



**SJVN LIMITED**

**Mid-Term Impact Evaluation  
of the  
RAP Implementation and Community Development Activities  
of  
Rampur Hydro Electric Project**



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## Abbreviations

AERC	Agro Economic Research Centre, Himachal Pradesh University, Shimla
CD	Community Development
DC	Deputy Commissioner
FGD	Focus Group Discussion
GOI	Government of India
HP	Himachal Pradesh
GoHP	Government of Himachal Pradesh
LA	Land Acquisition
LAA	Land Acquisition Act, 1894 (amended in 1984)
LADA	Local Area Development Authority
MHV	Mobile Health Van
MOU	Memorandum of Understanding (between Govt. of Himachal Pradesh and SJVNL)
NJHEP	Nathpa Jhakri Hydro Electric Project
NPRR	National Policy on Resettlement and Rehabilitation, 2003
OP 4.12	World Bank's Operational Policy (OP 4.12) on Involuntary Resettlement
PAF	Project Affected Family
PAH	Project Affected Household
PIC	Public Information Centre
QPR	Quarterly Progress Report
RAP	Resettlement Action Plan for RHEP, 2007
RG	Resettlement Grant
RHEP	Rampur Hydro Electric Project
RTI	Right to Information Act, 2005
R&R	Resettlement and Rehabilitation
SCDP	Sustainable Community Development Plan
SIA	Social Impact Assessment
SJVNL	SJVNL Limited
TORs	Terms of Reference
WB	World Bank

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## Executive Summary

**Introduction:** Rampur Hydro Electric Project (RHEP) – a 412 megawatt project is currently being executed on the bank of river Satluj by SJVN Limited<sup>1</sup> (SJVN) affects a total of 8 panchayats in the area namely – Gadej, Bahawa, Poshna, Badi, Tunan, Kharga, Kushwa and Duttnagar. Private lands and structures were acquired in four (4) revenue villages – Bayal, Koyal, Averi and Dutt Nagar. Of the total land requirement of 78.254 hectares, 49 hectares belonged to government and was transferred while the balance 29 hectares was privately owned and was acquired. SJVN had formulated and adopted a Resettlement & Rehabilitation Plan for the Project Affected Families (PAFs) and development of the local infrastructure in the affected villages. In addition to the direct provisions targeted at the project affected families (PAF), a sustainable community development (CD) programme was formulated for the benefit of general population in the project affected area (PAA).

**Objectives and scope of the impact evaluation assignment:** The objective of assignment to independently evaluate at the mid-term stage the impact of Resettlement and Rehabilitation implementation on the project affected families (PAFs) and local communities residing in the vicinity of the project towards achievement of Resettlement Plan objectives. Specifically the study attempted to assess the impact of compensation and assistance provided to the affected people in improving their living standards against baseline information gathered as pre-project scenario. The team visited the site between April 23 and May 12, 2010. During the survey, as the total number of affected households was small (142 households) attempt was made to cover all the ‘available’ affected households/families still residing in the project area<sup>2</sup>. In addition, a small sample of 36 households from the same villages with similar socio-economic background was surveyed to collect the control data for comparison purposes. Besides the household survey, consultations with affected villages (and one non-affected village) were held

**Findings of the impact evaluation survey:** Change in family size: The average family size has come down from 5.04 in 2005 to 4.04 in the year 2010. Change in average annual income: As against the baseline figure of Rs. 55,890/- in the current average annual income reported is Rs. 92,931.50. In real terms the income has gone up 26.29%<sup>3</sup>. In absolute terms it has gone up by 66%. 27.40% of the households have recorded an increase in income in real terms, while 37% of the surveyed households have reported an increase in absolute terms. Further, in comparison to the control households surveyed, the figure is 41% higher. Change in occupation: Amongst the surveyed population, 49.51% of the working population report agriculture as their main occupation i.e. an increase of approximately 12% from 2005. 14.56% of PAFs are in government service i.e. 5.62% increase. Others include 7.77% in business (i.e. shops) and 17.48% are in private service. Increase in government employment and private service indicate a diversification in occupation when compared to the 2005 figures. Changes in living standards: 57.53% PAFs utilized the amounts towards making pucca their existing house; and/or purchasing or building new houses; and/or adding more rooms to these houses. In terms of pucca houses, an increase of 20.21% is

<sup>1</sup> Satluj Jal Vidyut Nigam Limited (formerly known as Nathpa Jhakri Power Corporation) has been recently renamed as SJVN Limited.

<sup>2</sup> In RHEP project affected zone or area includes: Kushwa, Kharga, Tunnan, Poshna, Bari, Bahwa and Gadej panchayats of district Kullu and Jhakri and Duttnagar of District Shimla

recorded. Further, average house size has increased by 36.45% in size in comparison to 2005 figures. When compared to the control group the average size of affected families is 17% bigger in terms of size. 17.81% of PAFs have invested in land (or apple orchards) either in the vicinity of their village or away. Land holding (less than 5 bighas) too has shown a marginal increase of 4.70%. In terms of investment in financial instruments, 45.21% invested in Bank savings, 42.47% in fixed deposits. 57.53% of PAFs reported of investment in education of their children particularly in ITI courses, and courses relating to computer and engineering (diploma and degree) thereby indicating a preference for the option most useful to securing their children's future. 27% PAFs reported consumptive usage such as marriages and other family /life events. Further improvement in living standards is recorded in terms of ownership of consumer durables such as TV, refrigerators, LPG gas connections with more 90% household reporting ownership of these items in comparison to the baseline figures. 24.66% of the surveyed households reported having obtained one or more than one additional asset utilizing the compensation and assistances received. Of these, 19.18% of households reported having added more than one additional asset such as TV, Fridge, Car, Motor-vehicle, etc.

Status and evaluation of social impact of RAP and community welfare measures: Technical education for local youth scheme, Merit scholarship scheme, Bayal dispensary/ Mobile Health Van service are some of key welfare measures that have been largely acknowledged by the community. Further the many community infrastructural works carried out by SJVNL has found both enthusiastic response from communities as well as a preference for SJVNL in execution of such works. Further broader community too has shared the project benefits and in particular from the other provisions such as the provision of petty contracts, hiring/renting of vehicles; agriculture/horticulture/veterinary camps for provision of support services to farmers.

Gender impact: A significant achievement of the community welfare measures is observed with respect to the women's participation and benefits that accrued to women who reside in the project areas. 24 nos. of young women have enrolled and completed ITI training in trades such as cutting, sewing and COPA, while 14 nos. have received merit scholarship (arts and crafts, computer engineering, cutting and sewing). A significant number (100 nos.) of women from both affected and non-affected have attended many of the agriculture, horticulture camps and found them useful.

**Community perceptions:** A total of 6 community consultations were held in the four villages – Bayal (2), Koyal (2), Averi (1) and Duttnagar (1) with 52 persons with specific reference to the types of measures that had been brought forth by the project and how they had benefitted or otherwise. There are some concerns pertaining to permanent employment to PAFs in RHEP, compensation for impacts to dwelling units, compensation for impacts to crops, mobile health van services, adding of new streams in ITI sponsorships, opening up of a public school, Income generation scheme.

Community welfare measures: i) ITI training is useful however since these are trades are of use to SVJNL, efforts may be made to give permanent employment in SJVN. Further the list of trades may be expanded to include Hotel management, business management and mobile repairing, etc. *Nursing* is an important trade and should be included henceforth; ii) Augmentation of drinking water supply was a major issue in Duttnagar as it had been more than two years since the tendering process had been completed and desired that Irrigation and Public Health (IPH) department should take immediate steps to take it over for its operation. Communities indicated a clear preference for SJVNL as the executing agency to carry out works sanctioned by LADA as the work was considered superior in quality and is also carried out a timely manner.

Further, they wanted better transportation for their children; iii) Mobile health van is useful but medicines are given based on symptoms and some diagnostic facilities may be made available as well. Also stock of medicines needs to be improved.

**Key outstanding actions:** The RAP (2007) stated that the RAP would be deemed completed if 100% of the following actions were achieved. (See Table 1) In terms of financial progress, thus far, out of planned amount of Rs. 102 crores (inclusive of the budget of Rs. 53 crores of the total R&R and Community development), an amount of Rs. 66.28 crores (Rs. 6628.46 lakhs) or 64.98% has been achieved. At the mid-term stage, it is recorded that more than 85% of the RAP actions have been completed.

Table 1 – Status of Key R&R actions	
Compensation offered to eligible families.	Completed
Disbursement of resettlement grant to landless families	Completed
Benefits provided to the houseless families (independent house/cash plus plot/cash only as per their choice)	Yet to be completed. Provision of construction allowances to balance eligible families in Kullu district. Provision of house plots and construction allowances to <b>four nos. (4)</b> of houseless and landless PAFs in Duttnagar village
Transitional allowance	Yet to be completed. Due to PAFs in Duttnagar
Shifting allowance disbursed, etc	Yet to be completed. Due to PAFs in Duttnagar

*Source: Impact Evaluation survey, May 2010*

**Key Recommendations** include: i) In the MOU, de-link the provision of seed capital from the employment provision and ii) provide the same amount of Rs. 30,000/- as a “working capital” to the affected families so that they augment their existing business/shops, if any; ii) Revise seed capital amount from the current amount of Rs. 30,000/- to Rs. 50,000/-; iii) Include “Nursing” trade as one option to the trades available to females from project affected households, besides “Mobile repairing” as an option for males; iv) hire an Non- Government Organization to carry out a survey to ascertain usage of repairing costs on blasting impacts and to obtain utilization certificates along with photographs; v) Discontinue the practice of provision of ‘free’ medicines so that all patients (villagers) pay and know about the treatment given and the medicines they consume besides completing the full course of treatment at the MHV and dispensary and increase outreach of MHV to more villages in the area.

## Chapter 1 – Introduction and Methodology

### 1.1 Project description

1. Rampur Hydro Electric Project (RHEP) – a 412 megawatt project is currently being executed on the bank of river Satluj by SJVN Limited<sup>4</sup> (SJVNL). The project lies in the Kullu and Shimla districts in the state of Himachal Pradesh. The project is conceived as tailrace development from 1500 MW Nathpa Jhakri Hydro Electric Project (NJHEP) to tap the hydropower potential of river Satluj between *Jhakri* and *Bayal* village (See **Figure 1** for layout plan of RHEP).



Figure 1: Layout Plan of Rampur Hydro Electric Project

2. The project affects a total of 8 panchayats in the area namely – *Gadej, Bahawa, Poshna, Badi, Tunan, Kharga, Kushwa and Duttanagar*. However, private lands and structures were acquired in four (4) revenue villages – *Bayal, Koyal, Averi and Dutt Nagar*. Of the total land requirement of 78.254 hectares, 49 hectares belonged to government and was transferred while the balance 29 hectares was privately owned and was acquired.

See **Table 1.1** for details. The lands acquired were used to create various infrastructure facilities such as power house, roads, dumping area, quarry, dumping site, crusher, job facilities, office complex, etc.

S.No.	Name of work	Name of village	Private land acquired (in ha)
1	Road P.H.Site and Site office	Bayal	05-26-12
2	Road P.H. site and site office	Bayal	00-25-82
3	Office complex and components of power house etc	Bayal	01-09-66
4	Dumping area	Averi	03-84-46
5	Quarry road, crusher and job facilities	Averi	03-93-32
6	Residential and non-residential accommodation	Duttanagar	14-71-20
			<b>29-10-58</b>

*Source: SJVNL records, May 2010*

<sup>4</sup> Satluj Jal Vidyut Nigam Limited (formerly known as Nathpa Jhakri Power Corporation) has been recently renamed as SJVN Limited.

3. Compensation for assets acquired was completed in three villages of Bayal, Koyal and Averi, and payment was completed prior to commencement of civil works in February 2007. For computation of land value, Government of Himachal Pradesh had constituted a separate committee consisting of Deputy Commissioner, District Kullu as Chairman and Superintending Engineer, District Horticultural office, Tehsildar and representative of the Forest department as its members for evaluating the land prices<sup>5</sup>. The committee decided the rate as Rs. 4,47,242 per bigha for Bayal, Rs. 4,49,874 per bigha for Averi and Rs. 4,41,172 per bigha for Koyal. Evaluation of the house structures was carried out by through a registered evaluator (third party) and has been mentioned in the land acquisition award. The evaluator employed item rate method and rate of HPPWD schedule of rate plus the prevailing market premium of these rates.

