

# Implications, Relevance and Confluence with IDRiM

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DRH-Consortium IDRiM Pre-Workshop

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# Key Messages

- IDRiM (Integrated Disaster Risk Management) as a entrepreneurial stream, and DRH also as a entrepreneurial stream, how they have come across
- Now expected to mainstream Implementation Science for Disaster Reduction
- From DRH to IDRiM, IDRiM to DRH, so far with Case Station-Field Campus (CASiFiCA)

- DRH as a self-refreshing living archive
- For IDRiM it's a source of "success practice archives", self-revising and self-evolving.
- For IDRiM it's a global common platform for innovative field works
  - For IDRiM it's a place to publish and get mutual credit from it

# IDRiM and DRH, How they come across?

## *IDRiM History*

- **2001 1st IDRiM Forum**

**IIASA, Laxenburg, Austria, 1–4 August 2001**

**Theme: Reducing Socio-Economic  
Vulnerability**

**-Disaster Risk Mitigation**

**-Financial Risk Management**

- 2002 2<sup>nd</sup> IDReM.

**Theme: Megacity Vulnerability and Resilience**

- **Venue: IIASA, Laxenburg, Austria**

**Date: 29–31 July 2002**

- Needs and scope of integrated management;
- Vulnerability and integrated assessment;
- Integrated regional planning for disaster mitigation;
- Vulnerability of urban systems and lifelines, including an international action plan to reduce risks and vulnerability;

- Risk-transfer instruments (insurance, cat bonds, etc.) that link mitigation measures with financial recovery objectives;
- Ex-Ante risk management for governments in risk-prone developing countries;
- Seismic risk assessment and mitigation;
- Flood risk and mitigation;
- Terrorist activities and protecting critical infrastructure;
- Market and government in reducing the risk of terrorist activities;
- Risk perception, communication and governance.
- the Turkish case study

## **2003 3<sup>rd</sup> IDRiM Forum**

**Theme: Coping with Regional Vulnerability**

**Venue: Kyoto International Conference Hall**

**Date: 3-5 July 2003**

- Regional vulnerability (particularly Japanese and Asian case studies )
- Integrated assessment
- **Global climate change and weather-related catastrophic risks**
- Flood risk and mitigation
- The financial management of catastrophic risk

- Man-made disaster risks
- Seismic risk assessment and mitigation
- Participatory planning and communication technology
- Risk perception, communication and governance
- Anticipating to changes under uncertainty

# 2004 4<sup>th</sup> IDReM Forum

**Theme: Integrated Disaster Risk**

**Management- Challenges of  
Implementation**

**Venue: Ravello, Italy**

**Date: 3-7 July 2004**

- a particular emphasis on research the **implementation of equitable and efficient strategies for risk mitigation**, what might be thought of as **"implementation science"**
- Implementing Response Strategies in an Era of Improved Seismic Hazard Assessment;

- The Protection of **Vital Infrastructure: The Case of Health Facilities;**
- **School as the Key Component of Disaster Reduction;**
- Coping with **Floods in Developing and Transition Countries;**
- Coping **with Droughts in Developing Countries;**
- The Mediterranean Cooperation.
- Italian Case Study
- Iranian Case Study

# Between 4<sup>th</sup> and 5<sup>th</sup> IDRiM Forum

## 2005 Jan. WCDR Kobe Conference

- A global blueprint for disaster risk reduction efforts with a ten-year plan, adopted in January 2005 by 168 governments at the World Conference on Disaster Reduction: [Hyogo Framework](#)
- **Implementation Technology Thematic Session by Kameda**
- **Case Station-Field Campus Thematic Session by Okada; NEXUS-IDRiM Formed**

# 2005 5<sup>th</sup> IDRiM Forum

Theme: Integrated Disaster Risk  
Management:

**Innovations in Science and Policy**

Venue: International Academic Exchange  
Center, Beijing Normal University,  
Beijing

Date: 14-18 September 2005

- natural disasters
- **infectious diseases**
- **technological accidents**

- Implementation of Innovative Science and Policy for IDRiM;
- IDRiM Methodology, Models and Tools.
- A special session for young scientists was scheduled on September 17.
- On September 18, a Round Table Discussion on the NEXUS-IDRiM Initiative, which is a network of researchers and practitioners dedicated to implementing IDRiM, was held.

