

The legal and administrative framework for the project is provided in this section. The relevant laws, regulations, acts, national and international standards are summarised below. This includes Acts and Policies of the state and central government and donor agencies.

3.1 *APPLICABLE R&R GUIDELINES FOR TRANSMISSION LINES OF POWER PROJECTS*

3.1.1 *National Guideline for R & R*

To date, there are no approved national guidelines for dealing with resettlement and rehabilitation issues within projects in different sectors in India. A national policy of resettlement and rehabilitation has been drafted and is being debated in various forums. It has however not yet been approved by the Parliament, and therefore does not have a legal status.

3.1.2 *The Land Acquisition Act, 1894*

The **Land Acquisition Act, 1894** is the most relevant national act that has implications for project. The Act lays down in detail, the procedure for:

- Acquisition of land, including notification, payment for damages, hearing of objections, declaration of the intended acquisition, enquiry into measurement, values and claims and award by the Collector and finally taking possession of the land
- Objection to be lodged within 30 days of the notification and the provision for hearing of all objections.
- Reference to court if award is not accepted and hearing in court.
- Apportionment of compensation and dispute settlement regarding the same.
- Payment of compensation for land value, trees and structures including 30% solatium and 12% p.a. interest for delayed payment.
- Temporary Occupation of Land
- Acquisition for companies.

3.1.3 *Applicable Guidelines for the R&R in case of Hydro-electric Projects in H.P.*

In absence of a national and state policy on R&R, RSWM will follow IFC guidelines, incorporating best practices that have emerged in the country and reflect close relationship with the ground realities and cultural context.

One such example is the NTPC's scheme for rehabilitation and resettlement of the oustees of Kol Dam project in H.P. The scheme was accepted by the H.P. government and hence has become a benchmark for projects undertaken by other agencies. As stated earlier NTPC's scheme is largely on the lines of World Bank's own guidelines for identification of Project Affected Persons and their

resettlement and rehabilitation. This could be considered as a reference point for the ADHP as well.

Some specific provisions of the scheme were, giving the oustee family rendered houseless provision for cash compensation and developed housing plots. The resettlement colony would be provided with infrastructure like state government run primary schools and dispensaries in the resettlement colony. For the families that are rendered landless or who are left with less than five bighas there is provision for rehabilitation grant. All these grants are in addition to the compensation paid under the Land Acquisition Act, 1894. There is also provision for employment by project authorities in the unskilled and skilled workmen category for at least one member of severely affected families subject to suitability and availability. Else project authorities would have to help in starting some gainful occupation.

3.1.4 *Applicable Guidelines for Indigenous People*

There is also no separate national policy or guidelines for Indigenous People as far as resettlement & rehabilitation is concerned. The Constitution of India (Part X) however outlines the process for creation of Scheduled Areas, which are regions notified as having predominantly tribal population, referred to in India as Scheduled Tribes (ST). The Fifth Schedule of the Constitution {Article 244 (1)} gives details on the provisions as to the administration and control of Scheduled Areas and Scheduled Tribes, while the Sixth Schedule outlines provisions for administration of Tribal Areas in the selected states of Assam, Meghalaya , Tripura and Mizoram.

Part XVI of the Indian Constitution lays out the special provision relating to certain classes, including the Scheduled Casts and the Scheduled Tribes. Some of these provisions are reservation of seats in services and posts.

In a recent amendment {Section 4, clause (I) of the Provisions of the Panchayat (Extension of the Scheduled Areas) Act 1996}, lists out a separate procedure to be followed for the acquisition of land and organising resettlement and rehabilitation in 5th Scheduled Areas. The one important procedure required for the land requiring agency is that they have to get a separate certificate from the concerned Gram Sabha or village councils, consenting in writing to the acquisition proposal. It also lays down dispute settlement procedures and obligatory monitoring of the R & R by the State Government.

In absence of a national and state policy on R&R, project proponent will follow IFC guidelines, incorporating best practices that have emerged in the country and reflect close relationship with the ground realities and cultural context.

3.2 *RELEVANT STATE ACTS*

3.2.1 *Himachal Pradesh Land Transfer Act 1968 (Amendment Act 2002)*

The Act is to prevent land alienation vis-à-vis tribals in the state as well as land transfer issues and norms. The act provides that no person belonging to any scheduled tribe shall transfer his interest in any land by way of sale, mortgage,

lease, gift or otherwise to any person not belonging to such tribe except with prior permission of the Deputy Commissioner of the concerned district. Section 8 of the said act provides that no rights, title or interest held by persons belonging to a scheduled tribe in any land shall be liable to be attached or sold in execution of any decree or order, in favour of any person not belonging to a scheduled tribe of any court except where the amount due under such decree or order is due to the state government or to any co-operative land mortgage bank or co-operative society. This Act has been further amended to the effect that the protection of the act could be sought to set aside a decree at any stage of the proceedings and the period of limitation has been extended to 30 years for restoration of the alienated land.

The Act is for scheduled tribes and their rights on land reforms (transfer issues). The 1968 Act has been amended in the Vidhan Sabha in 2002, providing some more added benefits to the scheduled tribes and additional features in the main act. There has been an amendment to the act in 2002 where some additional features were added one of which is that permission for transfer of tribal land now needs to be sought from the state government ratified by the gram sabha and gram panchayat.

3.2.2 Himachal Pradesh Panchayati Raj Act, 1994

The aim of this act is to consolidate, amend and replace the law relating to Panchayats with a view to ensure effective involvement of the Panchayati Raj Institutions in the local administration and the developmental activities.

The act has specific provisions for the formulation, composition, specific functions and powers, various sub committees, election procedures, judicial functions, finance, taxation and accounts of the local bodies such as Gram Panchayat, Gram Sabha, Panchayat Samiti and Zila Parishad. The act also specifies dispute solving mechanisms within these institutions.

3.3 RELEVANT IFC GUIDELINES & POLICIES

3.3.1 IFC's Environmental and Social Safeguard Policies

OP 4.01 Environmental Assessment

IFC policy on environmental assessment (EA) states that all projects proposed for IFC financing require an EA to ensure that they are environmentally and socially sound and sustainable. Various instruments are used to perform the EA depending on the complexity of the project. They include environmental impact assessment (EIA), an environmental audit, a hazard or risk assessment, and an environmental action plan (EAP). The policy requires that all IFC projects be classified into category 'A', 'B', 'C' and 'FI'.

The current project is a Category A classified project.

OP 4.04 Natural Habitats - This policy affirms IFC's commitment to promote and support natural habitat conservation and improved land use, and the protection and rehabilitation of natural habitats and their functions in project financing.

IFC does not support projects that involve significant conversion or degradation of critical natural habitats.

World Bank OD 4.20 Indigenous Peoples - Pending finalisation of its own operational policy, IFC projects must comply with the World Bank OD 4.20 on Indigenous Peoples, as appropriate in a private sector. If there are any significant social or environmental impacts on people belonging to the Scheduled Castes or Scheduled Tribes, the World Bank OD 4.20 will be adhered to.

World Bank OP 4.12 Involuntary Resettlement – The OP 4.12 lays down the policy and procedures on involuntary resettlement associated with World Bank and IFC financed projects. The OP provides guidelines for mitigating the adverse effects of development projects including social and environmental impacts such as land acquisition, relocation, loss of occupations and income sources, productive assets as well as community resources.

World Bank OPN 11.03 Cultural Property- Pending finalisation of its own operational policy, IFC projects must comply with the World Bank OPN 11.03 Cultural Property, as appropriate in a private sector.

3.3.2

Public Consultation and Disclosure

Public Consultation - During the EA process for Category A projects the project sponsor is required to conduct meaningful consultation with relevant stakeholders including affected groups, non-governmental organisations (NGOs) and local authorities about the project's environmental and social aspects and take their views into account. The project sponsor initiates such consultations as early as possible. For meaningful consultations, the project sponsor provides relevant information in a timely manner and in form and language that are understandable and accessible to the groups being consulted.

For Category A projects the project sponsor consults the relevant stakeholders at least twice:

- a) during scoping and before the terms of reference for the EA is finalised and
- b) once a draft EA report is prepared

Following the public consultation on the draft EA, the project sponsor supplements the EA by adding details of the public consultation process, including the sponsors responses to concerns raised by the various stakeholders and details of measures taken to incorporate these concerns into project design and implementation. The project sponsor continues to consult with relevant stakeholders throughout the project construction and operation, as necessary, to address EA related and other issues that affect them. IFC requires the sponsor to report on ongoing consultations as part of its annual reporting requirements.