4. In addition to the above, SJVNL had formulated and adopted a Resettlement & Rehabilitation Plan for the Project Affected Families (PAFs) and development of the local infrastructure in the affected villages. The main provisions envisaged in the R&R Plan for the PAFs were: transportation assistance for relocation; house plot for houseless families; rehabilitation grant for landless families; allotment of shops in market complexes; support for income generation; employment; merit scholarship scheme for the wards of the PAFs; award of petty contracts to PAFs; jobs with contractors of PAFs; rental grant of Rs. 2000 per month for a period of 18 months; assistance to vulnerable groups<sup>6</sup> of Rs. 18,000/-; seed capital of Rs. 30,000/- towards IGS for those families who have not been provided with employment in the Nigam or have not been allotted any shop; and infrastructural assistance at rehabilitation colony.

5. In addition to the direct provisions targeted at the project affected families (PAF), a sustainable community development (CD) programme was formulated for the benefit of general population in the project affected area (PAA). The CDP measures included: introduction of mobile health van in the project affected villages/area; infrastructural works in project affected villages; support services to farmers in their agriculture/horticulture/veterinary practices; protection and promotion of cultural heritage and support to local fairs and festival; technical education scheme for youths of project affected area; merit scholarship scheme; infrastructure and other aids to the government schools within the project affected area; promotion of sports activities in project area; restoration of dried up water resources; construction of bridges, bus stand and widening of existing roads.

## 1.2 Objectives and Scope of the Study

6. The R&R plan under implementation since the year 2006-07, provided for a mid-term impact evaluation that would review the implementation progress, undertake verification in consultation with affected people and submit an evaluation report. Hence, the current study assignment has been undertaken to independently evaluate at the mid-term stage the impact of Resettlement and Rehabilitation implementation on the project affected families (PAFs) and local communities residing in the vicinity of the project towards achievement of Resettlement Plan objectives. Specifically the study attempts the assess the impact of compensation and assistance provided to the affected people in improving their living standards against baseline information gathered as pre-project scenario. Further contribution of development of community development programmes for local area development has been assessed

<sup>5</sup> The committee took into account of consultations with the affected persons, project officials, recent transactions, compensation paid through private negotiations for a nearby private hydropower project, compensation enhanced by courts for Parvathi hydropower project to finalize the land prices. Accordingly, compensation rates as decided by the committee have been announced by the LAO. Over and above 30% solatium and 12% interest have also been added in the compensation amount from the date of section 4 notification.

<sup>6</sup> SC, SC+WHH, ST are considered as the vulnerable groups under the policy

based on the socio-economic survey and also on consultations carried out directly and indirectly impacted villages in the project area.

### 1.3 Approach and Methodology

7. The team<sup>7</sup> held an initial meeting with officials from SJVN Limited and also World Bank (WB) to understand the objectives and expectations from the study. Following the meeting, preparation stage activities such as review of the relevant literature and preparation of survey tools was carried out. The team visited the site between April 23 and May 12, 2010. Two survey investigators<sup>8</sup> were identified from the affected villages of Bayal and Koyal for the household survey and also to facilitate consultations with the affected communities and women groups. The socio-economic survey was carried out in these villages along with consultations and focus groups discussions between April 26 and May 7, 2010. During the survey, as the total number of affected households was small (142 households) attempt was made to cover all the 'available' affected households/families still residing in the project area<sup>9</sup>. In addition, a small sample of 36 households from the same villages with similar socio-economic background was surveyed to collect the control data for comparison purposes. See **Table 1.3** for village-wise breakup details of the surveyed households and **Annexure A** for list of surveyed households (affected and control groups). The civil engineer in the team surveyed the various community infrastructure works in the area based on the list provided by the project authorities.

Names of villages	No. of households			
	Affected	Surveyed	not available for survey*	Control
Bayal	65	35	30	15
Koyal	41	20	21	10
Averi	30	15	15	10
Duttnagar	16	3	13	2
<b>Total</b>	<b>142*</b>	<b>73</b>	<b>79</b>	<b>36</b>

*Source: Site survey, May, 2010*

\* there are 10 more number of families in respect of whom panchayat parivar register are not available .

\* many households were residing outside the project area, particularly in Averi village even at the time of acquisition while a few others have moved out as they have been working in non-agricultural jobs.

8. Consultations were held with the village communities and with women groups with prior intimation on the purpose of the interactions. Following completion of field activities, a final round of meetings was held with officials of SJVNL/RHEP to discuss the preliminary findings and potential recommendations. Interactions too were held with the monitoring consultants – Agro Economic Research Centre (AERC), Himachal Pradesh University to discuss their findings, activities undertaken to the support the implementation process, recommendations proposed, and follow up actions taken by project authorities if any. Subsequently, all data was entered into a suitable data entry program, analysed and segregated into aspects that were relevant to evaluation the impact of the R&R activities and those that are relevant to evaluation of community works in the eight (8) affected panchayats.

<sup>7</sup> Consultant team from SMEC India Pvt. Limited comprised: Dr. Debasish Bhattacharya (R&R Expert and Community Development Expert), Mr. G. Srihari (R&R expert), Mr. Bikas Chandra Singh (Civil Engineer) and Mr. Manish Tripathi, Survey Manager, besides local investigators

<sup>8</sup> one investigator belonged to a project affected family of Koyal.

<sup>9</sup> In RHEP project affected zone or area includes: Kushwa, Kharga, Tunnan, Poshna, Bari, Bahwa and Gadej panchayats of district Kullu and Jhakri and Duttnagar of District Shimla

### 1.4 Limitations to the Study

9. In terms of limitations, it was observed that during field survey owing to: i) the harvesting season in the project area; and ii) some PAFs relocating outside the region on their own or have lived outside from before, repeated house visits in order to survey the affected household did not yield desired results, and those households could not be surveyed.

### 1.5 Structure of the Report

10. The structure of the report is given below:

Table 1.4 – Structure of the report		
Chapters	Title of Chapter	Details
1	Introduction and Methodology	The chapter shall include project context and a brief of the scope of the study. Methodology of the study shall be presented in the chapter including details on the households covered
2	Status of the various R&R and community development measures	Findings of the household level socio-economic survey shall be presented in the chapter. The chapter shall present the <ul style="list-style-type: none"> <li>• status of the R&amp;R measures proposed and administered till the mid-term stage and their utilization and evaluation of their impact</li> <li>• assessment of community infrastructures shall be presented with respect to the quality of infrastructure and also easement felt by the community</li> </ul>
3	Stakeholder consultations and community perceptions	Details of the community consultations and focus group discussions with women groups are presented in the chapter
4	Observations and recommendations	Observations on the implementation thus far followed by recommendations
<b>Annexures</b>  Annexure A – Photographs for house structures – a comparison Annexure B – Photographs of the community consultations Annexure C – Photographs of community infrastructure Annexure D – Copy of affidavit for candidates obtained for enrolling at ITI		

All other relevant information to the study has been annexed to the report.

## Chapter 2 – Status and Impact of R&R & Community Development measures

### 2.1 Introduction

11. The chapter presents status of the various R&R measures followed by the evaluation of the economic impact of R&R implementation and other related interventions and details the changes recorded with respect to various parameters such as income, occupation, consumption, ownership of assets, yields, housing conditions, savings, etc. Further it takes into account indicators such as income, proportion of families living below poverty line, change in house durables, change in consumption patterns, savings, etc. Also covered are the status and social impact of community development measures. These are followed by assessment by the civil engineer of the community infrastructure works. The chapter concludes with a review of the existing mechanisms for information dissemination, implementation, grievance redressal and monitoring.

### 2.2 Status of provision of various R&R measures and their utilization

12. Findings of the socio-economic survey are presented below for affected and control households (See Table 2.1).

Table 2.1 – Socio-economic characteristics of surveyed and control households (in %)		
Characteristic	Surveyed households	Control households
Sex	Male – 49.49; Female – 50.51	Male – 50.76; Female – 49.24
Religion	All households follow Hinduism	
Social Stratification	General - 63.01; SC -35.62; ST - 1.36	General – 52.78; SC - 44.44; ST - 2.78
Type of household	Nuclear – 53.42; Extended – 46.58	Nuclear – 63.89; Extended – 36.11
Literacy levels	Illiterate – 16.95; Secondary – 34.24; Graduate – 27.82; Technical – 7.12	Illiterate – 12.12; Secondary – 56.06; Graduate – 5.30; Technical – 26.52
Employment status	34.24	41.43
Occupational pattern	Agriculture – 49.51; Agriculture labour – 5.83; Govt. Serv. – 14.56; Private service – 17.48	Agri. – 30.61; Agriculture lab. – 16.33; Govt. 8.16; private service – 22.45
Health status	Healthy – 95.93; chronic illness – 3.39	Healthy – 94.70; chronic illness – 3.79

*Source: Impact Evaluation survey, May 2010*

13. Various R&R measures were provided to address the direct impacts felt by the community were collected from RHEP. During the survey of the affected households, their status, usefulness and their utilization was assessed and same is presented below:

14. Disbursement of full resettlement grant to landless families: In addition to the compensation paid to the land owners under the land acquisition award, resettlement grant of amounts ranging between Rs. 45,000/- and Rs.65,000/- were disbursed to all the 37 nos. of families – 35 nos. of PAFs in Kullu district and 2 nos. of PAFs in Shimla district. Of these 35 PAFs in Kullu district, 8 PAFs belonged to Averi village, while the remaining 27 nos. belonged to Bayal village. 13 of these PAFs were both landless and houseless. **No family were rendered either landless or houseless or both in Koyal village.** Disbursements for the 35 nos. of PAFs in Kullu district were completed by September 2007 while for the 2 PAFs in Shimla it was completed by March 2009. Hence **100%** of the landless and houseless and landless PAFs have received their due.

15. Allotment of house plots and construction grant to houseless families: In accordance with the R&R scheme for RHEP that allows for three options – allotment of independent house or provision of house plot with construction grant or construction grant, all the houseless PAFs were asked their preferred option. **All the 19 houseless PAFs (15 no. of PAFs in Kullu and 4 nos. of PAFs in Shimla district), preferred the option of 60 sq.mtr plot along with construction grant.** All the house plots allotted thus far in Kullu district had been obtained by the project authorities on direct purchase basis from the willing sellers. These plots were levelled and developed for construction purposes. A total of 0.76 hectares of land was purchased directly. In Kullu district, the allotment of house-plots has been complete and construction of houses is already complete. 13 PAFs of the total 19 PAFs have shifted, while two others house constructions are approaching completion. In Duttanagar village, plots are yet to be identified by the project authorities. As on March 2010, **79%** of the total target has been achieved. Further 10 additional households were provided with construction allowances though they were not rendered houseless under the R&R policy (See Box 2.1 for details).

**Box 2.1 – Humanitarian approach towards houseless families – going beyond the ‘rule (policy) book’**

10 PAFs at Bayal village had lost their structures however since the owners were having second dwelling units in the affected panchayat area they were not declared houseless. As the owners would not be categorized and certified as houseless PAFs by the DC, Kullu in accordance with the policy, it was nevertheless as a loss that PAFs could ill-afford. Hence, adopting a humanitarian approach to the issue, RHEP provided all these ten (10) PAFs with a construction grant of Rs. 180000/- that would help them to reconstruct/augment their houses at a new location.

*Source: QPRs, interactions with PAFs and officials of SJVNL, May 2010*

16. Of the 19 PAFs, 4 nos. of PAFs belong to Duttanagar, while 5 nos. of PAFs belong to *Averi* village, while the rest belong to *Bayal* village. All these PAFs were given an amount of Rs. 1,80,000/- (i.e. Rs. 3,000 per sq.mtr x 60 sq.mtrs) towards construction costs across three instalments of 40%, 30% and 30% of the total amount. The disbursement of this assistance was synchronized with the progress of the construction of their homes and disbursement was done over three instalments based on inspection by the committee comprising one official from the R&R department accompanied by an Engineer. However, 4 nos. of PAFs in Shimla district are yet to be allotted house plots. At present, 15 nos. of PAFs (79%) of the total eligible 19 PAFs have either completed or are about to complete construction.

17. Provision of Rental Grants to all houseless families and Shifting allowances: A Transit plan was prepared for the houseless families of RHEP with the objective of providing temporary arrangement to the houseless families during the transition period of resettlement i.e. the period between vacating their houses and moving into to the new accommodation. The plan had the following provisions

- (i) temporary accommodation i.e. leased accommodation two room set Or Rs. 2000/- per month for 18 months or till the allotment of constructed houses in resettlement colony
- (ii) transportation charges i.e. a lump sum amount of Rs. 5000/- at project costs

18. All 19 PAFs indicated preference for the option of plot and construction grant. Besides shifting allowances too were availed of twice – first time from original dwelling unit to temporary accommodation and again from the temporary arrangement to newly allotted dwellings. As on March 2010 achievement has been **79%** of set target.