- Post-Kobe rationale for Integrated Disaster Risk Management;
- Importance of Integrated Risk Management in a Complex, Global World;
- Case Studies Demonstrating the Importance of Integrated Disaster Risk Management (Failures and Successes);
- Disaster Risk and Governance

# Conventional disaster plan vs. 21st century integrated disaster planning and management

- Reactive
- Emergency and crisis management
- Countermeasure manual approach
- Predetermined planning (Non-surprise)
- Sectoral countermeasure approach
- Top-down approach
- **More proactive**
- More risk mitigation + preparedness approach
- **More anticipatory/ precautionary approach**
- **More comprehensive** policy-bundle approach
- **More adaptive** management approach
- **More bottom-up & Participatory** approach

# **2006 6<sup>th</sup> IDRiM Forum**

## **Theme: Risks and Challenges for Business Industry**

**Venue:** the Disaster Management  
Coordination Center (AKOM) of  
the Istanbul Metropolitan Municipality  
Istanbul, Turkey

**Date:** August 13-17, 2006

- Vulnerability of business and industry
- Indirect socio-economic losses

- **Public-private partnerships** for risk mitigation
- **Public-private partnerships** for recovery
- **Lessons learned from current projects and practices**
- Setting an enabling environment through good governance
- IDRiM methodology, models, tools, and case studies
- Turkish Case Study
- A special session for young scientists

## **2007 7<sup>th</sup> IDRI Forum**

**Theme: Coping with Disasters:  
Challenges for the 21<sup>st</sup> Century and  
Beyond**

**Venue: Stresa on the Lake Maggiore, Italy**

**Date: September 19-21, 2007**

- Global Change and Vulnerability
  - Climate and extreme weather, land use, urbanization
  - Globalization and knowledge transfer

- Integrated disaster risk management and **sustainable human development**
- Long-term local and global disaster impacts
  - Physical, environmental, social
- Disaster risk reduction
  - Funding, capacity building, measuring performance
- **Industrial risk management**
  - Risk assessment and management, **Natechs**
- **Disaster safety nets**
  - Informal (kinship, livelihood diversification), **Microinsurance**
- **The science of implementation**
- **Policy, Implementation, and Legislation**

- **Optional Workshops**

- [Implementation Science, CASiFiCA and DRH](#)

- [Young Scientists Session](#)

- DFID Workshop

- [NATECH Risk Assessment and Management](#)

- Cost-Benefit Analysis Workshop

Date: 18 September, 2007

Organizers: [ProVention](#), [IIASA](#)

# **2008 8<sup>th</sup> IDRiM Forum**

**Theme:** Integration and Multi-Disciplinarity

**Venue:** Institute for the Protections and Security of the Citizen (IPSC) of the European Commission's Joint Research Centre, Italy

**Date:** 1 September 2008

- A disaster reduction hyperbase,
- Case stations for field science (CASiFiCA),
- Implementation of disaster management policy,
- Post disaster governance in the aftermath of the Sichuan earthquake,
- Adaptation to extreme events and climate change, and
- Integrated risk modeling and multi-risk mapping.

2009 (This year's) 9<sup>th</sup> IDReM Forum

Theme: Scientific **Challenges in  
Implementing Integrated Disaster Risk  
Management (IDReM)** in a Changing World

Venue: Kyoto University, Kyoto, Japan

Date: 12-16 Oct. 2009

Day 1 (12 Oct.)

- **DRH Consortium International Workshop  
toward Implementation Science for Disaster  
Risk Reduction**

Day 2 13 Oct.

