

# Resettlement Planning Document

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## IND: Uttaranchal Power Sector Development Plan

**Prepared by the Uttaranchal Energy and Irrigation Department  
Government of Uttaranchal  
India for the Asian Development Bank (ADB)**

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## LIST OF ACRONYMS

ADB	-	Asian Development Bank (“Bank”)
AIDS	-	Acquired Immune Deficiency Syndrome
APs	-	Affected Persons
BP	-	Bank Procedure
BPL	-	Below Poverty Line
CBO	-	Community-based organization
DPR	-	Detailed Project Report
EA	-	Executing Agency
EP	-	Entitled Persons
ESD	-	Environment and Social Division
FGD	-	Focused Group Discussion
GRC	-	Grievance redress committee
HA	-	Hectare
HIV	-	Human Immune Virus
IA	-	Implementing Agency
IIT	-	Indian Institute of Technology
IPDF	-	Indigenous Peoples Development Framework
IPDP	-	Indigenous Peoples Development Plan
ISA	-	Initial social assessment
LA	-	Land Acquisition
LAO	-	Land Acquisition Officer
M&E	-	Monitoring and Evaluation
MRM	-	Management Review Meeting
NGO	-	Non-Governmental Organization
OBC	-	Other Backward Classes
OM	-	Operational Manual
OP	-	Operational Policies
PH	-	Physically Handicapped
PIU	-	Project Implementation Unit
PPTA	-	Project Preparatory Technical Assistance
PTCUL	-	Power Transmission Corporation of Uttaranchal
RE	-	Resettlement Expert
RF	-	Resettlement Framework
RP	-	Resettlement Plan
R&R	-	Rehabilitation and Resettlement

RU	-	Resettlement Unit
SC	-	Scheduled Caste
SHP	-	Small Hydro Plant
SIA	-	Social Impact Assessment
SS	-	Sub Station
ST	-	Scheduled Tribe
TA	-	Technical Assistance
TOR	-	Terms of Reference
WHH	-	Women Headed Household
UEID	-	Uttaranchal Energy and Irrigation Department
UJVNL	-	Uttaranchal Jal Vidyut Nigam Limited

## Executive Summary

### Introduction

1. The proposed Project will be provided under a sector lending approach over a span of 5 years. The Project will have three components: transmission, small hydropower, and institutional strengthening.
2. Component A: Transmission System: The Phase I transmission system expansion includes 790 kilometer (km) of 400 kilovolt (kV) lines, 100 km of 220 kV lines, and 60 km of 132 kV lines, plus associated substations and auxiliary equipment. The total proposed investment is approximately \$310 million (Rs. 14.26 billion). The proposed physical investments are the most urgent components of the Uttaranchal power sector plan. Asian Development Bank (ADB) financing of up to \$250 million is proposed for this investment.
3. Component B: Small Hydropower: This component will support expansion of hydropower generating capacity, covering grid-connected projects ranging from 3 MW to 25 MW. An initial list of 6 projects totaling about 35 MW has been proposed. Preparatory work on these projects is underway, including development of technical and economic feasibility; and environmental, social and poverty reduction impact analysis. UJVNL also will develop a hydro-meteorological river basin monitoring and telemetry network to support optimized generating operations, which will be partly financed by the Project. ADB financing of up to \$45 million is proposed for this component.
4. Rehabilitation, modernization, and upgrading (RMU) on existing hydropower plants (e.g. the 144 MW Chilla powerhouse near Hardiwar) is also within the scope of ADB assistance. UJVNL has identified 7 major RMU investments totaling about \$100 million. ADB will consider supporting the RMU projects pending Government concurrence.
5. Component C: Institutional Strengthening: The third component of the ensuing loan project will support developing and strengthening institutional framework within Uttaranchal government and implementing agencies (IAs) to undertake power system expansion activities in a cost-effective manner. This will include (i) training of executing agency (EA) and IA staff in all aspects of transmission, generation, distribution, maintenance and rehabilitation; and (ii) initial design of a power trading program. ADB financing of up to \$5 million is proposed for this component.
6. Core subprojects are composed of: (i) Alaknanda Basin transmission system, (ii) Bhagirathi Basin transmission system, (iii) 4 small hydropower plants (SHP), and (iv) one RMU. Detailed appraisal of core subprojects is required prior to loan approval. During implementation, additional subprojects will be appraised by the executing agency (EA), and endorsed by ADB in accordance with established project administration procedures.
7. Land acquisition and resettlement impacts of core subprojects have been assessed and are documented in a resettlement plan (RP). Based on the RP, Component A will require 24.06 hectares (ha) of permanent land acquisition which includes 8.03 ha of private agricultural land and 16.03 ha of government land. 179.21 ha of temporary acquisition<sup>1</sup> will

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<sup>1</sup> Of 179 ha temporarily acquired, an estimated 113 ha of agricultural land will be compensated through lost agricultural income. Calculations have been made on the following assumptions: i) towers measure 10x10 m (footings 1x1 m); ii) buffer area around the towers 30x30 m; iii) stringing corridor (ROW) 6 m; and iv) 2.5 towers/km. In Uttaranchal, 49% of the land is either forest or government owned. Of the remaining 51%, 64% is used for productive activities (agriculture and pasture). Calculations of impacts of transmission lines were made upon these assumptions.

be required for component A. Component B will require 13.99<sup>2</sup> ha of permanent acquisition which includes 3.12 ha of private agricultural land and 10.87 ha of government land. There will be no temporary acquisition for component B. Part C will not involve land acquisition and resettlement. Land acquisition and resettlement from core subprojects will result in impacts to 25 households on a permanent basis, and 229 on a temporary basis. There will be no loss of structures for any of the components. Details are in Table S.1. The updated RP will be submitted for ADB review and approval prior to award of civil contracts.

**Table S.1: Land Acquisition and Affected Households by Subproject**

Component	Permanent Land Acquisition (ha)		Affected Households <sup>3</sup>	Temporary Land Acquisition (ha)	Affected Households
	Private	Government/ Forest Land			
<b>I. A. Core Subprojects</b>					
1. Alaknanda Basin Transmission system					
a. Towers	0.02	0.02		36.43	47
b. Transmission lines	0	0	0	89.87	115
c. Substations					
Kuwaripaass s/s	8	0	2		
Srinagar	0	16	0		
2. Bhagirati Basin Transmission system					
a. Towers	0.01	0.01		15.26	20
b. Transmission lines	0	0	0	37.65	47
c. Substations	0	0	0	0	0
<b>II. B. Core Subprojects</b>					
3. Kaliganga-I SHP	0	3.41	0	0	0
4. Kaliganga-II SHP	2.35	0.76	19	0	0
5. Madhyamaheswar SHP	0.77	2	4	0	0
6. Kaldigag	0	4.7	0	0	0
<b>III. C. Core Sub-Projects</b>					
7. Institutional Strengthening	NA		NA	NA	NA
<b>TOTAL</b>	<b>11.15</b>	<b>26.9</b>	<b>25</b>	<b>179.21</b>	<b>229</b>

### Resettlement Impact

8. There will be a total of 25 households to be affected due to the permanent acquisition and 145 affected persons which include 78 males and 67 females. There are 19 vulnerable households which include 1 SC, 5 women headed, 4 BPL and 10 severely affected households. No case of tribal households is found in the project area. There will be no commercial forest and structures to be affected in the sub core project. All the people preferred the cash compensation. The buffer zone around the towers will have no restrictions of use. Land underneath the towers and the stringing corridor will have

<sup>2</sup> The average area acquired for the SHPs is 3.5 ha, of which 0.15 ha for the construction of the plants, and the rest for associated facilities (staff housing, and safety buffer zone).

<sup>3</sup> The average household size in Uttaranchal is 5.29, and the average land tenure is 0.5 ha.

restrictions. In particular, owners will be allowed to plant crops and small trees, but restrictions will apply to tall trees and buildings. Concerning the footings of the towers (1x1 m per foot, in case of a 400 kV line, smaller for lower voltages), the ownership of the land will not change, although, the concerned area will not be accessible to the owners. While crop loss is expected to be one season (3 months), APs will be provided 1 year of compensation (3 crops) to cover the permanent loss of access to the area covered by the footings.

### **Indigenous People and Other Social Concern**

9. The percentage of schedule caste and scheduled tribe population in Uttaranchal compared to the total population is 17.87 and 3.02 respectively. There are five major tribal groups in the state of Uttaranchal. These are the hill tribes but very much linked with the mainstream society. The five major tribes are Bhotia, Buska, Jannasari, Raji and Tharu. However, based on the survey, it is derived that none of the tribal people will be affected by the land acquisition in the core sub project

10. Women in Uttaranchal are largely involved in domestic work. Women in the rural area of Uttaranchal take part in the agricultural activities also. However, they have a very low economic participation rate (i.e., productive or gainful employment). During RP implementation, NGOs will make sure that women actually take part in issuing identity cards, opening bank accounts, receiving compensation by cheque in their names. This will further widen the perspective of participation by the women in project implementation. The implementing agencies will provide training for upgrading women's skills for alternative livelihoods and income restoration. The case of child labour is not prevalent in the project area.

11. No case of HIV/AIDS and other sexually transmitted diseases were noted during the surveys and consultations. During construction and operation, especially near construction camps and other sensitive locations, there may be a risk of these communicable diseases. The NGOs will work closely with the relevant state agencies and other existing networks dedicated to prevention work to further build awareness programs in the project area. HIV/AIDS awareness brochures will also be developed for distribution to local communities.

### **Resettlement Principles, Policy Framework and Entitlement Matrix**

12. The entitlement matrix is prepared based on many policies, i.e. National Policy on Resettlement and Rehabilitation, Land Acquisition Act of India, Tehri Rehabilitation Policy, Powergrid's policy on Rehabilitation and Resettlement, Indian Telegraph Act and ADB's Policy on Involuntary Resettlement. The Entitlement Matrix provides category-wise details regarding the entitlements. **Table S.2** presents the entitlement matrix for the project:

**Table S.2: Entitlement Matrix**

Type of Losses	Definition of APs	Entitlement	Details
1. Land			
Loss of agricultural land	Titled owners and affected persons (APs) with traditional land rights	Provision of equivalent land within the same village If land is unavailable, compensation at market/replacement value Resettlement assistance Assistance to vulnerable APs (female-headed households, scheduled tribal households, scheduled caste households, poor households, and households headed by physically handicapped or disabled persons)	Alternative land Compensation based on the LAA (inclusive of 30% solatium and 12% interest) If the market/replacement value of land as determined by the resettlement committee (RC) is more than the above rate, the difference will be provided in the form of a grant by the Project directly to APs APs will be refunded transaction costs (documentary stamps, registration costs, etc.) if replacement land is purchased within one year of compensation Resettlement assistance equivalent to 365 days of wage per household Vulnerable households will be provided with all the above assistance and will be prioritized in land-for-land alternative. If land-for-land is unavailable, an additional relocation allowance of 500 days of wage per household will be provided.
	Individual tenant, sharecropper, or leaseholder	Reimbursement for unexpired lease	Lease rates will be determined by the RC based on consultation with landowners
Temporary loss of agricultural land	Farming households, sharecroppers, tenants, non-titled households	Notice to harvest standing crops  Compensation at market value  Restoration	Compensation at market value for the equivalent of 9 months of crop income (3 seasons) <sup>4</sup>
Loss of access to forestland	Affected household with forestland access	Provision of alternative facilities and technical assistance	Households losing access to forestland for their basic needs such as fuel, fodder, etc. will be provided access to alternative forest land. Communities will be involved in community social forestry schemes coordinated by the Department of Forests. Vulnerable APs will be provided assistance by the Project for alternative sources of fuel, fodder, etc. which will minimize their traditional dependency on forests.
2. Income			
Income from standing crops, rent or sharecropping	Farming households, sharecroppers and tenants	Notice to harvest standing crops  Compensation at market value	Compensation at market value for crops An assistance grant equivalent to Rs. 5,000 for the purchase of agricultural inputs for the next season Preferential employment in the Project will be provided to vulnerable households.
Income from affected business and wage earnings	Affected individuals	Compensation and income restoration	Compensation equivalent to 625 days of minimum wages preferably in the form of income generating schemes or in productive units in the joint name of spouses Needs-based short term training on

<sup>4</sup> While crop loss is expected to be one season (3 months), APs will be provided 1 year of compensation (3 crops) to cover the permanent loss of access to the area covered by the footings.

			developing entrepreneurial skills Preferential employment in the Project will be provided to vulnerable households
Income from trees or perennial crops	Affected households	Compensation at market value	Perennial crops (including fruit bearing trees) will be compensated based on 8 years of income at market value determined by the Horticulture Department  Trees will be compensated at 3-5 times the market value determined by the Forest Department for timber species, and by the Horticulture Department for other trees
Income from forest products and grazing land	Affected households	Lump sum compensation	Lump sum compensation for lost income for 3 months based on income from the forest/ grazing land determined by the RC in consultation with APs.
3. Community and Cultural Sites	Affected households or individuals	Conservation, protection and compensatory replacement (Schools, community centers, markets, health centers, shrines, other religious sites, places of worship, burial sites, rights to food, medicine, and natural resources)	Impacts will be documented and mitigated based on the principles agreed upon in the resettlement framework. Cultural properties will be conserved through special measures such as relocation in consultation with the community.
5. Other Impacts Not Identified	Affected households or individuals	Additional assistance	Unforeseen impacts will be documented and mitigated based on the principles agreed upon in the resettlement framework

Note: compensation to sharecroppers, tenants, or leaseholders will take into account applicable agreements between them and the land owner.

### Public Consultation and Participation

13. Public consultations in the project area were held at village, Tehsil and District and state level. There are various methodologies adopted for carrying out public consultations in this project such as : Disseminating information and requesting villagers to attend the public consultation meetings at all substations and small hydropower substations site; Sharing the opinions and preferences of the APs; Involving the APs and all other stake holders in decision-making including RP implementation; walk-through / informal consultation along the transmission lines. Key findings have been noted in the RP. Mechanisms for continued consultation have been developed and disclosure of RP (and Resettlement Framework), as advised, has been done by May 25<sup>th</sup>, 2005. The Hindi version of the above mentioned documents were distributed in various levels such as Village heads, Panchayat, Block, Tehasil, district and state. The translated version of RP and RF was again made into pamphlets (257 pamphlets) and distributed to the APs.

### Institutional Framework and Grievance Redress Mechanism

14. UEID will be the EA for the Project, with overall responsibility for project management. PTCUL and UJVNL will be IAs for the transmission and small hydropower components, respectively, with PTCUL retaining the lead role of Project Management Office (PMO). The PMO will be the IA for the institutional strengthening component. The current PTCUL project team will become a formal PMO with at least 1 representative of UJVNL. PMO expertise include engineering planning and design, financial management, procurement and contracts management, and environmental and social impacts management. The PMO members should be committed to serve throughout the project

implementation period. There will be three Project Implementation Units (PIUs) for different components.

15. PTCUL, being a newly created setup, does not have any social and environment division of its own. However, the PMO will form an environment and social department (ESD) in order to maintain the compliance with ADB policies and procedure during the implementation. For subproject RPs, the PMO will have overall coordination, planning, implementation, and financing responsibilities. The department will have a full-time resettlement specialist for the duration of the Project to head the Department's Resettlement Unit (RU) will be accountable, and ensure timely and effective implementation and supervision of RPs. The RU resettlement specialist and staff, and the PIU resettlement specialist and staff will be provided the necessary capacity building training under the Project's Component C. The PMO will coordinate PIUs in subproject RP related activities, and each PIU will have at least one full-time resettlement specialist for the duration of resettlement activities, with an academic background in social sciences, and relevant skills and experience in resettlement issues. The resettlement specialist will subsequently be engaged on a part-time basis for follow-up activities, particularly monitoring and grievance redress. The PIU will maintain all databases, work closely with APs and other stakeholders. Based on regularly updated PIU data, a central database will also be maintained by the RU.