19. Disbursement of financial assistance to vulnerable groups: For the vulnerable groups, a rehabilitation grant of Rs. 18,000/- equivalent to 6 month of average wage rate of unskilled labour (calculated at Rs. 100 per day for unskilled labor for 30 days in a month) was paid. 51 nos. of PAFs

that were certified by Deputy Commissioner Kullu as vulnerable groups, were disbursed an amount of Rs. 18,000/- as financial assistance. There has been 100% achievement on this measure.

20. Disbursement of rehabilitation grant to non-titleholders: In accordance with the policy (R&R scheme), three non-titleholders i.e. 2 tenants and 1 encroacher who had been certified by DC, Kullu were paid rehabilitation grant of Rs. 6000 per PAF and Rs. 36000/- per PAF respectively.

21. Infrastructural facilities for the rehabilitation colony: A total of 4 rehabilitation colonies – 3 in Kullu (2 – Bayal and 1 in Averi) and 1 (proposed) at Duttnagar panchayat exist under the resettlement program. Of these, in the rehabilitation colonies at Bayal and Averi villages, water supply has been provided, besides internal roads and approach roads. Street Lighting is being provided in the resettlement colony at Averi and Bayal villages. All the infrastructural facilities has been provided at project costs

22. Provision of Employment: Though there is very limited requirement of manpower in hydro power projects, SJVNL under this R&R scheme has provision that “one member of each project affected family rendered landless will be provided for employment by the project authority in the category of the skilled/semi-skilled/unskilled workmen subject to fulfilling the requisite criteria/qualification and as and when any fresh recruitment is done in these categories”. Though no direct recruitment for RHEP has taken place so far, however keeping in view the exigencies of the project at the construction stage requiring manpower, stop-gap arrangements have been made via which some employment in various categories through its contractors has been made by SJVNL. One post of pharmacist has been earmarked for PAFs, however under its social commitment SJVN RHEP has emphasised its contracting agencies to employ more and more no of persons from the PAF category. At present there are six persons who have been employed on annual contracts through Himachal Pradesh Ex Service men society (HIMPESCO) and these are at the levels of data entry operators and junior officers. Of these six persons, 5 nos. belong to Bayal village while 1 no. belongs to Koyal village.

23. Many major contractors such as Gammon, Patel and Bharat construction companies and their sub (or minor) contractors have provided employment to residents of both the project affected and non-project villages. Though the numbers fluctuate every month, the latest figures are given in **Table 2.2 below**.

Category	Project Affected Family	No. of persons from project affected area	Total
Supervisor	3	10	13
Workmen	11	204	215
Total	14	214	228

*Source: SJVNL records, May 2010*

24. As on March 2010, no. of man-days clocked for employment through Himachali contractors stood at 9,08,082 nos. man-days, while no. of man-days clocked for employment through Non-Himachali contractors stood at 7,06,026 nos. man-days. In the control group, seven persons indicated employment with the contractor beginning 2007-08 and reported incomes in the range between Rs. 3000/- and Rs. 7000/-.

## 2.4 Economic Impact of R&R measures

25. Following the status of R&R measures, the section indicates the changes or the economic impact of these measures on indicators such as occupation, crop yields, income, investments and provides a comparison with baseline figures as of 2005 and also in comparison to the control households. These are specific to the survey of the affected households in the four villages. **See Table 2.3 below.**

S.No.	Indicator	Unit	Value/Figure		
			Total	Affected	Control
			2005 (N=133)	2010 (N=73)	2010 (N=36)
1	<b>Demographic characteristics</b>				
	Average family	Average	5.04	4.04	3.67
	Nuclear	%	NA	53.42	63.89
	Joint	%	NA		0
	Extended	%	NA	46.58	36.11
	Literacy (PAPs)	%			
	Literate		83.01	83.05	87.88
	Sex (PAPs)				
	Male	%	49.48	49.49	50.76
	Female	%	50.52	50.51	49.24
	Age Group (% PAPs)				
	Social Stratification (no. & % of PAFs)	%			
	SC	%	30.08	28.77	44.44
	ST	%	0.75	0	0
SC+WHH	%	0	2.74	8.33	
Other	%	69.17	68.49	47.22	
2	<b>Economic</b>				
	Annual income (in Rs.)	Average	55890.00	92931.51	65888.89
	Increase in income in real terms	Average (%)	NA	26.29	NA
	Increase in income in absolute terms	Average (%)	NA	66	NA
	Increase in number of assets (one or more than one additional asset)	Average (%)	NA	24.66	NA
	Earner person per family	Average	1.45	1.42	1.36
	Amount invested in Bank accounts (33 nos)	Average	NA	264697.00	NA
	Amount invested in Fixed deposits (31 nos.)	Average	NA	498226.00	NA
	Amount invested in Education (40 nos.)	Average	NA	187023.80	NA
Amount spent on marriage/social events (27 nos.)	Average	NA	239444.00	NA	
3	<b>Land Holding before land acquisition</b>				
	Land holding per PAF (in hectare)				
	Less than 5 bighas (0.404 hectare)	%	41.87	46.57	44.44
	More than 5 bighas (0.404 hectare)	%	52.13	12.32*	8.33
	Rice/Acre	In 100 kg	32.00	15.00 to 16.00**	15.00 to 16.00
	Wheat/acre)	In 100 kg	30.43	15.00 to 16.00**	15.00 to 16.00
	Maize/acre (in 100 kg)	Nos	2.32	NA	NA*
Almond/Plum (in kg)	Nos	NA	500 kg		

S.No.	Indicator	Unit	Value/Figure		
			Total	Affected	Control
			2005 (N=133)	2010 (N=73)	2010 (N=36)
	Livestock (Draught animal, milk animal, young stocks, sheep, goats, etc) per family/HH	Average	2.36	2.22	2.19
4	<b>Vehicles for personal use</b>				
	Two wheeler	%	6.02	9.59	2.78
	Four wheeler	%	12.03	13.70	5.56
5	<b>Vehicles for commercial use</b>	%	6.77	2.74	2.78
6	<b>Occupation</b>				
	Cultivators (Agricultural landowners)	%	37.41	49.51	30.61
	Agriculture labour	%	1.49	5.83	16.33
	Wage labour	%	2.53	4.85	8.16
	Business	%	3.13	7.77	4.08
	Government Service	%	8.94	14.56	8.16
	Private Service	%	NA	17.48	22.45
7	<b>House type</b>				
	Kutcha	%	44.36	15.07	38.89
	Semi-Pucca	%	21.05	28.77	2.78
	Pucca	%	34.58	54.79	58.33
	Separate kitchen	%		100%	100%
	Separate toilet	%		100%	100%
	Rooms	Average nos.	3.98	5.44	2.5
	Size of House (Sq.ft.)	Average	587	801.31	680.55
8	<b>Food items consumption</b>	Annual average			
	Wheat (per HH of 4 members)	Annual average	NA	2.5 -3.0 quintals/ year	2.5 -3.0 quintals/year
	Paddy (per HH of 4 members)	Annual average	NA	2.0 quintals per year	2.0 quintals per year
9	<b>Material assets</b>				
	TV	%	72.93	95	NA
	Refrigerator	%	46.62	100	
	LPG	%	79.90	90	
10	<b>Health related</b>				
	Major disease, if any (heart, asthma, Gastric)	%	3.75	3.39***	3.79
	Families hospitalized	No	Nil	Nil	

Source: Socio-economic survey, HP university, 2005 and Impact evaluation survey, SMEC India, 2010

NA – Not applicable

\* land holding only pertains to project affected panchayats. Land holding in other panchayats / area are not considered

\*\* yield of crop only pertains to project affected panchayat area.

\*\*\* Based on the records of Bayal dispensary over a period of 9 months i.e. between April 2009 and Dec 2009 indicate that 836 cases out of 3310 cases mainly 4 ailments were primarily diagnosed. They are upper respiratory infections, asthma, bronchitis, lower respiratory infections, stomach ailments. However in the Bayal dispensary besides the villagers of Bayal contract labour of main contractors and infrastructure contractor as well as villagers from non project affected areas like Nirmand etc. also come for treatment. Further, no medical centre was functioning at Bayal prior to execution of project, hence it is likely to be difficult to make a comparison in increase/decrease of ailments.

26. **Change in Occupation:** Amongst the surveyed population, 49.51% of the working population report agriculture as their main occupation i.e. an increase of approximately 12% from 2005. Agriculture labour (5.83%) and wage labor i.e. non-agri labour (4.85%) have also increased. Of the rest, 14.56% are in government service, 7.77% in business (i.e. shops), 17.48% are in private service. Increase in government employment and private service indicate a diversification in occupation when compared to the 2005 figures. Sharecropping practice too continues though in comparison to the control household is lower. 4 PAFs reported to be continuing their same occupation as before by taking land on share cropping basis. Under the control group, 9 households reported taking land on sharecropping basis.

27. **Usage of compensation and rehabilitation grant amounts:** PAFs reported a variety of usages for the compensation amounts receive such as: purchase of land (13.7%), towards house construction (57.53%), acquisition of productive assets (6.85%). Investment in financial instruments such as Bank savings (45.21%), fixed deposits (42.47%) were recorded while postal savings (2.74%) were recorded as the least preferred option. 57.53% of PAFs reported of investment in education of their children particularly in ITI courses, and courses relating to computer and engineering (diploma and degree). Shop owners (5.48%) running such trades from before, reported of further investments from the compensation sum received. 27% of PAFs reported consumptive usage such as marriages and other family /life events. While some PAFs divulged investments by type and by amounts, others PAFs refrained. Details are given in the **Table 2.4**

Village Name	Land	House	Prod. Asset	Bank Saving	FDs, MFs	Postal/ Others	Education	Marriage / Events	Shop	Others*
Bayal	8	24	4	16	13	1	25	14	3	0
Koyal	0	3	0	6	9	0	8	7	0	3
Averi	1	14	0	9	7	1	9	6	1	0
Duttnagar	0	1	1	2	2	0	0	0	0	0
<b>Total</b>	<b>10</b>	<b>42</b>	<b>5</b>	<b>33</b>	<b>31</b>	<b>2</b>	<b>42</b>	<b>27</b>	<b>4</b>	<b>0</b>

*Source: Impact Evaluation survey, May 2010*

\*Others included responses such as "distributed to brothers, daughter and/or spent on medicine"

From the above table, it is inferred that utilization of compensation were towards investment in purchase of land, house construction and education are significant. In other words, investments in house and education indicate a preference of affected households towards improving both their present living standards i.e. in terms of building pucca houses or acquiring an additional house. Investing in financial instruments such as bank savings and fixed deposits indicate a preference to ensure good and productive usage of compensation amounts over a long term. Investment in education of their children is again an indication of their priority to significantly enhance the education and skill levels.

28. **Land related investments:** 9 nos. of PAFs (8 in Bayal and 1 in Averi village), reported purchase of agriculture land between 2 bighas to 8 bighas at a cost ranging from 1.5 lakhs to 5 lakhs. Only one PAF in reported purchase at the same location i.e. Bayal village, while others reported of purchases outside the village. 4 nos. of PAFs in Bayal reported investments in purchase of apple orchards ranging between 1.5 to 4 bighas at a cost ranging from 2.5 lakhs to 6.0 lakhs. These apple orchards purchased lie outside the project area and are approximately at a distance of between 18 km to 65 km. These include vulnerable groups – 3 SC PAFs who have invested their compensation amounts towards purchase of apple orchards one SC PAF has purchased agricultural land.

29. House related investments: 42 PAFs utilized the amounts towards their i) making pucca their existing house; ii) purchasing or building new houses; iii) adding more rooms to these houses and iv) two of them have added one more houses to the existing house of either greater or lower area. Of these 42 PAFs, 37 nos. of houses are pucca houses. Only 3 nos. are semi-pucca and 2 kuccha houses. Area of these house structures range from 380 sq.ft. to 2400 sq.ft. Further many of the houses have multiple rooms between 2-12 rooms. 34 of these house structures have more than three (3) rooms. Investment amounts reported range between Rs. 1.00 lakh and 20.00 lakh. 13 SC PAFs have made investments towards fixed assets between 2 and 10 lakhs, while 1 WHH PAF in Averi village has made an investment of Rs. 15.00 lakhs towards house. Average house size has increased from 587 sq.ft to 801 sq.ft i.e. 36.45% increase in house sizes. When compared to the control group where the average house size is 680 sq.ft. The average size of affected is 17% bigger house in terms of size. (See **Annexure A** for photographs comparing old house structures of 2005 in comparison with newly built houses in 2010).