13:00~14:30

- **SS6-(1) : ASEAN-DRH / User-Provider Communication**

Organizer: EDM-NIED

Graduate School of Global Environmental Studies, Kyoto University, JSPS, MEXT, ASEAN Secretariat

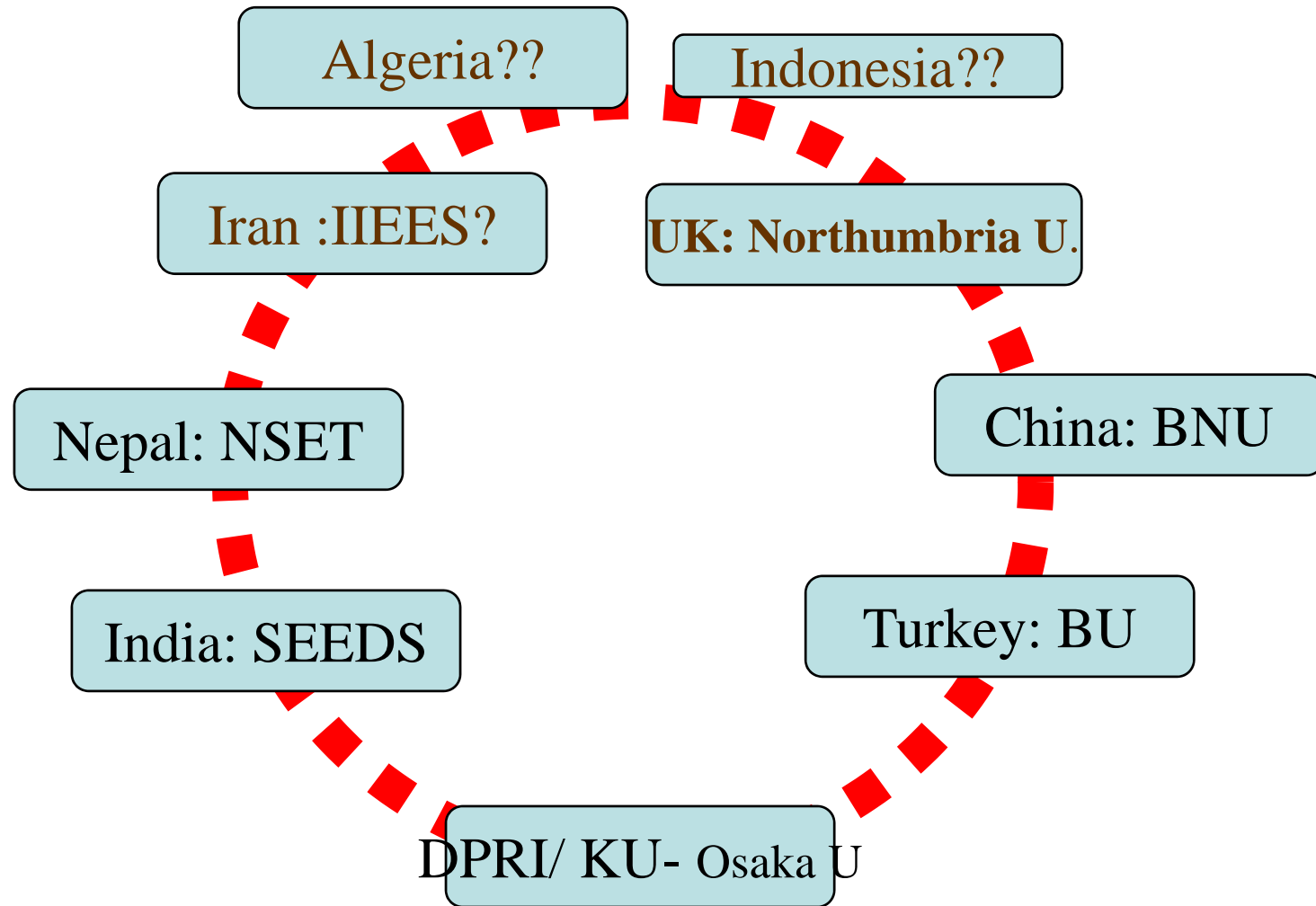
Chair: H. KAMEDA, S. RAJIB

# Case Station-Field Campus (CASiFiCA) Contribution to DRH as Content Source

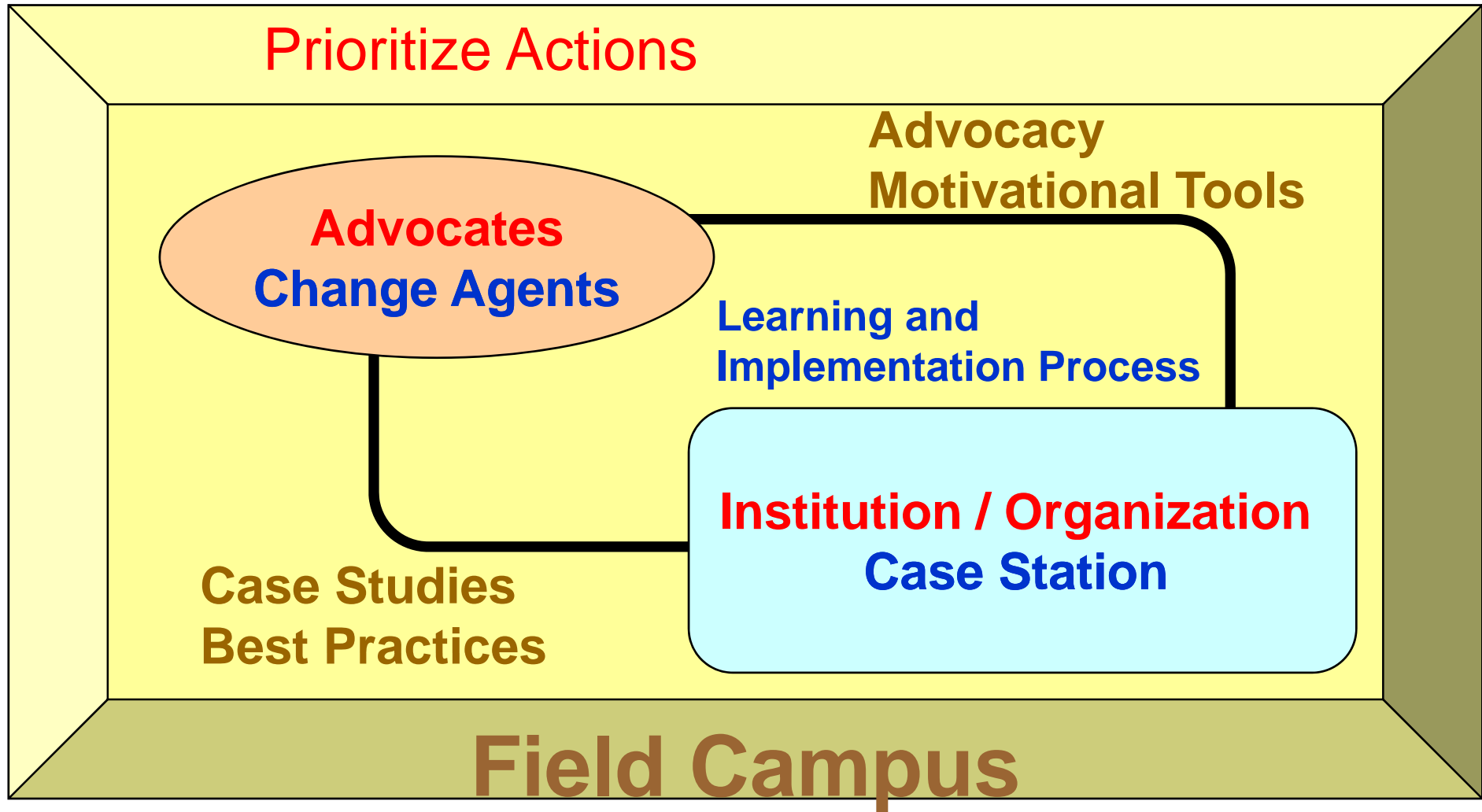
# Field Research and Education as the scheme of producing process technology

- Success (viable) model (policy/practice)  
as hypothesized
- Continuous Monitoring over time
- Cross Monitoring (Cross-place  
comparison)
- Stakeholders involved
- Students educated

# CASiFiCA Framework



# Case Station/ Field Campus



# Characteristics

- Flexibility and openness
- However, with some visible outputs
- Small but tangible output
- Graduate students exchange programs
- Sharing of experiences
- Publications: special volume of journals/  
refereed journal papers/ reports/ brochures
- Theme based groups/ workshops/ forum/
- Policy makers viewpoint

Just to illustrate a few of country-wise  
CASiFiCA activities

# India CASiFiCA



**Title:** *Community Based Disaster Risk Reduction in Vulnerable Coastal Regions*

## Case Station

**SEEDS (Interim);** to be transferred to local university in Orissa.  
**Research Function:** Repository of CBDM case studies on coastal shelter risks, climate change, urban risk, and risk to school children.