16. There is a need for an efficient grievance redress mechanism, which will assist the APs in resolving queries and complaints. A Grievance Redress Committee (GRC) will be formed to ensure APs grievances are addressed and facilitate timely project implementation. The GRC will have representatives from APs particularly vulnerable APs, local-level IA/PIU staff, local government, respected citizens in diverse professions, NGOs, CBOs, and local civil and interest groups. The head of a locally elected body will head the GRC. The GRC will meet every 2 weeks. The main responsibilities of the GRC are to: (i) provide support to APs on problems arising from land/property acquisition; (ii) record AP grievances, categorize, and prioritize grievances and resolve them within 2 weeks; (iii) immediately inform the PMO of serious cases; and (iv) report to APs on developments regarding their grievances and decisions of the GRC and the PMO. Other than disputes relating to ownership rights under the court of law, GRC will review grievances involving all resettlement benefits, compensation, relocation, and other assistance. Detailed investigation will be undertaken which may involve field investigation with the concerned APs. Grievances will be redressed within 2 weeks from the date of lodging the complaints. The GRCs will continue to function during the life of the Project including the defects liability period.

### **Income Restoration Measures**

17. To restore and enhance the economic conditions of the APs, certain income generation and income restoration programs are incorporated in the RP. Provision of employment to the local people during the construction phase will enable them to benefit from the project. The R&R framework of the project provides that the loss of livelihood which would mainly result from the loss of land will be compensated by way of Short term assistance through allowances / assistance grants and preference in providing employment through the contractors for project activity especially to those belonging to vulnerable groups. Alternative village income sources such as village-based industries will be promoted by the project in association with local NGOs/CBOs. Need based short term training will be provided to develop entrepreneurial skills.

### **Resettlement and Rehabilitation Budget**

18. Based on data collected during the survey, the R&R budget has been worked out and provided for the detailed project cost. Besides the cost for land, other allowances for

different categories have been fixed. In addition, APs will be entitled to R&R assistance according to the entitlement matrix. The total cost for the resettlement and RP implementation for the core sub project in Bhagirathi and Alakananda basin will be Rs. 46.90 million (US \$1.1 Million).

### **Implementation Schedule**

19. Implementation of RP consists primarily the aspect of Land Acquisition. As per the conditions in the technical construction works contracts, land free from all encumbrances is to be made available to the contractors in a phased manner for each contract package. Time frame for implementation of the RP will be synchronized with project implementation in a way that commencement and progress of civil works is not adversely affected. The period for implementation of RP has been taken as a continuous process and will be completed in a phased manner for over a period of six years. However, monitoring and evaluation will continue beyond the period of implementation. Planning, surveying, assessing, policy development, institution identification, AP participation, income restoration and implementation are typical RP related activities, which have been considered. However, the sequence may change or delays may occur due to circumstances beyond the control of the Project.

### **Monitoring, Evaluation and Reporting**

20. Monitoring and Evaluation (M&E) are critical activities in involuntary resettlement in order to ameliorate problems faced by the APs and to develop solutions immediately. Monitoring is a periodic assessment of planned activities providing midway inputs facilitates changes and gives necessary feedback of activities and the directions in which they are going, whereas evaluation is an activity aimed at assessing whether the activities have actually achieved their intended goals and purposes. The M&E mechanism will measure project performance and fulfillment of the project objectives. RP implementation for the project will be closely monitored by the PMO through its Resettlement Unit and will be at the helm of all activities related to the RP implementation. Components of monitoring will include performance monitoring, impact monitoring and external evaluation. Two broad categories of indicators will be monitored during the project are: (i) input and output indicators and (ii) outcome and impact indicators.

## CHAPTER- 1: INTRODUCTION

### 1.1. Project Description

The proposed Project will be provided under a sector lending approach over a span of 5 years. The Project will have three components: transmission, small hydropower, and institutional strengthening.

**Component A: Transmission System.** The Phase I transmission system expansion includes 790 kilometer (km) of 400 kilovolt (kV) lines, 100 km of 220 kV lines, and 60 km of 132 kV lines, plus associated substations and auxiliary equipment. The total proposed investment is approximately \$310 million (Rs. 14.26 billion). The proposed physical investments are the most urgent components of the Uttaranchal power sector plan. ADB financing of up to \$250 million is proposed for this investment.

**Component B: Small Hydropower.** This component will support expansion of hydropower generating capacity, covering grid-connected projects ranging from 3 MW to 25 MW. An initial list of 6 projects totaling about 35 MW has been proposed. Preparatory work on these projects is underway, including development of technical and economic feasibility; and environmental, social and poverty reduction impact analysis. UJVNL also will develop a hydro-meteorological river basin monitoring and telemetry network to support optimized generating operations, which will be partly financed by the Project. ADB financing of up to \$45 million is proposed for this component.

Rehabilitation, modernization, and upgrading (RMU) on existing hydropower plants (e.g. the 144 MW Chilla powerhouse near Haridwar) is also within the scope of ADB assistance. UJVNL has identified 7 major RMU investments totaling about \$100 million. ADB will consider supporting the RMU projects pending Government concurrence.

**Component C: Institutional Strengthening.** The third component of the ensuing loan project will support developing and strengthening institutional framework within Uttaranchal government and implementing agencies (IAs) to undertake power system expansion activities in a cost-effective manner. This will include (i) training of executing agency (EA) and IA staff in all aspects of transmission, generation, distribution, maintenance and rehabilitation; and (ii) initial design of a power trading program. ADB financing of up to \$5 million is proposed for this component.

### 1.2 Project Areas and Characteristics for the core sub project

Core subprojects are composed of: (i) Alaknanda Basin transmission system, (ii) Bhagirathi Basin transmission system, (iii) 4 small hydropower plants (SHP), and (iv) one RMU. Detailed appraisal of core subprojects is required prior to loan approval. During implementation, additional subprojects will be appraised by the executing agency (EA), and endorsed by ADB in accordance with established project administration procedures. Table: 1.1 shows the details about the location and capacity of the substations and small hydro plants for the core sub project.

**Table: 1.1 Sub Stations and Small hydro**

SI No	Name of SS/ SHP	Capacity	Village	District
1	Kuwaripaas SS	400	Ravigram	Chamoli
2	Srinagar SS	400	Khandukhal	Pauri
3	Kaliganga-I SHP	2X 2000 KW	Jaltala and Khunnu (Kotimaheswari)	Rudraprayag
4	Kaliganga-II SHP	2X3000KW	Khunnu (Kotimaheswari) and Kobilta	Rudraprayag
5	Madhyamaheswar SHP	2X5000KW	Girriyagaon and Chuni	Rudraprayag
6	Kaldigad SHP	2X4500KW	Sangam Chatti	Uttarkashi

### 1.3 Project Impacts on Land Acquisition

Development projects entail a variety of positive and negative impacts. The prime impact of the core subject will be on the land acquisition. Land acquisition and resettlement impacts of core subprojects have been assessed and documented in a resettlement plan (RP). Based on the RP, Component A will require 24.06 hectares (ha) of permanent land acquisition which includes 8.03 ha of private agricultural land and 16.03 ha of government land. 179.21 ha of temporary acquisition.<sup>5</sup> Will be required for component A. Component B will require 13.99 ha of permanent acquisition which includes 3.12 ha of private agricultural land and 10.87 ha of government land. There will be no temporary acquisition for component B. Part C will not involve land acquisition and resettlement. Land acquisition and resettlement from core subprojects will result in impacts to 25 households on a permanent basis, and 229 on a temporary basis. There will be no loss of structures for any of the components. The updated RP will be submitted for ADB review and approval prior to award of civil contracts. Details are in Table 1.2.

**Table 1.2: Land Acquisition and Affected Households by Subproject**

Component	Permanent Land Acquisition (ha)		Affected Households <sup>6</sup>	Temporary Land Acquisition (ha)	Affected Households
	Private	Government/ Forest Land			
<b>A. Core Subprojects</b>					
1. Alaknanda Basin Transmission system					
a. Towers	0.02 <sup>7</sup>	0.02		36.43	47
b. Transmission lines	0	0	0	89.87	115
c. Substations					
Kuwaripaass s/s	8	0	2		
Srinagar	0	16	0		
2. Bhagirati Basin Transmission system					
a. Towers	0.01	0.01		15.26	20
b. Transmission lines	0	0	0	37.65	47
c. Substations	0	0	0	0	0
<b>B. Core Subprojects</b>					
3. Kaliganga-I SHP	0	3.41	0	0	0
4. Kaliganga-II SHP	2.35	0.76	19	0	0

<sup>5</sup> Of 179 ha temporarily acquired, an estimated 113 ha of agricultural land will be compensated through lost agricultural income. Calculations have been made on the following assumptions: i) towers measure 10x10 m (footings 1x1 m); ii) buffer area around the towers 30x30 m; iii) stringing corridor (ROW) 6 m; and iv) 2.5 towers/km. In Uttaranchal, 49% of the land is either forest or government owned. Of the remaining 51%, 64% is used for productive activities (agriculture and pasture). Calculations of impacts of transmission lines were made upon these assumptions.

<sup>6</sup> The average household size in Uttaranchal is 5.29, and the average land tenure is 0.5 ha.

<sup>7</sup> Footing of the towers will not change ownership but the compensation will be such to cover long-term loss.

Component	Permanent Land Acquisition (ha)		Affected Households <sup>6</sup>	Temporary Land Acquisition (ha)	Affected Households
	Private	Government/ Forest Land			
5. Madhyamaheswar SHP	0.77	2	4	0	0
6. Kaldigag	0	4.7	0	0	0
<b>C. Core Sub-Projects</b>					
7. Institutional Strengthening	NA		NA	NA	NA
<b>TOTAL</b>	<b>11.15</b>	<b>26.9</b>	<b>25</b>	<b>179.21</b>	<b>229</b>

Source: PTCUL and UJVNL

#### 1.4 Status of Land Acquisition

The land will be of private as well as government and forest land. Executive agency has already identified the sites for land acquisition and the amount of land to be acquired for each component. Land acquisition process for some substations and SHPs has already been done on a departmental transfer basis. In some cases the land is not required to be acquired which is primarily government land. The status of the land acquisition on different components is given below which shows that certain part of the land acquisition has already been in the process. Table 1.2: summarizes a brief about the status of land.

**Table: 1.2 Status of Land Acquisition**

SI No	Name of the Sub Stations/ SHPs	Status of Land Acquisition
1	Kuwaripaas Substation	To be Acquired (Private Land)
3	Srinagar Substation	EA land
4	Kaliganga-I SHP	To be Acquired (Government Land)
5	Kaliganga-II SHP	To be Acquired (Private Land)
6	Madhyamaheswar SHP	To be Acquired (Private Land)
7	Kaldigad SHP	To be Acquired (Government Land)

Source: PTCUL and UJVNL

#### 1.5 Steps to Minimize Resettlement

During the feasibility and designing of the project, adequate precautionary measures have been taken by the executive agencies and also by the DPR consultants (Powergrid and IIT Roorkee) in order to avoid any adverse social impact. This has been done with proper consultation with the engineering team as well as with the local people. Suitable suggestions from the local people have been incorporated in the design which primarily focused on the issues related to least cost, social and environment viability of the project. Same has already been accepted by the ADB team and the reports are placed in the website of the PTCUL.

#### 1.6 Objectives of the Resettlement Plan

The primary objectives of this Resettlement Plan (RP) are to mitigate the adverse impacts of the project and to assist the affected persons (APs) in resettlement and restoration of their income and livelihoods. The RP is based on the general findings of the land holders' surveys, field visits, and meetings with various project-affected persons and other stakeholders in the project area. This RP complies with ADB policy on *Involuntary Resettlement* (1995), *Handbook on Resettlement: A Guide to Good Practice* (1998), *Policy on Indigenous Peoples* (1999) and other social safeguard policies designed to protect the rights of the affected persons and communities.

This document identifies and addresses the following issues:

- (i) Type and extent of loss of assets, including land and houses;

- (ii) Type and extent of loss of livelihood or income opportunities;
- (iii) Collective losses, such as common property resources and social infrastructure;
- (iv) Entitlement matrix and provisions for suitable compensation, assistance and other trainings for the income restoration
- (v) Institutional framework for the implementation of the plan, including monitoring and evaluation.

The RP also addresses other interrelated socio-cultural impacts – for example indigenous/vulnerable groups, issues related to safety, health with special reference to HIV/AIDS, Child labour etc.. In sum, the RP has taken an integrated and holistic approach to dealing with project impacts and aims at rebuilding lives and livelihoods of those affected as quickly as possible. It is designed to involve all stakeholders, including communities and other user groups, in the planning and implementation of the project.

## **CHAPTER – 2: RESETTLEMENT IMPACTS**

This chapter presents an analysis of the project impacts based on the land holders' house hold survey conducted during the month of March 2005 and also with the feedback collected from various stake holders. The purpose of the analysis is to develop profiles of APs and communities affected by the project and to identify the nature and types of losses. The following section briefly describes the methods used to ascertain various types of impacts.

### **2.1 Collection of Land Details**

A structured questionnaire (**Annexure: 2.1**) was developed to collect the details of the land holdings, their ownership and social background. The project sites along with the engineering designs were identified at the respective village sites with the help of the village maps. Accordingly, the details of the land owners losing the land were collected by the help of the local revenue officers. A team of engineering surveyors, revenue officers and trained social enumerators were composed to do the field survey. The raw data collected from the site were then computerized and a subsequent analysis was made.

### **2.2 Household Surveys**

After collection of the details of the land losers, the team of social enumerators was sent to the field to conduct the social survey of the households of those to be affected by the land acquisition. The objective of the survey was to generate an inventory of social impacts on the people affected by the project, social profile of the affected people, poverty and vulnerability status, their views about the project and options for rehabilitation and resettlement. Structured questionnaire (**Annexure: 2.2**) was developed for the land losers and was administered in the field to collect the data. However, the validity and authenticity of the ownership and the legal issues will be verified and updated during the time of RP implementation. NGOs will be involved in updating the census survey and finalization of the actual number of affected person with the proper coordination from the PMU.

### **2.3 Profile of APs**

The Land Holders' survey revealed a wide range of data including number of affected persons, social category, loss of assets, income, ownership pattern, vulnerability and preference for compensation etc. The database provides a detailed picture of the social and economic conditions and the likely impact that the people may have to sustain due to the project. A selected set of socioeconomic information is presented in the following sections to establish a profile of the affected people and communities.

### 2.3.1 Number of Affected Persons

There will be 25 households to be affected by the permanent land acquisition. The names of project affected land owners are listed in **Annexure: 2.3**. A total of 145 affected persons will be there due to the land acquisition. The details of affected households and APs for the substations and small hydro power plants are summarized in **Table: 2.1**.

**Table: 2.1 Project Affected Households and APs**

Sl No	Particulars	No of Households	No of Affected Persons		
			Male	Female	Total
1	Kuwaripaas SS	2	7	6	13
2	Srinagar SS	0	0	0	0
3	Kaliganga-I SHP	0	0	0	0
4	Kaliganga-II SHP	19	57	52	109
5	Madhyamaheswar SHP	4	14	9	23
6	Kaldigad SHP	0	0	0	0
7	Total	25	78	67	145

Source: Primary Household Survey of the Land holders, Mar 2005

### 2.3.2 Socially Vulnerable Groups

Based on the household survey, a social profile has been outlined for the understanding of the project area. The survey is limited to only titleholders of the land since there is no case of encroachers and squatters. The population belonging to: below the poverty line (BPL), scheduled castes (SC), scheduled tribes (ST), women-headed households (WHH) and households losing more than 10% of the productive assets are considered as socially vulnerable groups and thus need special consideration so that they can benefit from the project. There are 19 households belong to the socially vulnerable category. **Table: 2.2** presents the break ups of socially vulnerable groups in the core sub project area.