Disclosure of Information -For Category A projects the sponsor gives public notification and makes draft EA report available at a public place accessible to the project stakeholders as early as possible and no later than 60 days prior to Board consideration, closing date or management approval date. The document should include all supplement to the A report requested by IFC and the responses to public consultation process. In addition, non-technical EA report

summary in the local language shall be proactively disseminated to the local stakeholders.

3.3.3

Guidance Notes

Within the environmental and social policies and procedures and guidelines of the IFC, there are guidance notes, which need to be followed. The relevant guidelines for this project are as follows:

- Guidance note A - This contains a checklist of potential Issues for an EA that need to be addressed.
- Guidance Note B - This outlines the content of an Environmental Impact Assessment Report.
- Guidance Note C - This guidance note had an outline for an Environmental Action Plan. Every IFC category A project must have an EAP. An EAP consists of a set of mitigation, management, monitoring and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels.
- Guidance Note F - This contains the guidance for preparation of a Public Consultation and Disclosure Plan.
- Environmental, Health and Safety Guidelines for Electric Power Transmission and Distribution.
- Environmental, Health and Safety Guidelines for Polychlorinated Biphenyls (PCBs).

3.3.4

Miscellaneous Acts

There are some other central acts that have implications on power projects and these are summarised below.

3.4

THE INDIAN TELEGRAPH ACT, 1885

The Indian Telegraph Act, 1885, empowers the Telegraph authorities to use the land / property for telegraph lines without having any ownership or right in the property even for the land occupied by the telegraph line supports or belts covered by overhead wires and the only obligation of the telegraph authority is to compensate for the actual loss / damage to the owner of the property. The relevant section of the Act is as under:

“The telegraph authority may, from time to time, place and maintain a telegraph line under, over, along or across, and posts in or upon, any immovable property:
Provided that:

- (a) The telegraph authority shall not exercise the powers conferred by this section except for the purpose of a telegraph established or maintained by the Central Government or to be so established or maintained:
- (b) The Central Government shall not acquire any right other than that of user only in the property under over along across in or upon which the telegraph authority places any telegraph line, or post; and
- (c) Except as hereinafter provided, the telegraph authority shall not exercise those powers in respect of any property vested in or under the control or management of any local authority, without the permission of that authority; and
- (d) in the exercise of the powers conferred by this section, the telegraph authority shall do as little damage as possible, and when it has exercised those powers in respect of any property other than that referred to in Cal. (c) shall pay full compensation to all persons interested for any damages sustained by them by reason of the exercise of those powers."

3.5

THE INDIAN ELECTRICITY ACT, 1910

Three sections of the Indian Electricity Act, 1910 are relevant to the laying (and repairs) of transmission lines for the supply of energy. These sections are:

- *Section 12*, which details the provisions for opening and breaking up of streets, railways and tramways for the purpose execution of the works, which includes electric supply line and any building, plant, machinery, apparatus and any other thing of whatever description required to supply energy.
- *Section 13*, which contains the provisions for the exercise of any of the powers of the licensee in relation to the execution of any works in, under, over, along or across any street, part of a street, railway, tramway, canal or waterway.
- *Section 18*, which lays out the requirements for construction of overhead lines. Subsection (1) states that, "save as provided in section 13, sub section (3), nothing in this part shall be deemed to authorise or empower a licensee to place any overhead line along or across any street, railway, tramway canal or waterway unless and until the State Government has communicated to him a general approval in writing of the methods of construction he proposes to adopt:

Provided that the communication of such approval shall in no way relieve the licensee of his obligation with respect to any other consent required by or under this act."

Subsection (3) also provides the requirement for removal of trees standing or laying near an overhead line or where any structure or other object which has been placed or has fallen near an overhead line, interrupts or interferes

with, or is likely to interrupt or interfere with, the conveyance or transmission of energy or the accessibility of any works. It also specifies the requirement to pay appropriate compensation for removal of the trees or other objects.

- *Section 51*, which provides that “Notwithstanding anything contained in sections 12 and 16 (both inclusive) and sections 18 and 19, the Central Government in the case of inter-State transmission system and the State Government in the case of intra-State transmission system, as the case may be, may, by order in writing, for placing of electricity supply-lines, appliances and apparatus for the transmission of energy or for the purpose of telephonic or telegraphic communication necessary for the proper co-ordination of works, confer upon any public officer, Central Transmission Utility, State Transmission Utility, licensee, transmission licensee or any other person engaged in the business of transmission or supplying energy to the public under this Act, subject to such conditions and restrictions (if any) as the Central Government or the State Government, as the case may be, may think fit to impose, and to the provisions of the Indian Telegraph Act, 1885 (3 of 1885), any of the powers which the telegraph-authority possesses under the Act, with respect to placing of telegraph-lines and posts for the purposes of a telegraph established or maintained by the Government or to be so establishment or maintained.
- *Section 57* in the Indian Electricity Act, 1910 is an amendment to the Land Acquisition Act of 1894. In the two sub-sections of section 57, the following points are clarified:

In section 40, sub-section (1), clause (b), and section 41, sub-section (5), of the Land Acquisition Act, 1894 (1 of 1894), the term “work” shall be deemed to include, electrical energy supplied, or to be supplied, by means of the work to be constructed.

The State Government may, if it thinks fit, on the application of any person, not being a company, desirous of obtaining any land for the purposes of his undertaking, direct that he may acquire such land under the provisions of the Land Acquisition Act 1894 (1 of 1894), in the same manner and on the same conditions as it might be acquired if the person were a company.

3.6

THE INDIAN ELECTRICITY RULES, 1956

In exercise of the powers conferred under Section 36A of the Indian Electricity Act, 1910, the Central Electricity Board framed the Indian Electricity Rules, 1956 for the whole or any part of the territories to which the Act extends, to regulate the generation, transmission, supply and use of energy, and generally to carry out the purposes and objects of the Act.

In particular and without prejudice to the generality of the forgoing power, such rules may prescribe the form of applications for licences and the payments to be made in respect thereof; regulate the publication of notices; prescribe the manner in which objections with reference to any application are to be made; provide for the protection of persons and property from injury by reason of

contact with, or the proximity of, or by reason of the defective or dangerous condition of any appliance or apparatus used in the generation, transmission, supply or use of energy.

The Rules specify the general safety requirements for construction, installation, protection, operation and maintenance of electricity supply lines and apparatus. It also contains general conditions relating to supply and use of energy, the requirements for electricity supply lines, systems and apparatus for low, medium, high and extra-high voltages. It specifies the requirements for overhead lines, underground cables and generating stations, including material strength, factors of safety, clearances required above the ground for the lowest conductor, clearances from buildings of low, medium, high and extra-high voltage lines and service lines; as well as conditions for transporting and storing of material near overhead lines.

4.1 KULLU DISTRICT AT A GLANCE

4.1.1 Introduction

This section presents a profile of Kullu district, which is the project area in comparison with the other districts of the state. The physical features, demography, developmental indicators of the district are presented providing a comparative analysis with the remaining districts of the state.

Location and Administrative divisions

Kullu was made into a separate district on 30th July 1963 on the separation of Himachal Pradesh and Punjab as two distinct states. Prior to that it was a tehsil of Kangra district.

Kullu is a sparsely populated, centrally located district of the state. It is bounded on the north and east by Lahul & Spiti district, on the southeast by Kinnaur district, on the south by Shimla district, on the south west and west by Mandi district and on the northwest by Kangra district. The valley of Beas river, the entire stretch from Kullu to Mandi, has gentle slopes patched with fields and apple orchards against the black drop of lush green mountain ranges.

Kullu district has 6 Community Development (CD) blocks namely Kullu, Manali Banjar, Narmand, Sainj and Ani.

The following table gives the administrative divisions and population of different divisions of district.

Table 4.1 *Population in Tehsil, Subtehsil and Towns of Kullu District*

	Category of Administrative divisions	Population
Kullu	Tehsil	1,77,920
Narmand	Tehsil	47,904
Manali	Tehsil	44,239
Banjar	Tehsil	38,629
Ani	Sub-Tehsil	50,495
Sainj	Sub-Tehsil	20,678
Kullu	Town	18,306
Manali	Town	6,265
Bhuntar	Town	4,260
Banjar	Town	1,262
Kullu	District	379,865

Source: Census of Himachal Pradesh, 2001

Among the tehsils and among the existing towns in the district Kullu (town & Tehsil) has the highest population. In 1991, there were only 5 C.D. blocks after which Manali was established as a tehsil in 2001.