30. Between 2005 and 2010, while there has been a decline in number of kutcha structures (houses) from 44.36 to 15.07%, there has been a corresponding increase in semi-pucca houses from 21.05 to 28.77%. A significant increase has been in the number of pucca structures that has risen from 34.58% to 54.79% in the same period.

31. Shop related investments: Investments in shops were reported only by 4 PAFs of which 1 shop was new, while others improvements to the existing shop that are either in General/Kirana stores.

32. Investment in Livestock: There seems only a marginal variation in the livestock at 2.22 from 2.36. Investment in livestock seemed to be least attractive option for the affected households as only 6 households reported investment in livestock that include 1 WHH and 2 BPL households. 5 cows and 2 buffaloes were purchased amongst the PAFs. The reasons based on discussions though could be i) under-reporting of livestock assets; ii) lesser availability of fodder stock and iii) surveyed number of households not reflecting the full or actual livestock holding; (iv) PAFs may be more attracted towards service either govt or Private.

33. Saving Instruments (Bank Saving, Fixed Deposits, Mutual Funds, Postal/ Others): 33 nos. of PAFs reported investment in Banks i.e. opening of accounts or depositing in saving accounts, while 31 nos. of PAF reported investment in fixed deposits. Average amount equalled Rs. 2,46,697/- for amount invested in Bank savings and Rs. 4,98,226/- equalled in fixed deposits. Postal savings reportedly is the least favored option as only 2 PAFs invested in the instrument. 4 nos. of WHH PAFs invested amounts in Bank savings ranging from Rs. 50,000/- to 3.0 lakhs while in FDs they invested in a range between 2.0 lakhs to 11.0 lakhs. See **Table 2.5** for range of invested amounts by savings instrument.

Table 2.5 – Invested amounts by savings instrument	
Saving instrument	Amount range (in Rs.)
Bank savings	20000/- to 10,00,000/-
FD/MFs	25000/- to 35,00,000/-
Postal	10000/- to 60,000/-
<i>Source: Impact evaluation survey, 2010</i>	

34. Purchase of consumer durables: 14 PAFs reported purchase of Television sets, while 15 PAFs reported purchase of Refrigerators. 4 nos. of PAFs reported purchase of cooking gas facilities/stoves. Most of these purchases are recorded in Bayal village. However, during household survey, households indicated that only those who did not have these consumer durables before purchased them.

35. Purchase of Motor vehicles: In terms of motor vehicles, while 1 PAF reported purchased of a motor cycle, 5 PAFs (4 in Bayal and 1 in Duttanagar) reported purchase of motor cars (four wheelers). Some of the owners are not reportedly living in the area any longer. Two PAFs recorded these vehicles as being for commercial usage. Of the surveyed 73 households 18 nos. (24.66%) households reported have obtained one or more than one additional asset utilizing the compensation and assistances received. 4 nos. (5.48%) households reported having added one (1) additional asset, while 14 nos. (19.18%) of households reported having added more than one additional asset such as TV, Fridge, Car, Motor-vehicle, etc.

36. Crop yields: Surveyed households reported a gross figure of 200-300 kgs (2-3 quintals per bigha) as the yield for paddy and a similar figure for wheat. Market prices fetched by these crops were reported between Rs. 1200 and Rs. 1500 per quintal.

37. Annual income/expenditure and savings: As against the baseline figure of 2005 of Rs. 55,890/- the current average annual income reported is Rs. 92,931.50. **The figure is also above the average annual figure of Rs. 65,888.89 reported by the control households i.e. Therefore in real terms the income has gone up 26.29%<sup>10</sup>. In absolute terms it has gone up 66%. Further, in comparison to the control households surveyed, the figure is 41% higher.** Of the total surveyed households, 27.40% of the households have recorded an increase in income in real terms, while 37% of the surveyed households have reported an increase in absolute terms. Average annual 'expenditure' for the 73 surveyed households is at Rs. 51,415.28. Average annual savings are Rs. 42,220.54 as recorded during survey.<sup>11</sup> As per 2005 categorization, 23 of the households are in the income bracket between Rs. 20,000 and Rs. 50,000 while 27 are above Rs. 50,000 but below Rs. 1,00,000. See Table 2.6 for categorization of PAFs.<sup>12</sup>

Income Range	No of PAFs.
less than 20000	17
20000 to 50000	23
50000 to 100000	27
Above 100000	6
<b>Total</b>	<b>73</b>

*Source: Impact evaluation survey, 2010*

## 2.5 Status and evaluation of social impact of RAP and community welfare measures

38. In addition to the assistance measures for mitigation of the direct impacts, other measures too were provided for the benefit for the communities as a whole. The measures, their current status in terms of implementation and perceptions of communities with respect of their efficacy is presented in the ensuing paragraphs.

39. Technical education for local youth scheme: The scheme envisaged training to local youths in select vocations and was arranged by SJVNL at local Industrial Training Institutes (ITIs) so as to enable youth to become self sufficient to find a suitable employment in the industrial sector or to venture out their

<sup>10</sup> Measuring the change in real income was calculated using the Cost Inflation Index. The indices for the years in question are: 480 (for the year 2004-05 i.e. year of acquisition) and 632 (for the year 2009-2010 i.e. year of mid-term review). Formula applied for Indexed cost is as follows:  $Rs. 55890 \times 632 / 480 = Rs. 73589$ .  $Rs. 92931$  (reported income) –  $Rs. 73589$ - (indexed income) =  $Rs. 19343$  (increased income). Hence  $Rs. 19343 / Rs. 73589 \times 100 = 26.29\%$

<sup>11</sup> Figures for expenditure and savings were not available from baseline survey 2005

<sup>12</sup> RAP prepared based on socio-economic survey provided average annual incomes by village; and categorized households on the above income ranges

own plan in the acquired skill. These ITIs are located at different places in the state such as *Hamirpur, Shimla, Bilaspur, Shahpur Kangra, Jubble, Recong peo, Mandi, Paunta sahib* and others. The trades covered under ITI include: Motor mechanic vehicle, fitter, turner, welder, plumber, electrician, refrigeration, cutting, for boys and computer and sewing for girls. The duration of the course range from 1 year to 2 years. Of the total 105 candidates sponsored thus far, a total of thirty (30) candidates belong to the project affected families, while the rest are from the villages in the project affected area. Based on a pre-determined target<sup>13</sup> of one hundred and fifty (155 nos.) thus far one hundred and forty (140) candidates have been sponsored of which seventy five (75) candidates have successfully completed their training thus achieving 90% of target figure. Under the control group too, 8 households reported availing of the ITI scheme. 18-20 nos. of persons from PAFs households and also control household are reported to be working with contractors. They are mostly those who have undertaken 'motor-mechanic' trade. These candidates are put forward by the respective project affected family and forwarded to SJVN by the *Pradhan* of the respective *panchayat*. Further SJVN obtains an affidavit (**See Annexure D for copy of affidavit**) citing that the candidate "shall not claim employment as a matter of right after completion of ITI course".

40. Merit scholarship scheme: The merit scholarship scheme was introduced to: i) To encourage the meritorious students in furtherance of their education and to extend financial assistance to enable them to pursue higher education; ii) To minimize the number of dropouts who are meritorious; and iii) To create a pool of potential candidates in the area capable of making contributions to the project in the future. The merit scholarship scheme was applicable to candidates pursuing vocational training at ITI/Other institutes, diploma in engineering, pharmacy and computer and degree students in engineering and medicine. As on March 2010, the total number of merit scholarships applications received was thirty-one (31) nos. and all of the amounts were released to the candidates. Against a pre-set target of fifty (50) nos. of scholarships 62% has been achieved by March 2010. During survey, a total of 12 PAFs indicated of availing of the merit scholarships under the scheme. Under the control group, 2 persons were found to be getting scholarship under merit scholarship scheme.

41. Provision of petty contracts: SJVN as part of its efforts to augment the incomes of the affected families provided for petty contracts to be given to eligible families on a preferential basis. Under these three categories were observed:

- (i) Petty contracts given to PAFs: Petty contracts worth Rs. 7.31 millions were given to PAFs for various works to PAFs. Jobs such as cleaning, housekeeping works at RHEP complex at Bayal village (includes PIC, Bayal medical dispensary, project office) are given to a contractor who has employed ladies from the affected villages. Against a target set of Rs. 10.00 million, as on March 2010, achievement has been 73%.
- (ii) Petty contracts to residents of project affected panchayats: Petty contracts worth Rs. 60.14 million have been allocated to residents of project affected panchayats. Against a target set of Rs. 40.00 million, as on March 2010, achievement has been 150%. These include works such as gardening and other masonry works.
- (iii) Petty contracts given to residents to local persons by major contractors: Though no target was set, Rs. 40.40 million worth of contracts have been given thus far as on March 2010.

42. During survey, only three PAFs (2 – Bayal and 1 in Averi) indicated jobs with petty contractors. While two of them indicated that such contracts were ongoing from 2009, one indicated that they were

<sup>13</sup> The figure of 155 nos. of candidates for sponsorship to ITI was arrived upon mutually between WB and SJVN / RHEP

ongoing from 2005-06 onwards. They indicated a monthly income between Rs. 3000/- to Rs. 8000 per month. Under the control group, three of the households indicated that they had been given petty contracts since 2008 and derive incomes in the range Rs. 3000 and Rs. 9000/-

43. Provision of seed capital of Rs. 30000/-: The Income Generation scheme (IGS) was developed as a welfare measure with the objective of providing financial assistance to project affected families with preference for those belonging to vulnerable group (SC/ST/OBC). Financial assistance was made available for certain specified occupations to the extent of 80% of cost of assets subject to a maximum limit of Rs. 30000/-. Balance 20% of the amount was to be arranged by the applicant from his own resource. Eligibility for the grant was restricted to “only those families who have not been provided with employment in the Nigam or have not been allotted any shop.

44. The IGS scheme was launched initially to cover 37 nos. of landless and houseless families as the list had been certified by the DC. All these families had been issued letters by March 2008. By September 2009, the scheme was notified to all the 142 affected families. Similar to the experience under NJHEP the response has been poor even though the amounts have been revised Rs. 15,000/- to Rs. 30,000/-<sup>14</sup>. As on date, no response has been received.

45. Hiring/renting of vehicles from PAFs/residents of project affected area: The measure of renting or hiring vehicles from the project affected families required for construction contractors was expected to augment income. Initially the rental cost was fixed at Rs. 15000 per month and later revised to Rs. 18000 per month. As on March 2010, a total of 38 vehicles have been hired aggregating 894 vehicle months that exceeds the initial target of 600 vehicle-months i.e. 168% of the set target. As on March 2010, a total of 8 nos. of vehicles were belonging to Project Affected Families and 15 nos. from PAA have been hired.

46. Provision of Support services to farmers: AERC, Shimla organized training programs to support farmers by inviting local experts and these were made available for both project affected families and non-project families residing in other villages within the project affected area.. The objective was to make local people aware of the technical know how to improve the quality of fruits/crops and breeds/health of their cattle. Three camps were organized at *Bayal, Kharga and Randhal* villages between July 7 to 9, 2010 wherein horticulture, veterinary and agriculture related information and training were provided. In all, a total of two hundred and thirty three (233) persons have attended the training camps. At the training camp at *Bayal* village, a total of thirty-five (35) persons – both males and females attended the camp. Of these, fourteen (14) persons were from project affected families. **Further at all the training sessions, pruning scissors for cutting almonds and plums too were provided to all participants.** Reportedly, four more training camps are to be conducted in the project affected area. During survey, PAFs from *Bayal* village indicated that they were aware of such camps in the project area. They requested that such camps be organized soonest possible in their villages and also repeated at regular intervals.

