



SAWRA-KUDDU HYDRO ELECTRIC PROJECT
111 MW

REHABILITATION
AND
RESETTLEMENT PLAN

RELIEF & REHABILITATION PLAN OF SAWRA KUDDU HYDRO ELECTRIC PROJECT (111MW)

Introduction: - India is running against time to combat power shedding and to provide sufficient electricity to all by the year 2012 and to boost the growing economy to alleviate poverty. Prospects of 21st century living with adequate and eco-friendly power to meet the growing power demand, **particularly the peak power are bleak**. Economic growth and population explosion are resulting in rapidly increasing demand for energy in the country. Taking cognizance of this aspect, the Govt. of India has embarked upon an ambitious plan of capacity addition including accelerated development of hydro resources, to meet the peak load requirements and to provide reliable power.

India has a total hydropower potential of approximately 1, 50,000 MW out of which Himachal alone has around 21,000 MW flowing in its five river basins. Rapid exploitation of the large un-harnessed Hydel potential in Himachal (over 15000 MW) will go a long way in meeting the persistent power shortages in the Northern Region.

In this endeavour one of the identified and fully investigated projects is Sawra Kuddu Hydro Electric Project (111MW) on Pabbar river, a tributary of river Tons, which in turn is a tributary of Yamuna river.

Project at a Glance: - Name of this project as 'Sawra Kuddu Hydro Electric Project' has been drawn from the name of two prominent villages near to the proposed Barrage site and Power House site respectively. This project lies between longitudes 77°-45'-00" to 77°-49'-33" degree East and latitudes 31°-07'-54" to 31°-03'-30"North. Catchment area of Pabbar River and its tributaries is thinly populated, and mostly covered by forest/ forestland.

The project envisages diversion of water of Pabbar river by constructing a gated barrage (± 15.50 m high) at Hatkoti to create a small pondage, Intake structure, Desilting tank and a 11.145 km long Head Race Tunnel along with other appurtenant structures like surge shaft, pressure shaft and an underground Power House (with 3x37MW capacity) near Snail on left bank of river Pabbar to utilize a design discharge of 65cumecs and a gross head of 213.50m for generating 386 million units in a 90% dependable year.

Total cost of the Project has been estimated at Rs.648 crore including interest during construction period. Cost of generation has been worked out as Rs. 2.52 per unit at powerhouse bus bar after taking into account interest during construction, which is quite comparable with power available from other sources in the region.

Flood Control: - Pabbar river is a main tributary of river Tons and confluences with it about 30km down stream of the Power House site at Snail.

Most of the run-off discharge in river Pabbar occurs during summer /rainy season from June to September. A good amount of run-off is also experienced during winter months due to snowfall/ rainfall. Monsoon/ winter run-off in river Pabbar, which flows in a hilly terrain with well-defined banks, does not generally create a flood-havoc along its route. However, cloudbursts in some smaller zones in the upper catchment have been experienced in the past, which adversely affected human lives, properties & livestock in

the influence zone of such cloudbursts. The diversion Barrage during such events will help to moderate the flood problem to some extent in downstream reach.

SALIENT FEATURES OF THE PROJECT

LOCATION

STATE	:	HIMACHAL PRADESH
DISTRICT	:	SHIMLA
TEHSIL	:	JUBBAL
DIVERSION SITE	:	HATKOTI
POWER HOUSE SITE	:	SNAIL VILLAGE
IMPORTANT MONUMENT	:	HATKOTI TEMPLE

ESERVOIR

GROSS STORAGE	:	58.50 ha.m
LIVE STORAGE	:	46.82 ha.m

DIVERSION STRUCTURE

TYPE	:	BARRAGE
MAX.HEIGHT ABOVE FOUNDATION	:	15.50m

SPELLWAY

TYPE	:	PARTIALLY GATED LARGELY FREE FLOW
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INTAKE STRUCTURE

TYPE	:	SURFACE 4 Bays, 4m x 3m
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DESILTING TANK

TYPE	:	SURFACE WITH CENTRAL GUTTER
NO.OF BASINS	:	FOUR

SIZE : 80.0m x 19.5m x 10.5m (each).

