

**GOVERNMENT OF INDIA
DRINKING WATER AND SANITATION
LOK SABHA**

UNSTARRED QUESTION NO:571

ANSWERED ON:26.02.2015

WATER TREATMENT PLANTS

Bhatt Smt.Ranjanben;Mahendran Shri C.;Sawant Shri Arvind Ganpat;Senthilnathan Shri PR.;Tumane Shri Krupal Balaji

Will the Minister of DRINKING WATER AND SANITATION be pleased to state:

- (a) the state-wise details of Central/State level water treatment plants set up for converting saline water into the potable water in various States including Maharashtra;
- (b) whether the Government has proposals to set up more water treatment plants converting saline water into the potable water in the coastal states including Tamil Nadu, if so, the details thereof Statewise and if not, the reasons therefor and the steps taken by the Government to make safe drinking water available to all parts of the country;
- (c) whether the Government is contemplating to set up water treatment plant manufactured by USA to provide safe drinking water to the people if so, the details thereof and if not, the reasons therefor;
- (d) whether the Union Government has received 3 projects from Government of Tamil Nadu for setting up of major desalination plants to convert sea water into drinking water for Chennai, Ramanathanam and Tuticorin for financial assistance;
- (e) if so, the details thereof and the action taken by the Union Government thereon.

Answer

MINISTER OF STATE IN THE MINISTRY OF DRINKING WATER & SANITATION (SHRI RAM KRIPAL YADAV)

(a) Reverse Osmosis (RO) is a technology that can remove/ reduce salinity (total dissolved solids or chlorides) along with other chemical contaminations. As reported by States into the Integrated Management Information System of the Ministry and information obtained from States, the following States have installed RO plants.

Sl. No.	Name of the State	Number of RO Plants installed
1	Andhra Pradesh	7
2	Haryana	1
3	Karnataka	121
4	Punjab	33
5	Rajasthan	350
6	Tamil Nadu	17
7	Punjab #	1,876

#In Punjab, RO plants include treatment for other contaminations also, as reported by the State officials in a meeting held on 23/2/2015.

In respect of Rural Water Supply in the State of Tamil Nadu, water treatment plants for converting saline water into potable drinking water (Desalination plants) are operating in Ramanathapuram District. These desalination plants were installed during different years from 1990 to 1999. Among the 17 plants operating now, the plant at Narippaiyur is the major sea water based desalination plant installed with a capacity of 3.80MLD. All other are small plants with capacity ranging from 0.008MLD to 0.15MLD with local borewell sources.

However, the complete details of water treatment plants set up in different States are maintained at the State Government level. Further, as per the information known to the Ministry of Drinking Water and Sanitation, the details of major desalination plants set up are as given below: -

#The first experimental Low Temperature Thermal Desalination (LTTD) plant at Kavaratti island, Lakshadweep was commissioned by NIOT in 2005.

#NIOT commissioned an experimental, floating Low Temperature Thermal Desalination (LTTD) plant of the coast off Chennai, with a capacity of 1,000,000 L (220,000 imp gal; 260,000 US gal)/day, in 2007 for Chennai urban people.

#This LTTD technology is used by NIOT successfully and they set up 2 more LTTD plants each of 1 lakh litres per day capacity in Agatti and Minicoy in Lakshadweep islands in 2012.

#A 100 MLD desalination plant was established in 2010 at the North Chennai Thermal Power Station Minjur by Chennai Metropolitan Water Supply and Sewerage Board, Chennai (CMWSSB). This is meant for Chennai urban people.

#Another 100 MLD Sea Water Reverse Osmosis technology plant was set up by CMWSSB, Chennai in 2013 at Nemmeli to cater drinking water needs of urban people of Chennai city.

(b) A proposal for setting up of 6 nos. of low-temperature thermal desalination (LTTD) plants in Lakshadweep Islands have been received by the Ministry. A Central Team was constituted to examine the proposals technically. On technical examination, certain issues were to be modified considering the latest schedule of rates applicable to Lakshadweep Islands and accordingly, the National Institute of Ocean Technology (NIOT), Chennai (under the Ministry of Earth Sciences) who prepared the original Detailed Project Reports (DPRs) for these Islands and Lakshadweep Administration have been advised to recast and resubmit the Reports.

During the Annual Action Plan meetings of the Ministry held with representatives of Tamil Nadu Water Supply and Drainage Board (TWAD), it is understood that the State Government is contemplating to commission two desalination plants in Tamil Nadu. However, no documents in this regard were submitted by the State Officials of Tamil Nadu to the Ministry.

Powers to plan, design, implement and monitor water supply schemes including water treatment plants have been delegated to the State Governments as Rural Water Supply is a State Subject.

(c) The selection of technology / product / manufacturer of water treatment plants is with the State Governments and they select technologies products following standard procedures of transparent tendering. The Ministry has rendered technical assistance by publishing and circulating the Handbook on Drinking Water Treatment Technologies (Second Edition) in February 2013 for facilitating the States to take decision on choice of technology to be adopted for water quality affected habitations.

(d)&(e) In Tamil Nadu State, to tide over the water scarcity in 2 coastal districts namely Thoothukudi and Ramnad, Pre-feasibility Report has been prepared for setting up of Desalination Plants of 60 MLD Capacity each in Kuthiraimozhi in Ramanathapuram District and Alanthalai in Thoothukudi District as Phase I and Keelanagachi in Ramanathapuram District as Phase II.

The beneficiaries of Phase I Proposal are 1 Municipality, 1 Town Panchayat and 543 Rural habitations benefitting 3.20 Lakh population in Ramnathapuram District and 14 Town Panchayats and 1088 Rural habitations benefitting 7.05 Lakh population in Thoothukudi District. The cost of the proposal is Rs.1947.00 crore (Kuthiraimozhi - Rs.975.00 crore & Alanthalai -Rs.972.00 crore).

However, as on 23/2/2015, this Ministry is not in receipt of any formal proposal from Government of Tamil Nadu for setting up of major desalination plants to convert sea water into drinking water.