## Field Campus

**SEEDS.** Field areas to cover Bhubaneswar, Puri Orissa and their hinterland and Mumbai.

## Objective

- *To build resilience in vulnerable coastal communities for facing natural hazards*
- *To research and document community risks and practices for risk reduction*
- *To develop methodologies for community based risk reduction, and test them in the field*
- *To gather and analyses feedback on the field tests based on observations, focused consultations and research.*

### Aspirations Vs Problems...

<ul style="list-style-type: none"> <li>• Neglected urban growth</li> <li>• Archaic Master Plans</li> <li>• Sick ULBs</li> <li>• Widening gap in urban services</li> <li>• Rapid growth of slums</li> </ul>	<ul style="list-style-type: none"> <li>• Institutional absentia</li> <li>• Access to safe water, sanitation is very critical</li> <li>• Water logging, poor drainage</li> <li>• Air, water, noise pollution</li> <li>• Poor roads, traffic chaos</li> </ul>
<ul style="list-style-type: none"> <li>• Rural focus : ignored urban risk</li> <li>• Increasing health hazards</li> <li>• 'urban heat island' effect</li> <li>• Flash flood, water scarcity</li> <li>• Fire and chemical hazards</li> <li>• Earthquake, tsunami, cyclone</li> </ul>	

Kyoto University Graduate School of Global Environmental Studies

*by Akhikesh Surjan  
 Kyoto-u Doctor Students*

### Areas of Intervention

**Public Participation**

- NGOs and CBOs
- Enhanced role of NGOs
- Formalizing the ragpickers and Recyclers

**Regulatory Mechanisms/ Policy Framework**

- Puri Cleanliness And Sanitation Byelaws 2006
- C&D and Desilting Waste Management and Handling Rules 2006

**Finance**

- PPP model for Collection and Transportation
- PPP model for Treatment and Disposal
- PPP model for construction of Refuse Transfer stations

Kyoto University Graduate School of Global Environmental Studies

# Nepal CASiFiCA



***Title: Emphasizing “Implementation Aspects” in Disaster Risk Reduction Education***

## ***Case Station***

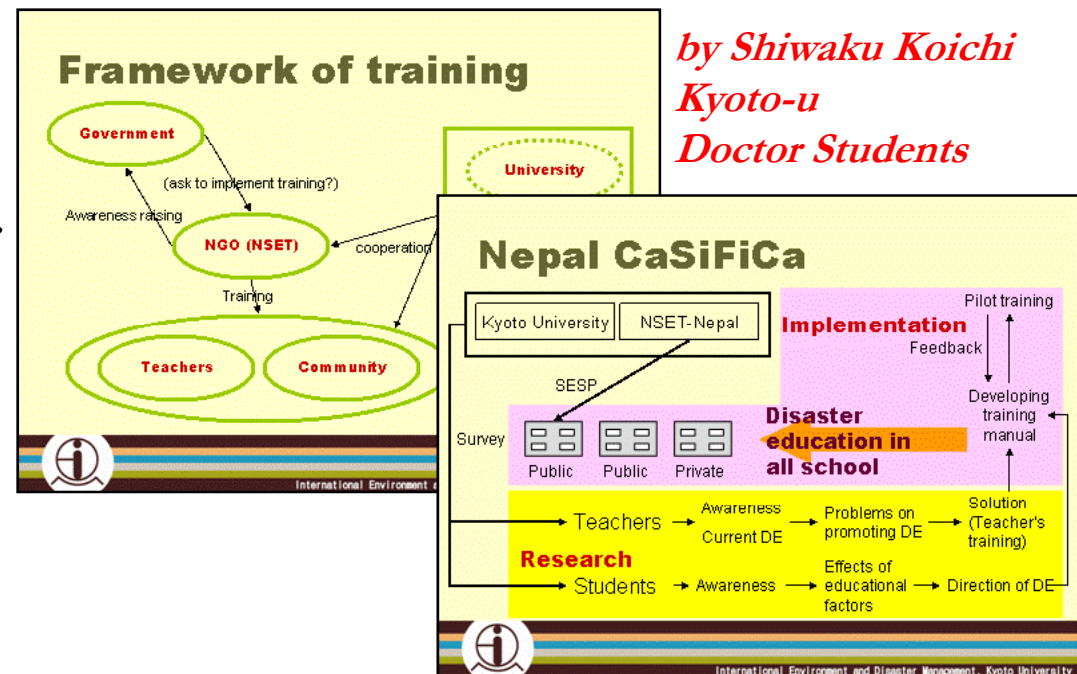
***National Society for Earthquake Technology – Nepal (NSET). This is an interim arrangement, subsequently, the role of CASiFiCA Case Station in Nepal will be performed by an academic institution. The geographic coverage will ultimately be the entire territory of Nepal.***

