GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:4023
ANSWERED ON:17.12.2014
DESALINATION PLANTS
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Will the Minister of EARTH SCIENCES be pleased to state:

(a) the number of desallnation plants set up so far in the country, location and State-wise;

(b) the cost of installing desalination plants and comforting sea water onto drinking water as well as the type of the technology used In this regard;

(c) whether the Government proposes to set up more desalination plants in the country including in coastal areas and also supply water to water deficit areas;

(d) if so, the details thereof, location and State-wise; and

(e) the present status of all plants under construcftiora/jproposed to be constructed and the time by which these are likely to be commissioned?

Answer

MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (DR. HARSH VARDHAN)

(a) Three desalination plants, based on the Low Temperature Thermal Desalination (LTTD) technology indigenously developed arad demonstrated by the National Institute of Ocean Technology (NIOT), Earth System Science Organization (ESSO), have been successfully commissioned one each at Kavaratti, Mini coy, and Agatti islands of the Union Territory of Laksfaadiweep. Tree capacity of each of these LTTD plants is 1 lakh liter of potable water per day. One experimental LTTD plant using condenser waste heat from power plant was set up at North Chennai Thermal Power Station (NCTPS).

(b) The technology used for the Desalination (LTTD) Technology that utilizes the temperature difference available between surface water and deep sea water. Bn this methodoiogy, the warmer surface sea water is evaporated at Bow pressures and the vapour obtained are condensed using the cofider deep sea water. The cost of plant to convert sea water into drinking water wouDd depered on the type of technology, capacity of the plant, location and cost of electricity which varies from place to place. According to the cost estimates made by an independent agency for LTTD technology, the cost per litre of desaSinated potable water is about 61 paise for island based plants.

(c to e) Work has been initiated to set up a prototype LTTD plant with a capacity of generating 2 million litres of potable water per day (2 MLD) at the TutBcorifn Thermal Power station, Tamil Nadu by the end of XII plan period. The Lakshadweep Administration requested ESSO-NIOT for setting up similar plants in remaining six islands viz., Amini, Chetlet, Kadamatfa, Kalpeni, Kiltan and Andrott. ESSO-NIOT has sent a detailed project report to the Lakshadweep Administration in this regard. The proposal has not been approved so far.