GOVERNMENT OF INDIA

MINISTRY OFEARTH SCIENCES

RAJYA SABHA

QUESTION NO07.03.2011

ANSWERED ON

CONVERSION OF SEA WATER INTO POTABLE WATER .

1145 Shri N. Balaganga

Will the Minister of COALEARTH SCIENCES be pleased to state :-

(a)whether there is any proposal with Government to convert sea water into potable water;

(b)if so, the details thereof;

(c)whether the Government has set up any pilot project for this purpose;

(d)if so, the details regarding the location of such projects; and

(e)the details as to the cost of conversion of sea water into potable water?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF PLANNING, MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS, MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES

(SHRI ASHWANI KUMAR)

a)Yes, Sir.

b)The Ministry of Earth Sciences (MoES) had launched a program for development of Low Temperature Thermal Desalination (LTTD) technology for conversion of seawater into potable water, suitable for installation in the island territories and near the coastal Power Plants. The National Institute of Ocean Technology (NIOT) an autonomous body of the Ministry of Earth Sciences has been responsible for design, develop, demonstrate and commission the LTTD plants in selected coastal locations. 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.

c)Yes, Sir.

d) Currently, two plants are in operational one each Kavaratti, Lakshadweep and at Northern Chennai Thermal Power Station (NCTPS), Chennai, which have capacity 1 and 1.5 lakh liter per day capacity, respectively. Two more plants one each in Agatti and Minicoy islands of Lakshadweep of 1 lakh liter per day capacity are in advanced stage of commissioning. Besides, the ministry is working to set up 6 more plants funded by Lakshadweep Administration, one each in the islands of Lakshadweep viz., Amini, Chetlet, Kadamath, Kalpeni, Kiltan and Androtт plants, through public-private partnership. NIOT has also demonstrated an offshore barge mounted 10-lakh liter per day capacity plant about 40 kms off Chennai in April 2007, as a part of scaling up plants for the coastal region of India

e) The cost per liter of desalination would depend on the technology used and cost of electricity which varies from place to place. According to the cost estimates made recently by an independent agency for LTTD technology, the operational costs per litre per of desalinate water currently works to be 19 paise.