

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 1010
TO BE ANSWERED ON FRIDAY, NOVEMBER 22, 2019**

INTENSE SHAKING OF EARTH'S SURFACE

1010. MS. MIMI CHAKRABORTY:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has its own method and/or technology to forecast any intense shaking of earth's surface apart from the instrument of seismometer;**
- (b) if so, the details thereof;**
- (c) whether the Government has no satellite system or information recorder to get advance report of earthquake, if so, the details thereof;**
- (d) whether the Government has any tie-up with foreign Governments to get advance information, the time, location and intensity of an earthquake thereof; and**
- (e) if so, the details thereof and if not, the steps taken by the Government in this regard?**

**ANSWER
MINISTER FOR SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)**

(a) and (b) No Sir, at present, there is no scientific technique available, anywhere in the world, to predict/forecast the occurrence of earthquakes with reasonable degree of accuracy in terms of space, time and magnitude. National Centre for Seismology (NCS), an attached office of Ministry of Earth Sciences (MoES) maintains a seismological network round the clock for continuous monitoring of seismic activity in and around the country.

Steps have been taken up to prepare seismic zonation map at large scale based on historical seismicity and site characteristics. Bureau of Indian Standard has published seismic zoning map of India. As per this map, entire country is grouped into four seismic zones viz. Zone II, III, IV and V. Out of these Zone V is seismically the most prone region, while Zone II is the least. Also Seismic Microzonation i.e. detailed hazard zonation at small scale of selected urban areas like Delhi, Kolkata, Sikkim, Guwahati and Bengaluru have been completed. The reports of Delhi and Kolkata Microzonation are available on website of Ministry of Earth Sciences. These studies are useful for land use, urban planning, and retrofitting of buildings etc.

- (c) No Sir.**
- (d) No Sir.**
- (e) Does not arise.**
