

**Brief summary of Ujh Multipurpose Project (UMP)**

The State of J&K is perpetually energy deficient and has to rely on power purchase from Northern Grid to meet its requirement particularly in winters, when its own generation recedes and demand peaks. The estimated hydropower potential of the State is 20,000 MW, out of which about 16480 MW have been identified. Out of the identified potential, Only 2457.96 MW i.e. 15% (of identified potential) has been exploited so far. The Jammu and Kashmir State Power Development Corporation has proposed a multipurpose project namely Ujh Multipurpose Project with a total installed capacity of 186 MW (3x 62) + 26 MW (1x24 + 1x2) for hydropower generation, irrigation and drinking water. Index map showing project location and map of UMP showing various components are given in Figure 1 and Figure 2.

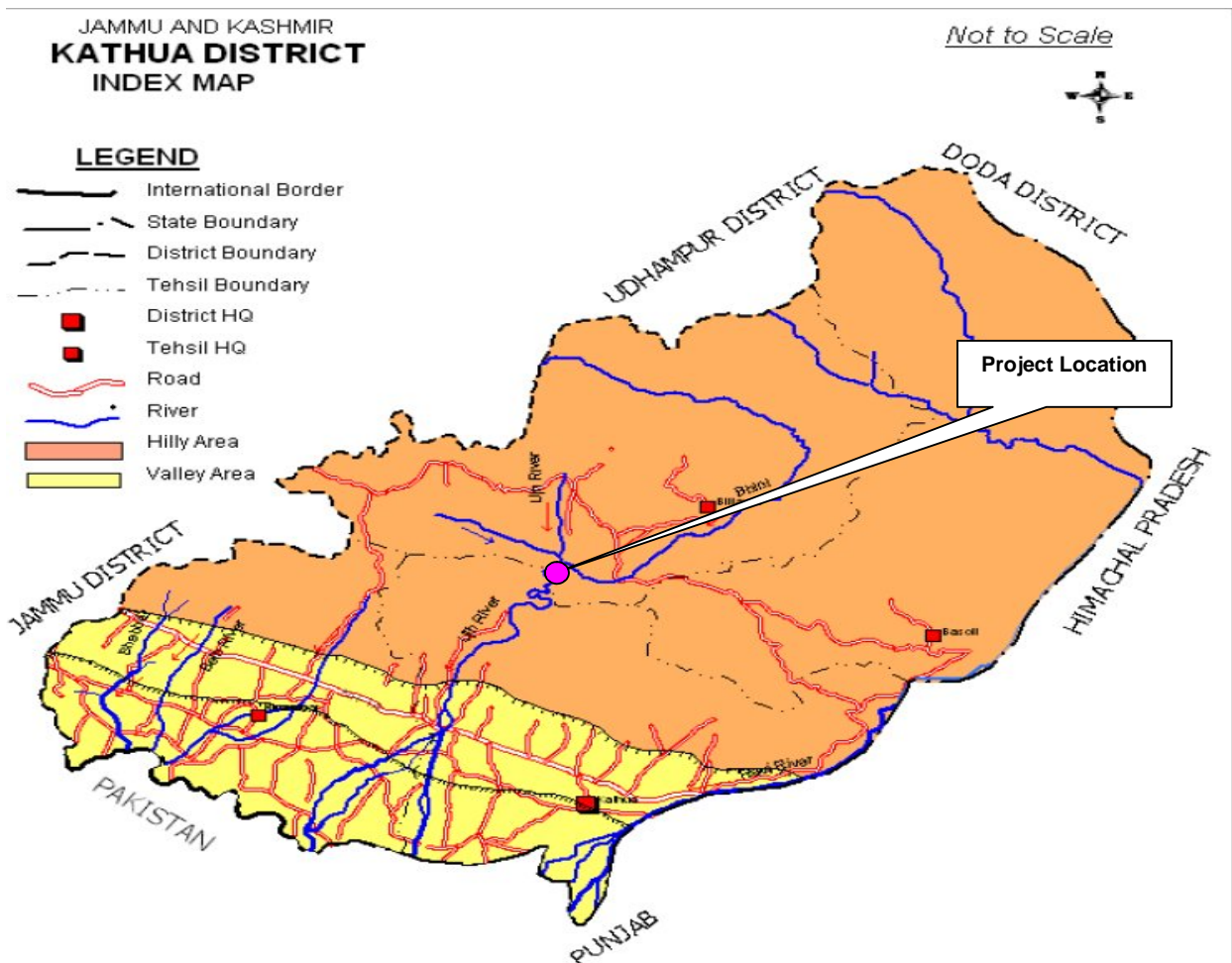


Figure 1 Index Map showing project location.

## Location of Project

The Ujh project is a multipurpose (Hydropower, Irrigation and Drinking) River valley scheme and is first of its kind in Jammu and Kashmir State. The proposed project is on the River Ujh, which is one of the main tributary of River Ravi.

