



November, 2006  
BRI Workshop

# Community Based Disaster Management (CBDM) by UNCRD Hyogo Office

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**UNCRD**

(United Nations Centre for Regional Development)

# Vulnerable Houses (Stone/Brick)



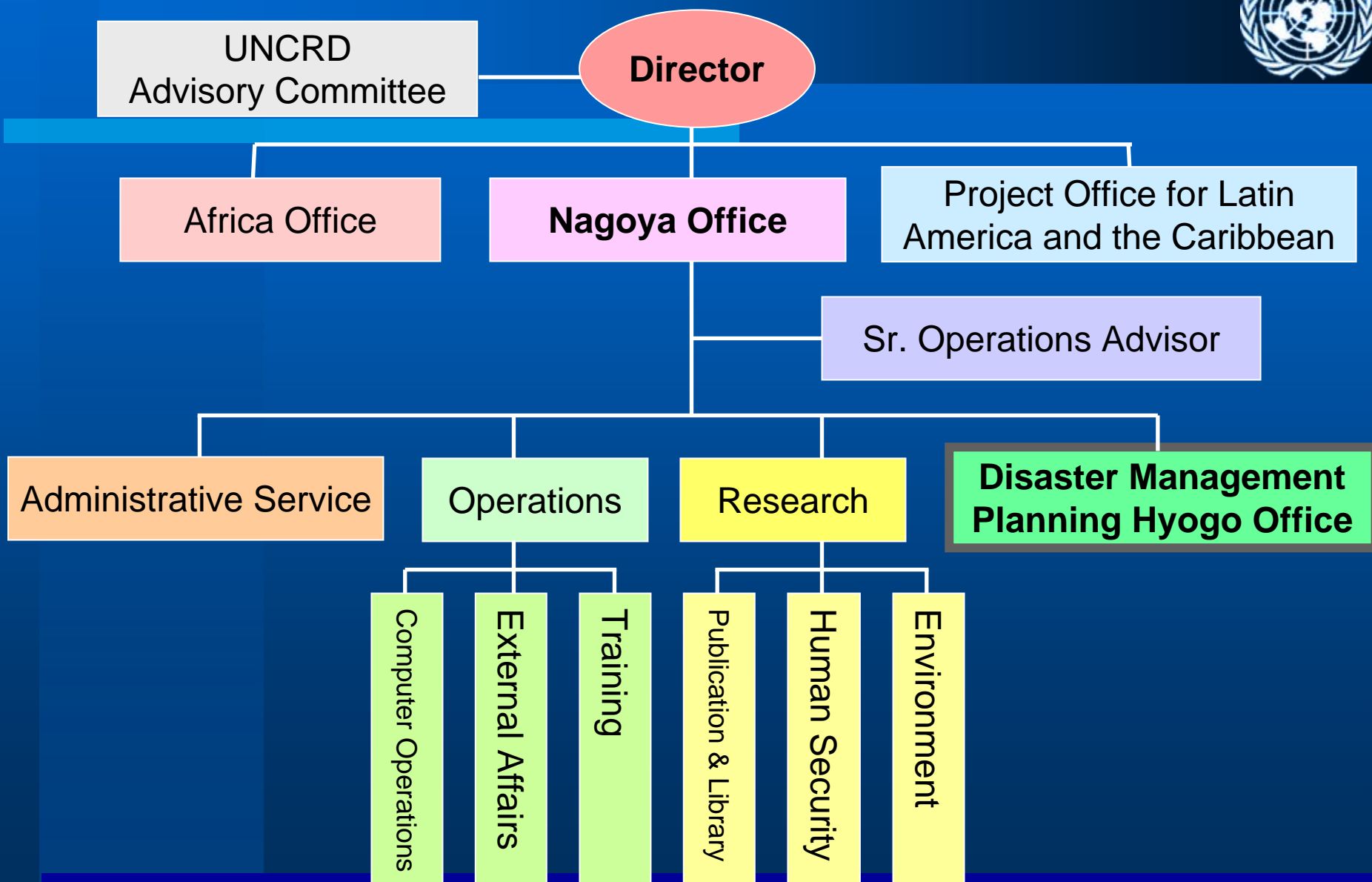
# Vulnerable Houses (Adobe)



