

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 1289
TO BE ANSWERED ON THURSDAY, May 05, 2016**

PLAN FOR GIVING WARNING ABOUT NATURAL CALAMITIES

1289. SHRI AMBETH RAJAN:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether Government has formulated any comprehensive plan for giving warning about natural calamities particularly for earthquake in the backdrop of recent earthquakes at Japan and Ecuador; and**
- (b) if so, the details thereof and if not, the reasons therefor?**

ANSWER

**MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY
AND MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)**

- (a-b) To date, there is no proven scientific technique available, anywhere in the world, to predict/ forecast the occurrence of earthquakes with reasonable degree of accuracy with regard to space, time and magnitude. Nevertheless, efforts are being made world-over including India, to monitor and study various earthquake precursory phenomena in critical seismotectonic regions, which would not only help understand the earthquake generation processes better but also lead to identifying possible earthquake precursors, which may serve as useful predictors in future.**

As part of this, a Program on 'Seismicity & Earthquake Precursor' has been initiated by Ministry of Earth Sciences (MoES), through a multi-institutional and multi-disciplinary mechanism to adopt an integrated approach of generation, assimilation and analyses of a variety of earthquake precursory phenomena in critical seismotectonic environments in the country in a comprehensive manner.

MoES has also initiated a major project on drilling a deep bore hole in the seismically active Koyna-Warna region in

Maharashtra, to study in detail the ongoing earthquake generation processes in the region. The proposed scientific deep drilling investigations in the seismically active Koyna region will provide a unique opportunity and the much desired data sets to better understand the mechanisms of faulting, physics of reservoir triggered earthquakes and also contribute towards earthquake hazard assessment and develop models for earthquake forecast in future.

India Meteorological Department (IMD) is responsible for monitoring, detection and forecasting of weather including severe weather events such as cyclones, heavy rainfall, extreme temperature etc. It provides forecast of these events at national, regional and state levels through its three tier structure.

In order to provide early warning of severe weather events, IMD has setup a network of state meteorological centres to have better coordination with a state and other agencies. IMD simultaneously shares its forecast and warning with respective national/state/district level Disaster Management Authorities to take remedial action.