## Project description and components

The Jammu and Kashmir State Power Development Corporation (JKSPDC) has proposed UMP for generation of 186 MW (3x 62) + 26 MW (1x24 + 1x2) hydropower, providing water for irrigation of 16743 ha agriculture land and 20 Cusec drinking water for Kathua district. It is a River Valley and Hydroelectric Project falling in Schedule 1 (C) and is a Category A project, as per the EIA notification, 2006.

Total area under submergence below MWL is 41 sq. km. which include 16. 94 sq. km. culturable area, 3.00 sq.km. irrigated, 2.42 sq. km forest area and 21.64 sq. km. other lands like state land, barren land and shamlot. Forest land is falling under submergence along the periphery of the reservoir area.

The cost of the Project is estimated to Rs 363073.00 lakhs at April 2013 price level.

## Salient features of the project

1	Name of the project	Ujh Multipurpose Project			
	Type of project	Multipurpose			
	Location	Kathua (J&K)			
2	River Basin	Indus Basin and Sub-basin Ravi			
	Name	Ujh River			
	Located in State(s):	J&K			
	i) Countries (if international river)	India, Pakistan			
	River/ Tributary	Ujh, Tributaries - Sutra, Talyan, Bhini, Dunari			
3	State(s)/ District(s)/ Taluka(s) or Tehsils in which following are located		State	District	Blocks
		(a) Reservoir	J&K	Kathua	Billawar
		(b) Headwork	J&K	Kathua	Billawar Kathua
		(c) Command Area	J&K	Kathua	Hiranagar, Samba Kathua
	(d) Power House	J&K	Kathua	Kathua	
3.1	Name of village near the Head-works	Village: Barbari Tehsil: Billawar			
3.2	Location of Head-works				
		(a) Longitude	32°33' to 32°040'N		
		(b) Latitude	75°05' to 75°35'E		
		c) Seismic	Zone IV		
4	Estimated life of the project (years)	100 yrs.			
5	Irrigation (ha.)				
5.1	Area under irrigation (break up)				
	(i) Kharif	16743 hectare			

	(ii) Rabi	14637 hectare
	District(s) benefited	Kathua & Samba
6	0.6 Cumecs for irrigation or drinking water	
7	Sedimentation rate and levels	
	(a) Rate	0.33 mm/Year
	(b) New zero elevation after 50 yrs	514.63 m
	(c) New zero elevation after 100 yrs	523.15 m
8		
8.1	Power	Type
		Conventional
		Installed capacity (MW)
		186 MW (3x62)+26(24x1+2x1)
		Load factor
		16.7%
		Annual energy
		(a) Firm
		31.09 MW
		(B) Total Annual energy
		263.68 MU

UMP falls in Kishanpur, Barota Jakhol & Palal villages and having Khasra no. 5095/3973, 5096/3973, 3975, 3976 and 3974. The location of dam site is between 75°29' 16"E and 32°33' 48"N. The dam site of the project is located in tehsil Billawar of the district Kathua which is about 1.6 km downstream of Panchtirithi. The location of Power house is between 75°27' 58.4" E and 32°32' 38"N which is located approximately 9.5 km downstream of dam site near a village called Deoli. A barrage has been proposed d/s of Powerhouse which lies between 75°27' 31.1" E and 32° 32' 1.22" N.

Capacity of Ujh Multipurpose Project has been proposed as 186 MW which would enable peaking operation of the powerhouse for about 4 hrs with a load factor of about 16.7%. Further, the annual energy benefit from the project in the 90% dependable year would work out to be 263.68 Million Unit (MU). The firm power from the project has been estimated as 31.09 MW. Three unit of Francis turbine with the unit size of 62 MW have been proposed for the power house. In addition to that a dam toe powerhouse comprising of two units, one of 2 MW and another of 24 MW has been proposed to harness the hydro-electric potential of the water meant for mandatory environmental releases. The unit of 2 MW will run through the environmental releases in lean period as well as in monsoon period while the unit of 24 MW will run through the releases in the monsoon months of July, August and September. The annual energy benefits from this dam toe power house will be 31.7 MU. This will make the total annual energy benefits from the project to the 335.48 MU. 10 cusec water has been earmarked through each main canal i.e. RMC and LMC of the project for drinking water for the district of Kathua in J&K.

## **Project benefits**

1. Provision of water for irrigation  
GCA and CCA of LMC are 5684 ha and 3053 ha respectively.  
GCA and CCA of RMC are 14364 ha and 5595 ha respectively
2. Provision of water for drinking: 20 cusec water for Kathua district (10 cusec from left main canal and 10 cusec from right main canal)
3. Power generation:
4. Development of Tourism
5. Development of fisheries
6. Development of industries
7. Infrastructure improvement