

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH
LOK SABHA**

**UNSTARRED QUESTION NO.3190
(TO BE ANSWERED ON 16.03.2016)**

EARTHQUAKE RESISTANT BUILDING

3190. SHRI RAJU SHETTY:

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

- (a) whether any research work has been started by various research laboratories/ institutions for development of earthquake resistant buildings;**
- (b) if so, the details of the institutions involved in the said work; and**
- (c) the steps being taken to popularise the research works/scientific studies for construction of earthquake resistant buildings?**

ANSWER

MINISTER OF STATE FOR SCIENCE AND TECHNOLOGY AND EARTH SCIENCES

(SHRI Y.S. CHOWDARY)

- (a) Yes, Madam.**
- (b) Three CSIR laboratories namely CSIR-Central Building Research Institute (CSIR-CBRI), Roorkee; CSIR-North East Institute of Science and Technology (CSIR-NEIST), Jorhat and CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai are pursuing research related to earthquake resistant buildings.**
- (c) CSIR labs have taken following steps for popularization of the developed technologies:**
 - organisation of awareness, Training and Demonstration programmes on 'Earthquake Resistant Design, Construction, Retrofitting of Buildings' for masons, practicing engineers and architects;**
 - development of documentary movies highlighting construction features, problems and their solutions in Indian context. The movies have been circulated to various stakeholders and uploaded on websites in public domain;**
 - contribution in development of Indian standards/guidelines, design procedures based on experimental evidences of Indian masonry and architecture for mass application;**
 - publication of research findings in International & National journals, participation in conferences, publication of brochures (in Hindi and English for general awareness) and dissemination of information through print and electronic media; and**
 - Presentation through pictorial charts focusing earthquake resistant design features in Exhibitions, Training Programmes etc.**