# Vulnerable Houses (RC)



# Organizational Structure of UNCRD



# Objectives and Activities of UNCRD



## Major Goal

## Sustainable Regional Development

### Three Sub-goals

- Economic Development
- Environmental Conservation
- Human Settlement Development

### Activities

- Training: Hold annually training course for developing countries
- Provide advisory services in regional development
- Promote the exchange of data on the research of practical experience

# Disaster Management Planning

(1985-1999: before Hyogo Office, in Nagoya)



## Disaster Management Planning Sub-programs

- The Mega-City Risk Assessment Project in China
- Comparison on effective early seismic warning systems in Mega-cities (Mexico City & Kawasaki City)
- Cyclone Disaster Management in Bangladesh
- Support the activities of IDNDR
- “Quake Busters” educational software for children
- The Development of GIS for disaster management
- Learn from the best practices and recent examples



**Research, Training and Advisory Services**

# In 1999, Establishment of the Disaster Management Planning Hyogo Office

## Disaster Management Planning Hyogo Office

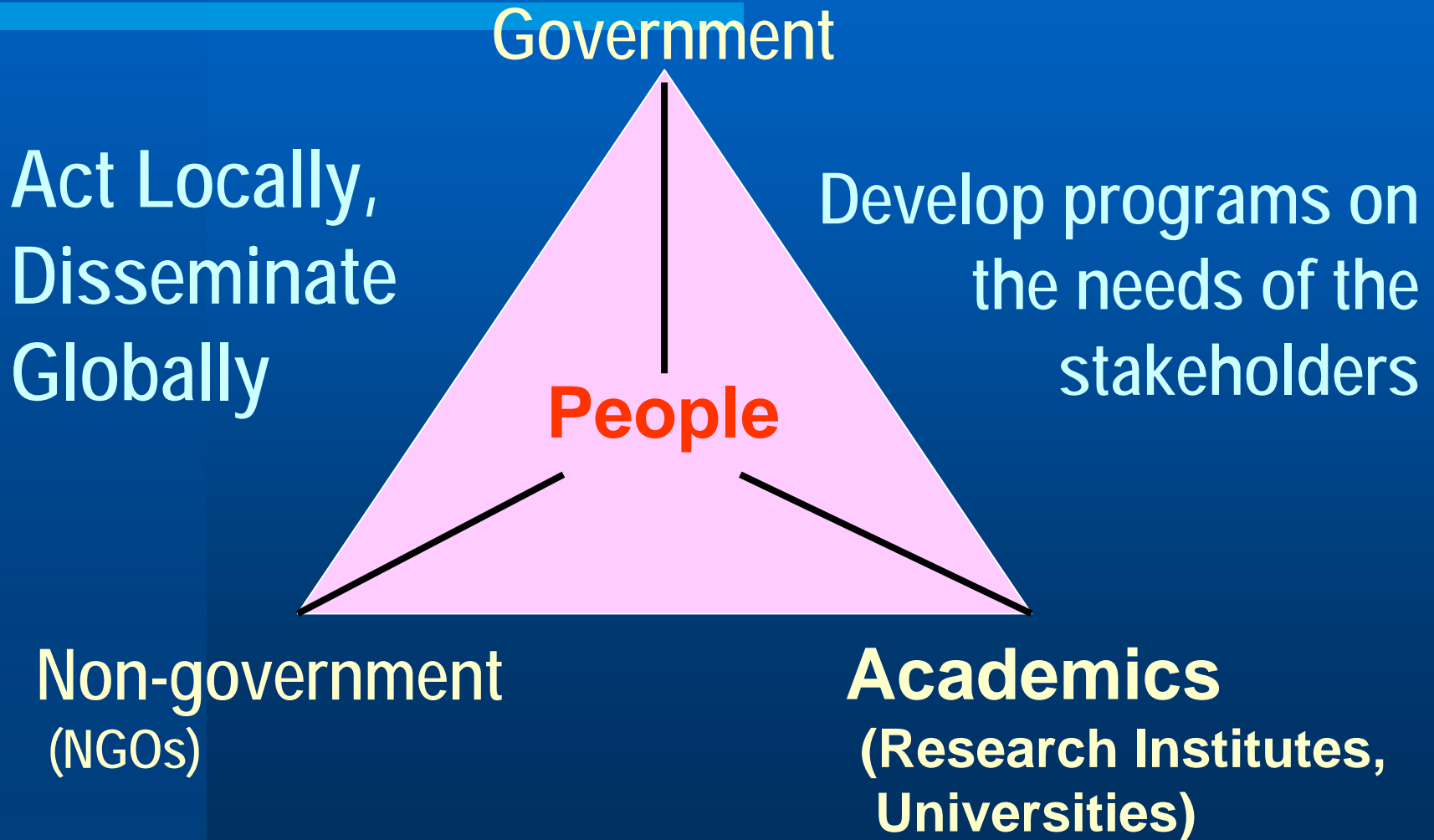
- Kobe Earthquake, 1995
- IDNDR (United Nations International Decade for Natural Disaster Reduction 1990-1999)





