

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

UNSTARRED QUESTION NO:4434
ANSWERED ON:19.05.2006
TAPPING OF HYDRO POWER POTENTIAL
Mandal Shri Sanat Kumar

Will the Minister of POWER be pleased to state:

- (a) whether the Government proposes to tap the hydro power potential of the country to its full potential;
- (b) if so, the details thereof;
- (c) the extent to which the hydro power potentiality of the country is being explored;
- (d) the various forms of hydro power projects presently existing in the country;
- (e) whether the Government has undertaken any study on the additional hydro power potential;
- (f) if so, the details thereof;
- (g) whether the tidal power projects also come under hydro power projects;
- (h) if so, the details thereof along with the steps being taken by the Government for implementation of the Durga Duani Mini Tidal Power Project of Sundarbans in West Bengal; and
- (i) the time by which it is likely to be implemented?

Answer

THE MINISTER OF POWER (SHRI SUSHILKUMAR SHINDE)

(a) to (c) : As per re-assessment studies carried out by CEA during 1978-87, the economically exploitable hydro-electric power potential of the country has been estimated as 84044 MW at 60% load factor from 845 schemes. The hydro potential of 84044 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. As on 1.5.2006, out of the above potential, 24.68 % of the potential has either been developed or is under development. The State-wise/Region-wise details of hydro development in the country is given at Annex-I.

In addition, there is an estimated potential of about 15,000 MW from Small Hydro Projects (SHP) up to 25 MW installed capacity. So far, 4404 SHP potential sites aggregating to 10,477 MW have been identified. 556 SHP projects (up to 25 MW) with an aggregate capacity of 1826 MW have been set up and 203 projects aggregating 468 MW are under construction. Government has accorded high priority for development of hydro potential in the country and has taken several measures in this direction such as;

- Creation of various Central /Joint Sector Corporations for implementation of Hydro-Electric (H.E.) Projects.
- Policy on hydropower development (1988) including measures to attract Private participation.
- 3-stage clearance procedure for CPSUs.
- 50,000 MW Hydroelectric Initiative.
- Advance action for identification of H.E. Projects for benefits during 11th Plan and beyond.
- National Water Policy, 2002.
- National Rehabilitation and Resettlement Policy, 2003.
- Enactment of Electricity Act, 2003.
- Formulation of National Electricity Policy, 2005.
- Guidelines for determination of tariff by bidding process for procurement of power by distribution licensees.
- Periodical review of projects under construction by the Ministry of Power and Central Electricity Authority (CEA).
- Monitoring of the projects under construction by the nodal officers of CEA.
- Regular visits of Senior Officers to project sites.
- Review meetings with manufacturers / suppliers of major equipments.
- Co-ordination meetings with Ministry of Environment & Forests / Ministry of Water Resources / Central Water Commission for early clearance of the projects from environment, forest / wild life angles and sharing of waters of inter-State rivers.

(d) : Presently, the following forms of hydro power projects are existing in the country: - Storage Schemes

- Run-of-River (ROR) Schemes without Pondage
- Run-of-River Schemes with Pondage
- Pumped Storage Schemes.

(e) & (f) : In addition to conventional storage/ROR type hydro power schemes covered under hydro potential of 84044 MW at 60% load factor, the reassessment studies of CEA acknowledged the need for identifying Pumped Storage Scheme sites and identified 56 sites for Pumped Storage Schemes (PSS) with total installation of about 94,000 MW. The details of these schemes are given at Annex-II.

(g) : No, Sir.

(h) &

(i) : The Government of India in the Ministry of Non-conventional Energy Sources has provided financial support to the Government of West Bengal for the preparation of the Detailed Project Report and Environmental Impact Assessment Study for a 3.65 MW capacity demonstration Tidal Power Project at Durga Duani, Sundarbans. West Bengal Renewable Energy Development Agency (WBREDA) has so far not submitted the Coastal Regulatory Zone-I clearance of the Ministry of Environment and Forests for the project.