HEAD RACE TUNNEL

SHAPE : D-SHAPED

LENGTH : 11145 m

DIA : 5.0 m

DESIGN DISCHARGE : 65m³/sec.

SURGE SHAFT

SHAPE : CIRCULAR

SIZE :

DIA : 14.00m

HEIGHT : 73.10m

PRESSURE SHAFT

TYPE : UNDERGROUND

SIZE :

DIA : 3.50m

LENGTH : ± 312.00m

POWER HOUSE

TYPE : UNDERGROUND

INSTALLED CAPACITY : 111MW

UNITS : 3 Nos.

CAPACITY : 37MW EACH

SIZE OF CAVERN : 87.5m x 14.5m

TYPE OF TURBINE : FRANCIS

TAIL RACE TUNNEL

SHAPE : D-SHAPED

DIA : 5.0m

LENGTH : 440 m

Land Acquisition: Wherever a dam/barrage is constructed, a pool of water is formed on the upstream, which is termed as reservoir. When the reservoir is filled up to the required level, certain area is submerged due to water stored in the reservoir. This area may involve patches of agricultural land, forestland, barren land etc. Therefore, the submerged land has to be acquired as per applicable rules. In addition, some land is required to construct colonies, job facilities area and locate other components of the project. Land is also required for afforestation in lieu of acquisition of forestland. Since private land is acquired in the public interest, adequate compensation must be ensured to the people affected by land acquisition.

In this project also similar land requirement is of the order of 42-94-85 ha and the break-up is given below.

DETAIL OF LAND AT A GALANCE:

i)	Agriculture land.	30-30-65 Ha.
ii)	Forest Land and revenue land.	53-72-59 Ha.
iii)	Populated and barren land.	12-64-20 Ha.
iv)	Submerged area.	50-29-38 Ha.
v)	Cultivated land.	30-30-65 Ha.
vi)	Forest and barren land.	24-50-37 Ha.

NUMBER OF PANCHAYATS AND PUPULATION TO BE BENEFITED:

i)	No. of Panchayats	8 Nos.
ii)	Population	9831 Nos.

OCCUPATION OF THE AFFECTED PEOPLE:

i)	Agriculture/Horticulture	90%
ii)	Agriculture labour	0.8%
iii)	Forest labour	---
iv)	Artisan	9.00%
v)	Others	0.2%

RESETTLEMENT AND REHABILITATION SCHEME FOR PROJECT AFFECTED FAMILIES OF SAWRA KUDDU HYDRO ELECTRIC PROJECT.

Whereas for the construction of Sawra Kuddu Hydro Electric Project besides the Government land, some private land is also to be acquired by the H.P. Power Corporation Limited. Due to acquisition of private land for the project, some families will be affected but only one family shall become land less.

And whereas to protect the interests of the project affected people and landless family (and any other family affected during construction stage of the project), adequate arrangements for the resettlement and rehabilitation shall be made in accordance with Rule 8A of the H.P. Nautor Land Rule, 1963, which provides for forming of a special scheme for Resettlement and Rehabilitation of persons who are displaced as a result of anything done for any public purpose.

Now, therefore, the H.P. Power Corporation Limited hereby proposes the following scheme for Resettlement and Rehabilitation of the persons affected on account of acquisition/ of their land and other immovable properties along with water rights under the Land Acquisition Act.1894 for the construction of Sawra Kuddu Hydro Electric Project (111MW) in Shimla District. The proposed scheme is based on the R&R Policy notified by the Govt. of H.P. vide Notification No. Rev (PD) F (5)-1/1999 dated 27.4.2006.

OBJECTIVES:

1. To compensate families whose land or other assets are acquired for the construction of the project.
2. To create better living conditions and to improve by and large the quality of life of people residing in the project area.
3. To contribute to the overall development of the project affected areas.
4. To create good rapport with the local people for long-term relationship and mutual benefits.

