up van		1	1		4	3
Truck	1	-	1	8	-	3
STD booth	2	1	3	15	4	8
Tea stall	1	1	2	8	4	5
General store	1	6	7	8	26	19
Guest house		1	1		4	3
Auto repair shop		1	1		4	3
Other	5	9	14	38	39	39
Total H.H.	13	23	36	100	100	100

		(Rs. Per household)				
Assets	SC/ST	Gen.	Total			
Taxi	10667	11833	11250			
Pick up van		4000	4000			
Truck	12000		12000			
STD booth	4000	2000	3333			
Tea stall	3800		3800			
General store	2000	9667	8572			
Auto repair shop		5000	5000			

 
 Table- 4.16: Average monthly income from commercial assets with indirectly project affected households.

Table- 4.17:	Number of	households	having	modern	durables.
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Durables	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
TV	152	189	341	65.80	68.98	67.52
VCD	9	22	31	3.90	0.03	8.12
Refrigerator	33	102	135	14.29	37.23	26.73
M. Cycle	2	8	10	0.87	0.73	1.98
Car	1	6	7	0.43	0.36	1.39
LPG	114	211	325	49.35	77.01	64.36
Bio gas	0	6	6	-	2.19	1.19
Other	3	5	8	1.30	1.82	1.58
Total H.H.	231	274	505	100	100	100

Table- 4.18:	Total Number of modern durables with indirectly
	project affected households.

Durables	N	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
TV	154	196	350	44.00	56.00	100	
VCD	9	30	39	23.08	76.92	100	
Refrigerator	33	106	139	23.74	76.26	100	
M. Cycle	2	8	10	20.00	80.00	100	
Car	1	7	8	12.50	87.50	100	
LPG	126	223	349	36.10	63.90	100	
Bio gas	0	6	6	-	100.00	100	
Other	3	5	8	37.50	62.50	100	

			(Rs/HH)
Durables	Ru	pees per Househol	d
	SC/ST	Gen.	Total
TV	3683	5548	4726
VCD	4611	4764	4719
Refrigerator	7242	8188	7957
M. Cycle	31500	26875	27800
Car	231000	428333	400143
LPG	1996	2351	2226
Bio gas	0	5866	5866
Other	3766	8925	6990

# Table- 4.19: Value of modern durables with indirectly<br/>project affected households.

 Table
 4.20:
 Land resources of indirectly project affected households.

	(In Bighas/H.H.)					
Type of land	Are	a per HI	4	Ρ	•	
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Agricultural land						
IR	0.82	2.41	1.68	15.30	29.00	24.14
UIR	2.81	4.52	3.74	52.43	54.39	53.73
Total	3.63	6.93	5.42	67.73	83.39	77.87
Horticultural land						
IR	0.12	0.22	0.17	2.24	2.64	2.44
UIR	0.80	0.86	0.83	14.92	10.35	11.93
Total	0.92	1.08	1.00	17.16	12.99	14.37
Grass land	0.12	0.06	0.09	2.24	0.73	1.29
Waste land	0.69	0.24	0.45	12.87	2.89	6.47
Total land	5.36	8.31	6.96	100.00	100.00	100.00

Crops	Number			Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
Maize	152	164	316	65.80	59.85	62.57	
Paddy	52	130	182	22.51	47.44	36.04	
Wheat	162	230	392	70.13	83.94	77.62	
Barley	15	71	86	6.49	25.91	17.03	
Pulses	31	112	143	13.42	40.88	28.32	
Cabbage	22	72	94	9.52	26.28	18.61	
Peas	2	6	8	0.87	2.19	1.58	
Tomato	14	21	35	6.06	7.66	6.93	
Cauliflower	0	9	9	-	3.28	1.78	
Beans	0	20	20	-	7.30	3.96	
Potato	4	10	14	1.73	3.65	2.77	
Apples	43	61	104	18.61	22.26	20.59	
Almond	18	3	21	7.79	1.09	4.16	
Pears	16	5	21	6.93	1.82	4.16	
Plum	0	10	10	-	3.65	1.98	
Others	30	4	34	12.99	1.46	6.73	
Total H.H.	231	274	505	100	100	100	

 Table- 4.21: Number of indirectly project affected farmers growing different crops.

 Table-4.22: Cropping pattern of indirectly project affected farm households.