## ***Field Campus***

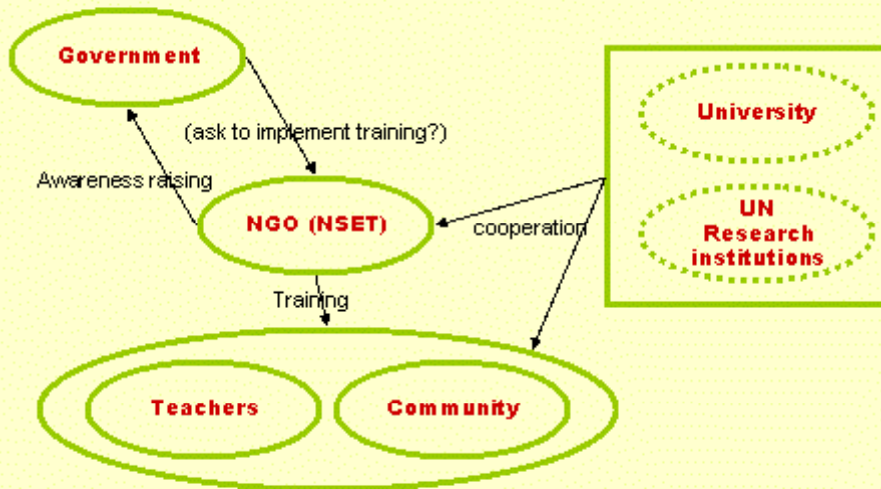
***National Society for Earthquake Technology – Nepal (NSET)***

## ***Objective***

- ***Help institutionalize disaster risk education based on national/regional necessities and demands on academic education and researches.***
- ***Provide academic assistance to the initiatives on disaster risk management by government, non-government or financial institutions and private sector.***



