

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

UNSTARRED QUESTION NO:560
ANSWERED ON:25.11.2005
HYDRO POWER GENERATION
Agarwal Shri Dharendra;Mahato Shri Bir Sing

Will the Minister of POWER be pleased to state:

- (a) the details of potential/untapped source of Hydel power in the country;
- (b) whether the Government is aware that Hydel power could be generated by harnessing the west flowing river waters in certain regions of the country;
- (c) if so, the rivers where Hydel power generation is possible after harnessing their water;
- (d) whether the Government propose to take steps to harness these river waters to generate energy at affordable cost; and
- (e) if so, the details thereof?

Answer

THE MINISTER OF POWER (SHRI P.M. SAYEED)

(a) to (c) : The re-assessment studies of hydro-electric potential of the country, completed by Central Electricity Authority in 1987, have placed the economically exploitable hydro power potential at 84,044 MW at 60% load factor, when fully developed would result in an installed capacity of about 1,50,000 MW on the basis of probable average load factor. A total of 845 hydro-electric schemes have been identified in the various basins. So far, 28,625 MW (19.2% has been developed and 13,382 MW (9.0%) is under development. The status of Basin wise Hydro Electric Potential development in the country in terms of potential at 60% load factor is given in Annexure-I.

(d) & (e) : The Central Electricity Authority (CEA) had conducted a Ranking Study in 2001-02 in which 399 schemes with an aggregate capacity of 1,06,910 MW were prioritized on the basis of various aspects involved in the development of hydro schemes. Based on the Ranking Studies the 50,000 MW Hydroelectric Initiative was launched by Government of India during 2003-04 under which Preliminary Feasibility Reports (PFRs) of 162 attractive hydroelectric projects in 16 states have been prepared. Based on the results of the Pre-feasibility Reports, 77 schemes aggregating to an installed capacity of 33,951 MW, whose first year tariff works out below Rs.2.50 / kWh, have been taken up for detailed survey & investigation and preparation of DPRs and eventual Implementation. This exercise would provide a shelf of bankable DPRs for development of hydroelectric schemes which would yield benefits during 11th Plan period and beyond.

In addition to above, the Government has taken the following steps to harness the untapped hydro potential:

(i) A Hydro Policy was announced by the Government in August, 1998 incorporating several steps and measures to facilitate accelerated development of hydro power. The Policy also encourages greater participation by private sector.

(ii) A number of Hydro Power Corporations in the Central Sector and Joint Ventures with State Governments have been created for development of hydro power;

(iii) The Government has also approved a Three-Stage Clearance procedure for expeditious execution of hydro electric projects in the Central Sector. Other procedural reforms have also been undertaken.

(iv) To meet the all India peak demand and energy requirement at the end of 11th Plan, based on the demand projections as per 16th Electric Power Survey (EPS), advance action has been taken to identify hydroelectric schemes for inclusion for benefits in the 11th Plan period.

(v) The Electricity Act, 2003 has been enacted from 10th June, 2003 which establishes direct commercial relationship between generating companies and consumers / electricity traders. The right to open access to the State and Central transmission network for wheeling of electricity has been allowed. Statutory Bodies like Central Electricity Regulatory Commission (CERC), State Regulatory Commissions (CRC) and Appellate Commission to fix tariff in an objective and transparent manner have been set up.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO.560 TO BE ANSWERED IN THE

LOK SABHA ON 25.11.2005.

STATUS OF H. E. POTENTIAL DEVELOPMENT (BASIN WISE)

As on 01.11.2005

River Basin	Potential at 60% (MW)	Developed at 60% (MW)	Potential %	Devel- opment Load	Under devel- opment (MW)	Under devel- opment (MW)	deve- loped+ (MW)	CEA %	CEA %	cleared	cleared	Total
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Indus	19988.00	3730.85	18.67	1475.42	7.38	26.05	948.75	4.75	30.79			
Ganga	10715.00	1969.08	18.38	1298.88	12.12	30.50	526.47	4.91	35.41			
Central Indian Rivers	2740.00	1751.68	63.93	455.28	16.62	80.55	190.50	6.95	87.50			
West Flowing Rivers	6149.00	3704.17	60.24	82.03	1.33	61.57	415.80	6.76	68.34			
East Flowing Rivers	9532.00	4215.23	44.22	126.85	1.33	45.55	212.70	2.23	47.78			
Brahma-putra Basin	34920.00	660.83	1.89	1138.63	3.26	5.15	409.00	1.17	6.32			
All India	84044.00	16031.85	19.08	4577.10	5.45	24.52	2703.22	3.22	27.74			