

**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
LOK SABHA  
UNSTARRED QUESTION NO. 3260  
TO BE ANSWERED ON FRIDAY 12<sup>TH</sup> JULY 2019**

**O-SMART PROGRAMME**

**3260. SHRI BALASHOWRY VALLABHANENI:**

**Will the Minister of EARTH SCIENCES be pleased to state:**

- (a) the aims and objectives of Ocean Services, Technology, Observations Resources Modelling and Science (O-SMART) Programme;**
- (b) the extent to which the above programme help user communities in coastal areas like Machilipatnam in Andhra Pradesh (AP);**
- (c) the estimated cost of the said project and the time by which it is likely to be completed;**
- (d) whether the desalination plants are going to be set up under O-SMART Programme, if so, the details thereof;**
- (e) whether the Government proposes to set up the same in the huge coastal areas of AP; and**
- (f) if so, the details thereof and if not, the reasons therefor?**

**ANSWER**

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

- (a) The scheme on “Ocean- Services, Modelling, Applications, Research and Technology (O-SMART) of Ministry of Earth Sciences aims to (i) provide a suite of Ocean Information Services, (ii) develop technology for sustainable harnessing the ocean resources, (iii) promote front-ranking research and (iv) conduct scientific ocean surveys.**
- (b) There is no specific programme for Machilipatnam, Andhra Pradesh. However, various ocean information services such as Potential Fishing Zone (PFZ) Advisory services, Ocean State Forecast (OSF) services, early warning services for tsunami, storm surges, high wave alerts are provided to the coastal population of India including Machilipatnam, Andhra Pradesh through Indian National Centre for Ocean Information Services (INCOIS) on a daily basis in operational mode. The PFZ advisories help the fishermen community in locating the potential zones of fish aggregation in the ocean in a lesser time and with reduced human effort. The OSF services are provided for the safety of the fishermen community and coastal population. These are crucial information for the fishermen community in making decision on**

**venturing into the sea. The information is disseminated through SMS, Voice Call, Mobile App, Email, and 25 Digital Display Systems (DDS) installed in Andhra Pradesh, including Machilipatnam and in collaboration with various Non-Governmental Organisations. A suite of equipments such as Tide Gauges, High Frequency Coastal Radar, Drifting Buoys, Moored Buoys and Automatic Doppler Current Profiler (ADCP) have been deployed off Machilipatnam and its surrounding areas for improved services and observations. Indicative maps of probable coastal flooding due to oceanogenic disasters that can cause coastal inundation were prepared for 2181 sq. km of coastal area of Andhra Pradesh including Machilipatnam.**

- (c) Estimated cost of the component for the entire country under O-SMART for three years (2017-2018, 2018-2019 & 2019-2020) is Rs. 274.11 crore which is ongoing. The national project on Multi Hazard Vulnerability Mapping (MHVM) for the entire coast of the Indian mainland completed in March 2018 had the total budget of Rs. 43.66 crore.**
- (d) Yes, Sir. An Ocean Thermal Energy Convention (OTEC) based on Low Temperature Thermal Desalination Plant is proposed to be set up in Kavaratti, Lakshadweep Island with a capacity of producing 1 Lakh Liter on drinking water per day and a site has been identified for setting up the plant.**
- (e) No, Sir.**
- (f) The required depth of about 400 meters for setting up Low Temperature Thermal Desalination Plant is not found in the vicinity of the coast of India including Andhra Pradesh.**