

does not show any trend but on regional scale, areas of increasing trend is discerned. It is not clear if this increasing trend in the heavy rainfall events is attributable to global warming.

#### **Proposal to conversion of sea water into potable water**

477. SHRI GARIKAPATI MOHAN RAO: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether it is a fact that the Government proposes to convert the sea water into potable water by using technology and transport it through pipelines to the water deficit areas, if so, the details of the proposal; and

(b) the number of States that will be covered under the proposal?

THE MINISTER OF EARTH SCIENCES (DR. HARSH VARDHAN): (a) and (b) Ministry of Earth Sciences, through National Institute of Ocean Technology (NIOT), has been working on the Low Temperature Thermal Desalination (LTTD) Technology that utilizes the temperature difference available between surface water and deep sea water. In this methodology, the warmer surface sea water is evaporated at low pressures and the vapour obtained are condensed using the colder deep sea water. Three LTTD plants have been successfully commissioned in the country, one each at Kavaratti, Minicoy, and Agatti islands of the Union Territory of Lakshadweep. The capacity of each of these LTTD plants is 1 lakh liter of potable water per day. The fresh water produced is supplied through local pipe network within the same Island. The Lakshadweep Administration requested NIOT for setting up similar plants in remaining six islands. NIOT has sent a detailed project report to the Lakshadweep Administration in this regard. Work has been initiated to set up a prototype LTTD plant with a capacity of generating 2 million litres of potable water per day at the Tuticorin Thermal Power station, Tamil Nadu.

#### **Mapping of multi-hazard coastal vulnerability**

478. SHRI GARIKAPATI MOHAN RAO: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether ESSO-INCOIS, Hyderabad and ESSO-ICMAM, Chennai have carried out mapping and demarcating of multi-hazard coastal vulnerability for the States, if so, the details thereof; and

(b) what is the vulnerability being found for Andhra Pradesh?

THE MINISTER OF EARTH SCIENCES (DR. HARSH VARDHAN): (a) Yes Sir. Earth System Science Organization (ESSO) - Indian National Centre for Ocean