**Table: 2.2 Socially Vulnerable Groups**

Sl No	Particulars	SC	ST	WHH	PH	BPL	Severity	Total
1	Kuwaripaas SS	1	0	0	0	2	0	5
2	Srinagar SS	0	0	0	0	0	0	0
3	Kaliganga-I SHP	0	0	0	0	0	0	0
4	Kaliganga-II SHP	0	0	5	0	2	8	15
5	Madhyamaheswar SHP	0	0	0	0	0	1	1
6	Kaldigad SHP	0	0	0	0	0	0	0
7	TOTAL	1	0	5	0	4	9	19

Source: Primary Household Survey of the Land holders, Mar 2005

### 2.3.3 Ownership/Tenure Status of APs

The survey is based on the privately owned land holders. Therefore, land is owned by the people and almost all the agricultural land is privately owned. Agriculture sometimes involves agricultural labour, sharecropper or tenants. In the present project there is no labour, sharecroppers and tenants. **Table:2.3** describes the details about the ownership status.

**Table: 2.3 Ownership Status**

Sl No	Particulars	Private	Government	Religious	Community	Others	Total
1	Kuwaripaas SS	2	0	0	0	0	2
2	Srinagar SS	0	0	0	0	0	0
3	Kaliganga-I SHP	0	0	0	0	0	0
4	Kaliganga-II SHP	19	0	0	0	0	19
5	Madhyamaheswar SHP	4	0	0	0	0	4
6	Kaldigad SHP	0	0	0	0	0	0
7	TOTAL	25	0	0	0	0	25

Source: Primary Household Survey of the Land holders, Mar 2005

### 2.3.4 Type of Land

Attention was paid to gather a rough idea about the typology of land. The household survey revealed that the affected land is of non irrigated type. Out of 25 households surveyed, it is found that all the land to be acquired is non irrigated in nature. A brief description about the type of land of the land loser households is given Table: 2.4

**Table: 2:4 Type of Land**

Sl No	Particulars	Irrigated	Non Irrigated	Barren	Fallow	Forest	Total
1	Kuwaripaas SS	0	2	0	0	0	2
2	Srinagar SS	0	0	0	0	0	0
3	Kaliganga-I SHP	0	0	0	0	0	0
4	Kaliganga-II SHP	0	19	0	0	0	19
5	Madhyamaheswar SHP	0	4	0	0	0	4
6	Kaldigad SHP	0	0	0	0	0	0
7	TOTAL	0	25	0	0	0	25

Source: Primary Household Survey of the Land holders, Mar 2005

### 2.3.5 Use of Land

According to the household survey, it is noted that all the households use their land for cultivation purpose. A brief description about the use of land by the affected households is given Table: 2.5

**Table: 2:5 Use of Land**

Sl No	Particulars	Cultivation	Orchard	Residential	Commercial	Forestation	Others	No Use	Total
1	Kuwaripaas SS	2	0	0	0	0	0	0	2
2	Srinagar SS	0	0	0	0	0	0	0	0
3	Kaliganga-I SHP	0	0	0	0	0	0	0	0
4	Kaliganga-II SHP	19	0	0	0	0	0	0	19
5	Madhyamaheswar SHP	4	0	0	0	0	0	0	4
6	Kaldigad SHP	0	0	0	0	0	0	0	0
7	TOTAL	25	0	0	0	0	0	0	25

Source: Primary Household Survey of the Land holders, Mar 2005

### 2.3.6 Other Assets

The proposed land acquisition for sub stations and small hydro will not have any impact on trees or structures as has been noted from the survey. However, the transmission line components will require 906 numbers of trees to be cut which is calculated on certain

assessment and the cost is accommodated in the budget. Table: 2.6 describe the details about other assets.

**Table: 2:6 Other Assets**

SI No	Particulars	Trees	Structures	Total
1	Kuwaripaas SS	0	0	0
2	Srinagar SS	0	0	0
3	Kaliganga-I SHP	0	0	0
4	Kaliganga-II SHP	0	0	0
5	Madhyamaheswar SHP	0	0	0
6	Kaldigad SHP	0	0	0
7	TOTAL	0	0	0

Source: Primary Household Survey of the Land holders, Mar 2005

### 2.3.7 Compensation Options

The compensation options as suggested by the APs are presented in Table 2.7, which suggests that the main option preferred by the affected households was cash compensation. These choices have been taken into consideration while designing compensation and assistance in the RP.

**Table: 2.7 Compensation Option**

SI No	Particulars	Land for Land	Cash for Land	Total
1	Kuwaripaas SS	0	2	2
2	Srinagar SS	0	0	0
3	Kaliganga-I SHP	0	0	0
4	Kaliganga-II SHP	0	19	19
5	Madhyamaheswar SHP	0	4	4
6	Kaldigad SHP	0	0	0
7	TOTAL	0	25	0

Source: Primary Household Survey of the Land holders, Mar 2005

### 2.4 Summary Profile of Project Corridor

The summary profile of the project affected population and assets are presented in the Table: 2.8.

**Table: 2.8 Summary Profile of Project Corridor**

Description	Units
Project Affected Households	25
Project Affected Persons	145
Average Household Size	6
Vulnerable Households	19
Ownership of land	Private
Type of Land	Non Irrigated
Use of Land	Cultivation
Structures (SS/ SHP)	Nil
Trees (SS/ SHP)	Nil
Trees for Temporary Acquisition (Transmission corridor)	904
Main Occupations of APs	Cultivation



## CHAPTER – 3: INDIGENOUS PEOPLE AND OTHER SOCIAL VULNERABILITIES

### 3.1 Introduction

Through initial social impact assessment and subsequently through the household surveys and consultation, efforts have been made to identify critical social issues such as indigenous/tribal people, gender impacts, use of child labor, the very poor (i.e., those below the poverty line), and HIV/AIDS and health associated with project impacts. This chapter examines the issues from social safeguard considerations to develop specific mitigation measures.

These aspects are beyond the scope of the IR policy. Nevertheless, because special consideration shall be given to vulnerable groups, these issues shall be assessed.

### 3.2 Indigenous People/Scheduled Tribes

Indigenous peoples are defined as those having a distinct social, cultural, economic, and political traditions and institutions compared with the mainstream or dominant society<sup>8</sup> Based on the Indian Constitution, indigenous peoples with similar cultural characteristics are recognized as Scheduled Tribes (ST) and Scheduled Castes (SC). However, since independence in 1947, target-oriented programs for tribal development – for example, tribal area development plans, positive discrimination in educational/employment opportunities, various rural development schemes and empowerment, and democratization have brought significant changes in many STs groups. STs enjoy constitutional protection, support and reservation for education and employment. The purpose of this section is to illustrate the typical profile and impacts to be experienced by the project affected STs to decide whether a separate indigenous people's development plan (IPDP) is necessary, following ADB's policy and guidelines on indigenous peoples

The distribution of scheduled caste and scheduled tribe in India shows that Uttaranchal is having very less representation to the national figure. At the national level, 16.2% of the total population is scheduled caste and 8.2% of the total population is scheduled tribe. The percentage of schedule caste and scheduled tribe population in Uttaranchal compared to the total population is 17.87% and 3.02% respectively. Hence, it is evident that Uttaranchal has less number of tribal populations compared to the national tribal figure as well as compared to the total population of Uttaranchal. A broad scenario about the tribal people's representation is described in Table:3.1.

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<sup>8</sup> ADB uses the following characteristics to define indigenous people: (i) descent from population groups present in a given area before territories were defined; (ii) maintenance of cultural and social identities separate from dominant societies and cultures; (iii) self identification and identification by others are being part of a distinct cultural group; (iv) linguistic identity different from that of dominant society; (v) social, cultural, economic and political traditions and institutions distinct from dominant culture; (vi) economic systems oriented more toward traditional production systems rather than mainstream; and (vii) unique ties and attachments to traditional habitats and ancestral territories.

**Table: 3.1 ST Population in Uttaranchal**

Level	NAME	Population	% of Tribal Population to the National Tribal Figure	% of Tribal Population to the State Tribal Figure	% of Tribal Population to the State and District Population
National	INDIA	84326240	100	NA	NA
State	UTTARANCHAL	256129	0.30	100.00	3.02
District	Uttarkashi	2685	0.003	1.05	0.91
District	Chamoli	10484	0.01	4.09	2.83
District	Rudraprayag	186	0.0002	0.07	0.08
District	Tehri Garhwal	691	0.001	0.27	0.11
District	Dehradun	99329	0.12	38.78	7.75
District	Garhwal	1594	0.002	0.62	0.23
District	Pithoragarh	19279	0.02	7.53	4.17
District	Bageshwar	1943	0.002	0.76	0.78
District	Almora	878	0.001	0.34	0.14
District	Champawat	740	0.001	0.29	0.33
District	Nainital	4961	0.01	1.94	0.65
District	Udham Singh Nagar	110220	0.13	43.03	8.92
District	Hardwar	3139	0.004	1.23	0.22

Source: Primary Census Abstract: Census of India 2001.

### 3.2.1 Scheduled Tribes in the Core Sub Project Area

There are five major tribal groups in the state of Uttaranchal. These are the hill tribes but very much linked with the mainstream society. The five major tribes are Bhotia, Buska, Jannasari, Raji and Tharu. However, based on the survey, it is derived that none of the tribal people will be affected by the land acquisition in the core sub project. Table: 3.2 describes the brief about the ST in core project area.

**Table: 3.2 Socially Vulnerable Groups**

SI No	Particulars	SC	ST	WHH	PH	BPL	Severity	Total
1	Kuwaripaas SS	1	0	0	0	2	0	5
2	Srinagar SS	0	0	0	0	0	0	0
3	Kaliganga-I SHP	0	0	0	0	0	0	0
4	Kaliganga-II SHP	0	0	5	0	2	8	15
5	Madhyamaheswar SHP	0	0	0	0	0	1	1
6	Kaldigad SHP	0	0	0	0	0	0	0
7	TOTAL	1	0	5	0	4	9	19

Source: Primary Survey (Land holders') Machr2005

In accordance with ADB's procedure for sector lending, core subprojects have been selected for project preparation and processing. Salient features of these substations and hydro plants are described in Table:3.3. It can be noted from the table mentioned below that the core subprojects are passing mainly through seven districts. They are Chamoli, Rudraprayag, Pauri, Almora, Uttarkashi, Tehri and Pithoragarh. The district wise ST population distribution shows that core sub projects are passing through less tribal area and the percentage of tribal people is less than the state average of 3%, in most of the cases except Chamoli and Pithoragarh.

**Table: 3.3 Locations of Substations and Small Hydro Power Plants**

Sl.No	Name of the Sub Stations/ Small Hydro Plants	Capacity/Size	Name of the Village	Name of the Districts
<b>Sub Stations</b>				
1	Kuwaripaas	400	Ravigram	Chamoli
2	Srinagar	400	Khandukhal	Pauri
<b>Small Hydro Plants</b>				
1	Kaliganga-I	2X 2000 KW	Jaltala and Khunnu (Kotimaheswari)	Rudraprayag
2	Kaliganga-II	2X3000KW	Khunnu (Kotimaheswari) and Kobilta	Rudraprayag
3	Madhyamaheswar	2X5000KW	Girriyagaon and Chuni	Rudraprayag
4	Kaldigad	2X4500KW	Sangam Chatti	Uttarkashi

### 3.2.2 Socioeconomic Characteristics of the Groups

Since independence in 1947 and the integration of the “tribal” peoples into the modern state system, the STs are moving towards modernization and the market economy. In the project-affected districts, the STs are largely involved in farming, particularly commercial crops like rice, wheat, ground nut, fruit and vegetables and bring their produce to the local markets. The STs, particularly residing near the project sites are part of the mainstream economy. The scheduled tribes identified during the consultations have fixed assets like houses, land and derive their income from agriculture and small business.

### 3.2.3 Summary and Conclusions of Indigenous Groups Issue

During project preparation, no indigenous groups or population were found in any of the sites where core subprojects will be undertaken, which would lead to adverse or differential impacts on these groups. Special care has been taken to ensure that no indigenous people, especially the tribal people are affected. The Project will directly and indirectly contribute to economic growth and will reduce poverty, by lowering household energy costs and by removing energy constraints to enterprises that offer employment opportunities for the poor and indigenous people. There is an association between electrification, higher income levels, improved health status, and educational achievements. There will be benefits to households which will include better quality lighting for the same outlay as they currently incur on kerosene, improved air quality in the home, and possible substitution of at least some of the prevalent fuelwood used for cooking. The indirect benefit will cover improved public facilities such as street lighting, and social infrastructure such as hospitals and schools. Gender impacts of electrification are particularly favorable; women want electricity and have clear perceptions of its power to reduce drudgery, to ease working hours, to increase access to the media, and to enhance the general amenity in their lives.

The tribal groups of the project area have free social interaction with the mainstream population and they are integrated to the main stream population. The tribes share their source of water, folklore, food, infrastructure and other belongings with the outside community. Moreover, these groups are also open to new ideas like family planning and formal education. Most of these tribes have a nuclear family norm. Thus, it is clearly

established that in their social behavior and interactions they are not disconnected from the mainstream population but are assimilated with them.

### **3.3 Women's Participation in the Project**

Women in Uttaranchal are largely involved in domestic work. Women in the rural area of Uttaranchal take part in the agricultural activities also. However, they have a very low economic participation rate (i.e., productive or gainful employment). In the project, women are affected in a variety of ways. For example, they face hardships and stress and continue to suffer during the transition period until the project-affected households are able to regain lost income and livelihoods. Often the duration of this process is lengthened due to delays in payment of compensation, rehabilitation assistance and implementing resettlement and reconstructing the livelihood systems. The longer the transition period, greater are the miseries for women. According to the Land holders' survey, there are 11 women headed households. During project implementation, project-affected women will receive preferential treatment for work in the project activities. Each field team of the RP implementation agencies/partner agencies will include at least one woman investigation/facilitator. The PMU will ensure that women are consulted and invited to participate in group based activities, to gain access and control over resources. The monitoring and evaluation team(s) will include women. Further, during RP implementation, NGOs will make sure that women actually take part in issuing identity cards, opening bank accounts, receiving compensation by cheque in their names. This will further widen the perspective of participation by the women in project implementation. The implementing agencies will provide training for upgrading women's skills for alternative livelihoods and income restoration.

### **3.4 Child Labour**

Any child below the age of 14 years working in an economic organization or adding to the family income constitutes child labor. Presence of child labor in a society shows poverty levels are high because children have to augment the household income in order that all family members can sustain themselves. During RP implementation, the implementing NGO will identify families of the child labor as special target groups for poverty reduction assistance through ongoing poverty alleviation programs. The Ministry of Rural Development (MRD) has been acting as a catalyst effecting change through implementation of a variety of programs such as the Integrated Rural Development Program (IRDP), Training of Rural Youth for Self-Employment (TRYSEM), Development of Women and Children in Rural Areas (DWCRA), and Jawahar Rozgar Yojana (JRY). The resettlement implementing NGOs will liaise with Block Development Officers (BDO) and *Zilla Parishad* (District Council) and *Gram Panchayats* for rehabilitation of child workers from employment to schooling in the project area. Poverty reduction will provide the most sustainable solution to eliminate child labor and broaden educational opportunities of the poor children. Field work did not show child labour in the project area.

### **3.5 HIV/AIDS and Health Risks**

HIV/AIDS is a major development challenge in India. Given the epidemic nature of the problem, it may reverse India's achievements in health and development. According to the National AIDS Control Organization (NACO) estimates for 2001, India has close to 4 million HIV infected people. This is less than one percent of the adult population but still more than any country in the region. No case of HIV/AIDS and other sexually transmitted diseases were noted during the surveys and consultations. The local health officers were consulted in the field. The common diseases in the project area are anemia, malaria, tuberculosis, jaundice, leprosy, polio and other respiratory problems. There are cases of malnutrition and the water and sanitation problem persists in the area.