4.1.2

Social and cultural characteristics

Religion

Main population consists of Hindus followed by Buddhists and fraction of Sikh and Christian populations. Though no record of above-mentioned classification is available. The predominant castes of the area include Rajputs, Brahmins and scheduled castes.

Food habits

The staple food of the people is rice, wheat, maize and barley and minor millets. However with growing improvement in the standard of life barley consumption is being abandoned in favour of wheat, maize and rice.

Language

The language spoken by people of Kullu is known as Kulbi, which is one of the several languages that come under western pahari. Kullu group of languages comes under Indo-European family of languages.

4.1.3

Economy

The economy of Kullu district is basically agriculture. More than 80% of the workers are engaged in agricultural activities.

Agriculture

The elevation of Kullu district ranges from 914-4,084 metres above mean sea level with agro-climatic conditions. The texture of soil varies from sandy loam to clay loam. The agro-climatic conditions provide a range of potentialities for growing cash crops, off season vegetables, seed potatoes, pulses and temperate fruits apart from the cereals, millets and oilseeds.

The holdings are small and cultivation is done by orthodox techniques of farming. The sources of irrigation are Khuls, Lift and Tanks, where rainwater is stored. The total cultivated area in the district, according to District Census Handbook, Kullu, 1991 is 39112 hectares.

Horticulture

Development of horticulture occupies an important place in the economy of district. Agro-climatic conditions offer a great scope for the production of temperate and sub-tropical fruits especially apple, peach, apricot, chestnut, almonds, japani phal, cherries, goose berries and olive are being planted. Bee keeping is a subsidiary source of income. The particular suitability of climate has resulted in shifting of land use pattern from agriculture to fruit crops in past few decades.

Animal Husbandry

Livestock is an important source of income as well as wealth in the agriculture-based economy of the district. Besides providing income, livestock also serves

as subsistence. Most of the households invariably keep livestock such as cows, buffaloes, sheep, goats, pig and ponies.

Fisheries

Most of the inhabitants in Kullu district are found in the interior valleys having rivers, streams and nallahs. The waters of these rivers contain lots of minerals and are most suited to Pisciculture.

Forests

Forests occupy a prominent place in the economy of the district and forest division, Kullu, administers these. Forests constitute a major proportion of the land use in the district. The Kullu forests considerably resemble those in adjacent parts of Kangra and Mandi. Extensive forests of common Himalayan oak are found largely in the Hurla valley above 2400 metre elevation. The principal forest products are major trees like Deodar, Kail, Cheel, Pine, Walnut, Horse chestnut and Oak, minor trees like Hazal, Hornbeam, Yew, Bird cherry, Birch, Moru, Ban, Willows, Ash, Wild, Apple, Juniper and Rhododendron products used for medicinal purposes like karu, Dhoop, Muskwala, Mushrooms and Kakarsingi

Industry

Due to its location the district does not have any large or medium scale industrial units. However, the district is known for some of its beautiful traditional handicrafts in weaving like multi-coloured caps and shawls that are well known in the country.

4.1.4 Demographic Profile

Population and Density

Among the 12 districts Kullu has relatively low population, which is 6.25% of the total state population. The highest among the districts is Kangra which also has the highest density and the lowest is Lahol & Spiti with a density as low as 2.

Kullu showed the highest decadal growth rate in 1981-1991, but it decreased marginally to 25.60% in 1991-2001. In 1991-2001, Solan showed the highest growth rate of 30.64%, followed by Sirmaur and Una districts.

Rural & urban population

Rural Population has registered an increase of 16.15% during 1991-2001. Due to hilly profile of Himachal Pradesh, the highest population resides in rural areas and kullu district has the highest increase i.e. 24.29% in rural population, followed by Solan with 21.86% for the period of 1991-2001. On the other hand, Shimla has the highest urban population 23.90% of the state and has shown a growth of 39.12% during the last decade. Manali town has recorded the highest growth of 157.50% followed by Rohru Nagar Panchayat 96.26 and Solan Town 57.23% during 1991-2001.

Table 4.2 *District wise Population and Density*

District	Area (sq. Km.)	Population	Pop.to the state (%)	Rural (%)	Urban (%)	Gr. Rate 1981-1991	Gr. Rate 1991-2001	Density per sq. km. 1991	Density per sq. km. 2001
Bilaspur	1167	340735	5.60	5.8	3.7	19.41	15.35	253	292
Chamba	6528	460499	7.58	7.8	5.8	26.40	17.09	60	71
Hamirpur	1118	412009	6.78	7.0	5.1	16.17	11.62	330	369
Kangra	5739	1338536	22.02	23.1	12.1	18.50	14.01	205	233
Kinnaur	6401	83950	1.38	1.5	0.0	19.69	17.79	11	13
Kullu	5503	379865	6.25	6.4	5.1	26.68	25.60	55	69
L & S	13835	33224	0.55	0.6	0.0	-2.51	6.17	2	2
Mandi	3950	900987	14.83	15.3	10.2	20.40	16.05	197	228
Shimla	5131	721745	11.88	10.1	28.0	20.84	16.90	120	141
Sirmaur	2825	458351	7.54	7.5	8.0	23.72	20.72	134	162
Solan	1936	499380	8.22	7.4	15.3	26.02	30.64	197	258
Una	1540	447967	7.37	7.5	6.6	19.17	18.43	246	291
H.P.	55673	6077248	100	90.2	9.8			93	109

Source: Census of Himachal Pradesh, 2001

Sex Ratio

Kullu has a low sex ratio i.e. 928 compared to districts like Hamirpur, Kangra that show a favourable ratio. Some districts like Kinnaur, Lahol & Spiti, Solan have shown a decline in the sex ratio from 1981-91 to 1991-2001 however sex ratio in Kullu has improved from 920 in 1981-1991 to 928 in 1991-2001. The low sex ratio in certain areas may indicate large scale in migration of male workers though there may be other related factors.

Literacy

There is an increase of 14% in overall literacy of the state from 1981-1991 to 1991-2001. Sirmaur, Chamba and Kullu districts have shown the highest growth in literacy rates by 19.23%, 19.03% and 18.54% respectively. Hamirpur has the highest literacy rate of 83.16% followed by Una with 81.09% in 1991-2001.

Table 4.3 *Literacy Rate*

District	Literacy Rate 1981-1991	Literacy Rate 1991-2001
Bilaspur	67.17	78.80
Chamba	44.70	63.73
Hamirpur	74.88	83.16
Kangra	70.57	80.68
Kinnaur	58.36	N.A.
Kullu	54.82	73.36
L & S	56.82	73.17
Mandi	62.74	75.86
Shimla	64.61	79.68
Sirmaur	51.62	70.85
Solan	63.30	77.16
Una	70.91	81.09
H.P.	63.86	77.13

Source: Census of Himachal Pradesh, 2001

4.1.5

Occupation

In the overall state as per the 2001 census, non-working population is more than total working population. Bilaspur, Kangra, Sirmaur and Una have higher percentage of non-workers. However in these districts there has been an overall decrease in the non-working population from 1991 to 2001.

Table 4.4 Occupational Profile

	Total Workers		Main Workers		Marginal workers		Non Workers	
District	1991	2001	1991	2001	1991	2001	1991	2001
Bilaspur	44.60	48.95	31.03	32.52	13.57	16.43	55.40	51.05
Chamba	48.58	50.04	32.55	27.88	16.03	22.16	51.42	49.96
Hamirpur	41.87	49.90	29.87	29.34	12.00	20.56	58.13	50.10
Kangra	34.37	44.04	27.55	25.20	6.82	18.84	65.63	55.96
Kinnaur	52.42	60.54	47.32	50.79	5.10	9.75	47.58	39.46
Kullu	47.93	57.05	42.44	43.96	5.49	13.09	52.07	42.95
L & S	64.93	63.50	54.18	57.88	10.75	5.62	35.07	36.50
Mandi	45.72	50.44	37.46	29.89	8.26	20.55	54.28	49.56
Shimla	48.62	51.19	43.08	42.19	5.54	9.00	51.38	48.81
Sirmaur	46.59	49.30	40.11	38.38	6.48	10.92	53.41	50.70
Solan	45.05	52.70	34.98	34.57	10.07	18.13	54.95	47.30
Una	33.45	45.03	27.45	26.60	6.00	18.43	66.55	54.97
H.P.	42.83	49.28	34.41	32.36	8.42	16.92	57.17	50.72

Source: Census of Himachal Pradesh, 2001

Kullu in 2001 has higher working population than non-working population, which has changed from the 1991 figures where the reverse was true.