 (In Bighas)

(III Digitas)							
Crops	Δ	II HH Are	а	Pe	rcentage	e	
	SC/ST	Gen.	Total	SC/ST	Gen.	Total	
Maize	594.32	741.28	1335.6	33.11	24.45	26.67	
Paddy	115.96	451.10	567.06	6.46	14.88	11.75	
Wheat	667.44	1145.40	1812.84	37.19	37.77	37.56	
Barley	22.50	132.06	154.56	1.25	4.35	3.20	
Pulses	48.67	210.56	259.23	2.71	6.94	5.37	
Cabbage	41.80	92.88	134.68	2.33	3.06	2.79	
Peas	3.00	6.00	9.00	0.17	0.19	0.18	
Tomato	31.22	26.67	57.89	1.74	0.88	1.19	
Cauliflower	0	6.84	6.84	0	0.22	0.14	
Beans	0	20.40	20.40	0	0.67	0.42	
Potato	5.00	13.70	18.70	0.28	0.45	0.39	
Apples	123.84	156.77	280.61	6.90	5.17	5.81	
Almond	45.00	4.50	49.50	2.51	0.14	1.03	
Pears	18.24	7.50	25.74	1.02	0.25	0.53	
Plum	0	16.50	16.50	0	0.54	0.34	
Others	77.70	0	77.70	4.33	0	1.61	
Total cropped area	1794.69	3032.16	4826.85	100	100	100	

			(Qtls./ H.H.)			
Crops	SC/ST	Gen.	Total			
Maize	4.23	3.02	3.56			
Paddy	1.41	4.31	2.81			
Wheat	3.64	5.04	4.37			
Barley	0.05	0.33	0.18			
Pulses	0.07	0.27	0.17			
Cabbage	0.86	3.29	2.04			
Peas	0.09	0.19	0.15			
Tomato	0.84	0.59	0.73			
Cauliflower	0	0.27	0.08			
Beans	0	0.72	0.21			
Potato	0.11	0.36	0.22			
Apples	23.98	3.29	13.78			
Almond	1.75	0.03	0.49			
Pears	0.41	0.17	0.32			
Plum	0	0.78	0.23			
Others	3.76	0	0.89			

# Table-4.23: Production of crops grown by indirectly<br/>project affected households.

Table- 4.24:	Per household value of crop out put.	
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				(Rs	s./ H.H.)	
Crops	Value per HH			P	ercentage	•
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Maize	2515	1881	2161	12.24	10.55	12.02
Paddy	1005	2988	1967	4.89	16.76	10.94
Wheat	2426	3587	3028	11.81	20.12	16.84
Barley	26	183	97	0.13	1.03	0.54
Pulses	140	620	368	0.68	3.48	2.05
Cabbage	474	1579	1030	2.31	8.85	5.73
Peas	52	132	95	0.25	0.74	0.53
Tomato	537	458	506	2.61	2.57	2.58
Cauliflower	0	148	44	0	0.83	0.24
Beans	0	637	187	0	3.57	1.04
Potato	98	143	136	0.48	0.86	0.72
Apples	8831	4818	6887	42.98	27.02	38.31
Almond	1118	49	374	5.44	0.27	2.08
Pears	715	118	343	3.48	0.66	1.91
Plum	0	488	143	0	2.74	0.79
Others	2611	0	619	12.71	0	3.44
Total	20548	17829	17979	100	100	100

Type of livestock	No. of H.H			Percentage			
	SC	Gen	Total	SC	Gen	Total	
Draught Animals	95	94	189	41.12	34.30	37.42	
Milch Animals	192	213	405	83.12	77.74	80.20	
Young stock	106	126	232	45.88	45.98	45.94	
Sheep & goats	15	17	32	6.49	6.20	6.34	
Others	0	3	3	0	1.09	0.59	
Total Household	231	274	505	100	100	100	

#### Table- 4.25: Number of households having livestock.

## Table-4.26: Number of livestock owned by indirectly project affected households.

		(N	umber/ H.H.)		
Type of livestock	Number per Household				
	SC/ST	Gen.	All		
Draught Animals	0.67	0.60	0.63		
Milch Animals	1.32	1.21	1.26		
Young stock	0.67	0.64	0.66		
Sheep & goats	0.56	0.42	0.48		
Other	0	0.01	Neg.		
Total	3.22	2.88	3.03		

## Table- 4.27: Value of livestock owned by indirectly project affected households.

(Rs./	Farm)	
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Type of livestock	Value						
	SC/ST	Gen.	Total				
Draught Animals	2266	2177	2218				
Milch Animals	5858	6780	6358				
Young stock	1266	1212	1237				
Sheep & goats	9266	8011	8585				
Others	4667	6333	5571				

#### Table- 4.28: Number of Households owning cross breed livestock among indirectly project affected households..

Type of livestock	Number of HH			P	ercentage	e
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Draught Animals	6	3	9	2.60	1.09	1.78
Milch Animals	79	115	194	34.20	41.97	38.41
Young stock	43	60	93	18.61	21.90	18.41
Sheep & goats	-	0	-			
Total Households	-	-	-			
Others	231	274	505	100.0	100.0	100.0

Particulars	Number			Percentage		
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
No. of women in	242	310	552	100	100	100
decisions						
Active	190	180	370	78.51	58.06	67.03
Supporting	49	113	162	20.25	36.46	29.35
No role	3	17	20	1.24	5.48	3.62
Operation	262	307	569	100	100	100
Active	216	234	450	82.44	76.22	79.09
Supporting	42	68	110	16.03	22.15	19.33
No role	4	5	9	1.53	1.63	1.58

 Table 4.30:
 Role of women in animal husbandry.

