

Assam Earthquake

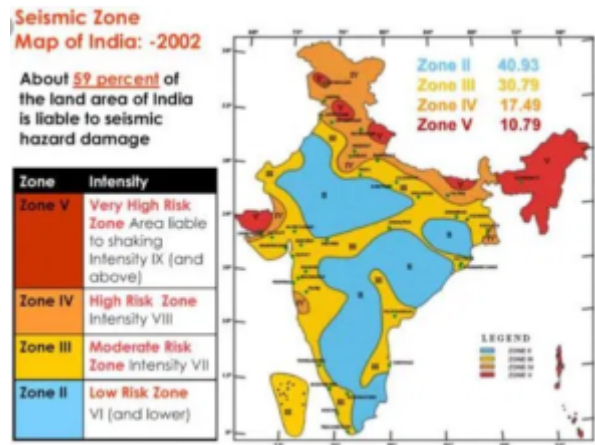
April 30, 2021

In News: Recently an earthquake of magnitude 6.4 on the Richter scale hit Assam which caused loss of lives and property.

Location of epicentre-

- The primary earthquake had its epicentre at latitude 26.690 N and longitude 92.360 E, about 80 km northeast of Guwahati, and a focal depth of 17 km, the National Centre for Seismology (NCS) .
- According to preliminary research, the events occurred near the **Kopili Fault, which is closer to the Himalayan Frontal Thrust (HFT).**
- The Kopili Fault, which **runs from the Bhutan Himalaya to the Burmese arc**, is a 300-kilometer northwest-southeast trending fault.
- The HFT, also known as the **Main Frontal Thrust (MFT)**, is a geological fault that **runs along the tectonic plate boundary between India and Europe.**
- The fault is a crack in the crust that has caused the blocks on each side to shift relative to one another parallel to the fracture.
- The region is seismically very active, falling in the **highest Seismic Hazard zone V** associated with collisional tectonics where the Indian Plate subducts underneath the Eurasian Plate.

The latest 2002 version of the **seismic zone map by the Bureau of Indian Standards (BIS)** divided India into **four zones**, viz. Zone II, III, IV and V.



Zone II: This is seismically the least active region. It covers parts of India that are not included in Zone III, IV and V.

Zone III: Comprises Kerala, Goa, Lakshadweep islands, remaining parts of Uttar Pradesh, Gujarat and West Bengal, Parts of Punjab, Rajasthan, Madhya Pradesh, Bihar, Jharkhand, Chhattisgarh, Maharashtra, Orissa, Andhra Pradesh, Tamil Nadu and Karnataka.

Zone IV: It covers parts of Jammu and Kashmir and Himachal Pradesh, National Capital Territory (NCT) of Delhi, Sikkim, Northern parts of Uttar Pradesh, Bihar and West Bengal, parts of Gujarat and small portions of Maharashtra near the west coast and Rajasthan.

Zone V: This is seismically the most active region. Parts of the Himalayan boundary in North and Northeast India, the Kutch area in the West falls here. Remaining parts of Jammu and Kashmir, Himachal Pradesh, Uttarakhand, part of North Bihar and Andaman and the Nicobar Islands are included.