

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:4194
ANSWERED ON:19.12.2012
SEISMIC RISK-PRONE REGION
Pradhan Shri Nityananda

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether it is a fact that Delhi is a seismic risk-prone region in the country;
- (b) if so, the details thereof;
- (c) whether the Government has identified or proposes to identify weak buildings in the capital city to control any kind of loss of life in such an eventuality;
- (d) if so, the details thereof;
- (e) whether it is proposed to seek the help of an IIT to find out the weak points in various zones in Delhi; and
- (f) if so, the details thereof?

Answer

MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (SHRI S. JAIPAL REDDY)

(a) Yes Madam.

(b) Bureau of Indian Standards [IS-1893 (Part-1): 2002], based on the past seismic history, grouped the country into four seismic zones, viz. Zone-II, -III, -IV and -V. Of these, Zone V is the most seismically active region, while zone II is the least. Zone-IV covers some parts of Jammu & Kashmir and Himachal Pradesh, Union Territory 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.

(c) Yes Madam. By imparting professional training to the Engineers of the civic bodies, Delhi Government is enhancing the technical capabilities of field engineering wings to survey potentially weak buildings. Guidelines for improving Earthquake Resistance of Low Strength Masonry Buildings (IS 13828:1993) that covers the special features of design and construction for improving earthquake resistance of buildings of low-strength masonry are already in force to supplement these efforts. Ministry of Home Affairs is keen to see atleast from now that all new buildings constructed under various National and State schemes should be made earthquake resistant in the first instant so that no new additions to the stock of existing unsafe buildings are made.

(d) The Delhi Government in coordination with the National Institute of Disaster Management (NIDM) and National Disaster Management Authority (NDMA) had organized 6-training programmes for training 300-Engineers of Municipal Corporation of Delhi and New Delhi Municipal Committee on the "Rapid Visual Screening (RVS)" with particular reference to the evaluation of safety criteria for dangerous buildings in Delhi. Sphere heading the RVS pilot of identifying 10000 buildings in East Delhi, NIDM in its last training programme, that concluded in the first week of November, 2012, had deliberated in detail the findings from RVS pilot study and made MCD engineers familiar with the special purpose RVS data management software. The above training programmes have kept a good balance between class room lectures and hands on exercise, along with some nondestructive testing exercises in the field.

(e)-(f) Professional groups from various knowledge institutions in the country including IITs are actively engaged in design, development and implementation aspects of Seismic Vulnerability Assessment of Buildings and Procedure for RVS of Buildings for Potential Seismic Vulnerability including the RVS training modules undertook by NIDM.