Growth rate of main workers has shown a decrease by 2.05%, but the growth rate of marginal workers has increased by 8.5% from 1991 to 2001. Bilaspur, Kinnaur, Kullu and Lahul and Spiti districts have positive growth rate in main workers.

Rural areas on an average have more people working as main workers as compared to the urban areas. Almost 36% people are engaged in main workers category.

4.1.6

Agriculture

Agriculture is the main source of occupation in the state. Out of the working population, more than 40% of the population is categorised under main workers. Maximum Land comes under cultivation.

Table 4.5 District wise Classification of Agriculture Area (in '000 Hectare)

District	Fallow land			Net Sown area (in Ha)	Total cropped area	Area sown more than once
	Current Fallows	Other fallows	Total			
Bilaspur	1.2	1.6	2.8	30.8	59.4	28.6
Chamba	2.0	.2	2.2	42.4	66.3	23.9
Hamirpur	7.6	1.0	8.6	36.4	71.6	35.2
Kangra	7.9	1.1	9.0	11	222.6	103.6
Kinnaur	1.6	.1	1.7	7.6	10.0	2.4

Fallow land						
District	Current Fallows	Other fallows	Total	Net Sown area (in Ha)	Total cropped area	Area sown more than once
Kullu	2.6	.2	2.8	36.6	63.1	26.5
L & S	.2	-	.2	3.2	3.3	.1
Mandi	5.8	.3	6.1	91.1	163.6	72.5
Shimla	12.5	1.4	13.9	71.1	107.1	36
Sirmaur	4.5	.9	5.4	42.2	78.4	36.2
Solan	4.9	.8	5.7	39.4	65.6	26.2
Una	4.6	15.1	19.7	40.3	75.2	34.9

Source: Statistical Outline of H.P., 1999

Kangra has the largest area under the category of sown more than once. Large number of districts comes in the category of 60-225 hectare cropped area. Except Kangra, Kinnaur and Lahul and Spiti, more than 60% of the total area is under cultivation.

Major Crops

Rice, wheat and maize are important cereal crops of the state. The state Government is laying emphasis on production of off-season vegetables seeds, potato, ginger, pulses and oilseeds.

Area under rice, wheat and maize is highest in Kangra and Mandi. Apart from this, both the districts also lead in area under total food grains, potato, onion, tomato, and chillies, ginger and edible oilseeds to other districts. Area under crops in Kullu district is below average except Barley, Common Millets, Other Cereals and Pulses.

Mandi and Kangra are showing the maximum production in all the crops. Food grain is the largest produce of the state. According to Economic survey 2002, the food grain production for 2001-2002 is expected around 14.37 lakh M.T. The largest produce in State is Food grain, Rice, Wheat and maize.

4.1.7

Size of Land Holding

District wise operational holding and area for 1995-96 is given. Average size of holding for the state is 1.16 hectare. As is evident from the table, districts like Sirmaur, Solan, Lahul & Spiti, Una, Shimla have the larger size of land holdings while Kullu has the smallest average land holding size.

Table 4.6

District Wise Operational Holding and Area

District	Number of Holders	Area (in Ha)	Average size of holding (in Ha)
Bilaspur	48,656	52,619.98	1.08
Chamba	64,524	56,697.36	0.88
Hamirpur	69,193	76,579.09	1.11
Kangra	2,24,759	2,09,505.09	0.93
Kinnaur	9,693	14,310.84	1.48
Kullu	57,061	44,233.44	0.78
L & S	3,960	6,422.71	1.62
Mandi	1,36,710	1,29,689.20	0.95
Shimla	90,112	1,25,917.16	1.40
Sirmaur	45,048	1,02,510.28	2.28

District	Number of Holders	Area (in Ha)	Average size of holding (in Ha)
Solan	49,854	91,579.82	1.85
Una	64,137	89,034.71	1.39
Himachal Pradesh	8,64,437	9,99,099.68	1.16

Source: Statistical Outline of H.P., 1999

Distribution of land holdings, in the whole state shows that 84.5% of land comes under small and marginal farmers.

Irrigation

Agriculture in Himachal Pradesh is primarily done with the rainfall. Apart from this, the four major sources of irrigation in the state includes canals, tanks, wells and tube wells. The area irrigated by different sources in the state from 1991-98 is given in the following table.

As per the table shown below the net irrigated area under all the four sources has decreased from 1992 to 1998.

Although there has been a decrease in the net irrigated, the gross cropped area has shown a gradual increase.

Table 4.7 *Area covered by different Sources of Irrigation (in Hectares)*

Agricultural year	Canal	Tanks	Wells & Tube wells	Other sources	Total
1991-92	-	663	3,711	95,362	99,736
1992-93	9,076	798	5,5592	83,360	98,826
1993-94	-	122	5,120	94,404	99,646
1994-95	3,631	871	11,998	83,954	1,00,454
1995-96	3,393	397	13,082	87,918	1,04,790
1996-97	3,574	325	11,830	89,063	1,04,792
1997-98	3,398	255	11,820	87,144	1,02,617

Source: Statistical Outline of H.P., 1999

Area covered by tanks increased in 1994-95, but then there is steep decline in this source of irrigation.

4.2 *PROFILE OF THE PROJECT VILLAGES*

Majority of land acquisition would take place in three villages viz. Prini, Jagatsukh and Aleo. While the land would be acquired for development of residential colonies in Prini and Jagatsukh, a part of the road is likely to pass through Aleo and Prini. In this section, a profile of the three villages in terms of their location, demography, access to amenities etc is presented. It also looks at the type of development projects being implemented and the kind of development activities that local people would like to have in their villages.

All the three villages are a part of the Manali Tehsil, District Kullu. Jagatsukh and Aleo fall on the main road while Prini is about 0.5 km from the main road. However, it is connected to the main road by a narrow concrete path. Prini

enjoys a special status as it is one of the villages that have been adopted by the Prime Minister.

4.2.1 *Socio-economic Profile*

The three villages are quite different in terms of socio-economic conditions. The population varies from about 300 in Aleo to about 2000 in Jagatsukh. Jagatsukh has relatively higher ST population².

Table 4.8 *Demography profile*

Village	Total population			Scheduled Caste			Scheduled Tribe		
	Total	M	F	Total	M	F	Total	M	F
Aleo	300			110			75		
Jagatsukh	1995	1035	960	326	173	153	180	95	85
Prini	511	264	247	155	83	72	33	17	16
TOTAL	2806			591			288		

*Source: Gram Panchayat

The STs in the area have mostly migrated from Lahual- Spiti. Initially the migration was annual phenomenon when the people would come to the lower altitudes in the winters, as it was difficult to live in the harsh conditions. Some of them still own land in Lahual - Spiti as well in the project impacted villages. A member of the family generally lives in Lahaul – Spiti to take care of the land, while the rest of the family visits at least once a year. They depend largely on agriculture and animal husbandry for their livelihood. Most ST families in the area practice Buddhism. They also have distinct cultural identity and have their own festivals and customs.

