

34 p.c. of A.P., TS prone to quakes, says study

Seismic THREAT **EARTHQUAKE ENGINEERING RESEARCH CENTRE OF THE IIIT, HYDERABAD CONDUCTS SEISMIC STUDY**

<p>▶ Undivided A.P. is susceptible to experiencing quakes of the intensity VII</p>	<p>▶ State has experienced earthquakes of magnitude up to 5.7</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; padding: 5px;"> <p>▶ Vizianagaram (magnitude 5.5) In 1917</p> </td> <td style="width: 10%; border: none; text-align: center; padding: 5px;">  </td> <td style="width: 40%; border: none; padding: 5px;"> <p>▶ Ongole (magnitude 5.4) In 1967</p> </td> </tr> <tr> <td colspan="3" style="border: none; padding: 5px;"> <p>▶ Bhadrachalam (magnitude 5.7) in 1969</p> </td> </tr> </table>	<p>▶ Vizianagaram (magnitude 5.5) In 1917</p>		<p>▶ Ongole (magnitude 5.4) In 1967</p>	<p>▶ Bhadrachalam (magnitude 5.7) in 1969</p>		
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<p>▶ 5 seismic stations monitoring seismic activity in two States</p>	<p>▶ Most of the areas in the two States are in Zone II and Zone III</p>						
<p> There is possibility of earthquakes measuring up to the intensity of 7 on Richter scale in zone III while it will be around 6 in zone II RAMANCHARLA PRADEEP KUMAR, Head of Earthquake Engineering Research Centre</p>							

The undivided State had witnessed 80 earthquakes between 1800 and 1999

The 7.9 magnitude temblor that shook Nepal and the northern parts of the country should come as a wake up call for the planners as the State too has some vulnerability attached to it.

A seismic study conducted by the Earthquake Engineering Research Centre of the International Institute of Information Technology, Hyderabad confirms that 'as per seismic hazard map of Bureau of Indian Standards', 34 per cent of the area in the undivided AP is susceptible to experiencing quakes of the intensity VII' which is similar to the experience of Ahmedabad

during Bhuj earthquake in 2001 (6.9), according Ramancharla Pradeep Kumar, professor and Head of the research centre.

Seismic history of AP shows that the State has experienced earthquakes of magnitude up to 5.7 on the Richter scale i.e., Vizianagaram (magnitude 5.5) in 1917, Ongole (magnitude 5.4) 1967 and Bhadrachalam (magnitude 5.7) in 1969. In all, 80 earthquakes occurred from 1800 to 1999. Of them, 43 are of magnitude less than four and 28 of them are less than five and only nine of them are greater than five magnitude, he said.

Mr. Kumar said casualties were not reported during earthquakes. Earthquake that struck in Medchal on the suburbs of Hyderabad in 1993 with a magnitude of 4.5 caused cracks in several buildings.

Though not much of damage occurred due to these calamities, the earthquake in Killari in Maharashtra with a magnitude of 6.3 in 1993 brought to forefront the possibility of high risk to urban areas of the two States, where building construction activity is growing at phenomenal rate, especially high rise buildings, he said.

According to Mr. Kumar, seismic activity in the two States is being monitored through five seismic stations at Vishakhapatnam, Hyderabad, Nagarjunasagar, Srisailem and Sriramsagar. Since most of the areas in the two States are in Zone II and Zone III, the government need to take measures for earthquake safety.

The earthquakes like the one that shook Nepal make it mandatory for the government to give serious consideration to earthquake forces while designing and constructing buildings.

Quoting current seismic hazard map prepared by the Bureau of Indian Standards, Mr. Kumar said Gujarat, Kashmir, Himalayan region and north-eastern States come under zone V, classified as most severe, while Indo-Gangetic plain, Delhi, Gurgaon and Chandigarh come under zone IV and Mumbai, Latur, Chennai, Jabalpur, Bangalore, Tirupati, Vijayawada, Warangal, Bhadrachalam, Ongole and Kolkata fall under zone III.

Most part of the peninsular area, including Hyderabad falls under zone II. "There is possibility of earthquakes measuring up to the intensity of 7 on Richter scale in zone III while it will be around 6 in zone II," he added.