

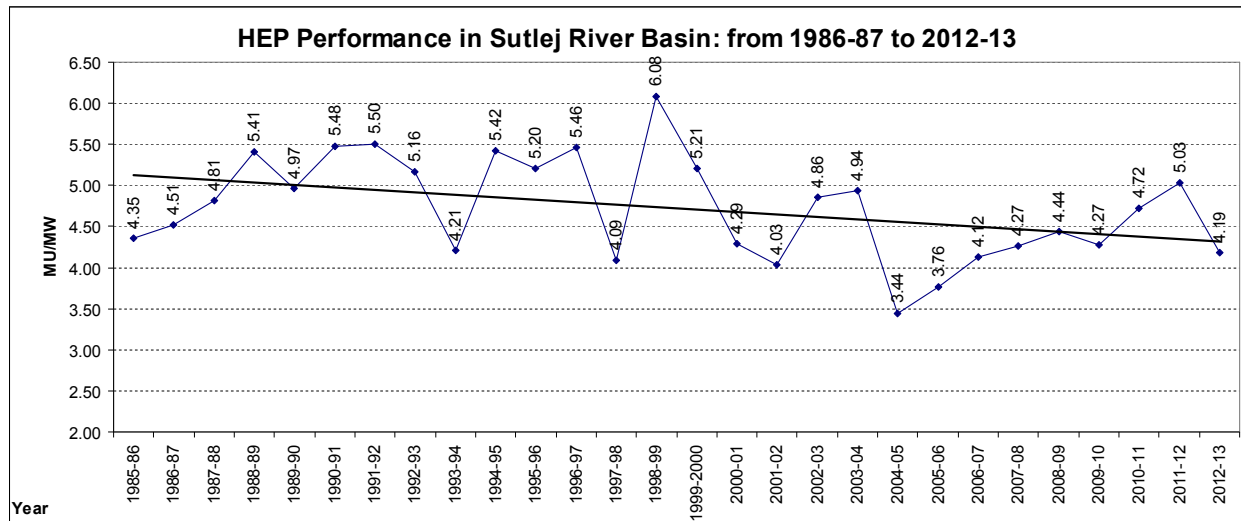
## Hydropower Generation Performance in Sutlej River Basin

The Sutlej River Basin is the major part of Indus River Basin. It is the easternmost tributary of the Indus River. It rises near the Darma Pass near Mansarovar Lake, enters the Zaskar range and flows through Tibet before entering India. It cuts through the Great Himalayan range and the outer Himalayas and enters the plains at Roper. It receives the Beas River at Harike at Punjab and forms the boundary between India and Pakistan nearly 120 km. It finally enters Pakistan near Sulemanki.

The project wise generation data of large hydro (above 25 MW) with installed capacity of the basin in the latest year 2012-13 is follows.

SN	Projects	State	Inst Capacity (MW)	Generation (MU)	MU/MW
1	Sanjay Bhabha	Himachal Pradesh	120	365	3.04
2	Baspa-II	Himachal Pradesh	300	1240	4.13
3	Nathpa Jhakri	Himachal Pradesh	1500	6778	4.52
4	Bhakra	Himachal Pradesh	1325	4707	3.55
5	Ganguwal	Punjab	77.65	593	7.64
6	Kotla	Punjab	77.65	600	7.73
7	AP Sahib	Punjab	134	639	4.77
8	Karchham Wangtoo*	Himachal Pradesh	1000	4057	4.6
	<b>Total</b>	--	<b>4534.3</b>	<b>18979</b>	<b>4.19</b>

\* The Generation figure of Karchham Wangtoo is available for one year only as it commissioned in the year 2011.



- The above graph shows the trend line of power generation of Big Hydropower projects for last 28 years in the basin, the trend-line shows diminishing generation from existing hydro power projects of Sutlej River Basin.
- It shows that the per MW generation in 2012-13 (4.19) has dropped by a huge 31.09% from the highest per MW generation (6.08) achieved in the year 1998-99.
- All generation figures have been taken from official data of Central Electricity Authority (CEA).

**List of other projects (up to 25 MW) under operation (for which latest generation figures not available):**

SN	Project	Ins Cap (MW)	State
1	Rukti	1.50	Himachal Pradesh
2	Chaba	1.75	Himachal Pradesh
3	Rongtong	2.00	Himachal Pradesh
4	Nogli	2.50	Himachal Pradesh
5	Titang	0.90	Himachal Pradesh
6	Lingti	0.40	Himachal Pradesh
7	Ghanvi	22.50	Himachal Pradesh
	<b>Total</b>	<b>31.55</b>	

Source: [http://www.hpseb.com/hydro\\_potential.htm](http://www.hpseb.com/hydro_potential.htm)

**List of proposed and under construction projects in the basin:**

	Project	Ins Cap (MW)	State	Status
1	Kol Dam	800	Himachal Pradesh	Under Construction
2	Rampur	412	Himachal Pradesh	Under Construction
3	Kashang-I	165	Himachal Pradesh	Under Construction
4	Kasang-IV	48	Himachal Pradesh	Under Construction
5	Shorang	100	Himachal Pradesh	Under Construction
6	Raura	8	Himachal Pradesh	Under Construction
7	Ghanvi-II	10	Himachal Pradesh	Under Construction
8	Bhaba Aug.PH	4.5	Himachal Pradesh	Under Construction
9	Chango-Yangthang HEP	180	Himachal Pradesh	EAC TOR Approved
10	Lara Sumta	104	Himachal Pradesh	EAC TOR Approved
11	Luhri HEP	775	Himachal Pradesh	EAC & FAC Recommended
12	Shongtong-Karcham HEP	402	Himachal Pradesh	EAC& FAC Recommended, (Under stay order of HC)
13	Sumta Kathang	130	Himachal Pradesh	EAC TOR Approved
14	Tidong -I	100	Himachal Pradesh	EAC Recommended
15	Tidong -II	60	Himachal Pradesh	EAC Under consideration
16	Yangthang - Khab HEP	261	Himachal Pradesh	EAC TOR Approved
17	Kashang -Stage II & III HEP	130	Himachal Pradesh	FAC Recommended
18	Jangi Thopan	480	Himachal Pradesh	Proposed
19	Khab-I	450	Himachal Pradesh	Proposed
20	Khab-II	186	Himachal Pradesh	Proposed
21	Kuling Lara	40	Himachal Pradesh	Proposed
22	Kut	24	Himachal Pradesh	Proposed
23	Mane Nadang	70	Himachal Pradesh	Proposed
24	Poo Spiloo	300	Himachal Pradesh	Proposed
25	Ropa	60	Himachal Pradesh	Proposed
26	Thopan Powari	480	Himachal Pradesh	Proposed
27	Bahairari	5.5	Himachal Pradesh	Proposed
28	Lara	60	Himachal Pradesh	Proposed
29	Baspa	210	Himachal Pradesh	Proposed
	<b>Total</b>	<b>6055</b>	--	--

EAC: Expert Appraisal Committee of MoEF; FAC: Forest Advisory Committee of MoEF

Source: [http://www.hpseb.com/hydro\\_potential.htm](http://www.hpseb.com/hydro_potential.htm); <http://envfor.nic.in>

**Map of Hydroelectric Projects in Sutlej River Basin available at:**

[http://sandrp.in/basin\\_maps/Hydropower\\_Projects\\_in\\_%20Sutlej\\_River\\_Basin.pdf](http://sandrp.in/basin_maps/Hydropower_Projects_in_%20Sutlej_River_Basin.pdf)

South Asia Network on Dams, Rivers & People ([www.sandrp.in](http://www.sandrp.in))

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