The people residing along the project sites who belong to vulnerable groups i.e. STs, SCs and other poor people and those who will be taking part in the construction may pose a threat in spreading HIV/AIDS, because of some influx of outsiders. During construction and operation, especially near construction camps and other sensitive locations, there may be a risk of these communicable diseases. The NGOs will work closely with the relevant state agencies and other existing networks dedicated to prevention work to further build awareness programs in the project area. HIV/AIDS awareness brochures will also be developed for distribution to local communities.

## CHAPTER-4: RESETTLEMENT PRINCIPLES, POLICY FRAMEWORK AND ENTITLEMENT MATRIX

### 4.1 Introduction

This chapter describes the principles and approach to be followed in minimizing and mitigating negative social and economic impacts of the project. These guidelines are prepared to address resettlement and rehabilitation of the APs. This Resettlement Plan (RP) is based on ADB's Involuntary Resettlement Policy, 1995 as well as on the Borrower's domestic laws, particularly, *National Policy on Resettlement and Rehabilitation for Project Affected Persons (NPRR)* by the Ministry of Rural Development, 2003.

### 4.2 National Policy on Resettlement and Rehabilitation.

The basis of the Government's resettlement policy is the NPRR. It provides minimum conditions ensured for persons affected by acquisition of land for public purposes. The objectives of the Policy are: (i) minimize displacement and identify non-displacing or least-displacing alternatives; (ii) plan resettlement and rehabilitation of Project Affected Families (PAFs), considering special needs of tribal and vulnerable sections; (iii) provide a better standard of living for PAFs; (iv) facilitate cooperation between the project proponent and PAFs. The Land Acquisition Act, 1894 (LAA) provides the framework for facilitating land acquisition in India. It enables the Government to acquire private lands for public purposes, and seeks to ensure that no person is deprived of land except under the Act.<sup>9</sup>

### 4.3 ADB's Involuntary Resettlement Policy.

ADB's policy requires:

- (i) avoiding or minimizing adverse project impacts where possible;
- (ii) consulting with affected people (APs) in project planning and implementation, including disclosure of RP and project-related information
- (iii) payment of compensation for acquired assets at the market/replacement value;
- (iv) APs are entitled to receive assistance to restore income and livelihood at pre-project standard, and all vulnerable APs are entitled to receive additional assistance to improve their income and livelihood;
- (v) resettlement assistance to APs, including non-titled persons (informal dwellers/squatters and encroachers);

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<sup>9</sup> The process for land acquisition under LAA is:

- i) Land identified for a project is placed under Section 4 of the LAA. This constitutes notification. Objections must be made within 50 days to the District Commissioner (DC, highest administrative officer of the concerned District).
- ii) The land is then placed under Section 6 of the LAA. This is a declaration that the Government intends to acquire the land. The DC is directed to take steps for the acquisition, and the land is placed under Section 9. Interested parties are then invited to state their interest in the land and the price. Under Section 11, the DC shall make an award within one year of the date of publication of the declarations. Otherwise, the acquisition proceedings shall lapse.
- iii) In case of disagreement on the price awarded, within 6 weeks of the award the parties (under Section 18) can request the DC to refer the matter to the Courts to make a final ruling on the amount of compensation.
- iv) Once the land has been placed under Section 4, no further sales or transfers are allowed.
- v) Compensation for land and improvements (such as houses, wells, trees, etc.) is paid in cash by the project proponent to the State government, which in turn compensates landowners.
- vi) The price to be paid for the acquisition of agricultural land is based on sale prices recorded in the District Registrar's office averaged over the three years preceding notification under Section 4. The compensation is paid after the area is acquired. An additional 30% is added to the award as well as an escalation of 12% per year from the date of notification to the final placement under Section 9. For delayed payments, after placement under Section 9, an additional 9% per annum is paid for the first year and 15% for subsequent years.

- (vi) APs will be integrated economically and socially into their host communities, if relocated.
- (vii) APs' social and cultural institutions will be safeguarded and supported. Common properties and facilities will be restored;
- (viii) compensation and rehabilitation programs will be carried out with equal consideration for women and men; and
- (ix) Income restoration and rehabilitation program.

#### 4.4 Policy Applicable to the Project

A comparison between the Government's Policy (NPRR) and ADB's Resettlement Policy is provided in Table: 4.1.

**Table 4.1: Comparison of NPRR and ADB Resettlement Policy**

Policy Principle	NPRR	ADB	Details
1. Resettlement must be avoided wherever possible; and if unavoidable it should be minimized	√	√	
2. Affected persons must be compensated to replace their lost assets and to restore/improve their living standards	√	√	However, replacement value is not clearly identified.
3. Affected persons should be fully involved and consulted in the planning and implementation of resettlement	√	√	
4. Compensation for lost assets must be on the basis of replacement cost	Not defined	√	
5. Transaction and transition costs	√	√	
6. Wherever feasible land should be an option for compensating loss of land	√	√	
7. An RP should be prepared in every instance where involuntary resettlement occurs	Only required where over 500 families are affected in plain areas and 250 or more families are affected in hilly areas	√	500 families is about 2,500 persons in the Indian context and this over 10 times the ADB requirement which is 200 persons or more.
8. The RP must be revealed to the affected people before finalization	√	√	
9. Application of policy	The Indian NPRR only applies to projects displacing 500 families or more in plain areas and 250 families or more in hilly areas	In all cases where involuntary resettlement occurs	ADB has three categories of impact: A (Significant) where 200 or more people experience major impacts; B (Not Significant) where impacts are not deemed significant (less than 200 persons affected) and C where no involuntary resettlement impacts are foreseen.
10. Entitlements under the policy	Chapter VI of the NPRR defines flat entitlements without considering the specific impact on a case by case basis.	Each impact must be defined and appropriate entitlements assigned on the	For acquisition of strips of land for railway lines, highways, transmission lines and pipelines, only an ex-gratia payment of Rs 10,000/= per family is to be paid.

Policy Principle	NPRR	ADB	Details
		basis of the basic principles of replacing lost assets and restoring livelihoods	This will not meet ADB or World Bank resettlement policy specifications.
11. Recognition of untitled persons such as squatters and encroachers	X	√	NPRR states that the landless, forest dwellers, tenants and artisans are more severely affected but no mention is made of specific entitlements for them.
12. Surveys and census required	√	√	NPRR requires survey findings to be disclosed to the affected persons with a view to inviting objections and suggestions
13. Social networks and cultural links should be preserved	√	√	
14. Recognition of vulnerable groups including indigenous people and the poor	√	√	NPRR gives preference to STs in land allotment. Additional financial assistance is also defined for them. Their traditional rights to natural resources in the area will be recognized.
15. Grievance Redress Procedure	√	√	NPRR requires a Grievance Redress Cell to be set up under a Commissioner for R & R.
16. Organization and Management of Resettlement	√	√	NPRR will set up a National Monitoring Committee chaired by the Secretary Department of Land Resources, under the Ministry of Rural Development and comprising seven other Secretaries.
17. Common property resources should be replaced	√	√	
18. All costs relating to resettlement and rehabilitation must be borne by the requiring agency and included in project costs	√	√	

Consistent with Government and ADB policy this resettlement framework and resettlement procedural guidelines will apply to all subprojects under the sector loan. This will ensure that all persons affected by land acquisition will be eligible for appropriate compensation and rehabilitation assistance.

The Government of Uttaranchal does not have any special policy on Land acquisition and resettlement. However, Rehabilitation Policy (1998) of Tehri Hydro Development Corporation Limited may be useful to follow. This policy is a comprehensive one which tries to fulfill maximum requirements of the R&R issues. A comprehensive package of improvements was decided after interaction with the affected population and the local administration, both for rural and urban rehabilitation.

As far as the transmission component is concerned, The Indian telegraph Act, 1885<sup>10</sup> is usually followed which does not include any sort of land acquisition for construction of transmission pillars and lines. The act exercises the power to remove any trees interrupting the transmission lines, however, subsection 2 of section 18 of the Act provides the opportunity for compensation for cutting the trees if the tree is in existence before the telegraph line was placed. The Indian Telegraph Act of 1885 does not comply with the ADB policy in the present context where the transmission line will be of major influence. Therefore, necessary attempt will be taken to minimize the negative impact and provisions will be made for the suitable compensation for trees and crop

#### **4.5 Compensation and Assistance**

The basic principles adopted for the Project are:

- i) Avoid negative impacts of land acquisition and involuntary resettlement on persons affected by the Project to the extent possible.
- ii) Where negative impacts cannot be avoided, assist affected persons (AP), particularly vulnerable groups, in improving or at least regaining their standard of living and income.
- iii) Disclose all information related to, and ensure AP participation in, resettlement planning and implementation.
- iv) Provide compensation for acquired assets at replacement value in accordance with the RP and RF.
- v) Provide resettlement assistance and income restoration to APs including non-titled persons.
- vi) Provide for APs not present during enumeration. However, anyone moving into the project area after the cut-off date will not be entitled to assistance.
- vii) Provide compensation and resettlement assistance prior to taking possession of the acquired lands and properties.
- viii) Establish grievance redress mechanisms at the district level to ensure speedy resolution of disputes.
- ix) Ensure involvement of women and vulnerable groups in all activities related to resettlement planning, implementation, and monitoring.
- x) Ensure adequate budgetary support to cover implementation costs for RPs.
- xi) Conduct internal and external monitoring of the implementation of RPs.

All APs will be provided with compensation and resettlement assistance if their land is permanently or temporarily acquired, their income source is adversely affected, their homes are fully or partially affected, and other properties such as commercial structures or agricultural structures, crops, trees, and other facilities or access to properties are damaged or reduced due to the Project. Lack of legal documents of their customary rights of occupancy or titles shall not affect their eligibility for compensation. In case of land acquisition where land-for-land is not a feasible option, the framework stipulates payment of compensation based on assessed replacement or market value of land and structures to

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<sup>10</sup> The telegraph authority may, from time to time place and maintain a telegraphic line under, over, along or across, and post in or upon, any immovable property provided that 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. 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 posts. 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. 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, shall pay full compensation to all persons interested for any damage sustained by them by reason of the exercise of those powers. In case of property and dispute other than that of a local authority where the power is to be exercised, the District Magistrate may, in his discretion, order that the telegraph authority shall be permitted to exercise them.

APs. Temporary land losers will be in charge of land clearance and will be therefore compensated for the provision of labor at the minimum wage rate for the duration of this activity. In any case, PTCUL has assured that civil works for the construction of the transmission lines, involving temporary acquisition, (towers and lines) will be synchronized in such a way to begin once the crops have been harvested.

In addition to compensation payments in accordance with the LAA, APs will receive additional assistance to match replacement costs (the difference between the replacement value and the assessed value) for lost land and structures; transaction costs including but not limited to stamps and registration costs for the purchase of replacement land; and other forms of resettlement assistance such transition/shifting allowances, and agricultural inputs for re-establishing crops. Losses of profits and income due to property loss or access loss to property regardless of whether the AP is titled or non-titled will be compensated. To restore income losses, compensation for lost workdays/income, and training will be provided to APs. Short-term training will be provided through engaging non-governmental agencies (NGOs), where feasible. Special assistance to vulnerable groups including prioritization in land-for-land compensation schemes; additional allowances for house reconstruction, relocation and income loss; specialized training; and priority for employment in project activities will be provided.

Temporary acquisition for the storage of construction materials and equipment for substations, SHPs, and RMUs in core subprojects will be in Government land. Temporary acquisition for this and other purposes in non-core subprojects, when occurring in private land, will be governed by the same principles and guidelines for the temporary acquisition involved in the construction of transmission lines for the core subprojects. Eligible APs, both titled and non-titled, will be provided rental income for temporary acquisition.

While crop loss is expected to be one season (3 months), APs will be provided 1 year of compensation (3 crops) to cover the permanent loss of access to the area covered by the footings.

No loss of structures is presently foreseen for either core and non-core subprojects. However, may any such loss occur due to changes in design, APs shall be compensated according to the provisions included in the entitlements matrix. Restoration for any disruption occurred during the implementation on temporarily acquired land shall be undertaken by the contractor.

#### 4.6 Entitlement Matrix

An entitlement matrix for non-core subprojects, based on specific project impacts and consistent with the provisions in the core subprojects RP, is given in Table 4.3. The Entitlement Matrix provides category-wise details regarding the entitlements according to the resettlement principles enumerated above.

**Table 4.2: Entitlement Matrix**

Type of Losses	Definition of APs	Entitlement	Details
1. Land			
Loss of agricultural land	Titled owners and affected persons (APs) with traditional land rights	<ul style="list-style-type: none"> <li>Provision of equivalent land within the same village</li> <li>If land is unavailable, compensation at market/replacement value</li> </ul>	<ul style="list-style-type: none"> <li>Alternative land</li> <li>Compensation based on the LAA (inclusive of 30% solatium and 12% interest)</li> <li>If the market/replacement value of land as determined by the resettlement committee (RC) is more than the above rate, the</li> </ul>

		<ul style="list-style-type: none"> <li>Resettlement assistance</li> <li>Assistance to vulnerable APs (female-headed households, scheduled tribal households, scheduled caste households, poor households, and households headed by physically handicapped or disabled persons)</li> </ul>	<p>difference will be provided in the form of a grant by the Project directly to APs</p> <ul style="list-style-type: none"> <li>APs will be refunded transaction costs (documentary stamps, registration costs, etc.) if replacement land is purchased within one year of compensation</li> <li>Resettlement assistance equivalent to 365 days of wage per household</li> <li>Vulnerable households will be provided with all the above assistance and will be prioritized in land-for-land alternative. If land-for-land is unavailable, an additional relocation allowance of 500 days of wage per household will be provided.</li> </ul>
	Individual tenant, sharecropper, or leaseholder	<ul style="list-style-type: none"> <li>Reimbursement for unexpired lease</li> </ul>	<ul style="list-style-type: none"> <li>Lease rates will be determined by the RC based on consultation with landowners</li> </ul>
Temporary loss of agricultural land	Farming households, sharecroppers, tenants, non-titled households	<ul style="list-style-type: none"> <li>Notice to harvest standing crops</li> <li>Compensation at market value</li> <li>Restoration</li> </ul>	<ul style="list-style-type: none"> <li>Compensation at market value for the equivalent of 9 months of crop income (3 seasons)</li> </ul>
Loss of access to forestland	Affected household with forestland access	<ul style="list-style-type: none"> <li>Provision of alternative facilities and technical assistance</li> </ul>	<ul style="list-style-type: none"> <li>Households losing access to forestland for their basic needs such as fuel, fodder, etc. will be provided access to alternative forest land. Communities will be involved in community social forestry schemes coordinated by the Department of Forests.</li> <li>Vulnerable APs will be provided assistance by the Project for alternative sources of fuel, fodder, etc. which will minimize their traditional dependency on forests.</li> </ul>
2. Income			
Income from standing crops, rent or sharecropping	Farming households, sharecroppers and tenants	<ul style="list-style-type: none"> <li>Notice to harvest standing crops</li> <li>Compensation at market value</li> </ul>	<ul style="list-style-type: none"> <li>Compensation at market value for crops</li> <li>An assistance grant equivalent to Rs. 5,000 for the purchase of agricultural inputs for the next season</li> <li>Preferential employment in the Project will be provided to vulnerable households.</li> </ul>
Income from affected business and wage earnings	Affected individuals	<ul style="list-style-type: none"> <li>Compensation and income restoration</li> </ul>	<ul style="list-style-type: none"> <li>Compensation equivalent to 625 days of minimum wages preferably in the form of income generating schemes or in productive units in the joint name of spouses</li> <li>Needs-based short term training on developing entrepreneurial skills</li> <li>Preferential employment in the Project will be provided to vulnerable households</li> </ul>
Income from trees or perennial crops	Affected households	<ul style="list-style-type: none"> <li>Compensation at market value</li> </ul>	<ul style="list-style-type: none"> <li>Perennial crops (including fruit bearing trees) will be compensated based on 8 years of income at market value determined by the Horticulture Department</li> <li>Trees will be compensated at 3-5 times the market value determined by the Forest Department for timber species, and by the Horticulture Department for other trees</li> </ul>
Income from forest	Affected households	<ul style="list-style-type: none"> <li>Lump sum compensation</li> </ul>	<ul style="list-style-type: none"> <li>Lump sum compensation for lost income for 3 months based on income from the</li> </ul>

products and grazing land			forest/ grazing land determined by the RC in consultation with APs.
3. Community and Cultural Sites	Affected households or individuals	<ul style="list-style-type: none"> <li>Conservation, protection and compensatory replacement (Schools, community centers, markets, health centers, shrines, other religious sites, places of worship, burial sites, rights to food, medicine, and natural resources)</li> </ul>	<ul style="list-style-type: none"> <li>Impacts will be documented and mitigated based on the principles agreed upon in the resettlement framework. Cultural properties will be conserved through special measures such as relocation in consultation with the community.</li> </ul>
5. Other Impacts Not Identified	Affected households or individuals	<ul style="list-style-type: none"> <li>Additional assistance</li> </ul>	<ul style="list-style-type: none"> <li>Unforeseen impacts will be documented and mitigated based on the principles agreed upon in the resettlement framework</li> </ul>

## 5. PUBLIC CONSULTATION AND PARTICIPATION

### 5.1 Introduction

To ensure peoples' participation in the planning phase of this project and to treat public consultation and participation as a continuous two way process, numerous events were arranged at all stages of project preparation. Aiming at promotion of public understanding and fruitful solutions of developmental problems such as local needs of road users and problem and prospects of resettlement, various sections of APs and other stakeholders were consulted through focus group discussions and individual interviews. The option of alternative design was also discussed to meet their local needs and to achieve speedy implementation of the project with peoples' involvement.