BASIC ISSUES AND NEED FOR R&R ACTION PLAN:

Acquisition of land generally induces change in land use pattern and can disturb the economic base. The R&R Action Plan is therefore formulated with an objective to resettle the families rendered landless or affected families whose land/house/shop is acquired and to rehabilitate them in such a manner that they improve or at least regain their previous standard of living, earning capacity and production level. Besides, it is imperative that the transition gap is to be reduced to the minimum possible extent.

With proper resettlement and rehabilitation plan, an amicable relationship with PAFs can be maintained which is essential for efficient operation of the project. It is generally seen that the displacement during acquisition of land is involuntary and the PAFs have to face a new social setup. During such transition period, the rural economic environment is

generally transformed into higher cost of living and reduction in traditional sources of income. In general, PAFs face difficulty to cope with the new environmental set up.

Domestic changes in the land use patterns substantially alter the agro based rural economy and lifestyle of affected families.

RELIEF REHABILITATION STRATEGIES:

- Each project affected family will be suitably compensated by the benefits such as monetary compensation for land, house and for both etc.
- The local population will be provided suitable guidance in the sphere of better technology and better knowledge base for better living conditions and better livelihood.
- Confidence building measures amongst the local population and project affected persons in particular to induce a sense of feeling of being cared and heard.
- General Development of the project area such as roads, footpaths, footbridges and community development works etc.
- Each PAF shall be issued an Identity Card. This card will be issued by Project Authorities, which will facilitate PAFs entry in project offices and also for the purpose of association in various activities of the project.
- A Public information Centre (PIC) will be opened in the project area, which will contain necessary information/details regarding project components and information pertaining to R&R for the benefits of the PAFs and local people. The PIC will remain operative for a period of one year after completion of the project.

PART-I

- 1.1 This Scheme may be called the Resettlement and Rehabilitation Scheme of Pabbar Valley Power Corporation Limited for the project affected families of Sawra Kuddu Hydro Electric Project (hereinafter called R&R Scheme for Sawra Kuddu Hydro Electric Project).
- 1.2 It shall extend to the whole of area affected or likely to be affected as a result of construction of Sawra Kuddu Hydro Electric Project within Tehsil Jubbal of Shimla District of Himachal Pradesh. Panchayat will be taken as a unit and all Panchayats where either land is acquired or where underground works are undertaken will constitute in the project affected area.
- 1.3 The Commissioner for Resettlement & Rehabilitation appointed by the State Government for supervising the relief and welfare works of various Projects in Himachal Pradesh would also be the Commissioner for welfare of the affected population so that the welfare works are carried out under his directions and guidance.
- 1.4 The Deputy Commissioner, Shimla in whose jurisdiction the project affected Area falls, will be the Administrator for Welfare of the area so that the Relief and Welfare works are carried out and controlled under his supervision.
- 1.5 In this Scheme, unless the context otherwise requires:

(a) Family

‘Family’ means husband/wife of the person who is entered as owner/co-owner of the land in the revenue record, their children including step or adopted children, grand children and includes his/her parents and those brothers and sisters who are living jointly with him/her as per entries of Panchayat Parivar Register as on date of notification under Section-4 of the Land Acquisition Act, 1894.

Explanation:

Only the Panchayat Parivar Register Entry, as it stood on the date of Notification under Section-4 of the Land Acquisition Act, 1894, shall be taken into account for the purpose of separate family for rehabilitation benefits as well as for consideration of employment.

(b) Project Affected Area means area as notified by the Project Authority or where land is acquired for construction of any component of the project, infrastructure, township, offices, construction facilities, welfare facilities etc. Unit for declaring Project Affected Area would be Panchayat /village.

(c) Project Affected Families (PAFs)

The Project Affected Family means a family/person whose place of residence or other properties or source of livelihood are substantially affected by the process of acquisition of land for the project and who has been residing continuously for a period of not less than three years preceding the date of declaration of the Project Affected Area/Affected Zone or practicing any trade, occupation or vocation continuously for a period of not less than three years in the Project Affected Area/Affected Zone, preceding the date of declaration of the affected zone.

Explanation

The date of declaration will be taken as the date of notification under Section 17(4) or 4 of Land Acquisition Act, 1894. The period of residence of not less than three years will not be applicable in respect of PAFs who own land in the Project Affected Area. The period of residence of not less than three years as well as effects on source of livelihood would be determined by the Deputy Commissioner concerned.