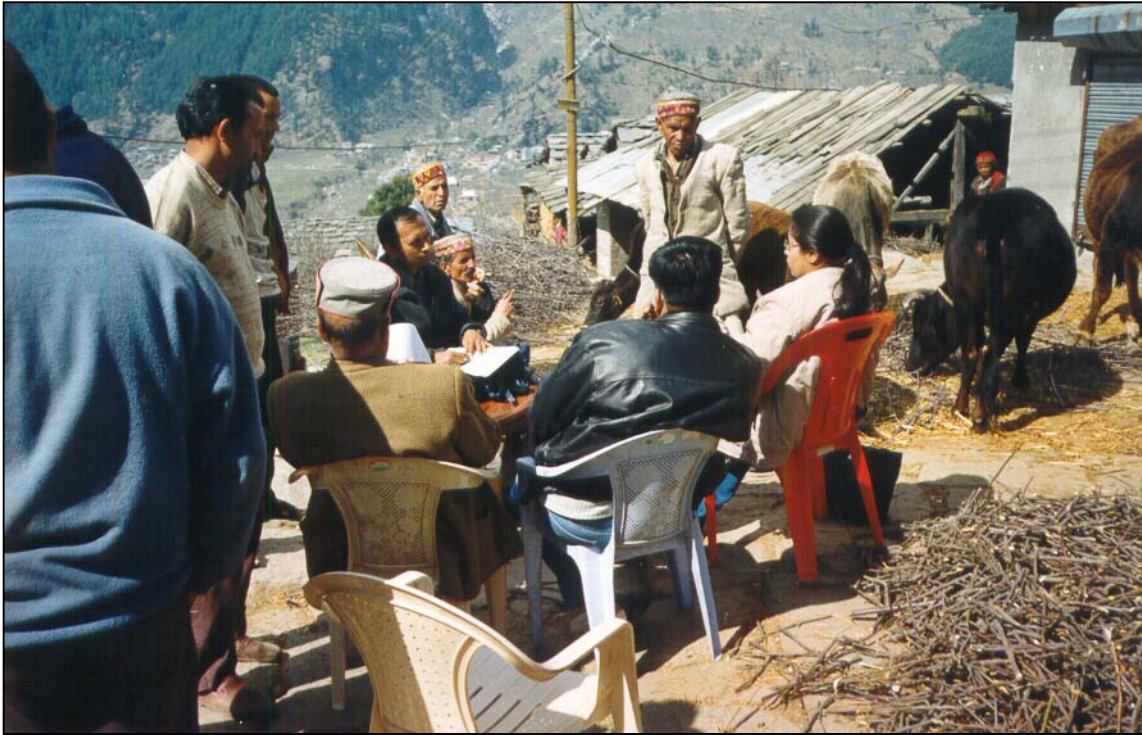
There were SC families in each village. These SC families, like others in the village, practice agriculture as their main occupation. The social discrimination against the SCs still exists, although it has been diluted over a period of time. They are however, given preference in the development schemes implemented by the government.

Literacy rate

The literacy rate in all the three villages has shown an increase in the last two decades. While most of the elderly people were either illiterate or had studied only till class V, most people in the younger generation had studied till at least class VIII. The presence of at least a primary school in these villages has ensured that all the children have access to some basic education.

The literacy levels in the project villages varied from 50-80%. According to the GP members, the literacy rate was about 60% in Prini and 80% in Jagatsukh. In both these villages the literacy rate was reported to be comparatively higher among men.

(2) ² Scheduled Caste (SC) and Scheduled Tribes are identified/notified by the Constitution of India (Articles 341 & 342 respectively), as groups that are marginalised/vulnerable and lays out special provisions for such group with the objective of promoting and safeguarding their social, educational and economic interests.



Consultations with PAFs in Prini



A watershed development activity on Prini Nalla

Occupational Pattern

There are limited job opportunities in the regions as there is very little industrial development, and the government jobs are very few. Absence of good technical training institute makes it difficult for local people to acquire adequate skills to apply for jobs in the nearby. The tourism industry in the area is unable to provide work for the entire year.

Agriculture is, therefore, the primary occupation in all the villages. It is followed by animal husbandry as many people sell milk or other dairy products like *Ghee*. Very few people have regular jobs, of which the government jobs are even fewer. Most of the private jobs are in the local hotels/restaurants and as drivers. Significant numbers of people in Aleo have leased their land for commercial activities, which are largely tourist centred. Some people also operate their vans/jeeps/cars etc as tourist vehicles.

Table 4.9 **Occupational pattern**

Village	Agriculture	Animal Husbandry	Private/govt Jobs	Labour	Any other
Aleo	100%	80%	5%	30%	30% (land on lease to hotels, van owners, business etc)
Prini	90%	30%	10%	10%	4-5% (own business)
Jagatsukh	80%	75%	5%	25%	5% (own business)

* Information provided by GP members and is an indicative estimate

4.2.2 Settlement Pattern

All the three villages have other villages in the Gram panchayat. Prini and Jagatsukh have Panchayat headquarters in the village, while Aleo is a part of the Vashisht GP. The other villages in Prini GP are Shuru, Gadrai, Chalet, Saithan and Hamta. Similarly, Jagatsukh GP has Banara, Chanala, Bhanu and Shamina.

Jagatsukh is one of the oldest settlements in the district and was reported to be the capital of Kullu state. The village had the largest number of villages in the GP till a few years ago and is famous for its ancient temples.

As all the three villages are quite close to Manali, a popular tourist destination, they are exposed to a large number of visitors. Prini is along a popular trek route that is frequently visited by tourists. Both Jagatsukh and Prini can attract a large number of tourists, but have been unable to exploit the tourism potential so far.

While both Jagatsukh and Prini are dispersed settlements, only Jagatsukh is divided into different clusters. Aleo's main hamlet is the central one where most houses have been built quite close to each other while the remaining houses are spread along the hill.

4.2.3 Social Infrastructure

Jagatsukh is the most developed village in terms of social infrastructure; Prini has some of the basic amenities in the village while Aleo is almost a part of the Manali town now.

The following table presents the details of access to different amenities in the three villages.

Table 4.10 *Access to amenities*

Village	Primary School	High School	College	PHC	Hospital	Post Office	Bank
Aleo	Village	Manali, 1.5 km	Kullu, 30km	Manali, 1.5 km	Manali, 1.5 km	Manali, 1.5 km	Manali, 1.5 km
Prini	Village	Village	Kullu, 30km	Jagatsukh, 3 km	Manali, 4 km	Village	Manali, 4 km
Jagatsukh	Village	Village	Kullu, 35km	Village	Manali, 6 km	Village	Village

All the villages have an *Aanganwadi*, a government run playschool for young children. Jagatsukh has a well-developed market; Prini has few shops that cater to daily needs like grocery, confectionary etc. Aleo has many shops like tea stalls, small eating joints etc. that cater to the needs of Manali as well.

All the villages are connected by telephones and many families in all the three villages have their private telephone connections. Some households have mobile phones as well. Power supply is quite regular and problems arise only during snowfall when it is difficult to repair local faults.

Access to drinking water

None of the villages reported any water problems. They have access to clean drinking water from the streams that flow through the villages. Piped water supply is available and has also been upgraded in last 5-6 years in Prini and Aleo.

Almost all the families in Aleo have private connections while in Jagatsukh and Prini about 60-70 households have individual connections. The number of stand posts varies between 5 in Prini to as many as 40 in Jagatsukh. The water is available 24 hrs a day.

Access to sanitation

Jagatsukh is the only village to be partially covered by the drains. All the villages have very few households with private latrines. In Jagatsukh, some latrines had been made through a government scheme but most of them are no longer being used.

Public health

The villagers reported that incidence of disease was quite low in the area and fever and cold were common ailments. There were also few isolated cases of malaria and jaundice. No epidemics were reported in the recent past. There were however a number of handicapped people in the villages, some of them afflicted by polio in their childhood. In terms of access to health infrastructure, only Jagatsukh had a PHC in the village itself, while villagers from Prini and Aleo had to travel between 1.5 to 3 km to access a PHC. The nearest hospital for all the villages was in Manali

4.2.4

Land Use Pattern

While Jagatsukh and Prini are spread over large areas, no data is available for area of Aleo. Also in Kullu district, the forest area has not been calculated so far.

Each village other than the private land and the *aabadi* (residential area) land has ownership over "*gauchar*" (grazing grounds) and streams. Most of the villages are surrounded by forests, which are used by the community. Each village is reported to have a well-defined boundary and people from other villages are not allowed either to graze their cattle or collect fuel wood. The Gram Panchayat is allowed to penalise if people from other villages break these rules. However, if the land belongs to forest department or any other government department, the Panchayats do not intervene (information provided by a local *patwari*).

Majority of land in all the villages is used for cultivation. The following table provides the land use of Prini and Jagatsukh.