# Goals of Disaster Management Planning

## Hyogo Office



# Target of UNCRD Hyogo Office



**UNCRD Hyogo Office 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.



# UNCRD Projects (1999 - 2006) and Concepts



Community  
Based  
Development

Recovery Projects  
of disaster affected areas

Disaster Policy  
Integration

Urbanisation  
and **CBDM**  
( HTF 7 - )

Sustainability  
in **CBDM**  
( HTF 4 - 6 )

Hyogo Trust Fund

School Earthquake  
Safety Initiative: **SESI**  
(Human Security Fund)

World Conference  
on Disaster Reduction  
**WCDR 2005**

Community Based  
Disaster Management  
( HTF 1 - 3 )

Earthquake Safety

Housing Earthquake  
Safety Initiative: **HESI**  
(Anti-seismic Building  
Code Dissemination)

Global Earthquake  
Safety Initiative: **GESI**  
(Urban risk assessment)

Self-help /  
Cooperation

Field Survey  
of disaster affected areas

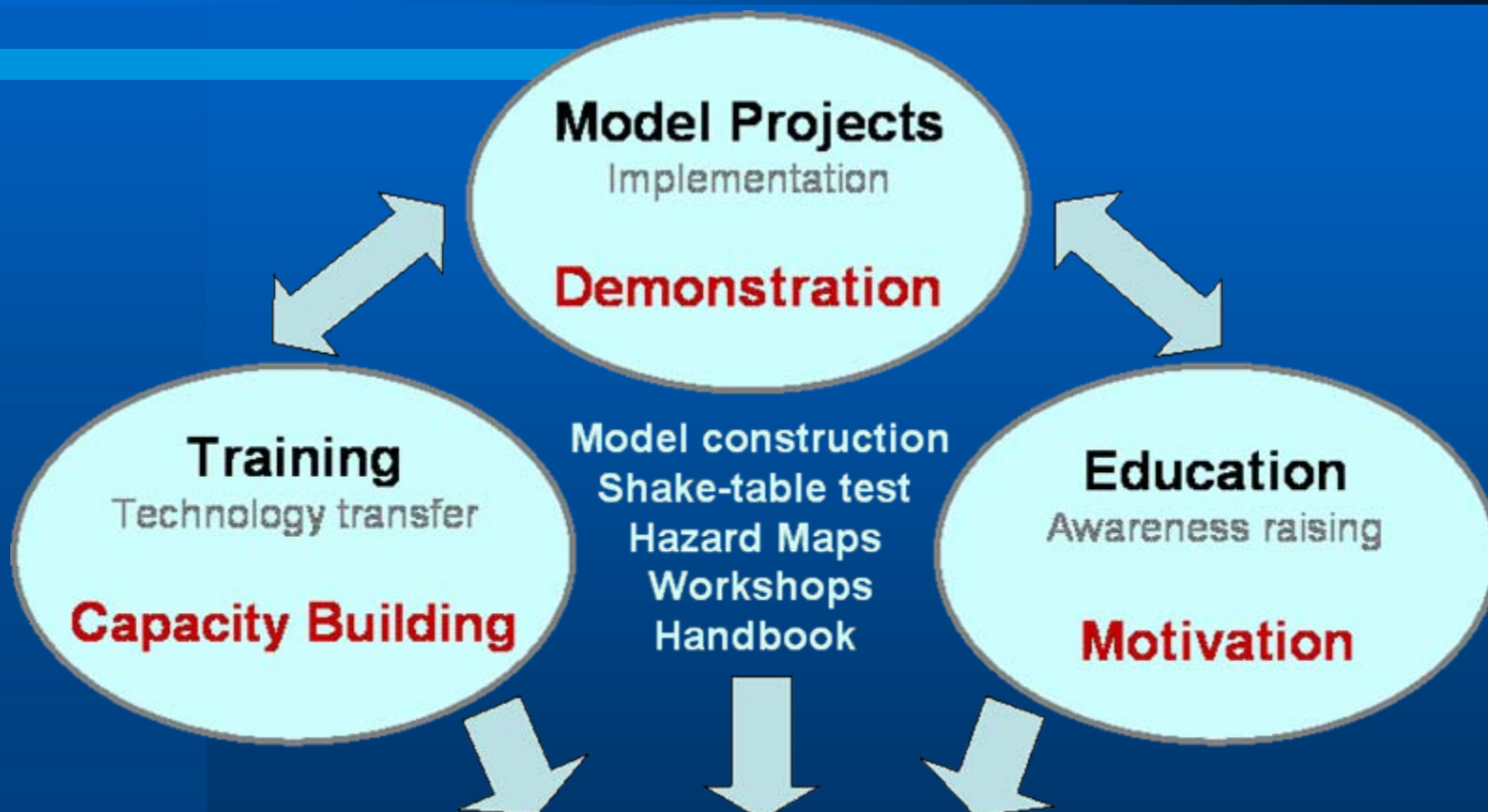
Sustainable  
Regional  
Development

# Why Community Based Disaster Management (CBDM) ?



- Local people are potential victims and assume responsibility in managing the risk  