47. Other camps – RTI and HIV/AIDS awareness: A HIV/AIDS awareness camp was organized at *Bayal* village in May 2008 for the benefit of the construction workers. It was attended by a total of 86 persons that included migrant and other workers working with major and minor contractors and officials from RHEP and NJHEP. In addition, two camps on provisions relating to Right to Information (RTI) Act were organized between July 2007 and May 2008. A total of one hundred

<sup>14</sup> Source: Implementation Completion Report of Nathpa Jhakri Hydro Electric Project, The World Bank, 2002.

eighty nine (189) persons attended these camps. Two of these camps were attended by representatives from the World Bank and also from Centre of Good Governance, Hyderabad. Notable among these, was the camp organized in May 2008, wherein a total of one hundred and four (104) participants, ninety-three (93) participants were from project affected villages of *Bayal, Koyal, Averi and Duttnagar*, while the rest were from other villages in the project affected area, project officials, media representatives and the faculty. Applications under RTI are being regularly received by the project from PAFs seeking information since the organizing of these camps.

48. Free of cost pressure cooker: The R&R scheme for RHEP stated that a pressure cooker shall be provided to each project affected family so as to reduce dependence upon forests for firewood. Officials however, confirmed that the pressure cookers shall be duly provided to all these families within a period of 2-3 months.

## 2.6 Other measures to address impacts at the construction stage

49. Besides the direct impacts in terms of loss of private assets, certain direct as well as in-direct impacts have been felt by the community – both affected and non-affected population that either reside or operate in project affected area/zone. In light of the past experience at NJHEP, the Resettlement Implementation plan had taken cognizance of certain impact that are likely at the construction stage and had provided commensurate measures to mitigate such impacts. Their present status i.e. action taken by project authorities and views obtained from communities are given below:

50. **Impact on structures due to blasting activities**: The blasting operations for construction of Rampur HEP have been carried out by applying the world's latest technology of underground blast so as to have minimum effect on the ground surface. However the local people reported that their houses were getting cracks due to the project blast works. In view of such allegation SJVN sought the services of Central Institute of Mining & Fuel Research, Dhanbad to ascertain the impact of blasting operations on the nearby house structures. The experts of CIMFR conducted study through experimental blasts in presence of, and by the villagers' representatives besides placing of seismographs in and around the houses at spots as indicated by them. The study report concluded that the blasting practice adopted by the RHEP management was safe and could not cause structural damage as alleged by the villagers. But the villagers were reluctant to accept the findings of the report and insisted upon for monetary assistance for the repair of their reported cracks in the houses. The issue raised by the local people was discussed in LADC meeting under the chairpersonship of DC (Kullu). In order to settle the issue the chairperson constituted a committee to assess the monetary assistance to the local house dwellers around the project. The assessment report prepared so by the committee was forwarded to SJVN to provide the assistance to the house dwellers. SJVN with a view to maintain harmonious relation with the local people deposited the monetary assistance of Rs. **1,27,24,606 (One Crore Twenty Seven Lakhs Twenty Four Thousand Six hundred and six)** with the Deputy Commissioner( Kullu) for disbursement amongst 1,942 house dwellers in seven panchayats namely - Kharga, Kushwa, Tunan, Bari, Poshna, Bahawa and Gadej.

**51. Monetary assistance for crop production in project area villages:** SJVN has taken utmost

care to avoid pollution hazards during construction the Rampur HEP. However the local farmers were of the opinion that their farm yield/produce was adversely affected due to construction activities and asked for monetary assistance in lieu of such reported losses. Because of all such apprehensions, CSK University, Palampur was requested to study the impact of project activities on horticulture/agriculture of local farmers. The CSK university, Palampur in April 2008 conducted the survey in presence of local representatives at Bayal, Nirsu, Naya Nirsu and Dutnagar villages. They observed and recorded poor as well as healthy fruit setting in almond and plum orchards. The study concluded that poor orchard management - inadequate use of manures, no basin preparation, lack of pruning, poor drainage were the causative reasons (see Box 2.2 for details). But the villagers were reluctant to accept the findings of the report and insisted upon for monetary assistance in lieu of the reported reduction in the farm yield. The issue raised by the local people was discussed in LADC meeting under the chairpersonship of DC(Kullu). In order to settle the issue the chairperson constituted a committee to assess the monetary assistance to the local farmers. The assessment report prepared so by the committee was forwarded to SJVN to provide the assistance to the farmers. SJVN with a view to maintain harmonious relation with the local people released the monetary assistance of Rs. 1,53,17,904/- (one crore fifty three lakhs seventeen thousand nine hundred and four) for the six panchayats namely – Kharga, Kushwa, Bari, Poshna, Bahawa and Gadej under District Kullu.

<b>Box 2.2 Report findings on damage to crops</b>
<p><i>...it was found that the farmers in these villages were growing crops such as Wheat, Barsim, cabbage, cauliflower, peas, potatoes, onion and garlic. Besides they were also found to have almond and plum orchards in these villages. After a thorough inspection of these fields and orchards, the committee found that on the face of it, there were no signs of dust deposition on cereal crops, vegetable crops and fruit trees in any of the sites surveyed. A closer scrutiny revealed that there were no traces of dust particles on the trunks, shoots, leaves (both upper and lower sides) and fruits. Although it rained the previous day in the project area, yet rain could not have washed off all the dust particles from the lower surfaces of the leaves, twigs, interiors, cracks and crevices on the plants. As such no crop damage was observed that could be attributed to the dust being raised and deposited by the project construction activities. On the contrary, the crop growth was observed to be healthy in the affected villages....Based on the above mentioned observations, prima facie, the committee is of the view that dust raised by construction operations being carried out by Rampur Hydro Electric project did not cause any damage to crops.</i></p>
<p><i>Source: Report by CSK university, Palampur June 2008</i></p>

**52. Monetary assistance for reported crop losses in village Averi near dumping site:** The farmers near village Averi were of the opinion that their farm production has been reduced due to dust from project dumping site situated adjacent to their farms. As a CSR measure SJVN provided them monetary assistance of Rs. 0.78 million towards such reported losses.

**53. Assistance to house dwellers of village Bayal near surge shaft area:** Near the surge shaft area in village Bayal, 12 families including some encroachers expressed their inconvenience in living there due to disturbance caused by the project construction activity. SJVN as a responsible corporate citizen provided all of them monetary assistance in shifting to a place of their choice for a temporary period of one year. They were provided monetary assistance of Rs.2000 per month for one year. In addition, amount of Rs.4.5 lakhs (or 0.45 millions) was also paid as monetary assistance for repair of their reported damages to their houses. After completion of work, these families moved back to their original location.

## 2.7 Status and evaluation of community development measures

54. The Sustainable Community Development Plan (SCDP) developed on the basis of the items listed in R&R scheme (MOU) provided for different types of infrastructure facilities and community development measures. This section provides details on the status of each of the community development measures followed by findings of the survey.

55. Health Centre/ Mobile Health Van: A medical dispensary has been operational in the *Bayal* village in since September 1, 2007. The dispensary is located at the *Bayal* village in proximity to the RHEP office and guest house facilities and in the same building as the PIC. It caters to three sets of patients – employees, private (persons working with contractors) and local (persons from adjoining villages). It is open six days a week between 10.00 am and 5.00 pm. At the dispensary, the doctors reportedly attend to 20 patients on an average during week days. The numbers of patients attended to increases on Mondays and Saturdays. For diagnostic services, patients are referred to hospitals in *Rampur tehsil*. Essential medicines are given. The dispensary is staffed with two (2) doctors, three (3) staff nurses and one (1) pharmacist. Further an ambulance is stationed at the Bayal dispensary for usage.

56. Similar to practice under NJHEP, a mobile health van service has been operational in the villages of *Kullu* district since January 26, 2005. Following land acquisition at *Duttnagar* village, MHV services had become operational at three specified locations in villages under *Duttnagar* panchayat from April 23, 2008. The mobile health van (MHV) visits villages in turn every week and is stationed at a convenient location for about 1 hour per village. It is staffed with one doctor and one compounder besides the driver. The days and timings of the MHV have been notified to the *Pradhan* of the village who in turn informs other villagers. The schedule is as given below:

Tuesday	-	<i>Randhal, Chatti and Kaju Khadd</i>
Wednesday	-	<i>Nirsu, Duttnagar and Badrash</i>
Thursday	-	<i>Averi and Koyal</i>

57. As, it is reported to have attended to a total of approximately 35000 cases, of which approximately 29438 patients have benefitted from the mobile health van services while approximately 5000 patients have benefitted from dispensary. Of these 5000 nos. there have been at least 1200 children who have attended the various health camps organized at the school meets.

58. In terms of keeping records of patients attended both at the dispensary and at MHV. At the dispensary, records of each patient are kept in a separate register that include name of patient, case, medicines given or injections administered or if referred. The doctor signs off on each page at the end of day after which no more patients are attended to. For the dispensary, a monthly statement is prepared that gives details as follows: total number of patients; male; female; children; total; employees; private; local; total; total no. of injections given; total no. of dressing; no. of referral cases. For the mobile health van a monthly statement is prepared that gives details as follows: dates; places of visit; male; female; children; total patients; referral patients; injections administered; dressing given. An annual statement is also prepared on the above lines for both the dispensary and the MHV providing the month-wise details. Further records are kept on the diagnosis of different patients.

59. Approach roads and Internal roads: In the affected villages and in surrounding villages in the project zone, paths have been constructed particularly at Bayal village, while an approach road is under construction at Koyal village (See **Table 2.7** for list of village paths/approach roads). In addition, a foot-bridge at near NJ power house connecting Samej village was repaired. During consultations at Bayal village in particular, communities reported that approach from the bridge to the village required construction. On discussions with Project authorities it was gathered that the permanent pucca road shall be constructed at the end of construction period as it will get damaged because

Table 2.7 – list of village paths/approach roads	
1	from road Kunni to Kazo near Jullah to village Badari
2	from village Upper Badari to existing at village lower Badari
3	Repair of foot bridge to Samej near NJPC power house
4	from Kuni bridge to village Bakhan
5	from village Damahali to village Bari
6	from village to cremation place at Averi
7	from village Koyal to cremation ground of village Koyal
8	from village Bayal to cremation place (via Dopa) at village Bayal

*Source: SJVNL records, May 2010*

of plying of heavy vehicles. An approach road of approximately 1.5 kilometer length is under construction at Koyal village with 500 meters already constructed (See Photo 2.1). Further communities in Koyal village requested that a road from *Koyal* to *Averi* is required and same has been put up at various LADA meetings that are held from time to time. At Averi village, communities indicated that some of their earlier paths had been closed down due to construction works and they are experience in difficulties in commuting.



Photo 2.1 – An under construction Approach road and a Kuhl (irrigation channel) at Koyal village

60. Drinking water supply schemes: In order to augment the water supply in the area, water tankers were deployed for a period of more than one year (26.06.07 to 31.08.2007) for providing drinking water to project affected panchayats of *Bahawa*, *Tunan* and *Poshna*. Further it was planned to install 6 energized borewells and 7 handpumps to the 4 affected villages of Bayal, Koyal, Averi and Duttanagar. For this purpose SJVN deposited an amount of Rs. 14.85 lakhs to XEN IPH for augmenting of drinking water in the affected area. As reported by authorities, 4 energized bore-wells have been executed thus far in Kullu district, while 2 others are awaiting execution in Shimla district. As reported, it has been stalled in Shimla district as the Irrigation and Public Health Department (IPH) has been non-responsive regarding taking operation and maintenance functions post installation. During survey, views were obtained from the communities on the water availability. Communities stated that drinking water sources from various natural

resources had gone down as a result of which they required such resources. In addition to that SJVN has deposited Rs 4 crore to Chairperson LADA i.e Dy. Commissioner Kullu for augmentation of the water supply schemes in the project affected Panchayats in Distt Kullu.

61. Community welfare centres: Two such welfare centres have been developed. The development of Devdhank complex at Bayal is acknowledged by the communities is an important contribution of SJVNL. Panchayat Bhawan at Brow village was regarded as a long standing but vital contribution and that helps to meet the community needs. The place is being used for different types of events, meetings or general village get-togethers. See **Table 2.8** below for list.

Table 2.8 – List of community welfare centres/panchayat bhawans	
1	Construction of Panchayat Bhawan at Brow village
2	Construction of Inn and development of Devdhank complex at Bayal

*Source: SJVNL records, May 2010*

62. Support to local fairs and festivals: Funds have been provided to Gram Panchayat Kharga for celebrating Kharga mela (0.5 lakhs), Gram Panchayat Bari for independence day (0.1 lakh), Gram Panchayat Gadej for Mandwa and Thirshu mela (1.0 lakh), SDM Anni for celebrating Anni mela (1.0 lakh), Boddhi Diwali Fair at Nirmand (2.15 lakhs)<sup>15</sup>. Grants were also paid to a number of schools to organize sports met and other activities.

