

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO.26
TO BE ANSWERED ON 19TH NOVEMBER, 2009

EARTHQUAKE IN NORTH EASTERN REGION

26. SHRI BIRENDRA PRASAD BHAISHYA

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether Government is aware of recurring earthquake recorded this year in North Eastern Region of small intensities;
- (b) if so, the details of all the quakes; and
- (c) Government's immediate measures taken to tackle the impending disaster in the region?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE)
MINISTRY OF SCIENCE AND TECHNOLOGY, MINISTRY OF EARTH SCIENCES,
MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE, MINISTER OF STATE IN
THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND MINISTER
OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS
(SHRI PRITHVIRAJ CHAVAN)

- (a) Yes Sir.
- (b) North Eastern region is known to be seismically active as it falls under Zone-V of the Seismic Zoning Map of India, produced by Bureau of Indian Standards. Bureau of Indian Standards [IS-1893 (Part-1): 2002], based on extensive scientific analysis has grouped the whole country into four seismic zones - Zone-II, III, IV and V. Of these, Zone V is the most seismically active region, while zone II is the least.

The India Meteorological Department (IMD) operates five observatories over the North Eastern Region and is located at Shillong, Tura, Imphal, Lekhapani and Agartala respectively. Another seismological observatory is also operated in Gangtok, Sikkim as well. A total of 65 earthquakes of slight intensity have been recorded by the Seismological observatory of IMD located at Shillong during the period 1st January, 2009 till 12th November, 2009 as detailed below:

Statistics of earthquake events of slight intensity recorded by Shillong observatory (within 550 km range) for the period 01-01-2009 to 12-11-2009

<u>Month</u>	<u>No. of events</u>	<u>Magnitude Range</u>
January, 2009	5	1.9-4.5
February, 2009	6	2.5-5.4
March, 2009	3	4.7-5.2
April, 2009	7	3.2-4.8

May, 2009	7	2.2-4.5
June, 2009	5	1.9-3.8
July, 2009	4	3.4-5.0
August, 2009	6	2.9-5.6
September, 2009	11	2.5-5.9
October, 2009	6	3.1-5.2
01 st to 12 th November, 2009	5	3.0-4.2
Total	65	1.9-5.9

- (c) Real Time Information on earthquake activity in the country is transmitted by IMD to the control room of the Ministry of Home Affairs (MHA) and to all concerned state government agencies dealing with disaster management related issues. Various earthquake disaster management and mitigation measures are in place through the efforts coordinated by the MHA in the country. Significant of them is the issuance of guidelines for earthquake resistant design and construction of structures that have been laid down by Bureau of Indian Standards (BIS), Housing and Urban Development Corporation (HUDCO) and Building Material Technology Promotion Council (BMTPC) etc for their adoption by appropriate planning and development authorities.

In addition, under the Research and Development Programs supported by the Ministry of Earth Science (MoES), following activities have been taken up in Northeast India:

- A state-of-art seismic telemetry network is being operated in Northeast India by the North East Institute of Science & Technology (NEIST), Jorhat with joint support of North Eastern Council and MoES for better understanding of earthquake generation processes in the region.
- Seismic Hazard and Risk Microzonation plays an important role in disaster mitigation planning and thus, minimizing the impact of earthquakes. Towards this objective, Seismic microzonation of Guwahati city has been completed on 1:25,000 scales.
- As part of public awareness, a program for school children has been organized in Northeast India through University of Imphal to impart earthquake education and create awareness on earthquakes impacts.
- A state-of-art Multi Parametric Geophysical Observatory (MPGO) has been established by the Indian Institute of Geomagnetism (IIG) at Shillong for understanding the earthquake precursory phenomena in the Northeast India region.

All the above mentioned efforts would greatly help in tackling the impending disasters in the future and minimizing the loss of life and property in the region.
