

Earthquake Awareness Programme

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Introduction

The prediction of time and location of earthquake is a difficult phenomenon. The recent earthquakes in all over the world have created a threat to the human society. The Killari (1999), Bhuj (2001) and Kashmir (2005) earthquakes are testimony to the great loss of human of life and property. Significant part of our population lives under a constant threat of a possible devastating earthquake particularly in high seismic zone like Himalayas and Gujarat. The Himalayas Tectonic belt is constantly generating active stresses not only along Himalayan Zone but also its neighbouring regions. The periodic accumulation of strains is being released in various segments in producing earthquakes.

NCR Delhi lies in Seismic zone IV, IS 1893 (2002), having a population of 13 million. Delhi is under a threat of a moderate earthquake in near future, which may cause a loss of life and property. A great earthquake in the Himalayan region may cause damage and loss of life in Delhi. As a capital it is growing with population and urban agglomeration. Any big earthquake from Himalayan Source is also a biggest threat to the human population in Delhi. Another important problem in Delhi is the current construction practices, which are not earthquake resistant. Awareness about earthquake is uncommon in Delhi even if in schools. If we remind our history of Bhuj earthquake, we would find that a number of school children died during the republic day parade. It indicates that our school children are not well aware of about earthquakes.

Most death and destruction in an earthquake are caused by collapse of man-made construction. Since the mankind is far from the possibility of being able to successfully predict earthquakes, the only option is to build or houses and other facilities to survive earthquake. Clearly, engineers have to play a major role by ensuring that (a) new constructions are earthquake resistant, and (b) the existing structures are strengthened appropriately to be able to withstand earthquake shaking.

Objective

The programme:

- Explained the school children, teachers and staff about the historical earthquakes and different terminologies;
- Educated the school children, teachers and staff through lecture-cum-audio-visual method about the causes and effect of earthquakes, safety measures and process to follow during a sudden occurrence of an earthquake; and
- Demonstrated earthquake waves, recordings and measurement through earthquake kits and films.

Target Groups

The target groups of the programme were school children from standard VIII onwards, teachers and staff of various schools of Delhi. After the 2001, Bhuj earthquake, and more recently the Kashmir one it has been observed that the school children are most vulnerable to a devastating earthquake. The earthquake awareness programme focused to raise the level of awareness of school children more particularly during a damaging earthquake.

Beneficiary

The programme covered a total of 16,000 participants of students, teachers and staff representing 40 schools of Delhi conducted at the premises of each targeted school. The school children benefited from the earthquake awareness programme

Methodology

The programme methodology focused on:

i. Education and Awareness

Lectures based on power point presentations organized on the following themes.

- Basics of earthquakes, how it happens?
- Causes and Effects of earthquakes?
- Explanation of different earthquake terminologies and earthquake recordings.
- Steps to be taken pre, during and post an earthquake with pictures and diagrams.

ii. Visual display on earthquakes

Earthquake films produced by Department of Science & Technology, Govt of India; TIFAC, Department of Science & Technology, Govt of India, New Delhi; and National Institute of Disaster Management, Ministry of Home Affairs, Govt of India, New Delhi.

iii. Circulation of earthquake literature

Literatures on earthquake were circulated to students and teachers of the targeted schools of Delhi.

iv. Circulation of earthquake kits

Earthquake kits procured from Vigyan Prashar, Department of Science & Technology, Govt of India, were demonstrated as well as circulated to each school for follow up demonstration.