

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:89
ANSWERED ON:10.08.2007
DESALINATION OF SEA WATER
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Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government have taken any measures to make sea water potable;
- (b) if so, the details thereof;
- (c) whether work on this project has been initiated;
- (d) if so, the per liter estimated cost involved in making sea water potable; and
- (e) by when this project is likely to be completed?

Answer

MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF EARTH SCIENCES (KAPIL SIBAL)

(a) Yes, Sir.

(b) & (c) The Ministry has indigenously designed, developed and demonstrated the desalination technology for conversion of sea water into potable water based on Low Temperature Thermal Desalination System (LTTD). The LTTD is a process under which the warm surface sea water is flash evaporated at low pressure and the vapour is condensed with cold deep sea water. After conducting several experiments in the Laboratory (500 Liter per day capacity & 5000 Liter per day capacity), a LTTD plant with a capacity of 1 lakh liter/day production of fresh water was developed and commissioned at Kavaratti, Lakshadweep in May 2005. The plant has been effectively working continuously since then and catering significantly to the needs of the population of Kavaratti. This LTTD plant has produced about 6 crore litre of water so far. In April, 2007, a 10 lakh liter per day capacity plant was demonstrated on a barge, about 40 kms off Chennai.

(d) The estimated cost per liter is about 6 paise.

(e) The demonstration of the technology for production of 10 lakh liter per day has been completed. During 11th Five Year Plan, the Ministry is proposing to take up 100 lakh liter per day demonstration plant.