## GOVERNMENT OF INDIA MINISTRY OF HOUSING AND URBAN AFFAIRS LOK SABHA UNSTARRED QUESTION NO. 2918 TO BE ANSWERED ON DECEMBER 05, 2019

## EARTHQUAKE RESISTANT BUILDING CODES

NO. 2918. SHRI ARVIND KUMAR SHARMA:

Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:

- (a) whether the Government has in place any earthquake resistant building codes;
- (b) if so, whether this/these codes are separate for each earthquake zone and inconformity with the best practices world over;
- (c) whether this/these codes have been made mandatory and whether the Government has mapped all disaster-prone vulnerable areas for remedial measures; and
- (d) whether the Government is planning for any scheme like incentives and tax rebates to promote demolishing of fragile buildings in earthquake prone areas?

## ANSWER

## THE MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF HOUSING AND URBAN AFFAIRS (SHRI HARDEEP SINGH PURI)

(a) The National Building Code of India 2016 (NBC 2016) published by Bureau of Indian Standards, in its Part 6 'Structural Design' Section 1: 'Loads, Forces and Effects' contains the provisions related to earthquake resistant design of buildings. (b) The standards are not separate for each seismic zone, but there are specific provisions applicable to each of the four seismic zones in India namely Zone II, Zone III, Zone IV and Zone V. The criteria specified in the standards are in line with the best practices adopted in many other countries of the world.

(c) These codes are advisory in nature. The Building Materials and Technology Promotion Council (BMTPC), under the Ministry of Housing and Urban Affairs, has published the third edition of Vulnerability Atlas of India. It is a collation of the existing hazard scenario for the entire country and presents the digitized State/UTwise Hazard Maps with respect to Earthquakes, Winds & Floods for district-wise identification of vulnerable areas. This edition contains additional digitized maps for Thunderstorms, Cyclones and Landslides. The Atlas also presents the district-wise Housing Vulnerability Risk Tables based on wall types and roof types as per 2011 Census Housing data.

(d) Urban Development is a State subject. Presently, no such scheme is under consideration to promote demolition of fragile buildings in earthquake prone areas.

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