# Framework of training

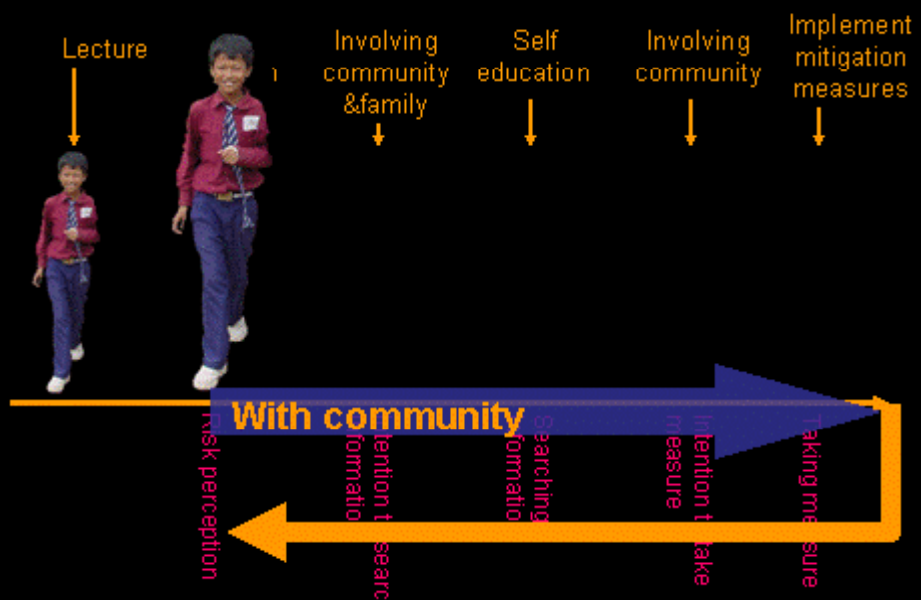


International Environment and Disaster Management, Kyoto University

*Product by Koichi Shiwaku*



## Future DE in school





# China CASiFiCA *Title: Integrated Disaster Risk Management Paradigm in China*



## Objective

- *Constructing Integrated Disaster Risk Management Paradigm in Dongting Lake region and Xiang River watershed of China;*
- *Getting firsthand material to build disaster risk database and platform for further analysis and decision-making;*
- *Estimating the flood risks and assessing the flood vulnerability and resilience, and identifying (further) mitigation and loss-sharing options that are economically, socially and politically acce*
- *Cultivating young professionals' interest and ability, especially their Fieldwork ability and problem solving ability, as well as improving their understanding of risk process*
- *Providing an atmosphere and platform for interdisciplinary integrative research and international academic communication in the Integrated*

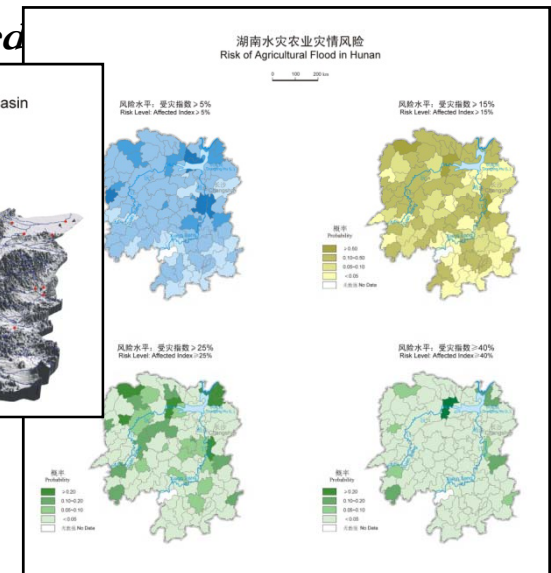
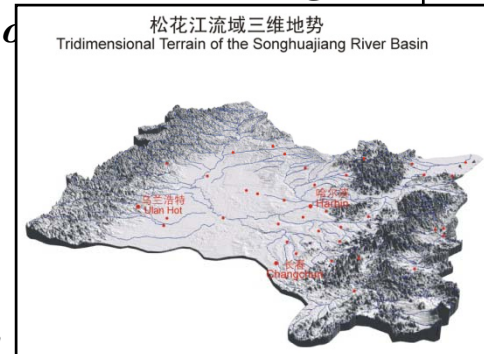
## Case Station

*Institute of Disaster and Public Security, College of Resources Science & Technology, Beijing Normal University, for integrated regional disaster reduction research*

## Field Campus

*Dongting Lake region and Xiang River watershed in Hunan Province of China, with field work in Changsha, Changde, Hengyang, and Quyuan Farm*

*Research of*



*by Shi Peijun*

# Japan Chukyo CASiFiCA



**Title:** *Diagnosis for disaster prevention capability in communities: to improve social preparedness for natural disasters*

## **Case Station**

*Disaster Prevention Research Institute Kyoto University, Osaka University Center for the study of communication-Design (CSCD), Nagoya Institute of Technology, Gifu University, Gunma University*

## **Field Campus**

*Tokai Area (Aichi/Mie prefecture), Rescue Stock Yard*

## **Objective**

- *the development of risk communication system for the flood risk, and the development of organization/process model to actualize both the risk communication and the community-based risk management*
- *the development of the methodology to diagnose the disaster prevention capability in communities*
- *the design for education program to improve the ability to correspond to a disaster risk*
- *the development for the system which evaluate the ability to respond to the flood risk in communities*
- *the design for education program to improve the ability to respond to flood risk*



*by Rescue Stock Yard*

# Japan Chuuetsu CASiFiCA



**Title:** *Research, Practice, and Education for Revitalization-Design: Problem solving in the less-populated mountainous areas*