Table 4.11 Land use pattern

Village	Total Area (in Ha)	Irrigated	Unirrigated	Culturable waste (including pastures & groves)	Area not available for cultivation
Prini	249	80	100	-	69
Jagatsukh	259	168	89	-	2

Source: District Census Handbook, Kullu- 1991

Ownership of private land

Land ownership in the state started some time in 1800s. Due to the hilly terrain, the cultivable land in the state is divided into very small plots. However, to prevent the division of these small plots into fragmentation, the Govt. of Himachal Pradesh enacted Himachal Pradesh Holdings (Consolidation and Prevention of Fragmentation) Act, 1971 to provide for consolidation of agricultural holdings and preventing fragmentation of agricultural holdings in the state and for assignment or reservation of land for common purposes of the villages.

In Himachal Pradesh, both the sons and the daughters inherit the land. However, in majority cases the daughters hand over their shares to their brothers.

The land records in the state are updated after five years. The mutation deeds in case of the death of the landowner have to be made within 6 months. Similarly, in case of sale, a copy of the registration documents is provided to the '*patwari*' to update the land records. In 1990s, the state government launched a campaign for "settlement" of land records. In Prini, this campaign was launched in 1994 and completed in 2001.

Himachal Pradesh has initiated a number of projects for the development of villages. Many departments like forest department, watershed development department, agriculture department etc have recently started seeking people's support in their projects. The GPs also implement many projects from the government grants received every year. The grants received by the three GPs and the revenue generated in the last financial year is presented below:

- Aleo- approximately 2,00,000 as grants and Rs 8,000 –10,000 as tax collection
- Prini- Rs 93,829 as grants and Rs 5,000 as tax collection
- Jagatsukh- Rs 5,00,000 in form of government allocation and Rs 60,000 in form of taxes.

Details of some of the projects that have been implemented in the recent years in the projects villages are provided below.

Aleo

Aleo being a very small village usually gets neglected in the development projects. Very few projects have, therefore, been implemented in the village.

- The community in Aleo had demanded piped water supply in the village 5 years ago and were provided with it within a year.
- The GP undertakes village cleanliness campaign annually and everyone in the village participates in it.
- Watershed development related activities were undertaken in the GP headquarters in Vashisht.
- A nursery had been started in the village by the forest department. However, no saplings were provided this year.

Prini

The Gram Panchayat undertakes works like maintenance of roads, water supply, construction of irrigation channels, construction of small bridges and providing grants under Indira Awas Yojana. Some other development projects that have been undertaken in the village include

- Enhancement of piped water supply through Prime Minister's Fund
- Watershed development through forest department. About 3 bighas were covered 3-4 years ago.
- Afforestation activity is undertaken every year through support from forest department and watershed development department. Plantations were done in 10 acres about 3 years ago. A Joint Forest Management (JFM) committee has been formed with about 11-12 members in the village.
- One SHG for the Below Poverty Line (BPL) households had been initiated. However, no bank account has been opened so far.

The present GP has constructed two school buildings (in other villages of the GP), a rest house, community hall and cremation ground in the village. It has also developed a stage for cultural activities in the village, small irrigation channels and bridges etc. Some other development projects in the village include:

- Drains covering about 50% of the village have been made
- Individual latrines through a government scheme constructed, but only few are being used
- Soil conservation efforts initiated since last year. A watershed development committee (WDC) has been formed. 5 self help groups (SHGs) (3 groups for men, 1 for women and 1 for SC community) have been formed as a part of the project.
- Afforestation activities have also been started by the forest department. There was a problem of co-ordination earlier. However, things have now become smooth and the community is willing to contribute 10% in the project. The GP was, however, not very clear about the kind of activities to be undertaken in the project.
- Vermi-composting through self-help groups has been started. The GP plans to promote it further.

Stakeholders refer to persons or groups who have stake in a proposed program or project and who may play a key role in influencing the project policy, planning and implementation. Stakeholders' identification and analysis is a precondition for social assessment and for setting the framework of participatory planning and implementation. It will help to generate information critical to planning, implementation and monitoring of the project. It will also help avoid or minimize the adverse impacts of the project and simultaneously support the realization of positive effects of the ADHEP.

ADHEP has several sub-components namely

- Power Station and other civil structures
- Colonies for the project staff
- Transmission lines
- Connecting roads

While the power station is being built on government land, private land acquisition would be required for development of colonies and some parts of roads.

5.1.1

Landowners

A major set of stakeholders consists of the people who are affected by the land acquisition. The intensity of impact varies according to the scale of acquisition in relation to the land holding of each household and the proportion of livelihood derived from such land holdings. In Himachal Pradesh, the land is inherited equally by all the children. In practice, the daughters give away their rights to the sons. However, such mutations are not formally recorded in the land records. Similarly, the family members informally divide the land among themselves, and hence although their names may appear in different *Khasras* or plots, they cultivate only some of these parcels of land. In absence of updated land records, it may be difficult to ascertain the actual land ownership of some of the affected parcels of land.

Key concerns & expectations

For people losing a large part of their land, their major concern is availability of alternate land in the village for cultivation. They expect good compensation for loss of land and would like assistance in shifting of apple trees wherever possible. It is feared that delay in compensation would increase uncertainty about the project and might affect the incomes from these affected parcels.

5.1.2

Non-legal cultivators

A large part of the land in some of the villages is classified as '*Devta*' land, which has been handed over to some families to cultivate. Similarly, there are pockets of forestlands, which are being illegally cultivated by some members of the community. Although many of such non-legal ownership had been

regularised in the state, there are still many such cases where have people have been cultivating the same parcel of land for many years without a legal title.

Although, no detailed exercise has been carried out to identify non-legal owners of land, there is a likelihood of 'Devata' or forestland being cultivated by some individual families.

Key concerns & expectations

The government generally does not recognise non-legal cultivators and hence, their major concern is that they will not only get compensated for the loss of land but would also be affected by loss of income from these lands. They expect that they will be treated at par with the legal titleholders or at least compensated for loss of trees and income.

5.1.3 Sharecroppers

As the land holding of many families is quite small, it is difficult for them to sustain themselves on small parcels of land. Therefore, many families cultivate land belonging to other people as sharecroppers. The sharecropping arrangement many vary from sharing 50% of the costs as well as 50% produce while in other cases it may be 60-40 for both the costs and the produce. In the sample survey, no family reported a sharecropper on any of the affected parcels of land. However, some of the PAFs did mention that they cultivate others' lands on the basis of sharecropping.

Key concerns & expectations

With the loss of land, these shareholders stand to lose a part of their family income. They expect to be compensated for loss of income from the affected parcel.

5.1.4 Labour

Most of the people involve their family members (cousins, in-laws etc) to work as labour during the agricultural season. In return, they assist their relatives by working their land as labour. However, there are few families in all the villages who are landless and earn their livelihood by working as labour. As there are very few opportunities to work as a wage labour in the area, many of these landless families depend on owners of large land holdings to work as agricultural labour. The project might affect some people belonging to this category as well.

Key concerns & expectations

The labour community is apprehensive about losing a more reliable source for work and would like to be compensated for loss of income.

5.1.5 Women's groups

The women generally belong to two different groups. The women from the economically well off families generally do not go out in the agricultural fields

to work. They are more involved in the household activities, taking care of the cattle and livestock as well as weaving of shawls, carpets etc. The women from the economically weaker section not only do the household work but also spend a considerable time working in their own fields and earning incomes by working as wage labour in others' agricultural fields. During the winter season when no agricultural activity is possible, they take up weaving activity, which helps them meet the domestic need and also provide them with an additional source of income.

In Jagatsukh, there are women's self help groups as well. However, at this stage it is not clear whether any of these members are being affected by the land acquisition.

Key concerns & expectations

Women fear that they might lose their freedom if the people from outside come to live in their village and their movements within the village might be restricted at some hours of the day. An impact on their social culture and customs was a major concern. As Jagatsukh has been rated as one of the best villages in the district, they felt that a large community from outside may also affect the cleanliness of the village. Their expectations from the project ranged from better education facilities to opportunities for income generation. Of those losing land, most wanted employment for at least one member of the family.

5.1.6 Tribal communities

The tribal community in the area belongs to Lahaul - Spiti area and migrated about 25-30 years ago. Some of them still maintain a house and land in Lahaul. One member of the family, usually the elder son, may be stationed in Lahaul to take care of that land. The family also visits Lahaul at least once a year. There are very few tribal families who would be affected by loss of plantations for the road construction. As these tribal families are among the marginalized communities, their concerns will have to be addressed on the priority basis during the implementation of the project.

Key concerns & expectations

The tribal communities expect a fair compensation for the affected land and additional financial support.

