

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:3148
ANSWERED ON:12.12.2012
SETTING UP OF DESALINATION PLANTS
Panda Shri Baijayant

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) the details of sites identified by Bhabha Atomic Research Centre (BARC) so far for setting up desalination plants for conversion of sea water into potable water along with the criteria for such selection;
- (b) whether the Government proposes to set up such desalination plants in other States including the State of Odisha; and
- (c) if so, the details thereof, State-wise and the estimated cost of the project and the funding pattern for the same?

Answer

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY) :

(a) Bhabha Atomic Research Centre (BARC) has set up Nuclear Desalination Demonstration Plant (NDDP) at Kalpakkam, Tamil Nadu based on hybrid technology consisting of Reverse Osmosis (RO) section of 18 lakh litres per day capacity and Multi State Flash (MSF) section of 45 lakh litres per day capacity. It is located adjacent to Madras Atomic Power Station (MAPS) and uses low pressure steam as energy input for MSF section. The hybrid MSF-RO plant produces distilled water for high end industrial requirements and potable water for drinking and other requirements. Kalpakkam site in Tamil Nadu was selected to demonstrate the technological capability of BARC for sea water desalination by co-locating with a power plant (nuclear power plant in this case).

(b)&(c) Yes, Sir. BARC has planned to set up a seawater desalination plant of 5 million litres per day capacity at Orissa Sand Complex (OSCOM), Indian Rare Earths Limited (IREL), Chatrapur, Ganjam District, Odisha, at an estimated cost of `115 crores during the XII Five Year Plan period. The existing plant at Kalpakkam and the one proposed for construction at OSCOM Complex at Chatrapur have been intended primarily for meeting the industrial and potable drinking water requirements for associated units of DAE. The technology developed by the BARC however could be made available to the concerned agencies including State governments on need basis.