(Over 90% of victims at the 1995 Great Hanshin-Awaji Earthquake lost lives by the collapse of their own houses.)
- Local people respond first and remain last to rebuild safer communities  
(Around 80% of people who were saved under the debris were rescued by the neighbors at the 1995 Earthquake.)

# Community Based Approach for Disaster Management Plans



**Disaster resilient communities, Safer schools, Houses for Sustainable Development and Hyogo Framework for Action**

# 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

# 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

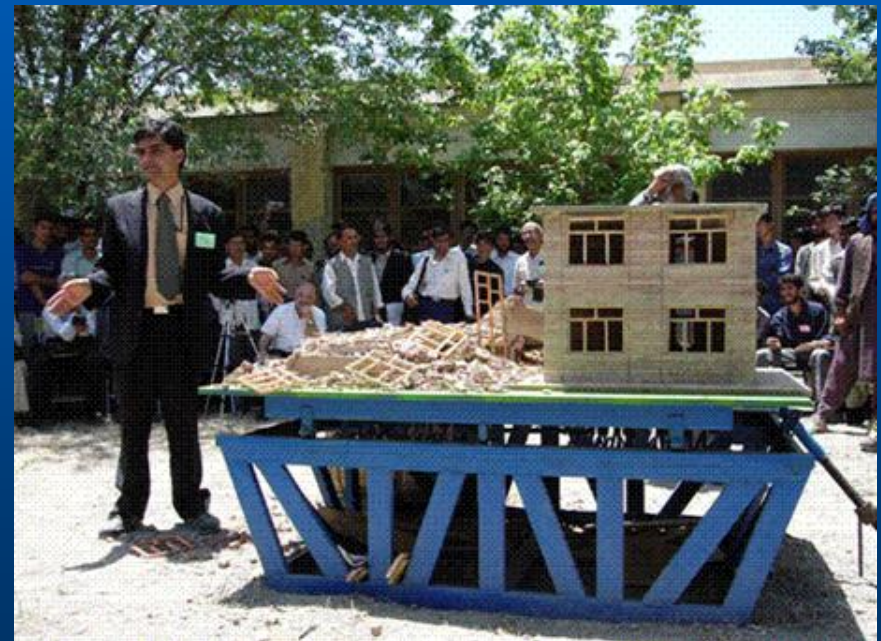
# Afghanistan Training and Livelihood Initiative



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

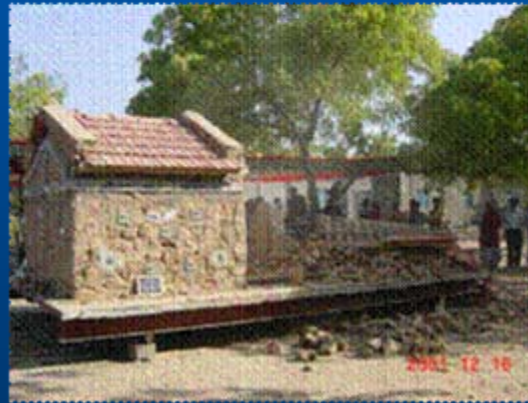
## Objectives

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





# 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

# 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**

# Sustainability in **C**ommunity-**B**ased **D**isaster **M**anagement (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**