The project will therefore ensure that the affected population and other stakeholders are informed, consulted, and allowed to participate actively in the development process. This will be done throughout the project, both during preparation, implementation, and monitoring of project results and impacts.

During implementation and monitoring, information will be disseminated to project affected persons and other key stakeholders in appropriate ways. This information will be prepared in local language (Hindi) as required, describing the main project features including the entitlement framework. Consultation will be carried out in ways appropriate for cultural, gender-based, and other differences among the stakeholders. Where groups or individuals have different views/opinions, particular emphasis will be laid on the views and needs of the vulnerable groups.

### 5.2 Methods of Public Consultation

Public consultations in the project area were held at village, Tehsil and District level. The following methodology has been adopted for carrying out public consultations in this project:

- Disseminating information and requesting villagers to attend the public consultation meetings at all substations and small hydropower substations site.
- Sharing the opinions and preferences of the APs.
- Involving the APs and all other stake holders in decision-making including RP implementation.
- Walk-through / informal consultation along the transmission lines.

Different techniques of consultation with stakeholders were used during project preparation, viz., in-depth interviews, public meetings, group discussions etc. To understand the socio-economic profile of the affected persons, questionnaires were designed and information was collected from the affected persons on one-to-one basis from 25 households who are to be affected by the permanent land acquisition. Public consultations were held at four SHP sites, such as Kaliganga-I & II, Madhyamaheswar and Kaldigad from 27<sup>th</sup> February 2005 to 28<sup>th</sup> February 2005. The number of participants in the consultations was 63 which include different representatives. Consultations have also been carried out with special emphasis on the vulnerable groups. The key informants during the project preparation phase included both individuals and groups namely:

- Heads and members of households likely to be affected.
- Groups/clusters of APs.
- Village Panchayats: Sarpanch and members.
- Local voluntary organizations and NGOs.
- Government agencies and departments.
- Other project stakeholders with special focus on APs belonging to the vulnerable group.
- Women and the representatives of the women organizations

### **5.3 Objective of the Consultation**

At the village / block level, APs and local public representatives were consulted. During the consultations, focus was given on the following objectives.

- Consultations with the local people for identification of sites for the core sub projects.
- Understand the views of the people affected, with reference to acquisition of land and its due compensation.
- Understand views of people on resettlement options, if any.
- Identify and assess major economic and social characteristics of the villages to enable effective planning and implementation.
- Resolve issues related to impacts on community property and their relocation.
- Examine APs' opinions on health safety issues during the construction and selection garbage materials or the waste materials.
- Identify levels and extent of community participation in project implementation and monitoring.
- To establish an understanding for identification of overall developmental goals and benefits of the project.
- Finally to develop a thorough coordination between all the stakeholders for the successful implementation of the project.

### **5.4 Key Findings of the Consultation**

Major findings related to key issues such as: general perception about the project, suggestions to mitigate hardships resulting from dislocation and loss of livelihood are presented below.

- There has been continuous consultation and also news items on the local news papers by the EA regarding the project. People were consulted by the EA for finalization of sites and land availability during the project preparation. Therefore, People were aware about the project and welcomed the project.
- People consented to cooperate if adequate compensation is given.
- Displacement is not an issue since the project will mainly focus on land acquisition. According to the people, land compensation should be adequately addressed.
- Cultivators prefer cash compensation. Land for land option was least preferred since the availability of land in hilly terrain is not adequate.
- Requests for facilities and amenities like drinking water or lighting was advised. For example, people at Kalinganga-II small hydro project sites suggested that a water tank may be provided and a minimum amount of water should be supplied from the powerhouse site to the tank so that the water can be supplied through tapes to the entire villages. This was subsequently agreed by the IA (UJVNL)
- Similarly, one play ground at Madhymaheswar small hydro power station site is to be affected. During the consultation, villagers came up with a suggestion for an alternate land for the play ground. This was also agreed by the IA (UJVNL)
- APs requested local representation in the Grievance Redress Committee.
- People asked about creation of employment opportunities during project construction and later phases of the project.
- Points were raised to involve the small local contractor during construction period and they may be included in the tender process.
- People suggested that adequate safety measures should be provided such as uninterrupted social life.

Format of public consultation along with a sample of participants is given in **Annex 5.1**.

## **5.5 Continuation of Public Consultations**

The effectiveness of the R&R program is directly related to the degree of continuing involvement of those affected by the project. During the preparatory stage, consultations were held at local level as documented above. Several additional rounds of consultations with APs will be required during RP implementation. Consultations during RP implementation will involve agreements on compensation, assistance options, and entitlement package and income restoration. The other round of consultations will occur when compensation and assistance are provided and actual resettlement begins.

Information disclosure is pursued for effective implementation and timely execution of the RP. For the benefit of the community in general and APs in particular, the RP and R&R policy will be translated into Hindi to be made available at following offices. Tehsil Office

- District Magistrate Office
- PIUs
- PMO

The PMO will provide information on R&R policies and features of the Resettlement Plan. For continued consultations, the following steps are envisaged in the project:

- The NGOs to be involved in implementation of the RP will organize public meetings and will apprise the communities about the progress in the implementation of R & R works.

- There will be Grievance Redress Committees (GRCs) for each component. The APs will be associated with such committees (each of the committees will include a representative of the APs).
- NGOs will organize public meetings to inform the community about the compensation and assistance to be paid. Regular update of the progress of the resettlement component of the project will be placed for public display at the PMU offices.
- All monitoring and evaluation reports of the R & R components of the project will be disclosed in the same manner as that of the RP report suggested above.
- Key features of the entitlements will be displayed in billboards on the project corridor.
- Together with the NGO, the PMO will conduct information dissemination sessions at major intersections and solicit the help of the local community leaders to encourage the participation of the APs in RP implementation.
- Attempts will be made to ensure that vulnerable groups understand the process and to take their specific needs into account.

For effective implementation of the RP it is essential to involve communities and APs in the process. The mechanism of involving APs, NGOs and local officials is suggested below in **Table: 5.1**

**Table: 5.1 Mechanisms for Continued Participation**

<b>Project Stage</b>	<b>APs</b>	<b>NGOs</b>	<b>Project and local Officials</b>
Planning	<ul style="list-style-type: none"> <li>• Participate in public meetings</li> <li>• Identify alternatives to avoid or minimize displacement</li> <li>• Assist in developing and choosing alternative options for compensation and income generation</li> <li>• Help to choose resettlement sites but it is not relevant in this case.</li> <li>• Participate in survey</li> <li>• Provide inputs to entitlement provision</li> <li>• Assist in preparation of action plan</li> <li>• Suggest mechanism for grievance redress</li> <li>• Conflict resolution and participate in grievance redress</li> <li>• Participate in coordination committee</li> </ul>	<ul style="list-style-type: none"> <li>• Assist in impact assessment</li> <li>• Assist in census and Socio-economic survey</li> <li>• Participate in coordination committee</li> <li>• Participate in group meetings</li> <li>• Design and implement information campaigns</li> <li>• Support group formation, problem identification and planning for APs and hosts,</li> <li>• Suggest mechanism for grievance redress of conflict resolution</li> <li>• Assist in preparation of action Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Provide information on AP skills etc.</li> <li>• Suggest ways to minimize impacts</li> <li>• Indicate local staff and budget capacity for compensation</li> <li>• Assist NGO in information dissemination</li> <li>• Participate in consultations</li> <li>• Help documentation and consultations.</li> </ul>

Implementa tion	<ul style="list-style-type: none"> <li>• Participate in implementation support activities</li> <li>• Participation in local decision making activities</li> <li>• Decide on management of common properties</li> <li>• Participate in grievance redress mechanism</li> <li>• Monitor provision of entitlements</li> <li>• Labour and other inputs at site</li> <li>• Credit and other group scheme management</li> <li>• O&amp;M of sites and project inputs</li> <li>• Members of implementation committee</li> </ul>	<ul style="list-style-type: none"> <li>• Provide ongoing information for APs</li> <li>• Support in group management</li> <li>• Monitor entitlement provision by implementation of income generation schemes.</li> <li>• Training to eligible PAPs</li> <li>• Support to vulnerable groups</li> <li>• Evaluate community participation</li> <li>• Provide advice on grievance redress</li> </ul>	<ul style="list-style-type: none"> <li>• Process income generation proposals</li> <li>• Participate in grievance redress</li> <li>• Provide assistance under local schemes</li> <li>• Participate as member of implementation committee</li> </ul>
M&E	<ul style="list-style-type: none"> <li>• Participate in grievance tribunals</li> <li>• Report to project director on income generation schemes</li> <li>• Report on service quality of sites</li> </ul>	<ul style="list-style-type: none"> <li>• Provide information to project staff on vulnerable groups</li> <li>• Act as M&amp;E agency for project</li> <li>• Act as external monitors for project (where not previously involved)</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing interaction with APs to identify problems in income generation programme</li> <li>• Participant in correctional strategies.</li> </ul>

## 5.6 Public Disclosure of Resettlement Plan

The draft Resettlement Plan and the Resettlement Framework (RF) have been disclosed to the affected persons and other stakeholders for review and comments on various mechanisms and entitlement suggested for the implementation of the RP by May 25<sup>th</sup> 2005. The intention of this procedure is to receive comments from the APs in particular so as to incorporate the appropriate suggestions technically feasible. Accordingly, the final RP will be disclosed upon its approval from the EA. A separate public consultation study was carried out during the project preparation and the report with the list of participants and key findings are placed on line in the website of PTCUL ([www.upcl.org/ptcul](http://www.upcl.org/ptcul) ). Also, Poverty and Social Impact Assessment done by PTCUL have been put online in the same official website.

In addition to this, the EA sent the endorsed copy of the Resettlement Plan (RP), Resettlement Framework (RF) and Indigenous Peoples Development framework (IPDF) to ADB by 6<sup>th</sup> of May 2005. EA will also provide a disclosure document based on the Resettlement Plan that provides: (i) resettlement information on compensation and resettlement options, including measurement of losses, detailed asset valuations, entitlements and special provisions (include the entitlement matrix), grievance procedures, timings of payments and displacement schedules. This disclosure document may be in the form of a resettlement information brochure or leaflet, a summary resettlement plan, or a complete resettlement plan to be provided to affected people in the local language (Hindi) and in an accessible place. The EA will provide evidence of the disclosure (time and date of disclosure, method of disclosure) and a copy of the disclosure document to ADB by 26<sup>th</sup> May 2005.

## 5.7 Information Campaign and Future Plans

APs will be invited to the proposed grievance redress system for a quick, inexpensive and amicable settlement of claims. They will be advised to get their records of rights updated. All possible efforts will be made to motivate the affected landowners for a voluntary and amicable settlement of their claims outside the court.

Most of the issues will be settled out of court as far as possible. Handouts will be distributed by NGOs among all the affected persons highlighting the benefits of amicable settlement of disputes outside the court. Besides, public announcements will be made in affected areas. Press notes will be released in local newspapers to aid publicity.

## CHAPTER – 6: INSTITUTIONAL FRAMEWORK AND GRIEVANCE REDRESS MECHANISM

### 6.1 Introduction

UEID will be the EA for the Project, with overall responsibility for project management. PTCUL and UJVNL will be IAs for the transmission and small hydropower components, respectively, with PTCUL retaining the lead role of Project Management Office (PMO). The PMO will be the IA for the institutional strengthening component. The current PTCUL project team will become a formal PMO with at least 1 representative of UJVNL. PMO expertise include engineering planning and design, financial management, procurement and contracts management, and environmental and social impacts management. The PMO members should be committed to serve throughout the project implementation period. There will be three Project Implementation Units (PIUs) for different components.

Timely establishment and involvement of appropriate institutions would significantly facilitate achievement of resettlement objectives. The main institutions include:

- Uttaranchal Energy and Irrigation Department (UEID)
- PTCUL and UJVNL
- Local Administration
- NGO
- Grievance Redressal Committee (GRC)
- Resettlement Committee
- Training Institutions
- Monitoring and Evaluation (M&E) Agency

### 6.2 Resettlement Institutions and Framework

PTCUL, being a newly created setup, does not have any social and environment division of its own. However, the PMO will form an environment and social department (ESD) in order to maintain the compliance with ADB policies and procedure during the implementation. For subproject RPs, the PMO will have overall coordination, planning, implementation, and financing responsibilities. The department will have a full-time resettlement specialist for the duration of the Project to head the Department's Resettlement Unit (RU) will be accountable, and ensure timely and effective implementation and supervision of RPs. The RU resettlement specialist and staff, and the PIU resettlement specialist and staff will be provided the necessary capacity building training under the Project's Component C. The PMO will coordinate PIUs in subproject RP related activities, and each PIU will have at least one full-time resettlement specialist for the duration of resettlement activities, with an academic background in social sciences, and relevant skills and experience in resettlement issues. The resettlement specialist will subsequently be engaged on a part-time basis for follow-up activities, particularly monitoring and grievance redress. The PIU will maintain all databases, work closely with APs and other stakeholders. Based on regularly updated PIU data, a central database will also be maintained by the RU. Roles and responsibilities of various agencies are in **Table 6.1**