63. Scheme for infrastructural facilities and other aids to schools situated in RHEP & Playground/support to Sports activity:

As part of its social upliftment efforts to SJVNL introduced a scheme for providing infrastructural facilities and other aids to schools in RHEP's vicinity with the objectives to:

- To enable improvement of natural environment which will foster aesthetic sense by involving students in plantation in and around their schools
- To facilitate creation of ambience conducive to good learning by providing adequate infrastructural facilities like, desks/Chairs and other furniture, library books, laboratory equipments, education aids, sports equipment, enlargement of class-rooms, structures, etc. See **Table 2.9** for list of playgrounds developed.

Table 2.9 – List of playgrounds developed	
1	Playground and fencing around Govt. Primary school at Bandthana
2	Playground and fencing around Govt. Primary school at Naal
3	Playground and fencing around Govt. Primary school at Chatti
4	Playground of middle school by providing of dozer
5	Construction of retaining wall at Playground and fencing around Govt. Primary school at Nirsu
6	Construction of Basketball court and store room in Govt. Sr. Secondary school, Duttnagar

*Source: SJVNL records, May 2010*

As on date, Rs. 0.27 million has been given in the affected villages and in surrounding villages in the project zone, support has been provided for development of play grounds and provision of cricket kits to some villages such as *Koyal* and *Bayal*. Further, as indicated by Project Authorities during discussions, second and third grant ranging from Rs. 75,000/- to Rs. 2,00,000/- shall be released upon approval.

<sup>15</sup> Views of communities were not obtained as these villages were not visited



Photo 2.2 – Devdhank complex at Bayal village and Panchayat Bhawan at Brow village

64. **Sanitation facilities:** Under the total sanitation campaign it distributed a total of 2191 nos. toilet seats and essential materials to villagers of seven panchayats around the area. Of the surveyed households, none of the households was without a separate toilet in their house.

65. **Street lighting:** Street lighting has been provided in Bayal village and Brow village. However villagers feel that street lighting facilities shall be extended to more no of villages.

66. **Gender Impact of community welfare measures:** Analysis of community welfare measures towards women in the project affected households/project affected area is given in **Table 2.10** below.

Table 2.10 – Gender impact of community welfare measure	
ITI	24 candidates in cutting, sewing and COPA; including 4 from PAF category
Merit scholarship	14 candidates thus far (arts and crafts, computer engineering, cutting and sewing) including 1 candidate from PAF category
Hired through HIMPASCO	1 person from PAF category
Agri/Hort/Vet.camps	98 from PAA, 2 from PAF
RTI camps	24 from PAA

Source: Impact evaluation survey May 2010

67. Key infrastructure works for the community were assessed by a civil engineer in the team with respect to their quality and sustainability in the long term. Views from the community were obtained on an ad-hoc basis and also during community consultation (See **Annexure C** for photographs of community infrastructure). Details of the assessment are presented in the **Table 2.11** below:

Table 2.11 – Assessment of Community civil works

No.	Name of Panchayat	Name of Work/ Infrastructures	Observations/Remarks	Response from the community
1	Kushwa	i) Repair of Foot-Bridge to Samej across the river satluj near Naptha Jhakri Power House at Jhakri	All damaged/ distorted plates, sections and cables of the steel cable foot-bridge were replaced and the bridge was fully repaired as per specifications. Now it becomes accessible for the pedestrians from Samej village to cross the river to Jhakri village side with ease.	the effort has been welcomed by the local communities
2	Kharga	i) Pucca Path/Steps from Kunni Bridge to vill. Bakhan.	Pucca path of cement & concrete was built and is at least one meter wide in cross-section as per specifications. The path was built in stepped sections to maintain a slope with ground, as the village is located on a mountainous terrain.	Useful as a long awaited community infrastructure had been met
3	Poshna	i) Panchayat Bhawan at Brow.	This is a double storeyed reinforced cement concrete framed structure having projections all-round on both the floors. Both the floors of building consist of a big hall along with a separate room attached with W.C.\Toilet, kitchen and a wide <i>verandah</i> . A concrete retaining wall has also been built on road side of the building to safe the main structure from overburdens. Suggestion: Both the middle columns could have been terminated at the roof of the ground floor as it would have led to have a better appearance. Besides enhancing the aesthetic appeal, it would result in more room/space inside the hall of 1st floor.	Communities indicated that community infrastructure was satisfactory as they had no other place till this was constructed. In discussion with Project authorities, it was confirmed that these structures are built based on design suggestions offered by the communities.
		ii) Class Room & Fencing for Govt. Primary School Brow.	Two class rooms of reinforced cement concrete had been added on 1 <sup>st</sup> floor and all-round fencing of steel was also provided at ground level as per specifications.	Communities were satisfied and indicated that there is a requirement for more class-rooms for upgrading it to Middle School.
4	Bahawa	i) Pucca Path /Steps from village to cremation place at Averi.	Pucca Path starts from the main road and goes up to the cremation place via Averi village. The path has been made of cement & concrete as per specifications. This is straight in longitude from main road to the village end, and then leads to the cremation place to maintain the slope along the mountainous terrain.	During consultations, communities acknowledged that it was a useful piece of infrastructure that helped to solve a long standing
5	Gadej	i) Pucca Path/Steps from vill. Koyal to cremation ground.	A pucca path connects the main path inside village Koyal to the cremation ground. The path has been made of cement & concrete as per specifications.	Pradhan and other villagers indicated that this

			path was among the many paths that had been constructed in the project area and it served the village requirements.
	ii) Devdhank complex at vill. Bayal	This is a single storeyed framed reinforced cement concrete structure consisting of three rooms built on a mountainous terrain in front of the temple of Shiva at Bayal village.	It is an useful addition to existing temple complex.
	iii) Construction/Providing of Street light in Bayal village.	Street lights of fluorescent tubes have been provided inside the village by mounting them on pillars of steel pipes supported on concrete foundations/ pedestals as per specifications.	Village communities wanted more street lights inside the village
	iv) Providing and Fencing of CGI Sheets roofing in community hall at Bayal.	In community hall above 1st floor roofing was done by providing and laying of corrugated galvanized iron sheets as per specifications. To avoid corrosion and long-lasting the sheets should be painted in three to five years.	Communities acknowledge this infrastructural contribution by SJVNL
<p><b>Comments:</b> All the above mentioned infrastructures were found physically in good condition and are structurally safe as per the Indian standard codes. Structural Designs / Drawings/ Specifications were provided by SJVNL teams and construction works had also been carried out under supervision of QC department of SJVNL.</p>			

68. Community development works: Community development works had been stalled for a period of about 9 months due to changes in their approach to their administration (see **Box 1** for a brief on change due to LADA).

**Box 2.3: Community Development at RHEP – A paradigm shift due to LADA**

As part of the project agreement between SJVNL and the World Bank local area development works and community development works were to be executed by SJVNL. A total budget of Rs. 2626.35 lakhs was incorporated within the overall R&R and CDP budget of Rs. 51.56 crores. This figure i.e. 2.52% of the total project cost was earmarked for the various LA, R&R and community development works under the agreement and prepared RAP and SCDP plan documents. These included: i) introduction of mobile health van in project affected villages/area; ii) infrastructural works in project affected villages; iii) support services to the farmers in their agriculture/horticulture/veterinary practices; iv) protection and promotion of cultural heritage and support for local fairs and festivals; v) technical education scheme for youths for project affected area; vi) merit scholarship scheme; vii) infrastructure and other aids to government schools with the project affected area; viii) promotion of sports activities in project area; ix) restoration of dried up water resources and x) construction of bridges, bus stand, widening of existing roads, augmentation of schools and technical education for youths.

However, in accordance with the Himachal Pradesh Hydro power policy (2006), there was a requirement of providing 1.5% of the total project costs for Local Area Development Works. Based on the above, Department of MPP and Power informed that though under the proposed outlay some of the works are covered while others were not and therefore a separate allocation of 1.5% of the total project costs (Rs. 30.75 crores) should be made. It considered that of the Rs. 24.18 crores spent thus far only Rs. 13.19 crores worth of expenditure could be treated as against 1.5% cost and are in accordance with the guidelines. Activities considered included only: Drinking water supply/restoration of dried water resources, construction of HRTC bus stand at Rampur, construction of Sr. Secondary school, Rampur). Soon after, in September 2009, vide another notification guideline on LADA fund was made operational. The guidelines provided parameters for allocation of funds such as 70% of the total funds shall be earmarked for project affected panchayats. These parameters were on the basis of (i) land area acquired, (ii) extent and quantities of underground works like Tunnel/edit length, dam and power house and (iii) length of river stream between reservoir and power house. It would involve preparation of shelf of schemes based on the above

parameters. Execution of works shall follow the approval of such shelf of schemes by the LADC (Local Area Development Committee) headed by the Deputy Commissioner of the area, Kullu.

Key implications: (i) Change in or reclassification of works that have been/can be taken up by SJVNL under new guidelines; (ii) change in decision-making with regard to execution of works i.e. LADA shall decide the executing authority for all such works; (iii) approximately Rs. 2.043 crores of community works already executed are not counted under these revised guidelines as well as towards the 1.5% of the project cost that is to be deposited in the LADA fund.

*Source: Review of government notifications and interactions with SJVNL officials, May 2010*

## 2.9 Review of the mechanisms

69. Implementation mechanism included an R&R cell at the project level, an internal monitoring committee to oversee the overall project progress and external monitoring consultants. These were supported by World Bank team project teams that provided overall supervisory guidance to implementation. The following section presents details on the mechanisms for implementation, information dissemination, monitoring and grievance redressal.

70. **R&R cell at the project level:** The AGM (P&A and R&R) is responsible for the overall coordination with support from Manager (R&R) and Officer (R&R) and an Engineer (R&R). In addition there is a separate wing comprising the Land Acquisition Officer, *Naib Tehsildar, Kanoongo and Patwari* for support on Land Acquisition matters. These officials are responsible for LA and R&R works. A separate wing operates for execution of the sustainable community development plan that comprises AGM (R&R) civil works, safety, environment and quality control, under whom there is a Manager (Civil Works) supported by Engineer Civil works and an Engineer (Safety). Both these groups directly report to the Head of Project. The AGM (P&A and R&R) also is the designated Public Information officer of RHEP and responds to applications submitted under RTI. The reporting structure for R&R implementation at RHEP is presented in the organization chart below (See Figure 2.1).

71. **Provision of information/Consultations:** From the time of project preparation (05.11.2004), many meetings have been held in different villages in the area. While some were specific to discuss provision of rehabilitation measures such as seeking option from those PAFs rendered houseless or landless and houseless, other meetings have been to discuss on issues such as the community infrastructure works, blasting impacts and crop losses. Many meetings have organized in presence of DC, Kullu and DC Shimla to address and resolve grievances of affected communities. These meetings have included various levels of officials and affected persons, their representative groups or individuals. Such meetings have continued since. As on 18<sup>th</sup> January, 2010, a total of 111 meetings with a total of 4919 nos. of participants have taken conducted. SJVNL keeps records of these at their office at Jhakri.

72. **Public Information Centre:** A Public Information Centre (PIC) has been operational at Bayal village from 19.12.2005 onwards that is a dedicated facility for seeking information on progress relating to R&R works and or grievance redressal. An officer in charge is responsible to provide information. At the PIC, information is received and/or given by a Junior Welfare officer who belongs to the Bayal village and is well-conversant with local issues. The information centre is a repository of all documents relating to the project i.e., R&R policy (or RHEP MOU), Socio-economic survey, Resettlement Action Plan, Environment Assessment and Environment Management Plan. It also is a repository of photographs of various events in R&R implementation such as launch of MHV, training camps, etc. A notice board too is also placed in the PIC for displaying of tender notices and other important information relating to PAFs / PAAs.

73. There is a register for listing the visitors who have come for any particular purpose. It records name of the village, name of the village and type of query and signature/thumb-impression of the visitor. Any applications or letters submitted are signed and received. Reportedly the queries were more in number at the commencement of project activities, particularly with respect to terms of employment, compensation and community welfare measures, while in the recent years, the visitors have queries relating to employment and community welfare measures such as street lighting. The PIC also supplies applications forms for ITI training, application for merit scholarship and Income Generation Scheme are received at the PIC, which then are forwarded to the Jhakri office. Actions on these applications are however directly communicated by RHEP to the respective applicants.

