

**GOVERNMENT OF INDIA  
EARTH SCIENCES  
LOK SABHA**

UNSTARRED QUESTION NO:418

ANSWERED ON:22.07.2015

Earthquake

Nagar Shri Rodmal;Senguttuvan Shri Balasubramaniam

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

- (a) whether the Government has recently conducted analysis of the data regarding low intensity earthquake activities recorded during each of the last three years and if so the details thereof;
- (b) whether the Government proposes to establish or has established Seismographic Observatories in the seismicity-prone zones in the country and if so, the details thereof;
- (c) whether the Ministry is aware that the United Nations study has indicated that about 200 million people in India are under threat from storms and earthquake particularly in the Very High Damage Risk Zones;
- (d) if so, the details, location-wise;
- (e) whether the Government has given any specific guidelines in High Risk Zone about the construction of houses, dams, nuclear power plants, hydro power projects, etc. and if so the details thereof and implementation/monitoring status thereof; and
- (f) the other proactive steps taken/ proposed to be taken to ensure that minimal damage and risk is faced in the event of earthquake?

**Answer**

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

(a) Yes Madam. Earth System Science Organization-National Center for Seismology (ESSO-NCS) is monitoring earthquake activity in and around the country round the clock through its national seismological network. Details of the seismic tremors reported in the country, for the last 3-years and the current year, are presented in Annexure.

(b) Yes Madam.

ESSO-NCS maintains a National Seismological Network consisting of 82 seismological observatories spread over the entire country, which includes a 17-station Real Time Seismic Monitoring Network (RTSMN) for detection and location of Tsunamigenic earthquakes in the Indian ocean region and two V-SAT based telemetry clusters, one each in (i) Delhi and surrounding regions (16 stations) and (ii) Northeast India (20 stations) region.

(c)&(d) The Government is aware of the World Bank-United Nations Report – Natural Hazards, Unnatural Disasters: The Economics of Effective Prevention released in 2011 where in need to place focus on preventive measures to save lives and reduce damage from natural hazards, such as earthquakes, storms, floods and droughts, is emphasized. While projecting the growing cities exposures with people and property to hazards, it is reported that an estimated 200 million city dwellers likely to be exposed to storms and earthquakes by 2050. Such projections do not have to necessarily translate into greater loss of life and increased property damage in view of various institutional mechanisms put in place for effective disaster management both at national and state levels in the country.

(e)&(f) Yes Madam. Loss of life and damage to property due to earthquakes could be considerably reduced through proper planning and implementation of pre-and post-disaster preparedness and management strategies by respective State and Central Government agencies in a coordinated manner. Guidelines have also been published by the Bureau of Indian Standards (BIS), Building Materials & Technology Promotion Council (BMTPC) and Housing and Urban Development Corporation (HUDCO) etc. for the design and construction of earthquake resistant structures to minimize the loss of life and damage to property caused by earthquakes. These guidelines are in wide circulation amongst the public and the administrative authorities responsible for the design and construction of earthquake resistant structures in earthquake prone areas.

Before construction of dam or establishment of power development related projects in the country, all necessary precautionary measures are taken as per the recommendations of the Dam Safety Organization of the Central Water Commission under the Ministry of Water Resources, by carrying out feasibility studies, impact assessment studies etc. Ministry of Water Resources, Ministry of Power, Ministry of Environment & Forest, Ministry of Finance etc operate various regulatory responsibilities towards location of various infrastructures projects of national importance. The seismic monitoring is also done at the site after installation of project.

Ministry of Home Affairs is keen to see at least from now that all new buildings constructed under various National and State schemes should be made earthquake resistant as per the Bureau of Indian Standards in the first instant so that no new additions to the stock of existing unsafe buildings are made.