**Table 6.1: Agencies Responsible for Resettlement Implementation**

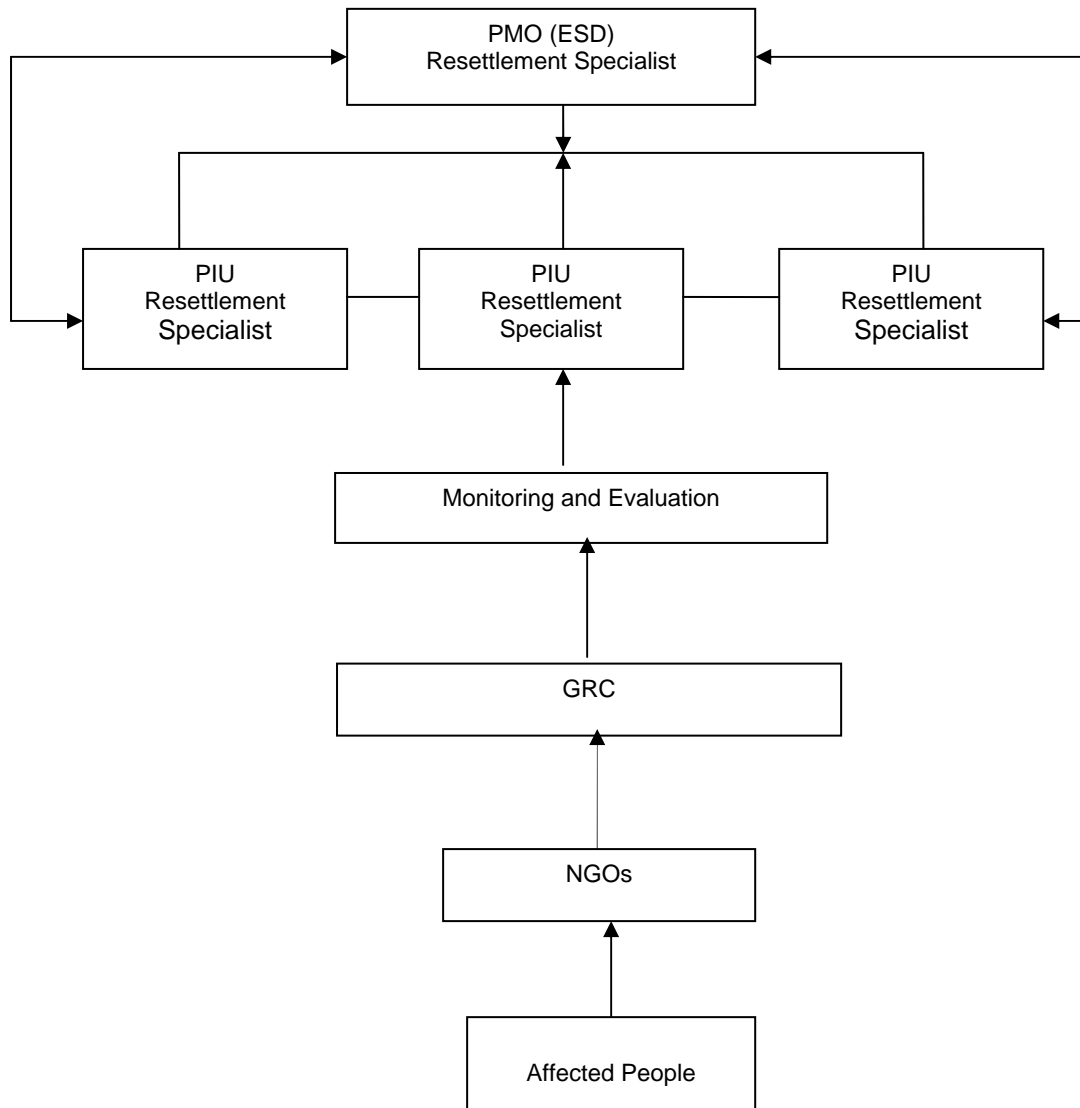
	<b>Activity</b>	<b>Agency Responsible</b>
1	Hiring of implementing NGOs and Resettlement Specialists	PMO Resettlement Unit (RU)
2	Updating the Land Acquisition and Resettlement Plan	Project Implementing Unit (PIU)/Implementing NGO
3	Review and Approval of Land Acquisition and Resettlement Plan	RU
4	Verification survey for identification of APs	PIU/Implementing NGO
5	Land survey for identification of plots	RU
6	Issue of identity cards	PIU/Implementing NGOs
7	Resettlement training workshops	RU/Project Consultants
8	Consultation and disclosure of Land Acquisition and Resettlement Plan to APs	PIU/Implementing NGOs/Resettlement Committee (RC)
9	Preparation of land acquisition plan	PIU/RU
10	Submission of land acquisition proposals to District Commissioner	PIU/RU
11	Compensation award and payment of compensation	District Commissioner
12	Payment of replacement value allowance	PIU/Implementing NGO
13	Takeover the possession of acquired land/houses	PIU/RU
14	Hand over acquired land to contractors for construction	PIU/RU/PMO
15	Notify construction starting date to APs	PIU/Implementing NGO/RC
16	Assistance in relocation, particularly for vulnerable groups	PIU/Implementing NGO/RC
17	Income restoration activities, particularly for vulnerable groups	PIU/Implementing NGO/RC
18	Restoration of temporarily acquired land to its original state including restoration of private or common property resources	Contractors subject to monitoring by PIU/Implementing NGO/RC
19	Internal monitoring	RU/PIU/Implementing NGO
20	External monitoring	Independent Monitoring Agency

### 6.3 The Process

The EA and the IAs will ensure that key institutions including the local government are involved in RP implementation. Moreover, in recognition of the complexity of resettlement in a sector project, experienced NGOs (which will have or open field offices) will be hired for RP implementation with clearly defined tasks, including community-based social development programs as appropriate. Local level Resettlement Committees will be formed to ensure representation of all stakeholders particularly APs, vulnerable APs, community-based organizations (CBOs), NGOs, and other local civil society and interest groups, local government, village leadership, and PIU staff—in decision making and RP implementation.

The organization chart for resettlement implementation is shown in **Figure 6.1**

**Figure 6.1: Institutional Mechanism for RP Implementation**



The land acquisition will be done as per the Land Acquisition Act of India. The organizations and departments to be involved in the process will be many folds. These are as follows:

- The EA
- The affected persons with their representatives
- village level committee (Panchayat)
- Local Revenue Department
- Land Survey Department
- District Commissioner (Land Acquisition)
- Court (In case of litigation)

The ultimate authority will be the District Commissioner. The interaction with the DC will be done through proper channels. The affected people will address their issues to village level committee and the committee will address the issue to the local administration (Revenue

Department) and ultimately the case will be put up before the DC. Even, the representative of affected people or may be the individual case can directly be addressed directly in a written application form to the DC's office.

#### **6.4 Roles and Responsibilities**

The roles and responsibilities of the various offices/officers in resettlement implementation are presented below:

##### **Head of the PMO**

- In-charge of overall project activities
- Participate in State Level Committees to facilitate land acquisition, pre- construction activities and implementation of R&R activities.

##### **6.4.1 ESD-Resettlement Specialist**

- Appoint NGO for R&R implementation and M&E consultants for monitoring and evaluation;
- Plan and conduct training programs for staff capacity building as well as capacity of field level NGOs and partner agencies;
- Review the micro plans prepared by the NGO;
- Review monthly progress reports;
- Monitor the progress on R&R and land acquisition;
- Advice PMO/NGO/M&E Agency on policy related issues during implementation; and
- Ensure early release of money to PMU for R&R activities.

##### **6.4.2 Resettlement Specialist at PIUs**

The field officer, Resettlement Specialist (PIU) will be responsible to carry out the following tasks concerning resettlement of the project:

- Overall responsibility of implementation of R&R activities;
- Responsible for land acquisition and R&R activities in the field;
- Ensure availability of budget for all activities;
- Liaison with district administration to support land acquisition and implementation of R&R; and
- Participate in district level committees.
- Prepare pamphlets of the policy;
- Printing of the policy and identity cards for the APs;
- Participate in the allotment of residential, commercial and agricultural plots;
- Liaison with district administration to dovetail government's income generation and developmental programs for the APs;
- Ensure the inclusion of APs who may have not been covered during the census survey; facilitate the opening of joint accounts in local banks to transfer assistance for R&R for affected households, and organize the disbursement of cheques for assistance in the affected area in public;
- Monitor physical and financial progress on land acquisition and R&R activities;

- Participate in regular meetings;
- Organize bi-monthly meetings with the NGO to review the progress on R&R; and
- Review micro plans and monthly reports submitted by NGO.

#### **6.4.3 NGOs.**

- Survey and verification of the PAFs;
- Verification of land records followed by verification on the spot related to identified plots and owners;
- Develop rapport with the APs;
- Photograph of each AP for ID cards;
- Assist to issue identity cards to the affected households
- Co-ordinate with the District Revenue Officer to implement R&R activities;
- Conduct market feasibility study;
- Valuation of properties/assets for finalization of replacement value;
- Distribute the pamphlets of R&R policy to the APs;
- Assist the APs in receiving the compensation;
- Facilitate the process of arranging loans for affected household
- Facilitate the opening of joint accounts
- Generate awareness about alternative economic livelihoods and enable the affected household s to make informed choices;
- Prepare micro-plans for R&R;
- Enable the affected households to identify alternative sites for agriculture, residential and commercial plots;
- Participate in the consultation on allotment of shops and residential plots;
- Ensure the APs have received their entitlements;
- Ensure the preparation of rehabilitation sites;
- Participate in the meetings organized by the PMU;
- Submit monthly progress reports;
- Identify training needs and institutions for the APs for income generating activities;
- Participate in the disbursement of cheques for the assistance at public places;
- Coordinate the training programs of the APs for income generating activities;
- Coordinate meetings of District Level Committees and accompany APs to GRC;
- Awareness campaigns for likely vulnerable diseases; and
- Ensure APs judiciously use compensation and R&R assistance.

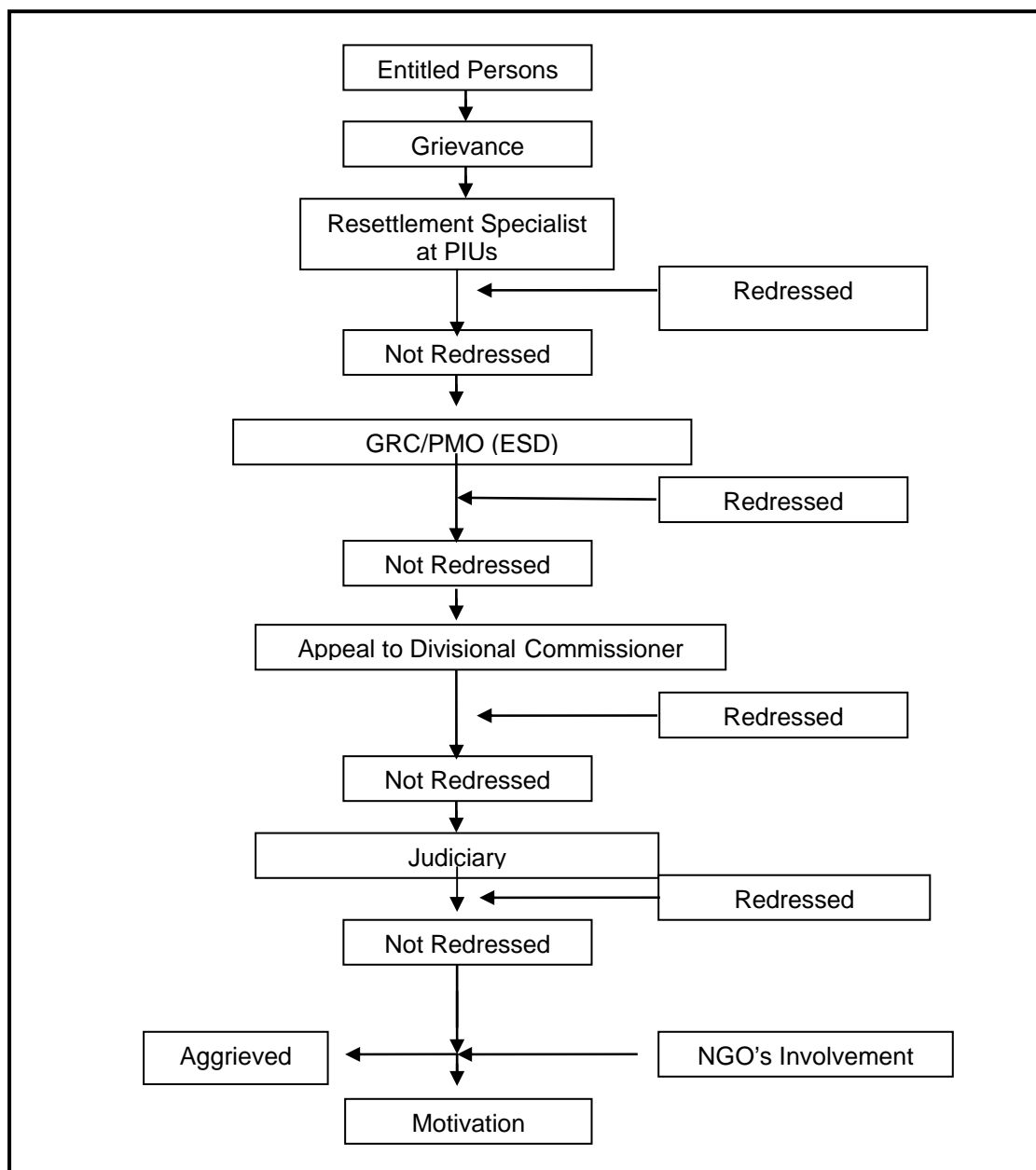
#### **6.4.4 Grievance Redress Committee**

There is a need for an efficient grievance redress mechanism, which will assist the APs in resolving queries and complaints. A Grievance Redress Committee (GRC) will be formed to ensure APs grievances are addressed and facilitate timely project implementation. The GRC will have representatives from APs particularly vulnerable APs, local-level IA/PIU staff, local government, respected citizens in diverse professions, NGOs, CBOs, and local civil and

interest groups. The head of a locally elected body will head the GRC. The GRC will meet every 2 weeks. The main responsibilities of the GRC are to: (i) provide support to APs on problems arising from land/property acquisition; (ii) record AP grievances, categorize, and prioritize grievances and resolve them within 2 weeks; (iii) immediately inform the PMO of serious cases; and (iv) report to APs on developments regarding their grievances and decisions of the GRC and the PMO. Other than disputes relating to ownership rights under the court of law, GRC will review grievances involving all resettlement benefits, compensation, relocation, and other assistance. Detailed investigation will be undertaken which may involve field investigation with the concerned APs. Grievances will be redressed within 2 weeks from the date of lodging the complaints. The GRCs will continue to function during the life of the Project including the defects liability period.

Procedure for grievance redress is given in **Figure:6.2**.

**Fig: 6.2 Procedures for Grievances Redress**



## 6.5 Selection of NGO

It is extremely important for the success of the RP to select NGOs that are capable, genuine and committed to the tasks assigned. Key criteria include:

- Experience in direct implementation of programs in local, similar and/or neighboring districts;
- Availability of trained staff capable of including APs into their programs;
- Competence, transparency and accountability based on neutral evaluations, internal reports, and audited accounts; and
- Integrity to represent vulnerable groups against abuses; experience in representing vulnerable groups, demonstrable mandate to represent local groups.

Besides the above, taking into consideration the risks of HIV/AIDS and safety issues during the project period, specialized NGOs will be invited to undertake activities related to their core competencies. The focus will be more on prevention as well as referral services on curative aspects. The major activities of such NGOs will include awareness generation, information dissemination and mobilization of communities to act on the issues towards safer behavior.

The NGOs chosen will have to agree to the terms and conditions under the RP. Hence, the selection of a committed NGO is very crucial for implementation of the Project. The selection process and TORs will be reviewed by the ESMD.

NGOs will be engaged on mutually agreed terms and conditions with specific responsibilities and in-built accountability. A contract will be signed with the NGOs indicating the tasks to be performed and the amount to be paid for their services. The payment to the NGOs will be linked to performance of the tasks assigned and the time period. Their payment will be arranged as per contract agreement. The NGO will submit monthly progress reports to the project level PMU-R&R Cell, which in turn will send the summarized version of their reports with comments to PTCUL headquarters. The monitoring and evaluation component of the RP will include the performance of the contracted NGO. The NGO services will be required till the completion of the projects for which provision will be made in the budget.

## **CHAPTER – 7: INCOME RESTORATION MEASURES**

### **7.1 Introduction**

Some development projects have adverse impacts on the incomes of project-affected persons. They may also have a negative impact on the socio- cultural systems of affected communities. Thus restoration of pre-project levels of income is an important part of rehabilitating the socio-economic and cultural systems in affected communities.