74. During survey as well as during consultations, community views and perceptions were obtained on the efficacy of these mechanisms. The following views were recorded:

- Communities at Bayal and Koyal village have visited these PICs and attended many of the meetings that had been organized and stated that these were useful.
- Community reported that their applications are received and quick responses were given.

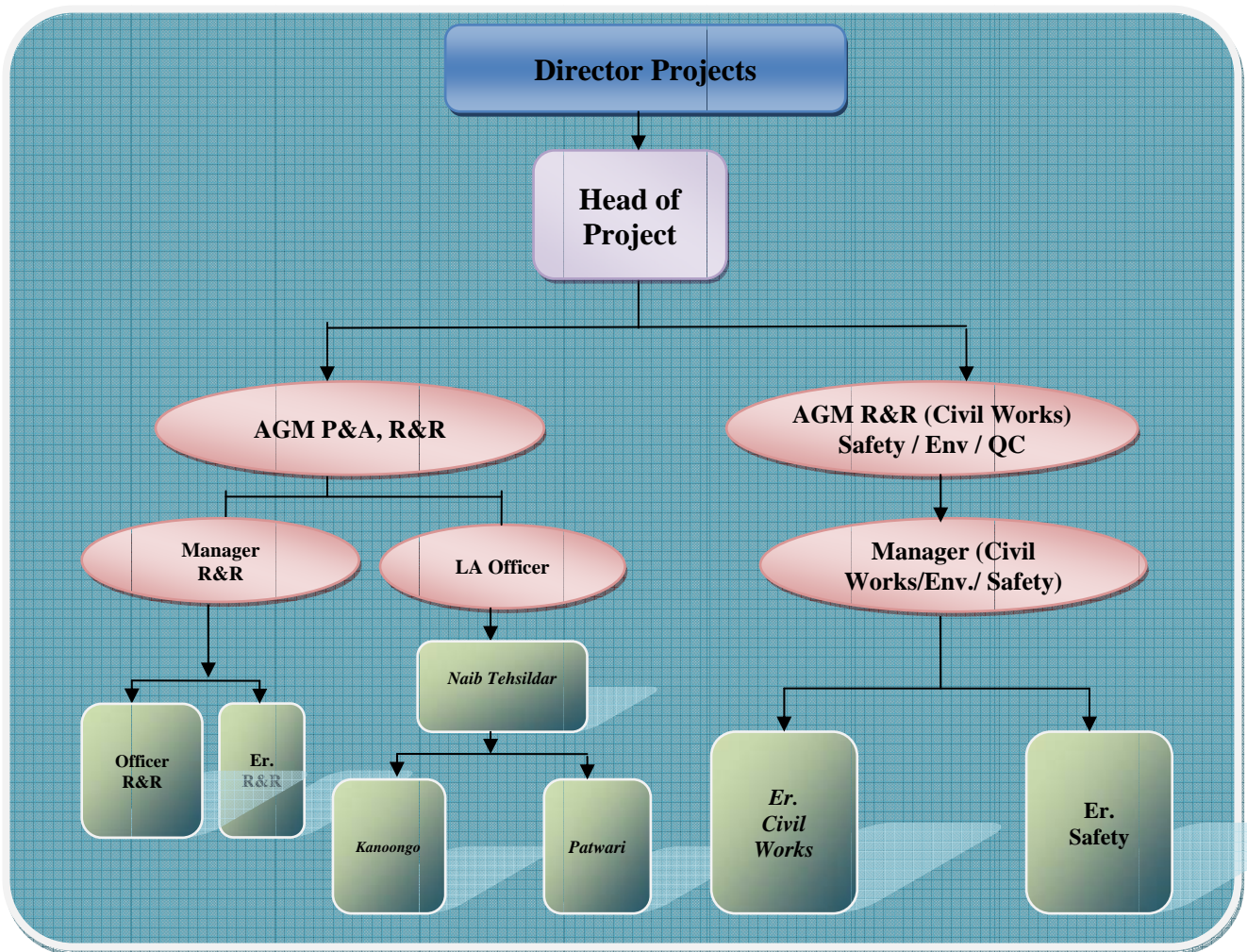


Figure 2.1 – Organization structure for LA & R&R at RHEP

75. **R&R database:** A database on project affected persons and others stakeholder/beneficiaries has been prepared and is being currently used by the project authorities to monitor R&R implementation. It has information with respect to the losses, category of PAFs such as houseless, landless and/or houseless or landless, compensation amounts, assistances received. Besides, it lists the types of assistances given as construction allowances (by instalment), grants for vulnerable groups, provision of house-plots, hiring of vehicles etc. It also records employment details such as persons hired by SJVN (through HIMPESCO), through petty contracts and also by major construction contractors.

76. **External Monitoring:** External monitoring of the R&R and CDP activities at RHEP were carried out by Agro Economic Research Centre, Shimla. The objectives of the external monitoring were the following:

- a) Assess whether the implementation of the RAP and SCDP is as per provisions outlined in the RAP and CDP adopted for the project;
- b) Monitor the schedules and achievement of targets described in the plans; and
- c) Provide periodical suggestion and recommendations for mid-stream alteration based on the implementation progress.

77. The monitoring team<sup>16</sup> comprised of two social scientists and one civil engineer and they carried out periodic visits, observations, individual interviews and group interviews with communities and also with concerned project officials. They reported along mutually agreed reporting formats and at quarterly or half-yearly intervals as required. Besides conveying the suggestions made by the PAFs, they also have made recommendations towards R&R implementation.

78. **Grievance redressal mechanisms:** A grievance redressal mechanism was constituted in early 2007 to address the grievances of the persons residing in the project affected zone. It comprises Sub-Divisional Magistrate – Ani (Chair), Block Development Officer (Secretary), Zila Parishad member (Member) and one affected person (member) as the committee members. Most of the recent applications have been either for employment, community welfare measures, compensation received for blasting impacts. *Though the exact number of applications is not known at present, grievance mechanisms have been operational.* Besides the LADA meetings, two other meetings<sup>17</sup> have been held in the presence of Deputy Commissioner, Kullu in the last two years to address and resolve the grievances of the affected persons of RHEP and NJHEP. Issues raised in such meetings pertain to: payment of compensation for crop damage and blasting activities, augmentation of drinking water supply. (See Photo 2.3)

<sup>16</sup> The monitoring consultant – AERC, Shimla included Dr. Ranveer Singh (Social Scientist), Dr. C. S. Vaidya (Social Scientist) and Mr. Sanjay Bhardwaj, Civil Engineer

<sup>17</sup> Meetings have been held under the chairmanship of DC, Kullu on 03.06.2009 and 19.01.2010 to address and resolve the grievances of persons affected by RHEP and NJHEP



Photo 2.3: Public Information Centre (PIC) at Bayal village; notice-board at PIC on GRC

79. An evaluation of the institutional commitment and capacity has been carried and is presented in Table 2.10.

Table 2.10: Institutional assessment of R&R and SCDP implementation mechanism at RHEP	
Criteria	Assessment
Willingness to make the necessary policy and institutional changes to develop an adequate framework for the resettlement;	An appropriate policy for the project affected families of RHEP was signed (as part of MOU) between State government of Himachal Pradesh and SJVNL on 20.10.04 that clearly spelt out the various R&R and community development measures that shall be taken to address the directly affected persons and also others indirectly affected or residing in the affected villages. Further the R&R department has continued since NJHEP <sup>18</sup> .
Willingness and ability to design and implement an effective consultation campaign involving key stakeholders, especially the affected people	Right from the time of project preparation (05.11.2004), a series (approximately 60 nos.) of meetings were organized with the affected communities till 04.12.2007), these included various levels of officials and affected persons, their representative groups or individuals. These meetings were carried out at different villages of the affected panchayats. Such meetings have continued since. As on 18 <sup>th</sup> January, a total of 111 meetings with a total of 4919 nos. of participants have taken place.
Willingness to allow independent, external monitoring and evaluation of the resettlement program;	External monitoring has been and is being carried out Agro economic research centre, Himachal Pradesh university followed the current study at the mid-term to independently evaluate the progress achieved at the mid-term stage.
Past experience in implementing resettlement programs, including capacity and willingness to provide adequate resources and take necessary corrective actions to achieve satisfactory outcomes;	Execution of the R&R program has benefited from the previous or past experience of executing works of similar nature but even greater complexity under the Nathpa Jhakri Hydro Electric Project executed in close proximity of the same area of the state. The experience had helped to build adequate capacity and further two distinct branches to carry out execution – R&R works and community development works.
Willingness to undertake an assessment of staffing, both of numbers and of skills, and the necessary recruitment or training, based on the results of the assessment;	Additional staff, such as Officer (R&R) was recruited on a permanent basis in accordance with need and with appropriate orientation and training. Further an exclusive database for the affected persons of RHEP was prepared M/s Cross-section Interactive Limited, New Delhi to enable maintenance of comprehensive information on each and every affected family besides other beneficiaries such as ITI trainees, petty contracts and other community development works executed thus and under progress.

<sup>18</sup> Source: Implementation Completion Report, Nathpa Jhakri Hydro Electric Project, The World Bank, 2002

Capacity of allied agencies, and the adequacy of the mechanisms to coordinate the work of other agencies; and	As the Deputy Commissioner, Kullu district and Deputy Commissioners of Shimla district are the administrators for the R&R program for RHEP of their respective areas, it has helped to facilitate the execution of key activities such as certification of PAPs, provision of compensation and other assistances, besides timely intervention in resolution of grievances.
<i>Source: Adapted from the Involuntary Resettlement Sourcebook, The World Bank, 2004</i>	

## 2.10 Key outstanding implementation actions

80. The RAP (2007) stated that the RAP would be deemed completed if 100% of the following actions were achieved. **Table 2.11** below lists the current status of these actions

Table 2.11 – Status of Key R&R actions	
Compensation offered to eligible families.	Completed
Disbursement of resettlement grant to landless families	Completed
Benefits provided to the houseless families (independent house/cash plus plot/cash only as per their choice)	Yet to complete. Provision of construction allowances to balance eligible families in Kullu district. Provision of house plots and construction allowances to <b>four nos. (4) of</b> houseless and landless PAFs in Duttnagar village
Transitional allowance	Yet to complete. Due to PAFs in Duttnagar
Shifting allowance disbursed, etc	Yet to complete. Due to PAFs in Duttnagar
<i>Source: Impact Evaluation survey, May 2010</i>	

In terms of financial progres, thus far, out of planned amount of Rs. 102 crores (inclusive of the budget of Rs. 53 crores of the total R&R and Community development), an amount of. Rs. 66.28 crores (Rs. 6628.46 lakhs) or 64.98% has been achieved.

## Chapter 3 – Stakeholder Consultations and Community Perceptions

### 3.1 Introduction

The chapter presents the details of the various stakeholders' consultations carried out with (i) project authorities; (ii) affected communities and (iii) monitoring consultants – Agro Economic Research Centre, Himachal Pradesh University, Shimla.

### 3.2 Consultations with project authorities

81. The implementation of R&R activities under this project was carried out in-house i.e. by the project staff themselves without the support of any third party or agency such as an Non-government organization or a consultancy agency. Key issues discussed are summarized below.

82. a) Blasting impacts: Project officials acknowledged the concerns expressed by the communities with respect to the blasting impacts and stated structural damages could not be attributed to the blasting works. However, as an humanitarian measures, an amount of **Rs. 1,27,24,066 (One crore twenty seven lakhs twenty four thousand and sixty six)** had been deposited with DC Kullu for further disbursement; b) Usage (or non-usage) of Seed capital: Communities concerns regarding seed capital were conveyed. In response, local residents suggested that a few of the trades suggested by the local population such as *dhaba* (eatery) dry-cleaning shop, snacks outlet, etc., could be added to the already existing list; c) Provision of employment as a rehabilitation measure: Project authorities observed that at present the sanctioned staff strength for RHEP is 299 nos. of which 298 nos. of positions were already filled in. 153 employees of SJVNL and 145 nos. of employees of HPSEB (Himachal Pradesh State Electricity Board) on deputation had filled up these positions. They further stated that due to exigencies of the project at the construction stage requiring manpower stop-gap arrangements have been made via which some employment in the category D category employees such as clerk, security personnel is being done through HIMPESCO. d) Inclusion of other trades under ITI/Merit scholarship: Project authorities were informed about the communities' perception on the trades available under ITI training scheme. Further during consultations, Nursing as a vocation was considered as one option in light of the new hospital and like requirements. Impetus to this trade could be beneficial as that would help females pursue a vocation that is: i) likely to have an increased demand in context of the upcoming township; ii) is a socially well-accepted occupation; and finally iii) could enable females to stay in their homes/villages, while working. e) Bayal dispensary/free medicines: Project authorities indicated that all the issues and details for the provision of medical services – dispensary, MHV and the upcoming hospital were being discussed upon by the management. f) Threshold for SJVNL's execution in community works: Project authorities acknowledged the communities preference for works being executed by SJVNL. However, they stated that it is not feasible to carry out works of smaller value i.e. 2-3 lakhs as the administrative costs of tendering/ executing the works, is more than the value of work.

