

Capacity of hydro power

†835. SHRI SHANTA KUMAR: Will the Minister of POWER be pleased to state:

- (a) the estimate of hydro power potential in the country, State-wise;
- (b) the quantum of capacity exploited, so far; and
- (c) the per megawatt cost incurred in hydro, thermal, non-renewable and atomic power generation, source-wise?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI BHARATSINH SOLANKI):
 (a) and (b) As per the re-assessment studies of hydro-electric potential of the country done by the Central Electricity Authority (CEA) earlier, the hydro power potential in terms of installed capacity (IC) is estimated at 148701 MW out of which 145320 MW of the potential consists of hydro electric schemes having IC above 25 MW. Of the above identified capacity, 32167.8 MW (22.14%) has so far been developed and another 14185 MW (9.76%) is under development. The State-wise details are given in the enclosed Statement (See below).

- (c) The indicative cost per megawatt for various types of power projects is as below:

Sl. No.	Type of Project	Indicative Cost per MW (Rs. in Crs.)
1.	Hydro	5-5.5
2.	Thermal	4-4.5
3.	Nuclear	5.5 - 6.0
4.	Wind	5.50-6.00
5.	Biomass	4.50-5.00
6.	Solar	15.00-20.00

†Original notice of the question was received in Hindi

State-wise details of Hydro Electric Potential Development

(In terms of Installed capacity - Above 25 MW)

As on 30.06.201

Region/State	Identified Capacity as per reassessment study		Capacity Developed		Capacity Under construction		Capacity Developed + Under Construction		Capacity yet to be developed	
	Total	Above 25 MW								
	(MW)	(MW)	(MW)	%	(MW)	(%)	(MW)	(%)	(MW)	%
1	2	3	4	5	6	7	8	9	10	11
Northern										
Jammu & Kashmir	14146	13543	2260.0	16.69	1189.0	8.78	3449.0	25.47	10094.0	74.53
Himachal Pradesh	18820	18540	6001.0	32.37	4600.0	24.81	10601.0	57.18	7939.0	42.82
Punjab	971	971	1206.3	100.00	0.0	0.00	1206.3	100.00	0.0	0.00
Haryana	64	64	0.0	0.00	0.0	0.00	0.0	0.00	64.0	100.00
Rajasthan	496	483	411.0	85.09	0.0	0.00	411.0	85.09	72.0	14.91
Uttaranchal	18175	17998	3026.4	16.81	2025.0	11.25	5051.4	28.07	12946.7	71.93

1	2	3	4	5	6	7	8	9	10	11
Uttar Pradesh	723	664	501.6	75.54	0.0	0.00	501.6	75.54	162.4	- 24.46
Sub Total (NR)	53395	52263	13406.3	25.65	7814.0	14.95	21220.3	40.60	31042.8	59.40
Western										
Madhya Pradesh	2243	1970	2395.0	100.00	400.0	20.30	2795.0	100.00	0.0	0.00
Chhattisgarh	2242	2202	120.0	5.45	0.0	0.00	120.0	5.45	2082.0	94.55
Gujarat	619	590	550.0	93.22	0.0	0.00	550.0	93.22	40.0	6.78
Maharashtra	3769	3314	2487.0	75.05	0.0	0.00	2487.0	75.05	827.0	24.95
Goa	55	55	0.0	0.00	0.0	0.00	0.0	0.00	55.0	100.00
Sub total (WR)	8928	8131	5552.0	68.28	400.0	4.92	5952.0	73.20	2179.0	26.80
Southern										
Andhra Pradesh	4424	4360	2060.8	47.26	527.0	12.09	2587.8	59.35	1772.3	40.65
Karnataka	6602	6459	3585.4	55.51	0.0	0.00	3585.4	55.51	2873.6	44.49
Kerala	3514	3378	1831.5	54.22	150.0	4.44	1981.5	58.66	1396.5	41.34

Tamilnadu	1918	1693	1708.2	100.00	60.0	3.54	1768.2	100.00	0.0	0.00
Sub Total (SR)	16458	15890	9185.9	57.81	737.0	4.64	9922.9	62.45	5967.2	37.55
Eastern										
Jharkhand	753	582	233.2	40.07	0.0	0.00	233.2	40.07	348.8	59.93 j
Bihar	70	40	0.0	0.0	0.00	0.0	40.0	100.00		
Orissa	2999	2981	2027.5	68.01	0.0	0.00	2027.5	68.01	953.5	31.99
West Bengal	2841	2829	77.0	2.72	292.0	10.32	369.0	13.04	2460.0	86.96
Sikkim	4286	4248	570.0	13.42	2066.0	48.63	2636.0	62.05	1612.0	37.95
Andaman & Nicobar	0	0	0.0	0.0						
Sub Total (ER)	10949	10680	2907.7	27.23	2358.0	22.08	5265.7	49.30	5414.3	50.70
North Eastern										
Meghalaya	2394	2298	156.0	6.79	166.0	7.22	322.0	14.01	1976.0	85.99
Tripura	15	0	0.0				0.0	0.0	0.0	
Manipur	1784	1761	105.0	5.96	0.0	0.00	105.0	5.96	1656.0	94.04
Assam	680	650	375.0	57.69	0.0	0.00	375.0	57.69	275.0	42.31
Nagaland	1574	1452	75.0	5.17	0.0	0.00	75.0	5.17	1377.0	94.83

1	2	3	4	5	6	7	8	9	10	11
Arunachal Pradesh	50328	50064	405.0	0.81	2710.0	5.41	3115.0	6.22	46949.0	93.78
Mizoram	2196	2131	0.0	0.00	0.0	0.00	0.0	0.00	2131.0	100.00
Sub Total (NER)	58971	58356	1116.0	1.91	2876.0	4.93	3992.0	6.84	54364.0	93.16
All India	148701	145320	32167.8	22.14	14185.0	9.76	46352.8	31.90	98967.2	68.10

Note: In addition to above 4785.6 MW Pumped Storage Scheme (PSS) are under operation.