Income restoration interventions are much more complex due to occupational diversity of APs. The complex nature of occupational diversity poses a problem for mitigation measures in the context of economic rehabilitation. The task becomes even more challenging due to the inherent pressure of completion of project construction work in a time bound manner.

However, the R&R framework proposed for the project has adequate provision for restoration of livelihoods of the affected communities. Attempts have been made to provide strategies for improving incomes. The focus of restoration of livelihoods is to ensure that the APs are able to at least regain their previous living standards. To restore and enhance the economic conditions of the APs, certain income generation and income restoration programs are incorporated in the RP. To begin with providing employment to the local people during the construction phase will enable them to benefit from the project, reduce the size of intrusive work forces and keep more of the resources spent on the project in the local economy. It will also give the local communities a greater stake and sense of ownership in the project. The Resettlement framework of the project provides that the loss of livelihood which would mainly result from the loss of land, will be compensated by way of:

- Suitable compensation for the land loss taking in to account the future loss.
- Short term assistance through allowances / assistance grants
- Additional allowances to the vulnerable groups
- Preference in providing employment through the contractors for project activity especially to those belonging to vulnerable groups.

The project will:

- Help in establishing contact with construction contractors;
- Encourage to enlist labour for work to handle project related contract services;
- Assist in identifying self-employment options.

### **7.2 Options in Income Generation and Restoration**

The labour force required for construction activities will be mostly of high-skilled nature since a lot of machine work is envisaged for the construction. As a result, the construction contractors are expected to bring along their own labour force. Thus, in most cases the labourers, both male and female, will be migratory labourers. But the involvement of local labour, especially for unskilled activities, cannot be ruled out. To ensure participation of the local population as labour, the EA has agreed that PMO will take the following steps:

- Resettlement specialist and NGO shall try to ensure that there should be participation of both male and female APs in the project activities. At the same time care will be taken to ensure that APs less than the age of 14 years are not involved in the project work, in accordance with the Child Labour (abolition and regulation) Act, 1986.

- NGO through continuous monitoring will ensure that equal wages are given to both male and female workers
- The contractor will give preference in jobs to people affected by the project

### **7.3 Self-Employment Generation Possibility**

The long term project implantation schedule will definitely bring some income source to the local area. The influx of people from outside for the project construction will be buying the local products such as food, vegetable, etc. Therefore, a ready made market will be emerged for the local products and people can sell their product easily.

### **7.4 Women's Needs & Participation**

In resettlement and rehabilitation, women require special attention. Changes caused by resettlement do not have equal implications for members of both sexes and may result in greater inconvenience to women. Due to disturbance in production systems, reduction in assets like land and livestock, women may have to face the challenge of running a large household on limited income and resources. This in turn may force women as well as children to participate in work to supplement household income. In contrast to this, due to changes that are likely to take place for any development project, especially changes in environment and land labour ratio, those women who at present are engaged in activities like agricultural labour, or collection and sale of forest produce may find themselves unemployed and dependent.

Therefore, efforts will be made to maintain the social support network for women headed households as far as possible so that they remain closer to their locations and /or provide special services at the new sites. Some examples of meeting practical needs of women that will be implemented by PMO through NGOs:

- Reduced women's workloads.
- Improve awareness on health status especially on HIV/AIDS counseling.
- Increase access to productive resources
- Promote equal opportunities for women's employment.

## CHAPTER – 8: RESETTLEMENT AND REHABILITATION BUDGET

### 8.1 Introduction

Based on data collected during the survey, the R&R budget has been worked out and provided for the detailed project cost. Besides the cost for land, other allowances for different categories have been fixed. In addition, APs will be entitled to R&R assistance according to the entitlement matrix given in Chapter 4. Contingency provisions have also been made to take into account variations from this estimate. The budget is indicative of outlays for the different expenditure categories. These costs will be updated and adjusted to the inflation rate as the project continues and in respect of more specific information such as extra number of APs during implementation, and unit costs will also be updated when necessary.

### 8.2 Unit Costs for Budget Components

There will be different components which will be covered by the resettlement budget. The unit costs for various components are determined as per the entitlement matrix and also by taking into account earlier experiences and having feedback from the stakeholders during the consultation. A brief description of different components and its break up is described in the following section

#### 8.2.1 Compensation for Acquisition of Private Properties

*Land:* The compensation of the permanent acquisition for private agricultural land has been calculated @ Rs. 1000000/- (Rupees ten Lacs) per hectare. The calculation has been drawn on the basis of present rate of the land as has been derived from the consultation with the local revenue officer.

*Temporary Acquisition:* The construction of transmission lines and other project activities will cause some temporary acquisition of agricultural land and also some trees. The compensation amount for the temporary acquisition has been calculated by assuming the approximate number of households and their land holding size. The land holding size is estimated to be 0.5 hectare and the amount for the loss of crop for 9 months is taken as Rs 30000/-.

*Trees:* Rs. 1500/- per tree has been evaluated based on the previous experience.

#### 8.2.2 Assistance

*Land:* As per the policy in entitlement matrix, 30% of solatium on the land rate will be provided along with another 12% interest, as an allowance to the title holder (land losers).

*Resettlement Allowance:* The average wage rate has been taken as Rs 100/- per day and on this basis, an allowance of 365 days wage will be made available to all the title land losers' households.

*Allowance to Vulnerable APs:* Additional allowance of 500 days wage, at the same rate (Rs. 100/- per day) will be provided to the vulnerable APs.

#### 8.2.3 Community Property Restoration

There will be one play ground to be affected in the small hydro component. According to the local people and the acceptance of EAs, it is estimated that Rs 500000/- (Rs five lacs) will be made available by the EA to restore the play ground.

#### 8.2.4 Supporting Cost for Implementation of RP

Following will be very important components of the cost of RP implementation:

*Social Cell at PMU Level:* As per the market rate of consultancy area, it has been derived that one Land Acquisition and Resettlement Officer at the PMU level will be hired by the EAs at the rate of Rs. 100000/- (One Lac) per month for 5 years.

*Independent M&E Agency:* An independent Agency for monitoring and evaluation will be hired at @ Rs. 800000 annually for a period of 5 years.

*Training:* Amount for Training to staff on different components related to the R&R activities and RP implementation is decided as lumsump of Rs. 500000/- (Rs. 5 lacs) which is based on the early experience.

*NGO:* One NGO will be hired by the EAs @ Rs.1000000/- (Rs ten lacs) per annum for five years of project implementation. The rate of the NGO has been decided by taking in to account the early experiences and thorough discussion with one existing NGO which is also involved in the project for consultation.

### 8.2.5 Contingency

10% of the compensation is kept as the contingency in order to aborb any variation in the budget during the implementation.

### 8.3 Resettlement Cost

The total cost for the resettlement and RP implementation for the core sub project in Bhagirathi and Alakananda basin will be **Rs. 46. 90 million** (US \$1.1 Million).out of which Rs 31.85 million will be the resettlement cost and Rs.15.05 million will be the supporting cost for RP implementation.

The detail breakups are given in Table:8.1.

**Table: 8.1: Resettlement Budget**

Item		Unit Rates Rs	Quantity	Cost Rs (in million)
<b>A: Compensation for Acquisition of Private Properties</b>				
A1	Agriculture Land	1000000	11.15	11.15
A2	Temporary Loss of agricultural Land	RS. 30000/- as 9 months crop value	229	6.87
A3	Loss of trees	Rs. 1500/- per tree for three times (1 productive year)	916	4.12
<b>1. SubTotal: A</b>				<b>22.14</b>
<b>B: Assistance</b>				
B1	Land Acquisition (Agriculture)	30% Solatium with 12% interest		4.68
B2	Resettlement Allowances	Rs.100/- perday for 365 days	25	0.91
B3	Additional Allowance to vulnerable	Rs.100/- per day for 500 days	19	0.95
<b>2. SubTotal: B</b>				<b>6.55</b>
<b>C: Community Infrastructure Replacement &amp; Improvement</b>				
C1	Relocation of community infrastructure	Rs. 500000 for relocating one play ground	1	0.5
<b>3. SubTotal: C</b>				<b>0.5</b>
<b>D: Support Implementation of RP</b>				

D1	Social Cell at PMU and PIU level	Rs.100000 per month for 5 years	1	6
D2	Independent Monitoring & Evaluation Agency	Lump sum	1	4
D3	Training	Lump sum		0.5
D5	NGOs Assistance for RP Implementation	Lump sum	1	5
<b>4. Sub-Total D</b>				<b>15.5</b>
<b>5. Total (2+3+4)</b>				<b>22.55</b>
<b>6. Contingency (10% of the Compensation)</b>				<b>2.21</b>
<b>Grand Total (1+5+6)</b>				<b>46.90</b>

#### Summary Budget

Sl. No.	Item	Amount (in Million Rs.)
1	Compensation cost	22.14
2	Assistance	6.55
3	Community infrastructure	0.5
4	RP implementation cost	15.5
5	Contingency	2.21
<b>Total</b>		<b>46.90</b>

**= 1.1 Million US \$ (@Rupees 44/- against US\$1)**

## CHAPTER – 9: IMPLEMENTATION SCHEDULE

### 9.1 Introduction

Implementation of RP consists primarily the aspect of Land Acquisition. As per the conditions in the technical construction works contracts, land free from all encumbrances is to be made available to the contractors in a phased manner for each contract package. Time frame for implementation of the RP will be synchronized with project implementation in a way that commencement and progress of civil works is not adversely affected.

The R&R official in the PMO and in Resettlement Unit will receive training for implementation and the capacity building will be accomplished prior to commencement of the civil works. The NGO will be trained to upgrade their skills to deliver the R&R components more effectively over time. The documentation and reporting of the process of implementation, monitoring and evaluation is to be done by the NGO and therefore, NGO staff will be trained for such process. The PTCUL and UJVNL staff will also be trained in order to ensure smooth implementation of RP. The following components will be covered:

- Understanding the Policy Guidelines
- Understanding the Implementation Schedule activities step-by-step
- Understanding of the Land Acquisition Act and its procedure
- Monitoring and reporting
- Understanding of the economic rehabilitation schemes

### 9.2 Schedules for Project Implementation

Civil works contracts for all the sections are to be awarded simultaneously, and a uniform time period is being proposed for completion from the date of commencement.

### 9.3 Implementation Activities

APs will be prepared for relocation through Panchayat level consultations. This will include community-based meetings, dissemination of information, individual counseling, written and verbal messages and information. This will also include consultations on explaining the entitlement framework. Also the process of grievance redress will be explained.

All properties will be subject to verification for finalization of land acquisition (LA). The verification procedure includes checking of recorded addresses, identification of surveyed properties and estimation of level of loss by type of property. An identity card will be prepared for each AP with an identification code and issued to them. Finally, they will be paid compensation.

### 9.4 R&R Implementation Schedule

The period for implementation of RP has been taken as a continuous process and will be completed in a phased manner for over a period of six years. However, monitoring and evaluation will continue beyond the period of implementation. Planning, surveying, assessing, policy development, institution identification, AP participation, income restoration and implementation are typical RP related activities, which have been considered. However, the sequence may change or delays may occur due to circumstances beyond the control of the Project. The RP Implementation schedule is shown in **Figure 9.1**.

**Figure 9.1: RP Implementation Schedule**

Activity	2005				2006				2007				2008				2009				2010			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>I. COMPONENT A</b>																								
<b>1. Bhagirathi Basin</b>																								
<i>a. 400kV Lohari Nagpala-Koteshwar Line &amp; LILO at Pala Maneri</i>																								
Census/surveys	■																							
Draft RP	■																							
Consultation	■																							
Notification		■																						
Disclosure		■	■																					
NGO selection		■	■																					
NGO engagement/training			■	■	■	■	■	■																
Finalization of APs and final notification							■				■	■												
Compensation								■	■	■	■													
Beginning of civil work											■													
Grievance redressal							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monitoring and evaluation											■	■	■	■	■	■	■	■	■	■	■	■	■	■
<i>b. 220kV Roorkee 400kV - Roorkee 220kV line</i>																								
Census/surveys	■																							
Draft RP	■																							
Consultation	■																							
Notification		■																						
Disclosure		■	■																					
NGO selection		■	■																					
NGO engagement/training			■	■	■	■	■	■																
Finalization of APs and final notification							■				■	■												
Compensation								■	■	■	■													
Beginning of civil work											■													
Grievance redressal							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monitoring and evaluation											■	■	■	■	■	■	■	■	■	■	■	■	■	■
<b>2. Alakananda Basin</b>																								
<i>a. 400kV Tapovan Vishnugad - Kuwari Pass line &amp; 400kV Kuwari Pass - Srinagar line &amp; 400kV Srinagar - Kashipur line &amp; 400kV Srinagar P/S - Srinagar S/S line</i>																								
Census/surveys	■																							
Draft RP	■																							
Consultation	■																							
Notification		■																						
Disclosure		■	■																					
NGO selection		■	■																					
NGO engagement/training			■	■	■	■	■	■																
Finalization of APs and final notification							■				■	■												
Compensation								■	■	■	■													
Beginning of civil work											■													
Grievance redressal							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monitoring and evaluation											■	■	■	■	■	■	■	■	■	■	■	■	■	■
<i>b. 132kV Lata Tapowan - Kuwari Pass line</i>																								
Census/surveys	■																							
Draft RP	■																							

Activity	2005				2006				2007				2008				2009				2010			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Consultation	■																							
Notification		■																						
Disclosure		■																						
NGO selection		■																						
NGO engagement/training			■	■	■	■	■	■	■	■														
Finalization of APs and final notification										■														
Compensation											■	■	■											
Beginning of civil work													■											
Grievance redressal											■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monitoring and evaluation														■	■	■	■	■	■	■	■	■	■	■
<i>c. 400kV Kuwari Pass s/s, Srinagar s/s</i>																								
Census/surveys	■																							
Draft RP	■																							
Consultation	■																							
Notification		■																						
Disclosure		■																						
NGO selection		■																						
NGO engagement and training			■	■	■	■	■	■																
Finalization of APs and final notification								■																
Compensation											■	■	■											
Beginning of civil work													■											
Grievance redressal											■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monitoring and evaluation														■	■	■	■	■	■	■	■	■	■	■
<b>II. COMPONENT B</b>																								
<i>Small Hydros</i>																								
<i>a. Kaliganga-I SHP</i>																								
<i>b. Kaliganga-II SHP</i>																								
<i>c. Madhyamaheswar SHP</i>																								
<i>d. Kaldigag</i>																								
Census/surveys	■																							
Draft RP	■																							
Consultation	■																							
Notification		■																						
Disclosure		■																						
NGO selection		■																						
NGO engagement and training			■	■	■	■																		
Finalization of APs and final notification								■																
Compensation											■	■	■											
Beginning of civil work													■											
Grievance redressal											■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monitoring and evaluation														■	■	■	■	■	■	■	■	■	■	■



## **CAPTER – 10: MONITORING, EVALUATION AND REPORTING**

### **10.1 Need for Monitoring**

Monitoring and Evaluation (M&E) are critical activities in involuntary resettlement in order to ameliorate problems faced by the APs and to develop solutions immediately. Monitoring is a periodic assessment of planned activities providing midway inputs facilitates changes and gives necessary feedback of activities and the directions in which they are going, whereas evaluation is an activity aimed at assessing whether the activities have actually achieved their intended goals and purposes. The M&E mechanism will measure project performance and fulfillment of the project objectives.

RP implementation for the project will be closely monitored by the PMO through its Resettlement Unit and will be at the helm of all activities related to the RP implementation. Components of monitoring will include performance monitoring, impact monitoring and external evaluation. Two broad categories of indicators will be monitored during the project are: (I) input and output indicators and (ii) outcome and impact indicators.

