

**GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA**

STARRED QUESTION NO:77
ANSWERED ON:05.03.2002
STUDY ON QUAKE ZONES
RAMSHETH THAKUR

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether Geo-Hazards International and the UN Centre for Regional Development has conducted a study in 21 cities of the country to find out the quake zones;
- (b) if so, the details thereof,
- (c) whether the study report has identified Delhi and Mumbai situated in quake zones; and
- (d) if so, the steps being taken by the Government to overcome the situation that may arise in these metro cities in the event of earthquakes of high intensity?

Answer

MINISTER OF HUMAN RESOURCE DEVELOPMENT, MINISTER OF SCIENCE AND TECHNOLOGY & MINISTER OF DEVELOPMENT (Dr. MURLI MANOHAR JOSHI)

- (a) Sir, the Government is not aware of any such proposal/study initiated by the Geo-Hazards International and UN Centre for Regional Development for 21 cities of the country.
- (b) & (c): Does not arise
- (d) The Government of India recognizes that the country is vulnerable to earthquake hazard and has taken several steps to monitor and study earthquakes and evolve earthquake disaster mitigation and management plans. A National Seismic Network has been operational in the country for a long time and is periodically upgraded technologically. A National Data Centre to compile and collate all the seismic related information has been recently started in India Meteorological Department. Based on available seismic cum geological data, the country has been divided into five major Seismic Zones; Zone-5 being the most active seismic region while Zone-1 is the least. Delhi is in Zone-4 whereas Mumbai is in Zone-3. The zonation map is also periodically updated based on new findings and new data. Micro-zonation of various urban cities has also been recently initiated by the Government and building codes for structures in different zones have also been evolved by the Bureau of Indian Standards (BIS). After evolving the BIS standards, awareness among the people for adopting building safety standards is being created. Technologies for strengthening the existing houses by way of retrofitting have been under development. The Earthquake Risk Evaluation Centre (EREC) with the mandate to prepare site-specific earthquake risk maps of high earthquake prone areas including Delhi and Mumbai is being established. Large number of research groups are being supported to carry out research and development activities related to earthquakes.