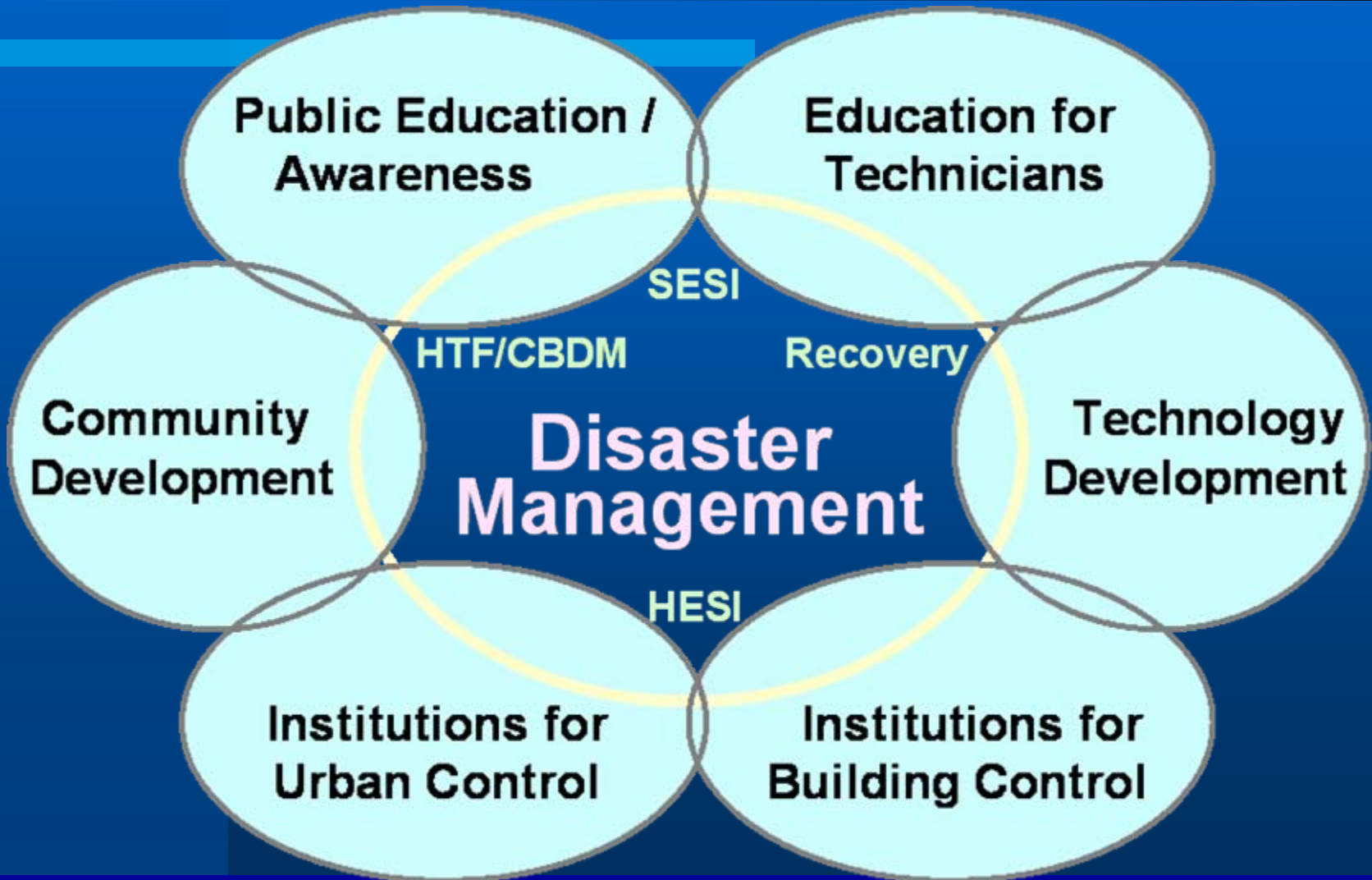
Year 3 (2004):