5.1.7 Other Vulnerable Groups

The vulnerable groups in this project comprise families that are headed by women, handicapped people affected by the project and people who will be pushed below the poverty line due to loss incurred as a result of the project. While the project affects some people marginally by acquiring only a portion of their land, for some people who stand to lose a major part of their land holding, the land acquisition might push them below the poverty line. Special attention will have to be paid to such vulnerable groups to ensure the restoration of their income levels.

Key concerns & expectations

Main apprehension of this group is the loss of land as it is the main source of income for them. As most of them have limited resources, they are concerned about the future. They expect employment, if possible, for one member in the family to ensure a regular source of income.

5.1.8 Common Property Resources (CPR) Users

Each village in the area has its well-defined *gauchar* land where the community is allowed to graze their cattle. They also collect dry wood for fuel. It is reported that for these villages, this is the major grazing ground and the availability of alternate land is low as the other villages might not allow these communities to graze their cattle or collect fuel wood from their '*gauchar*' lands. Once the project gets into the construction phase then it will not be possible for these cattle and goats to graze freely in the '*gauchar*' as they will be affected by the increased volume of traffic and construction activity.

The local streams, especially the Duhangan stream, are major source of irrigation.

Concerns & expectations

People were apprehensions that by trapping the water from the Duhangan stream, water available for irrigation downstream would be severely reduced. Lack of irrigation facility would then affect their crops. They wanted the project to ensure that adequate flow is maintained for irrigation

5.1.9 People affected by overhead transmission lines

The construction of overhead transmission lines is likely to result in disruption in agricultural activity. Although the extent of impacts on land is unlikely to be significant, the period during which the poles are erected and the cables are laid, it is likely that agricultural activity will be temporarily disrupted by the machinery and labour activities involved, before the land can be made available for agriculture again. Cutting of some of the trees for stringing the cables may be required. The construction phase of the transmission lines may also affect access to common property resources.

Key concerns & expectations

Usually the erection of towers is done in three phases. One of the common concern is that their standing crops might be affected in all the three phases. Affected people would therefore expect compensation for loss of standing crops for all the three phases.

5.1.10 Village Institutions

The Gram Panchayat in all the villages is a major stakeholder and likely to play a key role in the project implementation. Apart from the Panchayat, there are self-help groups, watershed development committees, afforestation groups that are involved in the development activities of the affected villages. These

institutions represent either interests of specific groups or provide an independent forum for interaction for the village people. These institutions are considered to be an important stakeholder to whom providing the accurate information will facilitate the building of the right process of a dialogue. Some of these like watershed development committee or the afforestation committees could be involved in implementation of environment management plan.

Key concerns & expectations

The GPs are concerned about the impact of large number of outsiders coming and living in their villages and the impact on local resources like water, fuel wood etc. They expect the project to enhance the existing infrastructure or provide basic amenities that might be required in the village.

5.2 OTHER STAKEHOLDERS

5.2.1 Political parties

Since the opposition of any political party may lead to the delay in the implementation of the project, it is necessary to take them on board at the initial stage of the project.

5.2.2 Government Departments

Various branches of the government play an important role in the successful execution of the project. These roles consist of land acquisition, transfer of money to the landowners and obtaining permission from the concerned departments like Himachal Pradesh State Electricity Board, Department of Power, Department of Finance, Forest Department, Tribal Development Department, District Treasurer and the local self-government institutions like the Panchayat and the Zilla Parishad.

5.2.3 NGOs and Media

There are no NGOs working in any of the three villages covered for the sample survey. However, there are a number of NGOs who have been working in the Manali district on a wide range of development issues. Till now no NGO has shown interest in the project, neither have the project authorities approached them. However, it would be worthwhile to engage some NGOs in mobilising the community in favour of the project and involve them in the implementation of the Rehabilitation Action Plan.

In Himachal Pradesh, the media provides a vibrant forum for information access. So far they have not been actively involved by the project proponents, although there has been some coverage of the project in the local media. At appropriate stages, the project has to provide accurate information to the media, which will help in percolation of information to all the other stakeholders.

5.2.4 *Service Providers*

The service providers such as the tour operators, transporters and the input providers would be positively affected by the project. It would also provide additional opportunities for more business through the project.

5.2.5 *Financial Institutions*

The financial institutions, both in India as well as the international institutions, which are involved in the project finance, have stakes in terms of the investment in the project. The financial institutions need to ensure that the project does not get delayed resulting in escalation of costs and reduced profitability of the investment. They would also like to ensure that other risks are minimised. Any adverse impacts of the project will also reflect on the image of the financial institution.



Individual interview with an affected person



Consultations with villagers in Jagatsukh

6.1 INTRODUCTION

This section presents the socio-economic profile of the project-affected persons in terms of their religion, education levels, occupational profile and income levels. This profile is based on the sample survey (of 62 families or 25% sample) of an estimated 140 families spread over three project impacted villages.

Table 6.1 *Sample Survey Details*

Village	No of families surveyed	% of sample	Projected no. of families
Prini	31	50.0	70
Jagatsukh	22	35.5	50
Aleo	9	14.5	20
Total	62	100	140

6.2 SOCIAL STRUCTURE

Most of the affected families are Hindus with few of them (especially among the Scheduled Tribes) being Buddhists. As per the land records provided by the project proponents, there are no Muslims, Christians or Sikhs among the affected families. The same trend is exhibited in the sample survey. Among those surveyed, approximately 97% practice Hinduism while the remaining belong to Buddhist community. The majority among the Hindus belong to upper castes, while all the Buddhist families surveyed come under Scheduled Tribes (ST). The following table presents the detailed break up of the project affected families.

Table 6.2 *Social classification*

Category	Number of PAFs*
Hindu	135
Buddhist	5

* These values are projected for 140 project-affected families

Most of the affected families in Prini, Jagatsukh and Aleo are Rajputs and Brahmins. Although no social discrimination was reported against any community, the upper castes obviously have a larger say in the village development matters. However, there were no separate hamlets for the Scheduled castes or other backward classes in any of the villages. ST households were interspersed within the larger community.

6.3 FAMILY SIZE

The average family size in all the three villages was reported to be high. Although most people mentioned that the nuclear families are becoming more popular, the sample survey revealed that there are still a large number of joint

families. The number of family members even in nuclear families was more than 4 in most cases. The average family size among the affected families is 6.5, though a significant percentage (more than 30%) had more than 8 members. The following table presents the range of family members among the PAFs.

Table 6.3 *Family size*

No. of family members	No of PAFs*
0-4	36
5 to 7	60
8 to 10	30
More than 10	14

** These values are projected for 140 project-affected families*

In the project-affected villages, many nuclear families stayed in the same house as other members of the family, but were identified as ones having separate kitchens.

6.4 *EDUCATION*

The education levels among the PAPs varied from being illiterate to being graduates. As all three villages have at least a primary school, the literacy levels quite high among the young generation. Most of the elderly people were either illiterate or had not studied beyond class V. Most younger people had however, studied till class X at least. There were a few graduates (less than 10%) among the PAPs and between these two persons had completed post graduation.

6.5 *MIGRATION PATTERN*

Migration in the hills is a very common phenomenon as people generally move to the lower altitude regions during the winter season, when snow covers their fields. These people generally maintain two houses and in some cases even have land holdings in the two villages.

During the course of the sample survey, it was observed that in some villages like Hamta the men moved to the lower regions to find some kind of work, while women with the children remain in the village to look after the livestock. The village during these months is inhabited entirely by women and children. The women not only look after the livestock, they also involve themselves in weaving activity. While most of the weaving is done to meet their own needs, some women do weaving to enhance their family incomes.

6.6 *VULNERABILITY*

Vulnerability of families have been linked with the following factors:

- Women headed households
- Families with aged members above the age of 60
- Families with members who are mentally or physically challenged.
- Income levels below the poverty line.

8% (projected number is 11) of the affected families were below the poverty line (Rs 20,000 per annum ³). 18% (projected number is 25) of the families surveyed were women headed households. A similar percentage had at least 1 physically or mentally challenged person in the family. As many as 55% (projected number is 77) families had at least one person above the age of 60 years.

Many families showed more than one vulnerability indicator. 40% of the BPL households were headed by women. 20% of the BPL families had one handicapped member while 80% of them had at least 1 member above the age of 60 years. This clearly indicates that a link between vulnerability and poverty.