### 3.3 Community perceptions

83. A total of 6 community consultations were held in the four villages – *Bayal* (2), *Koyal* (2), *Averi* (1) and *Duttnagar* (1), comprising 52 persons. Besides one community consultation was held in one non-affected village of *Nirsu* that falls in Duttnagar panchayat. Four (4) FGDs community consultations were held in each of the four affected villages with a total of 63 persons to understand how female groups had

been/are being impacted, and how they had benefitted from the R&R and the community welfare measures in particular and if they had any specific grievances that required to be addressed. (See Annexure B for photos of community consultations). Key issues from the consultations and FGDs are summarized below.

84. **R&R Measures:** *a) Compensation:* Compensation has been provided for land but, in particular Landowners of Duttnagar village had a feeling that they should have been given higher rate by the Govt. keeping in view the market rate. In Koyal, villagers indicated that the rates given were lower in comparison to Bayal as there was no difference to the land adjacent to the Sutlej river; *b) ITI training:* ITI training was considered as useful however they feel that technically trained students may be given permanent employment in RHEP (SJVN). Further the list of trades is limited and should be expanded to include Hotel management, business management and mobile repairing for males and Nursing for females. *c) Construction grant, rental and shifting allowances:* Affected families perceived that while the plots were given and construction grants were paid linked to the construction progress, they observed that the amount of Rs. 3000 per sq.mtr (or Rs. 1,80,000/-) was too less in view of the high construction costs. Communities opined that the rental grant and shifting allowance were: i) generous amounts particularly as the shifting took place within a distance of less than 1 to 1.5 km in most cases; and ii) contributed towards savings as most stayed with their relatives or friends and were used towards cost of construction of new houses. *d) Seed capital for Income Generation Scheme:* The stipulated amount of Rs. 30000/- that was 80% of the total cost (approximately Rs. 38000/-). The amount was considered to be small and insufficient to start any business and for any serious venture, it should be at least raised to Rs. 50,000/- if not to Rs. 1.0 lakh. They indicated that in the R&R policy document, taking up of seed capital was linked to the provision of employment and communities were concerned that accepting the IGS scheme would endanger their chances of employment in the future; and there was a lack of awareness or necessary guidance to start a scheme on the potential economic growth in the area was a hindrance as well. *e) Hiring/Renting of vehicles:* During survey and consultations, communities reasoned that (i) the current rate of Rs. 18,000 per month was low; (ii) the withdrawal of vehicles after the vehicle completed 1 lakh kilometres which was considered as a safe threshold for vehicles driven in the hills made the option unviable, particularly as while the vehicle covered the prescribed limit in about 1 to 1-1/2 years, the loan repayment period was longer; *f) Employment:* Employment provisions was one of the main demands as those who lost land and houses are the most impacted and should have the most benefit.

85. **Community Development Measures:** *a) Dispensary and Mobile Health Van services:* PAFs contacted during survey reported that the mobile health Van facilities and dispensary at Bayal village were beneficial, while the rest particularly those residing outside the village reported that they were not enthusiastic. They added that while free medicines are provided by RHEP, treatment is available for general ailments. Communities indicated that though the facilities were welcome, treatment was being provided on the basis of symptoms observed while diagnostic facilities are needed. *b) Community Works and LADA:* Communities stated that infrastructure works of value upto 4-5 lakhs should be executed by the village panchayat, while those above should be executed by SJVN. Some sections indicated a preference for SJVN for execution of concerned works, over other departments and reasoned that the quality of construction is better and works get carried out faster when compared to other departments.

**Other issues:** *a) Blasting impacts:* Communities repeatedly brought up the issue and stated that vibrations are experienced by them particularly during night hours when the blasting takes place and is causing cracks to occur in their structures.

### 3.5 Interactions with Project monitoring consultants

86. A summary of key issues discussed is as follows: a) R&R measures administered: They stated that as recorded in their quarterly reports, major R&R activities such as provision of resettlement grants, provision of transportation assistance and rental grant relocation to resettlement sites had been completed. Only a few houseless families in *Duttnagar* village required to be resettled. b) Income generation/seed capital: They observed that it had been a weak area in the overall implementation. They stated that the some guidance with regard to usage of seed capital and potential of these trades was required. A market assessment or survey would help to identify such trades.

## Chapter 4 – Conclusions and Recommendations

### 4.1 Introduction

The chapter concludes with the key findings and potential recommendations for future implementation.

### 4.2 Key Findings

87. Based on the findings and assessment of RAP actions, it is recorded that at the mid-term stage more than 85% of the RAP actions are considered complete. Key findings and assessment with respect to RAP and CDP implementation are presented below:

Income: Average annual income of affected households has seen an increase in real terms (26.29%) when compared to 2005 figures. It compares favourably with non-affected households too. Besides, it is an indication too of the type of productive investments avenues available which have been made use of. Besides the generous compensation amounts, the appropriate R&R measures such as provision of transitional allowance and shifting allowances proved to more than commensurate to address these resettlement costs normally incurred by those displaced. These measures helped to keep the compensation amounts largely untouched and purely for investments into productive assets such as cultivable land, orchards, commercial vehicles, etc. Also, equally relevant is the fact, that timely payment of the compensation amount – prior to commencement of civil works also meant that affected households have had a greater passage of time in which to recover to or go higher than earlier income levels. In comparison to the control households too, the figure is higher thereby implying the adequacy of compensation amounts and associated R&R measures.

Standard of living: The living standards of people too have shown positive change. In terms of housing and ownership of consumer durables, there has been increase over the baseline figures. Improvement has been recorded in terms of more number of pucca houses, increase in average house size. The generous rehabilitation measures along with a bouquet of options such as provision of house plots with construction grants and without indicate that impacts have been by mitigated suitably. Consumption pattern with respect to food grains too is at par with non-affected groups e.g. for major food items. Figure for consumption of food grains (wheat and rice) equals the figure reported by the control group. While marginal increase is recorded in those who own personal vehicles – two or four wheelers, a significant jump is ownership of consumer durables. Besides, investment in education for children indicates a changing mind-set in majority of the affected households i.e. a potential shift for the next generation from the traditional occupation of cultivation. Multiple investments such as in education, agriculture, land, house etc. further demonstrate the investible surplus that is an outcome of generous compensation amounts and adequate R&R measures.

Occupational change: A higher percentage of affected persons are now employed in either government service and/or in private service when compared to pre-project scenario as more and varied type of employment opportunities have come up – an indication of the changing socio-economic profile of the project area that is invariably an outcome of any development intervention.

Community welfare and infrastructural measures: Various community level measures such as ITI schemes, merit scholarship schemes have been largely acknowledged as important contributions brought in by

SJVNL. The usefulness of the Bayal dispensary is evident from the large number of patients who over the period of its operation have approached it for medicine and treatment, thereby indicating a need for such a facility that was previously non-existent in the project area. The desire expressed by communities to increase the outreach of the MHV facilities is an indication of the usefulness of the facility and also therein a justification for its continued operation. The provision of approach roads, *pucca* paths, augmentation of water supply by provision of water tankers, etc. have helped to meet critical infrastructural needs in these affected panchayats. Further the support to cultural events/fairs, grants to schools are other features that have ensured that SJVNL's approach to community development has been integrated with RAP actions.

**Gender impact:** A significant achievement of the community welfare measures is observed with respect to the women's participation and benefits that accrued to women residing in the area. While training under ITI, merit scholarship was availed by younger women in areas such as arts and crafts, computer engineering, cutting and sewing, a significant percentage of women from both affected and non-affected attended many of the agriculture, horticulture camps and found them useful.

## 4.2 Key Recommendations

88. R&R programs have to address the challenges of the prevalent scenario, further have to recognize and pre-empt the challenges in the emerging or changing scenarios and have to adapt accordingly. At the initial stage of land acquisition RHEP addressed the concerns of PAFs by providing adequate compensation for the assets acquired, rehabilitation grants to the landless, transit plans for those who lost their residence and were requiring relocation support. Once the immediate concerns were addressed, the challenge of maintaining or improving previous incomes was met and continues to be met with a host of measures that involved temporary income sources such as petty contracts and other work opportunities. At the current 'mid-term' stage, communities concerns have shifted from the above to the issue that many of these income sources may not be of a permanent nature. As they do not wish to see a development intervention by-pass them, they wish to maximize benefits by obtaining employment that is both secure and sustainable in the long term. Hence at this stage, the provision of permanent employment with Nigam, and other sources of permanent income like supplier's maintenance works, augmentation of water supply form the communities' main concerns. The chapter concludes the mid-term impact evaluation with recommendations along with the assessment of the risks involved, if any, in their acceptance.

89. Recommendations are provided below under separate headings.

### I. Rehabilitation related

#### A. Changes in the terms for availing Seed capital

- (i) Amend MOU to i) de-link the provision of seed capital from the employment provision and ii) provide the same amount of Rs. 30,000/- as a "working capital" to the affected families so that they augment their existing business/shops, if any.
- (ii) Revise seed capital amount from the current amount of Rs. 30,000/- to Rs. 50,000/-.<sup>19</sup>
- (iii) Add a few more trades against which the seed capital can be availed such as a *dhaba* (eatery) dry-cleaning shop, snacks outlet, etc., to the already existing list. Delete items such as poultry.
- (iv) Carry out a market assessment of trades that could be taken up once the incomes from the construction activities are over and market townships are to be established. The assessment should be carried out within the next 3-6 months.

<sup>19</sup> SJVNL's R&R policy of March 2010 has revised the income generation scheme limit to Rs. 50000/- besides adding a few more trades.

- (v) Hold group meetings with villagers or organize small awareness generation camps to familiarize villagers and particularly those interested groups on the types of activities that could be taken up and the likely returns. Identify and engage income generation or microfinance experts for this purpose.

**B. Provision of employment as a rehabilitation measure**

- (i) Consider provision of employment in light of the demands of, and need to have continued rapport with the communities but subject to suitable qualifications of candidates and SJVNL's requirements.

***Secondary Employment***

**A Inclusion of other trades under ITI/Merit scholarship:**

- (i) Include "Nursing" trade as one option to the schemes available to females from project affected households, besides "Mobile repairing" as another trade option for males.
- (ii) Give stipend for the period of training and provide scholarship to the meritorious candidates

***Blasting impacts***

- (i) hire an Non- Government Organization to carry out a survey to ascertain usage of repairing costs on blasting impacts and to obtain utilization certificates along with photographs.

***Medical dispensary and mobile health van services***

- (i) Discontinue the practice of provision of 'free' medicines so that all patients (villagers) pay and know about the treatment given and the medicines they consume besides completing the full course of treatment at the MHV. The same practice may be made applicable for the dispensary.
- (ii) improve the stock of medicines available at the MHV and also at the dispensary;
- (iii) permanent hospital services should be made operational at the earliest, then have free OPD for patients but provide and charge for diagnostic services and medicines; and
- (iv) Increase outreach of MHV to more villages in the area.

**4.3 Other recommendations**

90. Other recommendations with respect to RHEP implementation as well as lesson for the upcoming future hydro projects are listed below:

- (i) In addition to website disclosure, all relevant documents (hard copies) such as monitoring reports, mid-term impact evaluation reports, QPRs, report of blasting impacts and other display materials should be updated and disclosed at the PIC.
- (ii) The set of in monitoring indicators listed in **Table 2.2** should be used to measure impact of RAP and SCDP implementation at the end-term evaluation stage.
- (iii) As a welfare measure provide technical guidance to communities to help construct structures – residential, commercial or community level in a more scientific manner. This could be implemented for the balance nos. of houses or structures to be constructed in RHEP, e.g. for the houses that are to be constructed following allotment of house-plots in Duttnagar.
- (iv) Advise communities at the initial stages on the potential impacts of blasting and other civil works on their structures in future Hydro Electric project so that appropriate protective measures can be taken.