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

# UNCRD's Activities in 2005 WCDR in Kobe



# Fields of Disaster Management



# **New Programs of UNCRD 2005**



- **Urbanisation 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)

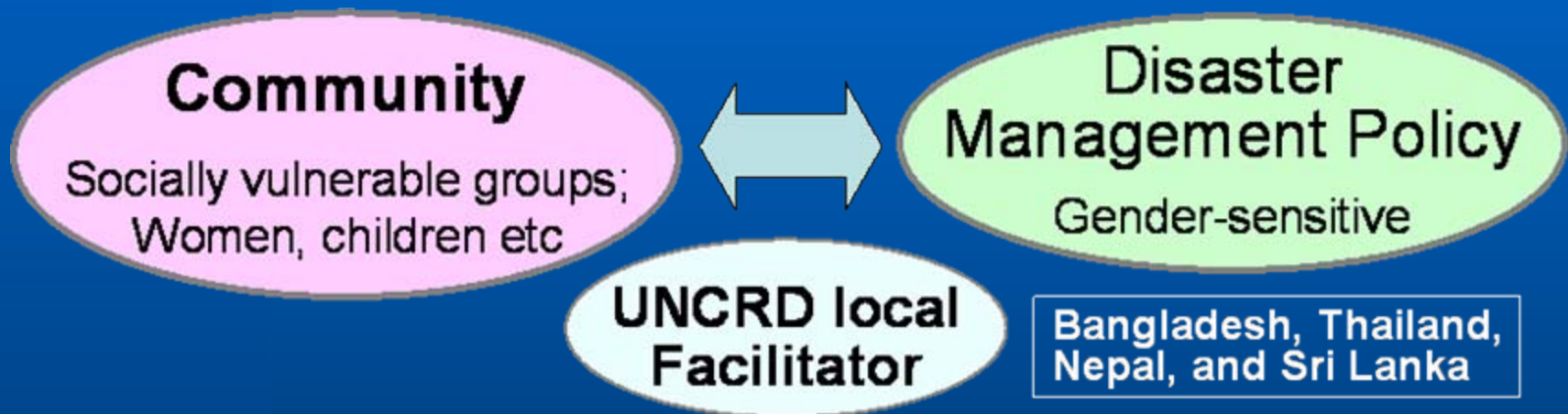
- **Housing Earthquake Safety Initiative (HESI) as a three-year program (2006-2008)**
- **“Anti-seismic Building Code Dissemination (ABCD)” project (2006) in Nepal, Indonesia, Japan, and other seismic countries.**

(based on the application)

# Urbanisation and Community-Based Disaster Management (2005-2007)



## Gender-sensitive CBDM: HTF VIII



1. Targeted at gender-sensitive CBDM for socially vulnerable community members.
2. UNCRD local facilitator promotes policy dialogs, training, and awareness raising.



# Reducing Vulnerability of School Children to Earthquake (2005-2006)



**International Workshop** in Katmandu, Nepal  
"Keeping Schools Safe from Earthquakes", **June 2006**

**South-East Asia:** Banda Aceh, Indonesia

**South Asia:** Simla, Himanchal st., India

**Asia Pacific and Oceania:** Suva, Fiji

**Central Asia:** Tashkent, Uzbekistan

Indonesia, India,  
Fiji, and Uzbekistan

**Seismic assessment**

Hardware

**School retrofitting**



**Training / Education**

Software

**Community seminars**

Funded by OCHA (Human Security Fund)