6.7 OCCUPATIONAL PROFILE

Agriculture is the predominant occupation among the project-affected families. Most people in the villages (and the PAFs as well) depend on agriculture and plantation for their livelihood. However, some of the PAFs with the smaller land holdings have secondary occupations like labour, dairy or petty business. The following table presents the %age of PAFs involved in different types of occupations.

Table 6.4 Occupational profile

Occupation	No of PAFs*
Agriculture	108
Plantation	135
Service	34
Business	18
Labour	31
Dairy	11
Others	9

* Family members were involved in more than 1 occupation.

6.8 LAND HOLDING

The landholding among the PAFs is quite varied. The land holding is also spread over many different parcels in some families. In some cases, people own land in more than one village. Most people with large landholdings mentioned that at least some of the land is left barren or uncultivated

The average land holding size among the project-affected families is slightly lower (8.87 *bighas* wherein 1 *bigha* is equivalent to .08 ha) than the average land holding (9.64 *bighas*) of the Kullu district. More than 35% of the PAFs surveyed had less than 5 *bighas* of land. The thriving tourism sector has hiked up land prices in the Manali area. The range of land holding owned by the PAFs is presented in the following table.

³ (3) The information was provided by the revenue department. In addition to the annual income, asset holding like two wheelers, television sets is also a criteria for declaring a family above poverty line.

Table 6. 5 **Land holdings**

Size of Land holding (in bighas*)	No of PAFs**
Less than 2	20
2.1 to 5	34
5.1 to 10	45
10.1 to 15	18
More than 15.1	23

* 1 *bigha* is equal to 809.28 sq m or 0.081 ha.

** These values are projected for 140 project-affected families

The smallest size of land holding is 1 *bigha* (0.081 ha) while the largest is 60 *bighas* (4.86 ha).

6.8.1 **Irrigation**

The irrigation in the area was generally used for rice crop while some also used it for wheat and mustard. Most farmers (about 85%) had irrigation facility in at least a part of their land holding. Source of irrigation was usually a stream in all the three villages, which had been channelised into irrigation channels. Most of the apple orchards did not have irrigation facility and were rain fed crops. The following table provides details of irrigation of the PAFs' land holdings.

Table 6. 6 **Status of irrigation**

Status of Irrigation	No of Land holdings
Yes	27
Partial	93
No	20

* These values are projected for 140 project-affected families

6.9 **INCOME LEVELS**

In all the three villages, most of the affected people pursued agriculture to meet their own domestic needs, while plantations were a source of income for most of them. Income levels of the families were arrived at by adding incomes from different sources like agriculture, plantation, business, service, labour etc. As it is difficult for most community members to assess the incomes from agriculture and plantation, hence, incomes were calculated on the basis of types of crops cultivated, market value of the crops, expenditures incurred for each crop. Similarly, for income from labour, the PAFs were asked about the kind of labour, average number of days when such work is available and average wage rate.

The table below presents percentage of families in different ranges of total family income per month.

Table 6. 7 **Total family incomes**

Income range	No of families*
Less than 2000	11
2001-4000	38
4001-6000	14
6001- 10000	20
10001-15000	25
More than 15000	32

* These values are projected for 140 project-affected families

The table above shows relatively high levels of income as compared to rural incomes in other states. However, it should be mentioned that incomes from agriculture and plantation were taken on the basis of good crops. As both agriculture and plantation depend heavily on suitable climatic conditions, the production is quite low in some years. For example, in the project-affected villages, the harvest in the last year was much better than the poor harvest of the previous three years. Even people who reported incomes above Rs 1,00,000 per annum during the survey mentioned that during bad years, they had to resort to taking out their children from the local schools in face of financial constraints.

6.9.1 *Income from the agriculture*

As mentioned earlier, most people pursue agriculture on subsistence basis. Most of them take two crops *Kharif* and *Rabi* every year. Due to the climatic conditions they are unable to take the third crop. Some of the common crops mentioned by the PAFs include rice, maize, mustard, wheat, barley, pulses (including *rajma* (kidney beans)).

Almost all the affected families were unable to specify the incomes from agriculture and at most could mention either the number of months the produce could sustain them, or the expenditure equivalent if they had to buy the same from the market.

Some of them cultivate some fodder crops, which they were not able to quantify in terms of money saved.

The following tables present the incomes of the PAFs from agriculture and percentage of income from agriculture to the total family income.

Table 6.8 **Income from agriculture per month**

Income range (in Rupees)	No of families*
0	32
1-500	38
501-1000	20
1001-2000	32
More than 2001	18

Table 6.9 *Income dependence on agriculture income*

Dependence	No of PAFs
Nil	32
1-15%	77
15-30%	11
More than 30%	20

6.9.2 *Plantation income*

Almost all the PAFs surveyed had plantations and were earning at least some income from the plantations. Many PAFs are largely dependent on plantations for their livelihood. Most of these PAFs had apple orchards while few of them also had few pear trees, although only the apple trees are being affected by the project. As with the agriculture, apple production depends heavily on favourable climatic conditions. People mentioned that only in the years of heavy snowfall could they expect a good harvest. The income from the harvest is further dependent on the size of the fruits, overall production in the area etc. While most people sell it to the middlemen, some sell it directly in the bigger markets (like Delhi) or give the entire plantation on contract. Those families that do not have sufficient support to undertake the management of crop harvest and its subsequent sale in the market usually contracted the crop. The contracts also act as a safeguard against a poor crop as the contracts are given before the fruiting season and the loss is entirely borne by the contractors.

The last year was reported to be a good year in terms of apple production after 3-4 successive years of poor crop. During 'bad years' it is even difficult to break even for most farmers. It was also mentioned that it takes as many as 10 years of care (including huge expenses) for the apple trees to mature and start bearing fruits.

The table below provides an overview of monthly income from the plantations.

Table 6.10 *Income from Plantation*

Income (in Rupees)	No of PAFs*
0	4
1 to 2000	2
2001 to 5000	47
5001 to 10000	32
10001-15000	14
More than 15001	22

** These values are projected for 140 project-affected families*

As mentioned earlier, most affected families depend on plantations for their livelihood. The following table presents the dependence on plantation for the total family income.

Table 6.11 *Dependence on income from Plantation*

Dependence (in %age)	No of PAFs
0	4
1-15%	0
15-30%	11

Dependence (in %age)	No of PAFs
30-50%	18
50-75%	44
75-99%	52
100%	11

6.10

PEOPLE'S VOICE

The expectations for development in all the three villages, though almost similar, varied in terms of priorities. This sub section presents the communities' priorities village wise.

Aleo

- Consistent/ improved power supply in winter
- Construction of bathrooms
- Community toilets that can either be maintained by the projects or GP. People would also be willing to contribute in their maintenance.

Prini

- Improvement in agricultural practices through support from government
- Improved variety of cattle and goats
- At least one dispensary in the village
- Community toilets

Jagatsukh

- Employment opportunities
- Improved education facilities
- Access to better and regular irrigation facilities
- Hospital
- Better roads
- Street lights
- Improved drainage facilities
- Sewerage

6.10.1

Expectations from the Project

People in Aleo were mostly positive about the project, as the road development is expected to present increased economic opportunities. However, in Jagsatsukh and Prini people were apprehensive about the project activities in their village as they were losing productive lands in large chunks. The community expressed its apprehension about the proposed residential colony and the idea of a large number of outsiders living in the vicinity of the village. Some people who stand to lose a large part of their landholding and hence their livelihood, expressed their feelings quite strongly.

When asked about the expectations from the Project, other than getting a fair compensation, employment topped the list, especially for those families losing a part of the land. Some of the expectations from the project are presented below.

Aleo

- Employment
- Improvement of existing school building, development of a middle school
- Street lights
- Increased opportunities for tourism through road development

Prini

- Employment
- School. It was suggested that the current school building could be used for locating a PHC while the school could be shifted to a new building located in a quieter area.

A local meeting place (specifically a small stadium for Panchayat and village level meetings)

Jagatsukh

The GP along with community members in Jagatsukh insisted that they would like to discuss it with the project proponents. They have already sent 2 GP resolutions to the project requesting them to come and discuss the project. They expressed their displeasure at not receiving any response from the project authorities. It was also mentioned that the GP might be willing to provide Panchayat land instead of private land, which is to be acquired, as it is the most productive land in the village.