Particulars	Number			P	e	
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
No. of women in decisions	239	281	520	100	100	100
Active	205	193	398	85.77	68.68	76.54
Supporting	33	73	106	13.81	25.98	20.38
No role	1	15	16	0.42	5.34	3.08
Operation	232	273	505	100	100	100
Active	190	164	354	81.90	60.08	70.10
Supporting	41	99	140	17.67	36.26	27.72
No role	1	10	11	0.43	3.66	2.18

Particulars	Number		Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
No. of women in household chores	244	351	595	100	100	100
Active role	223	308	531	91.39	87.75	89.24
Supporting role	21	40	61	8.61	11.40	10.25
No role	-	3	3	-	0.85	0.51
Role of women in Business						
No. of women	8	24	32	100	100	100
Active	8	1	9	100	4.17	28.12
Supporting	-	23	23	-	95.83	71.88
No role	-	0	0	-	-	-

Items	Number		Percentage			
	SC/ST	Gen.	Total	SC/ST	Gen.	Total
Rice	231	274	505	100.00	100.0	100.00
Wheat	231	274	505	100.00	100.0	100.00
Maize	127	104	231	54.98	37.96	45.74
Barley	-	I	-	-		
Pulses	230	274	504	99.57	100.0	99.80
Vegetables	223	268	491	96.54	97.81	97.23
Mutton	202	173	375	87.45	63.14	74.26
Fruit	114	231	345	49.35	84.31	68.32
Edible oil	228	267	495	98.70	97.44	98.02
Milk	228	272	500	98.70	99.27	99.01
Sugar	230	273	503	99.57	99.63	99.60
Salt	231	274	505	100.00	100.00	100.00
Теа	228	273	501	98.70	99.63	99.21
Tobacco	132	92	224	57.14	33.58	44.36
Liquor	148	109	257	64.07	39.78	50.89
Clothes	205	253	458	88.74	92.34	90.69
Footwear	211	260	471	91.34	94.89	93.27
Education	151	187	338	65.37	68.25	66.93
Medicines	206	218	424	89.18	79.56	83.96
Marriage etc.	145	208	353	62.77	75.91	69.90
Others	27	22	49	11.69	9.85	9.70
No. of Household	231	274	505	100	100	100

Table- 4.32:	Number of indirectly project affected families consuming
	various food and non-food articles.

Table- 4.33:	Monthly household consumption pattern.
	(Kg./HH)

			(Ng./111)	
Items	Quantity			
	SC/ST	Gen.	Total	
Rice	32.68	35.75	34.35	
Wheat	32.70	39.08	36.16	
Maize	13.85	16.13	14.88	
Pulses	4.01	5.92	5.05	
Fruit	-	-	-	
Edible oil	2.98	3.54	3.28	
Milk	40.41	48.43	44.77	
Sugar	4.06	5.80	5.00	
Salt	1.59	1.60	1.60	
Tea	0.336	0.40	0.371	

(Rs./Month/HH)				
Items	SC/ST	Gen.	Total	
Rice	370.47	404.92	389.16	
Wheat	311.57	362.07	284.71	
Maize	81.18	96.30	87.98	
Pulses	110.58	150.10	132.06	
Vegetables	166.02	249.53	211.60	
Mutton	212.85	254.31	231.98	
Fruit	139.12	203.89	182.49	
Edible oil	164.03	206.21	186.78	
Milk	373.18	461.80	421.39	
Sugar	85.19	110.59	98.98	
Salt	13.19	13.01	13.09	
Теа	52.43	65.63	55.12	
Tobacco	166.65	213.32	185.82	
Liquor	237.67	324.68	274.57	
Clothes	327.71	499.48	422.60	
Footwear	147.91	289.16	225.88	
Education	201.09	503.64	368.48	
Medicines	166.61	281.70	225.78	
Marriage etc.	187.45	278.43	241.06	
Other	140.11	304.87	229.5	
Total consumption	3654.95	5273.64	4469.06	
Total Household	231	274	505	

Table-4.34:	Value of monthly	consumption	of household.
		(Re	(Month/HH)

Diseases	Number		
	SC/ST	Gen.	Total
Chronic diseases			
No. of person	9	11	20
Adult	8	11	19
Children	1	0	1
Common diseases			
No. of person	4	35	39
Adult	4	27	31
Children	0	8	8