	• **Example**: Himalayan region have high sloping areas which also constitutes 'very high damage risk zone' in India.

2. On Manmade Structures:

Cracking:	Earthquakes can cause cracking of buildings, roads and other infrastructure. In the long run these cracks can make the structures more vulnerable for further damage.
Sliding:	Earthquake can develop sliding of structures to the lower strata. A tectonic plate can slide over another which can create unevenness on the ground. This causes sliding of buildings, roads and other infrastructures.
Collapse:	Manmade structures are high risk prone to earthquakes if these are not constructed according to the geological and geomorphological conditions of the area. Thus, buildings collapse is common phenomenon during earthquakes.

3. On Water:

Waves:	Earthquakes can create waves on water bodies usually higher than normal. Such high waves can intrude human settlements, agriculture, forests etc.
Hydro dynamic pressure:	Water bodies are highly sensitive to pressure changes as creates ripples of pressure. Dams are particularly more vulnerable to such pressure systems. Dam burst can occur if sufficient pressure is generated by earthquakes.
Tsunami:	• Earthquakes can cause shift in tectonic plates and it may create waves higher wavelengths. Such waves are more destructive. • **Example**: 2004 Tsunami, 2018 Tsunami waves in Indonesia.

Earthquake hazard mitigation:

It is not possible to prevent the earthquakes hence the best option is to **emphasise on disaster preparedness and mitigation** rather than curative measures such as:

- Establishing **earthquake monitoring centres** for regular monitoring and **dissemination of information** among the people in vulnerable areas. **Use of GPS** can be of great help in monitoring the movement of tectonic plates.
- Preparing a **vulnerability map** of the country and **dissemination of vulnerability risk information among the people** and educating them about the ways and means minimising the adverse impacts of disasters.
- **Modifying the house types and building designs** in the vulnerable areas and discouraging construction of high-rise buildings, large industrial establishments and big urban centres in such areas.
- Making it mandatory to **adopt earthquake resistant designs and use light materials** in major construction activities in the vulnerable areas.

Current developments:

- **India Quake App- Ministry of Earth Sciences launched 'India Quake' app** to enable users receive information about natural hazards on land and water. It has been developed by National centre for