(c-i) Project Affected Family Rendered Landless

The PAF rendered landless means that family whose whole agricultural land is acquired for the project or in whose case balance agriculture land left after acquisition is less than 5 bighas. For this purpose agriculture land held by project area by all such persons and their family members shall be taken into account. Person losing land on acquisition of building and land appurtenant there to shall not be treated as landless Project Affected Family. The landless PAF shall be duly certified by the Deputy Commissioner, Shimla. To arrive at balance land, with a family, land hold by them outside the project affected area will also be considered.

(c-ii) Project Affected Family rendered Houseless.

The Project Affected Family rendered houseless means the family whose dwelling house is acquired for the project, which shall be duly certified by the Deputy Commissioner Shimla.

(c-iii) In addition to above two categories, there will be Project Affected Families who will be rendered landless as well as houseless as per definitions given above. Such cases shall be eligible for benefits of project-affected families rendered landless and project affected families rendered houseless, which shall be duly certified by the Deputy Commissioner Shimla.

(d) Project Authority

‘Project Authority’ in normal connotation refers to the Project Developer or Project Proponent e.g. the State Govt. or the Public Sector Undertaking implementing a Project etc. i.e. H.P. Power Corporation Limited in this case.

(e) Words and expressions used in this scheme but not defined here-in shall have the same meaning as assigned to them in the Himachal Pradesh Nautor Land Rules, 1968.

PART-II

Sanction of welfare grant, or facilities and grant to the PAF rendered land less or house less or both.

2.0 Resettlement Grant.

2.1 The PAF rendered landless on account of acquisition of land shall be eligible for landless grant in the following manner.

1. Family whose land before acquisition was more than 5 bighas and is left with one biswa or no agriculture land after acquisition, Rs. 2.50 lac lump sum.
2. Family whose land before acquisition was less than five bighas and is left with one biswa or no agriculture land after acquisition, Rs. 1.50 lac lump sum.
3. Family whose land holding is left with more than one biswa and less than 2-10-0 bighas of land after acquisition, Rs. 1.00 lac lump sum.
4. Family whose land holding is left with more than 2-10-0 and less than five bighas of land after acquisition, Rs. 75,000/- lump sum.
5. Family whose cattle shed is acquired in the project area, shall get one time financial assistance of Rs. 10,000/-. In no case the grant shall exceed Rs. 25,000/- per family.

2.2 Each PAF rendered landless as well as houseless (both) or houseless will be provided an independent house with a built up plinth area of 150 Sqm. Alternatively, PAF can also be offered a plot of size which allows construction of built up house of 150 Sqm. plinth area plus construction cost of the house @ Rs. 4000 per Sqm. (limited to 150 Sqm. plinth area).

A family which does not opt for house/plot but constructs a house at own cost with a plinth area of 150 Sqm or more shall be paid the construction cost of the house @ of Rs. 5000 per Sqm (upto a plinth area of 150 Sqm maximum). Options from such families will be asked at an appropriate time. In case any of such family constructs house of less than 150 Sqm. Plinth area on his own plot or plot offered by the Project then amount to be given will be worked out on pro-rata basis.

2.3 Displaced shopkeepers will be given shops in allotment in the market complex of the Project Township wherever the Project constructs such market places. In addition, they will be entitled to one time displacement grant of Rs. 20,000/-. The

commercial premises/ shops allotted to such displaced shopkeepers shall be utilized by them or their successors in interest for bonafide use only. In case the project is unable to provide shops, displaced shopkeepers shall get financial assistance of Rs. 1,00,000/-

