Roshni lantern

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In news– Minister of State (Independent Charge) Earth Sciences has recently launched Roshni India's first Saline Water Lantern.

About Lantern-

- It uses the sea water as the electrolyte between specially designed electrodes to power the LED lamps.
- It was unveiled during the minister's visit to SAGAR ANVESHIKA, a Coastal Research Vessel, operated and used by the National Institute of Ocean Technology (NIOT), Chennai for coastal research.
- **The technology can also be used in hinterlands, where sea water is not available,** as any saline water or normal water mixed with the common salt can be used to power the Roshni lantern, which makes it cost-effective and feasible to operate.
- Saline Water Lantern will boost and supplement the centre's 'UJALA scheme' which was launched in 2015 for distribution of LED bulbs across the country.

A Technology to convert Seawater to Potablewater

- **Apart from launching Roshni, the Union Minister also reviewed the progress of NIOT developed Low Temperature Thermal Desalination (LTTD) technology for conversion of sea water to potable water**, which has been successfully demonstrated in Lakshadweep islands.
- **He informed that three desalination plants based on the LTTD technology have been developed and demonstrated at Kavaratti, Agati and Minicoy Islands of Union Territory of Lakshadweep.** The capacity of each of these LTTD plants is 1 Lakh litre of potable water per day.

- Importantly, based on the success of these plants, Ministry of Home Affairs (MHA) through Union Territory

(UT) Lakshadweep has entrusted the work of establishing 6 more LTTD plants at Amini, Androth, Chetlet, Kadmat, Kalpeni and Kiltan with a capacity of 1.5 lakhs litres/day.