

Earthquake Prone Areas

- An earthquake is the shaking of the surface of the earth. Earthquakes can be extremely violent or so slight that they only register on instruments. They are caused by sudden movement of the earth's tectonic plates.
- Earthquake has caused immense damage to life and property. Also, earthquakes further lead to tsunamis and volcanic eruptions causing even more damage. The world is divided into seismic zones based on the tectonic plates and the magnitude of earthquakes.
- We take five examples of the country or places of 'Earthquake Prone Areas', they are China, Japan, Bangladesh and Pakistan.
- China is one of the most seismic hazard-prone countries in the world. Seismic risk is then systematically assessed by combining peak ground acceleration (PGA) and building vulnerability curves, and an earthquake disaster risk map with regard to direct economic losses is obtained. Finally, the earthquake emergency response process, disaster response mechanisms, and post-disaster restoration and reconstruction process are analyzed using the Wenchuan Earthquake case. The Japanese archipelago is located in an area where several continental and oceanic plates meet. This

is the cause of frequent earthquakes and the presence of many volcanoes and hot springs across Japan. If earthquakes occur below or close to the ocean, they may trigger tidal waves (tsunami). Bangladesh is facing a high risk of moderate to strong earthquakes that may result in widespread damage and loss of thousands of lives also the risk of tsunami as four active sources of earthquakes in the Bay of Bengal can generate prepared to tackle the aftermath of any strong earthquake. Five geological fault lines run through the country, exposing it to highly vulnerable to a major quake by the experts. In a report on the earthquake and its causes, the USGS said the rupture occurred on either a near-vertical reverse fault or a shallowly dipping thrust fault. At the latitude of the earthquake, the sub-continent moves northward and collides with Eurasia at a velocity of about 37 millimetres per year. Active faults and their resultant earthquake in northern Pakistan and adjacent parts of India and Afghanistan are the direct result of convergence between the South Asian and Eurasia plates. This collision causes an uplift that produces the highest mountain peaks in the world like the Himalayas, the Karakoram, the Pamir and the Hindu Kush ranges.