- 2.4 Infrastructure facilities in the Rehabilitation colony will include water supply, sewage, drainage, electricity, streets community centre, green area, park and approach path/roads at the project cost.
- 2.5 Transportation at the project cost will be provided for physical mobilization of all the PAFs, and displaced shopkeepers, as soon as the houses/shop get constructed in the Rehabilitation colony or a sum of Rs. 10,000/- in lump sum shall be paid, for which option will be invited from the affected families/ shopkeepers.
- 2.6 Stamp duty and other fees payable for registration shall be borne by the Project Authority. Rehabilitation grant shall be provided by the Project Authorities and placed at the disposal of the Deputy Commissioner, Shimla for disbursement to the eligible PAF's.
- 2.7 Transitional Allowance based on 3 months minimum wages to each adult member of the family will be paid if the family has become houseless and has to shift house or become landless and has to shift livelihood to a different location or change livelihood.
- 2.8 Whereas it is not possible to provide land in exchange of land acquired but in case some agricultural land is available for distribution, upto 5 bighas land will be given to each PAF by giving priority to landless. This land will be given only to such PAF's who are primarily dependent on agriculture and the livelihood is substantially effected by land acquisition. In no case will land to be given in excess of that acquired. Giving of agricultural land will not be a right and will be only a welfare measure to be given only if possible.

NOTE: All the above grants shall be in addition to the compensation paid under Land Acquisition Act, 1894.

3.0 Employment

- 3.1 One member of each Project Affected Family rendered landless will be provided employment by the Project Authority in the category of skilled/semiskilled/unskilled workmen subject to fulfilling the requisite criteria/qualification and as and when any fresh recruitment is done in these categories, it would be ensured that land oustees eligible for employment as mentioned above are given chance first and normal

recruitment would be made only if none are eligible & willing from amongst them. However, persons who are allotted shops shall not be eligible for benefit of employment and vice versa.

The following criteria will be adhered to by the Deputy Commissioner concerned for providing of preference while sponsoring the names for employment to the Project Authority.

- i. Affected families whose entire land has been acquired.
- ii. Affected families who have become landless on account of acquisition of land by the project.
- iii. Other affected families.

Within these categories preference will be given on the basis of quantum of land acquired. Those who lose more land will come first.

3.2 Secondary Employment

There may be families who are not covered under the Project Affected Family, rendered landless/houseless/shop less as given at c-i, c-ii, c-iii and 2.3 above but their land is acquired for the project, they shall have to be helped in starting some gainful occupation for getting training. Therefore, such families who may not be accommodated in direct employment, the Project Authorities will help them in any one of the following manners:

- 3.2.1 Merit scholarship scheme for the wards of Project Affected Families (PAFs) who may be pursuing vocational or professional course will be introduced by the Project Authorities as per scheme to be drafted by the Project Authority in consultation with Government of Himachal Pradesh. The project authorities will also consider getting some special seats in ITI's for the project affected families and other residents of the project affected areas. Some schemes to provide apprenticeship or on the job training to increase the employability of the residents of the project affected areas will also be started.
- 3.2.2 The Project Authorities will also consider award of petty contracts to the cooperatives of eligible families on preferential basis so that some may be engaged in such jobs. Further, the Project Authorities will advise their contractor to engage eligible persons from amongst effected families on a preferential basis wherever possible during construction stage. Other employment opportunities like hiring vehicles from PAF's will also be made available.

3.2.3 The Project Affected Families (such as rural artisans/small traders and self employed persons) will be assisted to start various suitable self-employment occupations, which include dairy farming, poultry, weaving, bakery, handicraft, cottage industries unit/shops and hiring of vehicle to the corporation. The Project Authority will provide a grant of Rs. 50,000/- per family towards seed capital. The grant will be given once only.

“Only those families who have not been provided with employment in the Project or have not been allotted any shop will be eligible for this grant”

Families residing in the project affected area other than PAF's can also be considered for this on merit and if they are needy.

Explanation:

The Deputy Commissioner, Shimla will certify the effect on source of livelihood in case of rural artisans, small traders and self employed persons for eligibility of the grant.

3.2.4 The Project Authority will provide support services for Project Affected Families interested in horticulture, agriculture and veterinary.

