

**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
RAJYA SABHA  
UNSTARRED QUESTION No. 2609  
TO BE ANSWERED ON MONDAY, MARCH 19, 2018**

**PREDICTION OF CYCLONES, EARTHQUAKES AND TSUNAMIS**

**2609. DR. V. MAITREYAN:**

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

- (a) whether Government has initiated any specific project to predict, well in advance, the cyclones, earthquakes and tsunamis occurring in the Indian Ocean and Bay of Bengal;**
- (b) if so, the details thereof and if not, the reasons therefor;**
- (c) the steps taken/proposed to be taken by Government to facilitate the search operations to find missing persons during the cyclones; and**
- (d) the total amount allocated for the same during the last three years?**

**ANSWER**

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

**(a)-(b) Yes Sir.**

**IMD has one of the best forecasting systems for predicting tropical cyclones using high resolution advanced mathematical models (global, regional and cyclone specific models) and a suite of quality observations from Satellites and Radars.**

**To date, there is no proven scientific technique available, anywhere in the world, to predict the occurrence of earthquakes with reasonable degree of accuracy with regard to space, time and magnitude. However, National Centre for Seismology (NCS), maintains a country wide national seismological network, to detect and locate earthquakes occurring in and around the country.**

**The Early Warning Services for Tsunamis are being provided by Indian Tsunami Early Warning Centre (ITEWC) at Indian National Centre for Ocean Information Sciences (INCOIS), Hyderabad an autonomous body under Ministry of Earth Sciences. The ITEWC is capable of detecting tsunamigenic earthquakes occurring in the Indian Ocean as well as in the Global Oceans within 10 minutes of the occurrence of the earthquake and disseminates the advisories to the concerned authorities through email, fax, SMS, GTS and website. ITEWC is**

**considered as one of the most modern tsunami warning centre in the world. Considering the performance of ITEWC, in October 2012, Intergovernmental Oceanographic Commission (IOC) of UNESCO has designated ITEWC as the Tsunami Service Provider (TSP) for the entire Indian Ocean Region. Since then, ITEWC is providing tsunami advisories and related services to all countries on the Indian Ocean rim (25) countries.**

**(c) Not applicable**

**(d) During the last three years For ITEWC activities, an amount of Rs. 56.85 Crores and Rs 30.76 Crores budget has been allocated for the ITEWC and national seismological network operation respectively.**

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