

GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
**RAJYA SABHA**  
UNSTARRED QUESTION NO. 2281  
TO BE ANSWERED ON 15<sup>Th</sup> April, 2010

**CONVERSION OF SEA WATER INTO POTABLE WATER**

**2281. DR. PRABHA THAKUR:**

Will the Ministry of Earth Sciences be pleased to state:

- (a) whether sea water can be made potable water after purification;
- (b) if so, the cost involved in the process of making one litre sea water as potable water, the details thereof;
- (c) whether sea water is being made potable water anywhere in India; and
- (d) if so, the name of such place and, if not, the reasons therefor and the details thereof?

**ANSWER**

THE MINISTER OF STATE (INDEPENDENT CHARGE)  
MINISTRY OF SCIENCE AND TECHNOLOGY, MINISTRY OF EARTH SCIENCES,  
MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE, MINISTER OF STATE IN  
THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND MINISTER  
OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS  
(SHRI PRITHVIRAJ CHAVAN)

(a) Yes, Sir.

(b to d) There are two major technologies currently being used for conversion of seawater into potable water. These are Low Temperature Thermal Desalination (LTTD) and Reverse Osmosis (RO). The Ministry of Earth Sciences is working on LTTD technology. It has till date set up 2 LTTD plants one each at Kavaratti, Lakshadweep and at Chennai which have been operational since May 2005 and March 2009, respectively. Several desalination plants based on RO have been set up in various parts of the country. The cost per liter of desalination would depend on the technology used and cost of electricity which varies from place to place. As per broad estimates, LTTD technology has an operating cost of about 10 paise per liter.

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