3.2.5 Free of cost 'cooker' to each Project Affected Family will be provided by the project.

PART-III

4.0 Community Development

4.1 Project Affected areas/villages, after due assessment done by the committee constituted under the Chairmanship of the Deputy Commissioner will be provided with infrastructure up gradation schemes which will include:

- Mobile Health Centre/Van.
- Approach Roads
- Internal Roads
- Drinking Water Supply Schemes
- Community/Welfare Centers.
- Facilities/furniture/lab equipment etc. for Schools.
- Playground
- Sanitation facilities
- Street lighting
- Agriculture/Horticulture camps and facilities.
- Investment Guidance to PAF's.

The above infrastructure would form part of funds provided to the Local Area Development Committee (LADC) by the Project Authorities. 1.5% of the total project cost will be placed with LADC by the project authorities.

4.2 Infrastructure Facilities

The Project will build such infrastructure development works in the vicinity of the Project area that are essentially required for the construction of the Project and benefit the local population also.

So far, PVPC Ltd. has constructed the following infrastructure facilities, which are useful for the local people of the Project Area also:

(a) Approach Roads:

- | | | |
|------|--|----------------|
| i. | Bishkelty bridge to intake site: | Rs. 2679231.00 |
| ii. | Sawra bridge to intake site: | Rs. 4013116.00 |
| iii. | State Highway to Adit No.-II
at Anti: | Rs. 4878663.00 |

- iv. State Highway to Power House and Surge Shaft: Rs. 14578195.00
- v. Surge Shaft to High level dumping yard at Rajkot: Rs. 2127665.00
- vi. Power House to Colony site at Chaunri: Rs. 5581332.00
- vii. Snail bridge to Mungra Nadal dumping yard: Rs. 3155646.00
- viii. State Highway to Explosive magazine at Seema: Rs. 6105433.00
- (b) Bridges:**
- i. 70-R Bailey Bridge at Snail: Rs. 20008752.00
- ii. 40-R Bailey Bridge at Anti: Rs. 13800765.00

DETAIL OF POPULAION IN TEHSIL JUBBAL DISTRICT SHIMLA (HP)

S.No.	Name of Panchayat	Total Population	Male	Female	S.C.	ST.
1	Sawra	2173	1124	1049	560	-
2	Thana	970	490	480	200	-
3	Ranvi	1065	541	524	200	-
4	Bholar	951	464	487	304	-
5	Giltari	384	180	204	93	-
6	Jhalta	1234	628	606	562	-
7	Mandal	1320	698	622	213	4
8	Solang	1160	602	558	342	-
9	Pandranoo	833	437	396	309	-
10	Jagtan	926	443	483	227	-
11	Kuddu	1665	869	796	467	-
12	Anti	1624	842	782	549	-
13	Nandpur	1420	715	705	374	-
14	Jai PididiMata	2141	1114	1027	491	2

15	Bhadal	2025	1045	980	132	-
16	Dhar	1279	639	640	28	-
17	Barthata	877	435	442	297	-
18	Kathasu	969	503	466	155	
19	Shilli	1766	931	835	364	-
20	Parally	1576	834	742	513	28
21	Mandhoal	1600	829	771	631	-
22	Kotkayana	964	489	475	372	-
23	Nakrari	2361	1160	1201	1238	-
24	Sari	1020	519	501	192	-

SAWRA KUDDU HEP AFFECTED PANCHAYATS

S. No.	Name of Panchayat.	Population.
1	GRAM PANCHAYAT RANVI	1065
2	GRAM PANCHAYAT SAWRA	2173
3	GRAM PANCHAYAT THANA	970
4	GRAM PANCHAYAT MANDAL	1320
5	GRAM PANCHAYAT JHALTA	1234
6	GRAM PANCHAYAT KUDDU	1665
7	GRAM PANCHAYAT GILTARI	384
8	GRAM PANCHAYAT SARI	1020
	Total	9831

ABSTRACT OF RESTTLEMENT GRANT TO BE PAID TO PAF's RENDERED LANDLESS IN TERMS OF PART-II OF RR PLAN.

On account of acquisition of land for construction of Sawra Kuddu HEP (111 MW), only one family in Tehsil Jubbal will be rendered landless which falls under category 2.1 (2) of PART - II of this R&R Plan. The family shall be eligible for a lump- sum landless grant of Rs. 66000/- in addition to the compensation paid under Land Acquisition Act, 1894.