Input and output indicators related to physical progress of the work will include items such as:

- Training of PMO and other staff completed
- Public meetings held
- Census, assets inventories, assessments and socio-economic studies completed
- NGO recruited and trained
- Meetings of GRCs
- Grievance redress procedures in-place and functioning
- Compensation payments disbursed
- Employment provided to APs
- Community development activities completed
- Infrastructure repaired, bus stands, water and sanitation facilities provided
- Village roads repaired
- Training of APs initiated
- Income restoration activities initiated
- Number of families affected
- Extent of government land identified and allotted to the APs
- Monitoring and evaluation reports submitted

The PMU-R&R Cell with the help of the NGO will carry out internal monitoring. Impact indicators relate to the overall project objectives as stated in the R&R Policy and in the entitlement matrix. An external agency will be engaged to monitor and proactively evaluate the RP objectives. The external agency will submit monthly and quarterly monitoring reports. Final evaluation will be done by the agency to find out if the R&R objectives have been achieved as against the performance impact indicators.

## 10.2 Methodology for Monitoring

- Random sample of 25 percent of APs will be interviewed by M&E consultants
- Participatory rapid appraisal of the resettlement implementation will be done in every village
- Public consultations will be conducted
- Observation checklist will be used for assessing eviction and resettlement processes
- Grievance appeals will be reviewed and discussed with APs about the satisfaction regarding the process
- Standard of living of the APs before and after implementation will be reviewed using baseline information collected earlier.

## 10.3 Monitoring Project Input and Outputs

Internal monitoring will be the responsibility of the R&R Cell, which will report on the progress of the R&R activities to the PMO on a monthly basis in prescribed monitoring formats. The R&R Cell will report on each of the project indicators stated herein and others that might emerge as project implementation progresses. The reports will cover the progress of the project on the targets set at the commencement, with the help of the NGO.

Based on the reports, the PMO will monitor and evaluate every three (3) months the overall progress on each R&R component within the project and determine actions to be taken by the PMO in situations where the set objectives are not being met.

PMO will also monitor the following activities:

1	Verification exercise	No. of Affected Persons and No. of Affected Households
2	Land Acquisition notification	Date/s
3	Consultations on entitlement	No. of consultations, no. of APs/AHs attended
4	ID cards distribution	No. of consultations, no. of APs/AHs attended
5	Training of staff, NGO & APs	No. of staff trained
6	Establishment	Staff recruited, equipment purchased, vehicles brought
7	Appointment of i) NGO ii) M&E Agency	

Broadly, the monitoring and evaluation system will involve:

- *Administrative monitoring*: daily planning, implementation, trouble shooting, feed back & trouble shooting, individual AP file maintaining, progress reports
- *Socio-economic monitoring*: case studies, using baseline information for comparing AP socio-economic conditions, evacuation, demolition, salvaging materials, morbidity and mortality, communal harmony, dates for consultations, number of appeals placed, etc.
- *Impact evaluation monitoring*: Income standards restored/improved, situation of the affected persons.

#### **10.4 Set of key monitors to be used**

A set of indicators will be used to monitor the project objectives. These indicators will form the basis of the monitoring and evaluation of the implementation of the RP. The information collected through the household survey carried out for this study will provide benchmarks for comparison on the socio-economic status of the APs in the project implementation period. The indicators to be monitored will include vulnerable groups and their progress in resetting, and income restoration of APs.

All monitoring data, both internal and external will be disaggregated by gender.

This monitoring will give information about whether the project objectives are being met. A key objective will be the estimation of the affected persons' incomes and quality of lives. If the monitoring and documentation done during the first 6 months in service of the Project indicate that these objectives are not being achieved, more resources should be allocated towards it.

During implementation, benchmarks and indicators will be monitored to ensure that comparison is made against the socio-economic status including income streams, not just the fixed assets lost to the project.

#### **10.5 Role of Independent Agency**

The EA will engage the services of an independent agency not associated with the project execution to carry out monitoring and evaluation of the project. The M & E Consultants will be appointed (with ADB concurrence) within three months of the loan effectiveness. Criteria for selecting an external agency for M&E should be based on their experience in the field and comprehensive knowledge of R&R needs of the APs.

The EA, through the PMU, would continue to monitor quarterly the R&R activities through R&R Cell. The independent agency will carryout monthly monitoring; however, the impact evaluation will be undertaken on a sample basis by the independent agency twice in the cycle of the project: mid term and final.

Each evaluation will help to plan for corrective measures before the final evaluation. These will provide a basis for changes in approach to the problems relating to involuntary resettlement arising out of the project.

The independent agency will also evaluate the performance of the NGO and the R&R Cell. The agency will report its findings simultaneously to the EA and to the ADB. Provisions have been made in the budget for engaging the independent agency.

Monitoring will also include:

- Reactions from APs
- Information from APs on entitlement policies, options, alternatives and relocation related issues
- Visits to sites
- Valuation of property
- Use of grievance procedure
- Disbursement of compensation
- Behavior of staff

Developing early warning system to alert PIU is essential. Sensitive indicators and regular monitoring apart from those already suggested will accomplish this.

Examples of some of these will be:

- Law and order situation in the area,

- Vigilance during eviction and demolition.

### Annexure 2.1: Details of Land Holders

Name of the Place: .....		Name of the Tehsil: .....		Name of the District: .....		
Sl. No.	Khasra No.	Name of Land Holder(s)	Area to be Acquired	Total Area	Type of Land *	Remarks
1						
2						
3						
4						
5						

\* Code for Type of Land: 1. Agricultural Irrigated, 2. Agricultural Unirrigated, 3. Residential, 4. Commercial, 5. Barren, 6. Forest, 7. Others

## Annexure 2.2: Landholders' Survey Questionnaire (SS / SHP)

A. Questionnaire No: \_\_\_\_\_ Date: .....

B. Name of the SS/SHP: \_\_\_\_\_

C. Name of the Place (s)/Village /(s): \_\_\_\_\_

D. Plot No. -----

E. Block/Taluk: \_\_\_\_\_

District: \_\_\_\_\_

1. Ownership of the Land

1. Private      2. Government      3. Religious      4. Community      5. Others

2. Type of Land

1. Irrigated      2. Non-Irrigated      3. Barren      4. Fallow      5. Forest

3. Use of Land

1. Cultivation      2. Orchard      3. Residential      4. Commercial

5. Forestation      6. Others      7. No Use

4. Total Area of the Land (in Acre) .....

5. Area of the Affected Land (in Acre) .....

6. Rate of the Land (Per Acre)

1. Market Rate..... 2. Revenue Rate.....

7. Name of the Land Holder .....

8. Father's Name .....

9. Total Land you possess (in Acre)

1. Irrigated..... 2. Non-irrigated ..... 3. Total.....

10. Any of the following person associated with the Land

A. Agricultural Labour      1. Yes      2. No

B. Sub- Tenant      1. Yes      2. No

C. Share-Croppers      1. Yes      2. No

11. If yes, name of the agricultural Labour/Sub-Tenant/ Share-Croppers

A. ....

B. ....

C. ....

D. ....

12. Any structure in the Affected Land      1. Yes.....      2.No.....

13. Area of the affected structure (in Square Meter) .....

14. Type of Structure      1. Katcha      2. Semi-Pucca      3. Pucca

15. Market Value of the Structure (in Rs.).....

16. Number of trees within the affected area

1. Total.....2. Fruit Bearing.....3. Non-fruit Bearing.....
17. Social Category
1. SC 2. ST 3. OBC 4. General 5. Others (specify.....)
18. Number of family members Total.....Male.....Female.....
19. Number of family members above 18 years
1. Son.....2. Unmarried daughter.....3. Divorcee/widowed daughter.....
4. Others.....5. Total.....
20. Is it a women headed household?
1. Yes 2. No
21. Is it a household owned by physically handicapped?
1. Yes 2. No
22. Annual income of the family Rs.....
23. Willing to shift
1. Voluntarily 2. Need Resettlement
24. Compensation Option
1. Land for land loss
2. Cash for Land loss
3. House/Shop for House/ Shop loss
4. Cash for House/ Shop loss
25. Desire Assistance and other help
1. Shifting Allowance
2. Employment Opportunities in Construction work
3. Assistance/ Loan from other ongoing development scheme
4. Training for Vocational activities
5. Others (specify ..... )

(Signature of the Supervisor)

(Signature of the investigator)

**Annexure 2.3: LIST OF AFFECTED LAND HOLDERS**

<b>Sl. No</b>	<b>Name of the Place</b>	<b>Name of the Land Owner</b>	<b>Social Category</b>
1	KUWARIPAAS (SS)	Jugal Kishore	General Caste
2	KUWARIPAAS (SS)	Devilal	SC
3	KALIGANGA-II (SHP)	Tikaram	General Caste
4	KALIGANGA-II (SHP)	Purushottam	General Caste
5	KALIGANGA-II (SHP)	Om Prakash	General Caste
6	KALIGANGA-II (SHP)	Ramesh chandra	General Caste
7	KALIGANGA-II (SHP)	Rajendra Prasad	General Caste
8	KALIGANGA-II (SHP)	Mitranand	General Caste
9	KALIGANGA-II (SHP)	Subhash	General Caste
10	KALIGANGA-II (SHP)	Mugambar Singh	General Caste
11	KALIGANGA-II (SHP)	Manvar Singh	General Caste
12	KALIGANGA-II (SHP)	Uday Singh	General Caste
13	KALIGANGA-II (SHP)	Gabbar Singh	General Caste
14	KALIGANGA-II (SHP)	Vijay Singh	General Caste
15	KALIGANGA-II (SHP)	Govind singh	General Caste
16	KALIGANGA-II (SHP)	Indra Singh	General Caste
17	KALIGANGA-II (SHP)	Virendra Singh	General Caste
18	KALIGANGA-II (SHP)	Suraj Singh	General Caste
19	KALIGANGA-II (SHP)	Narayan Singh	General Caste
20	KALIGANGA-II (SHP)	Maya Ram	General Caste
21	KALIGANGA-II (SHP)	Ram Krishna	General Caste
22	MADHYAMAHESWAR (SHP)	Jagat Singh	General Caste
23	MADHYAMAHESWAR (SHP)	Avtar Singh	General Caste
24	MADHYAMAHESWAR (SHP)	Makar Singh	General Caste
25	MADHYAMAHESWAR (SHP)	Sher Singh	General Caste

### Annexure 5.1: Public Consultation at SHPs Sites

Location/ Site/Date	Issues	Participants' Comments and Suggestions
<p>1. Kaliganga-I 2. Kaliganga- II 3. Madhya Maheswar 4. Kaldigad</p> <p>Date: from 27/02/2005 to 28/02/2005</p>	<ul style="list-style-type: none"> <li>• General perception about the project and the awareness about the proposed project of transmission lines, substations, small hydro power, etc.</li> <li>• Number of inhabitants of village / number of families, castes / tribes in the village, general socio-economic standing</li> <li>• Whether village electrified, each house has connection, quality of power available</li> <li>• Source of drinking water</li> <li>• Use of fuel</li> <li>• Women Participation in economic activities and average time spent by the women in household activities.</li> <li>• Access to the forest land and the use of the forest land</li> <li>• Current rates for the agricultural land (revenue as well as market rates)</li> <li>• Loss of residential structures, if any</li> </ul>	<p>People are aware abbot the project which is quite generic to them. They want a specific description and knowledge about the project.</p> <p><b>No of families (Project Village)</b> Kalinganga-I and II = 71, average hoheshold size=5, No Tribe Madhymahesswar =11, No SC and ST Kaldigarh=45, No Tribe, 3 Sc Families.</p> <p>Most of the houses are electrified (Almost 80%)</p> <p>Natural stream water through tap or may be direct stream water.</p> <p>Firewood</p> <p>Being a hilly state, both man and woman take part in economic activities. Agriculture being the major source of income, women do participate in the agricultural activities thus cause the double burden of work for the women since they do take care of the household activities as well. On average women spend 4 hrs in household activities and around 5 hours in the field.</p> <p>Forest is usually used as the source of their fuel, fodder and in some cases grazing land. Thus, most of the villagers do have the access to the forest land.</p> <p>Rs. 80000/- to 1.5 lac per acre depending upon the fertility.</p> <p>No loss of residential structure in the project area.</p>

Location/ Site/Date	Issues	Participants' Comments and Suggestions
	<ul style="list-style-type: none"> <li>• Loss of community life</li>   <li>• Resettlement and Land acquisition</li>   <li>• Market Places, if any</li>   <li>• Health and Environment</li>   <li>• Mela Places and occasion &amp; session of occurrence</li>   <li>• Historical or archaeological sites, if any</li>   <li>• Type of compensation expected (Cash or Kind)</li>   <li>• Approximate daily wage rates for ]</li>   <li>• Perceived benefits from the project</li>   <li>• Perceived losses from the project</li> </ul>	<p>As there is no case of displacement, so the chances of disturbance to the community life are not foreseen.</p> <p>There will be no resettlement but there will be land acquisition and the land will be of both private and government/forest.</p> <p>No market place is going to be affected due to the project.</p> <p>Health condition of the people in the hills is normally good due to the climate and no such vulnerable or epidemical diseases were never found in these areas.</p> <p>The site of Kaliganga-I and II small hydro power station is having some historical importance. According to the villagers, there is a religious gathering in every year in the month of June. Necessary precautionary measures like, supply of safe drinking water, maintaining the sanctity of the place during the project construction, etc were suggested by the local people which will be incorporated in the safeguard measures.</p> <p>People prefer cash compensation for land loss and in case of the community property like play ground in Madhmaheswar, they want an alternate play ground to be built by the project official.</p> <p>The approximate wage rate in the village area of uttaranchal varies from Rs80/- to Rs. 120 depending on the nature of work.</p> <p>People do agree that there will be benefits from the projects. These benefits will be like temporary job opportunities, mercerization of the local product, opening up of small business centres for the construction workers, enhancement in the infrastructure and may be increase in supply of electricity.</p> <p>Land acquisition may cause some burden to those who will lose a greater amount of land. There is a chance of outsiders who will be engaged by the contractors in the construction which may cause disturbance among the local community.</p>

Location/ Site/Date	Issues	Participants' Comments and Suggestions
	<ul style="list-style-type: none"> <li>• What other organizations of a social nature (NGOs/CBOs) active in their area, name, phone</li> <li>• Name of any Panchayat members, phone contact</li> <li>• Any Other Issues</li> </ul>	<p>They are aware about few organizations operational in social development activities but they don't know the names.</p> <p><b>Kaliganga- I and II SHP</b>  Mr. Murlidhar Bhatt  Mr. Tikaram Bhatt  Mr. Pradeep Chauhan  Ms. Vimla Devi  Mr. ram Chandra Singh  Ms. Sumati devi  Mr. Virendra singh</p> <p><b>Madhymaheswar SHP</b>  Mr. Ganesh Taplyal  Ms. Anjana Rawat</p> <p><b>Kaldigad SHP</b>  Ms. Sabitri Devi  Ms. Phuli Devi  Mr. Darshan Lal  Mr. Mahadev  Mr. Mr. Virendra Singh  Ms. Seema saha</p> <ul style="list-style-type: none"> <li>• Provision of making water tank for the better drinking water supply to all the villagers. Supply of the water to the tank should be from the hydro plant site.</li> <li>• Alternate play ground to be made by the government at Madhymaheswar site</li> <li>• Engagement of local labour in the construction work should be made mandatory for the contractors.</li> <li>• Consultation with the local people and with the local bodies should be continued through out the project execution.</li> <li>• Fishing is not done in these villages even if there are small fishes in the river.</li> <li>• Debris from the construction work should be used for road construction or may be for</li> </ul>

Location/ Site/Date	Issues	Participants' Comments and Suggestions
		<p>some other village infrastructure development.</p> <ul style="list-style-type: none"> <li>• All the schools should be electrified with free of cost and the provision should be made by the government official to make it happen.</li> <li>• Proper meter reading for the electric bill.</li> <li>• Local people should have a direct access to the higher official during the compensation</li> <li>• Overall, the project is welcomed by the people and they assured of rendering all their support for the successful execution of the project.</li> </ul>