## **Case Station**

*Center for the Study of Communication-Design, Osaka University, Disaster Prevention Research Institute, Kyoto University and Nagaoka University of Technology*

## **Field Campus**

*Chuuetsu, Niigata; Tao-mi, Taiwan; Katmandu, Nepal  
Counterpart: Chuuetsu Fukkou Network (Japan), Tao-mi Community Development Association (Taiwan), NSET (Nepal)*

## **Objective**

- *Economical dynamics in revitalization will be surveyed in empirical ways.*
  - *Life events during revitalization will be monitored to examine the possible obstacles against revitalization, and analyses and evaluation of the processes will be issued.*
  - *Political issues for the revitalization will be analyzed.*
- Revitalization processes among villages in Chuuetsu will be compared.*
- *Revitalization processes between Chuustesu and Taiwan will be compared.*
  - *Ways of transferring lessons of Chuuetsu and Taiwan will be discussed with counterparts in Nepal.*



*by Tomohide Atsumi*

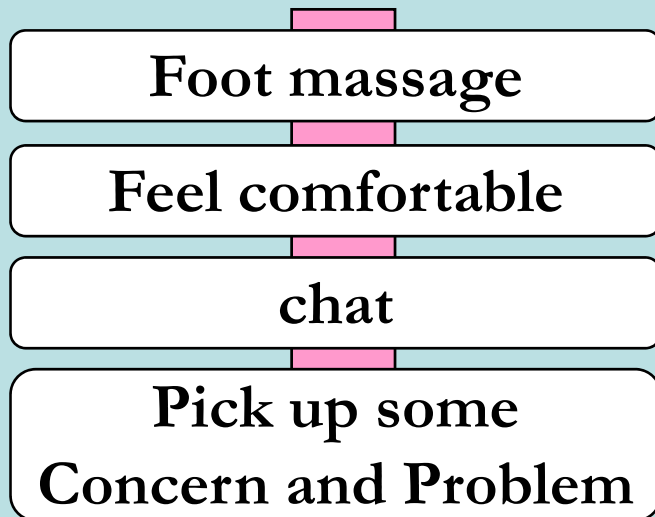
## Japan Chuuetsu CASiFiCA

Tool: foot  
massage in  
evacuation  
place



*Photo by Atsumi*

Model for communication  
at after disaster



Good Volunteer coordinate

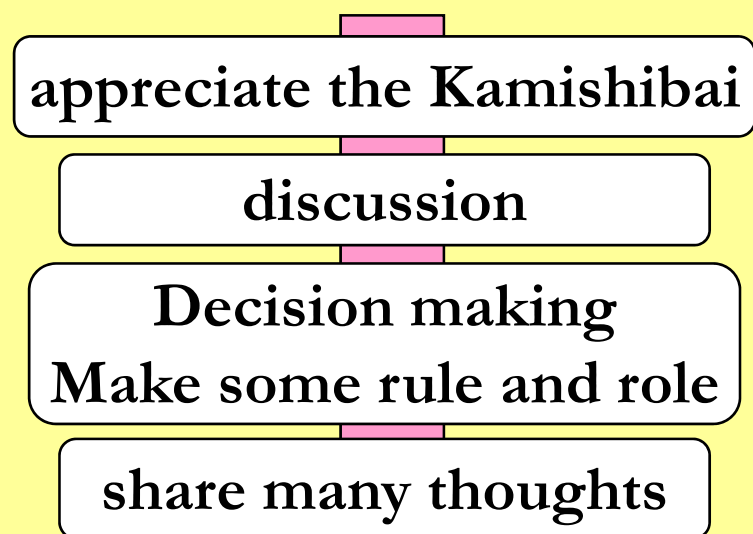
## Japan Chukyo CASiFiCA

Tool: digital  
disaster  
*Kamishibai*



*by Rescue Stock Yard*

Model for communication  
as usual



Formation of good  
community

# Work shop using digital disaster Kamishibai April 2007



Appreciate the Kamishibai



Discussion



Share many thoughts



Decision making/Make some rule and role

# Join us in CASiFiCA

- For more information visit
- Contact  
Norio OKADA at [okada@drs.dpri.kyoto-u.ac.jp](mailto:okada@drs.dpri.kyoto-u.ac.jp)