# School Earthquake Safety Initiative (SESI)



Retrofit

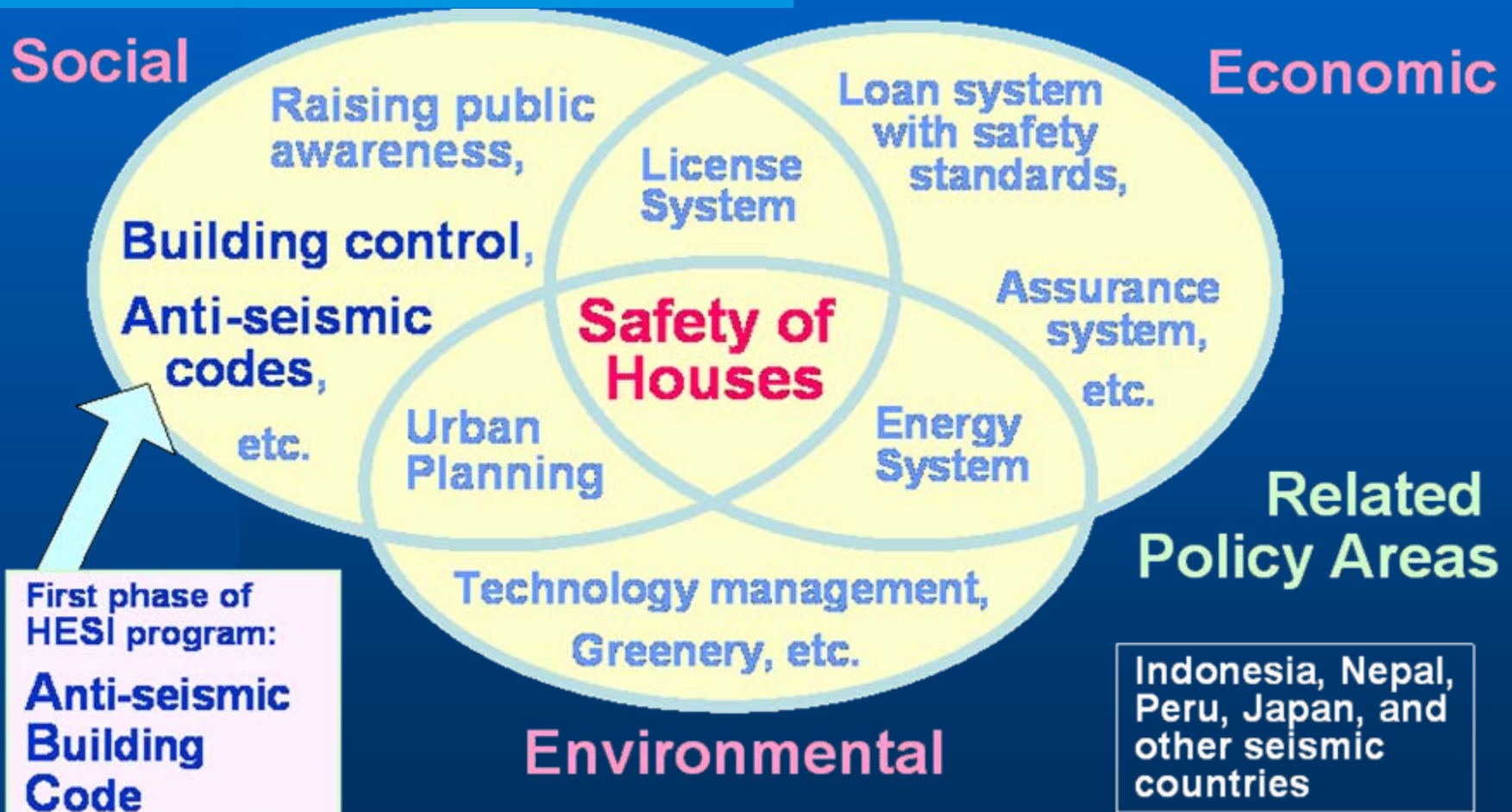


Bal Vikas Secondary School, **Nepal**

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

# Housing Earthquake Safety Initiative

(HESI) “Anti-seismic Building Code Dissemination (ABCD)” project (2006)



Funded by Ministry of Land, Infrastructure and Transport

# Field Survey (North Pakistan Earthquake)



Muzaffarabad, Pakistan, 2006.03



Shake-table Test, Pakistan, 2006.03



# Recent Symposiums and Publications



- 2003 Int'l Workshop on Earthquake Safer World, Kobe**
- 2003 Int'l Workshop on Reconstruction, India**
- 2003 Towards Sustainable Community Recovery, PNY**
- 2003 Sustainability in Grass-Roots Initiatives: CBDM**
- 2003 Guidelines for Earthquake Resistant Design**
- 2003 From Disaster to Community Development, Kobe**
- 2004 Int'l Symposium on Community Legacy, Kobe**
- 2004 Int'l Conf. on Partnership in CBDM in Asia, India**
- 2004 A User's Guide – CBDM Practices in Asia**
- 2004 UNCRD Tapestry / UNCRD Digest**
- 2005 World Conf. on Disaster Reduction (WCDR), Kobe**
- 2005 UNCRD at UN WCDR 2005, Proceedings**



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# UNCRD

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