



17 March 2006  
Seoul, Korea

## UNCRD Programmes on CBDM Community-Based Disaster Management

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## Major Disasters since 1970

Nation	Disaster	Year	Death
Peru	Eq	1970	67,000
Bangladesh	Cyc/flood	1970	300,000
China	Eq	1976	290,000
Armenia	Eq	1988	25,000
Iran	Eq	1990	35,000
Bangladesh	Cyc/flood	1991	140,000
Japan	Eq	1995	6,400
Turkey	Eq	1999	17,000
India	Eq	2001	17,000
Iran	Eq	2003	27,000
Indonesia, others	Eq/tsunami	2004	270,000
Pakistan	Eq	2005	78,000

## Vulnerable Houses (Adobe)



## Vulnerable Houses (Stones)



## Vulnerable Houses (R.C.)



FIGURE 9A: Typical Earthquake Damage - Multiple-story Collapse in a Six-story building at Goleik (Source: EERI 2002)

## UNCRD Target

UNCRD aims to enhance the capacity of local people and governments with various partners, to make communities safer

Motivation and actions at individual and community level are essential



## Why Community Based Disaster Management (CBDM) ?

- Local people are potential victims and assume responsibility in managing the risk
- Local people respond first and are left last to rebuild safer communities
- Disasters reflect local conditions, of which local people are ware
- People can be motivated only individually

## Community Based Approach for dissemination and application of Disaster Management Plans



## UNCRD Activities for CBDM

- Dissemination of best practices
- Initiation of model projects
- Development of practical guidelines / tools for risk assessment and CBDM
- Training and advisory services
- Building partnership internationally and locally

## Global Earthquake Safety Initiative (GESI) with 41 cities worldwide

Partnership among local/national government, and NGO  
Joint initiative with GHI

### Objective of the Project

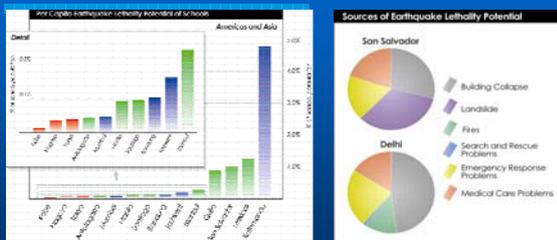
- To know where the risk is the most
- To understand the causes of the risk
- To provide affordable city specific solution
- To enhance an effective decision making system

### End-users

City and regional disaster managers and decision makers

## GESI – City risk analysis

to better understand the causes and countermeasures



Risk comparison among the cities

Sources of Earthquake Lethality Potential are diverse in each city. What Delhi needs to do to reduce its risk is different from what San Salvador needs to do.

## PNY Patanka New-Life Project

Rehabilitation after Gujarat Earthquake of January 2001, focusing on non-engineered construction



Partnership with:  
EDM, NCPDP,  
NGOs Kobe,  
NSET-Nepal,  
and SEEDS

Training  
Education  
Awareness  
Confidence

## Shake Table Demonstration

Stone with mud mortar structure

Comparison of resistance to Earthquake between Normal vs. Retrofitted

Build People's confidence/ Simple and effective means, Enhance understanding of performance of simple structures, Incorporate people into process of transferring technology

Explanation

Measurement

Inspection

Training

## Afghanistan Training and Livelihood Initiative

With national governments, Kabul University, SFL, CODE, and NSET

Objectives

- To develop guidelines (Persian) for earthquake safer construction practice
- To conduct training of masons and engineers
- To recover livelihood

## Improvised Shake Table Demonstration

For reconstruction of Exhibition at World Conference in Bam, Iran, Nov. 2004 and World Conference on Disaster Reduction (WCDR) in Kobe, Jan. 2005

## School Earthquake Safety Initiative (SESI)

Retrofit

Bal Vikas Secondary School, Nepal

- Strengthen school buildings (retrofitting)
- Technology transfer and training of masons/engineers
- Disaster education and mitigation culture

## School Earthquake Safety Initiative (SESI)

- Seeing is believing
- Doing is believing
- Training of school children
- Promotion of Mitigation Culture

Source: ITB, 2001

## Sustainability in Community-Based Disaster Management (2002-2005)



### Year 1 (2002):

Framework for sustainable CBDM through 6 case studies in **Bangladesh, Cambodia, India, Indonesia, Nepal, and the Philippines**



### Year 2 (2003):

Development of Guidelines for Sustainable CBDM and field testing in **Bangladesh, Viet Nam, and the Philippines**



### Year 3 (2004):

Application of the Guidelines in **Viet Nam and Mongolia**, Partnership building

## UNCRD Activities at WCDR

(World Conference on Disaster Reduction)

Jan. 2005, Kobe, Hyogo, Japan



- Publication of the outcome of the various CBDM projects "User's Guide," "Tapestry," and "Digest"
- Panel 4 on "reducing the underlying risk factors"
- Sessions on "CBDM" (21 Jan. 2005) and "Policies for Safer Housing/Building" (19 Jan. 2005)
- International Symposium on "Safer Communities" on 21 Jan. 2005 in Kobe.
- Shake Table Demonstration on 18 and 21 Jan.

## New Programs of UNCRD 2005



- **Urbanization and Community-Based Disaster Management (2005-2007)** in Nepal, Bangladesh, Indonesia, Thailand and Sri Lanka.
- "Reducing Vulnerability of School Children to Earthquake" project (2005- 2006) in Uzbekistan, India, Indonesia and Fiji.

## New Programs of UNCRD 2006

(Planned)



- **Housing Earthquake Safety Initiative (HESI)** as a three-year programme (2006-2009)
  - "Anti-seismic Building Code Dissemination (ABCD)" project (2006) in Nepal, Indonesia, Japan, and other seismic countries.
- (based on the application)

## Japanese Proverbs



- **Disaster strikes when it's slipped our memory.**  
(災害は、忘れたころにやってくる。)
- **Providing is preventing.**  
(備えあれば、憂いなし。)
- **Turn misfortune into a blessing.**  
(災いを転じて福となす。)

## UNCRD

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