

# Urban Earthquake Vulnerability Reduction Project

under GoI-UNDP DRM programme

## THE PROJECT

This project essentially *aims* at **strengthening capacities** of communities, urban local bodies and the administration in **mitigation, preparedness and response** in 38 cities in India.

## GOAL

**Sustainable Reduction in Earthquake Risk** in the most earthquake-prone urban areas across the country.

## OBJECTIVES

**Objective 1:** *Create awareness* among government functionaries, technical institutions, NGOs, CBOs and communities/individuals about earthquake vulnerability and possible preventive actions.

**Objective 2:** *Development and Institutionalising* of Earthquake Preparedness and Response Plans at administrative/ward level and practise these through mock drills

**Objective 3:** *Development of regulatory framework* (techno-legal regime) to promote safe construction and systems to ensure compliance

**Objective 4:** *Capacity building* of professionals (engineers and architects) and DMT members

**Objective 5:** *Networking* knowledge on best practices and tools for effective earthquake risk management, including creation of information systems containing inventory of resources for emergency operations.

## **5 way action plan**

### **Development of Institutional Mechanism**

- **Awareness Generation**
- **Training and Capacity Building**
- **Techno-legal regime**
- **Disaster Management Plans at various levels**
- **Knowledge Network**

# Urban Earthquake Vulnerability Reduction Project

under Gol-UNDP DRM programme

## Strategies for Urban Earthquake Vulnerability Reduction

### 1. Awareness Generation

#### **1.1 *Informing the citizens about the earthquake hazard/ risks and possible mitigation measures***

- ü Seismic hazard in their region
- ü The codal provisions-in simplified vernacular language
- ü Cost effective disaster resistant technologies
- ü Earthquake resistant features
- ü Cost-effective simple retrofitting measures
- ü Costs and benefits of seismic strengthening
- ü Possible damage scenario in their environment.

#### **1.2 *Awareness on safe building practices among practicing architects/ engineers/ builders***

#### **1.3 *Informing the policy/decision makers about the earthquake hazard/ risks and possible mitigation measures***

# Urban Earthquake Vulnerability Reduction Project

under GoI-UNDP DRM

## Strategies for Urban Earthquake Vulnerability Reduction

### 2. Development of Earthquake Preparedness Plans

***2.1 Develop preparedness and response plans at ward level***

***2.2 Develop sectoral plans***

***2.3 Establish ward level DMT***

***2.4 Develop inventory of resources***



# LIST OF SOME SIGNIFICANT EARTHQUAKES IN INDIA AND ITS NEIGHBOURHOOD

DATE	EPICENTRE		LOCATION	MAGNITUDE M >6
	Lat(Deg N)	Long( Deg E )		
1819 JUN 16	23.6	68.6	KUTCH,GUJARAT	8.0
1869 JAN 10	25	93	NEAR CACHAR, ASSAM	7.5
1885 MAY 30	34.1	74.6	SOPOR, J&K	7.0
1897 JUN 12	26	91	SHILLONGPLATEAU	8.7
1905 APR 04	32.3	76.3	KANGRA, H.P	8.0
1918 JUL 08	24.5	91.0	SRIMANGAL, ASSAM	7.6
1930 JUL 02	25.8	90.2	DHUBRI, ASSAM	7.1
1934JAN 15	26.6	86.8	BIHAR-NEPALBORDER	8.3
1941 JUN 26	12.4	92.5	ANDAMAN ISLANDS	8.1
1943 OCT 23	26.8	94.0	ASSAM	7.2
1950 AUG 15	28.5	96.7	ARUNACHAL PRADESH-CHINA BORDER	8.5
1956 JUL 21	23.3	70.0	ANJAR, GUJARAT	7.0
1967 DEC 10	17.37	73.75	KOYNA, MAHARASHTRA	6.5
1975 JAN 19	32.38	78.49	KINNAUR, HP	6.2
1988 AUG 06	25.13	95.15	MANIPUR-MYANMAR BORDER	6.6
1988 AUG 21	26.72	86.63	BIHAR-NEPAL BORDER	6.4
1991 OCT 20	30.75	78.86	UTTARKASHI, UP HILLS	6.6
1993 SEP 30	18.07	76.62	LATUR-OSMANABAD, MAHARASHTRA	6.3
1997 MAY 22	23.08	80.06	JABALPUR,MP	6.0
1999 MAR 29	30.41	79.42	CHAMOLI DIST, UP	6.8
2001 JAN 26	23.40	70.28	BHUJ , GUJARAT	6.9

Source: <http://www.ird.ernet.in/section/seismo/static/signifi.htm>

**राजस्व आपदा विभाग**  
उत्तर प्रदेश सरकार



*Revenue (Scarcity) Department*  
Govt. of Uttar Pradesh

- ▶ Home
- ▶ About Us
- ▶ Organisation Structure **NEW**
- ▶ Commissioners Message
- ▶ Citizen Charter
- ▶ Government Orders **NEW**
- ▶ Who's Who **NEW**
- ▶ PAC HELP **NEW**
- ▶ List of Drought Affected Districts **NEW**
- ▶ List of Flood Affected Districts
- ▶ Earthquake Mitigation
- ▶ Reports
- ▶ India Meteorological Dept.
- ▶ Contact Us



## EARTHQUAKE PREPAREDNESS AND MITIGATION

- ▶ Feel the Earthquake
- ▶ Do's And Dont's About Earthquakes
- ▶ Earthquake Tips
- ▶ Seismic Zone map of India
- ▶ Seismicity of Uttar Pradesh
- ▶ Earthquake resistant design of Non-Engineered Construction
- ▶ Safe Construction Practices
  - Masonary Structures
  - RCC Structures
  - Guidelines For Retrofitting
- ▶ Government Orders On Earthquake Safety
- ▶ Indian Standards And Codes
  - For General Safety
  - For Earthquake Protection
- ▶ Urban Earthquake Vulnerability Reduction Program (UEVR) (English)
- ▶ Urban Earthquake Vulnerability Reduction Program (UEVR)(Hindi)
- ▶ Reports on city consultations on UEVR Program
  - Lucknow city consultation on UEVR