

**THE 7th SCIENCE COUNCIL OF ASIA (SCA)
CONFERENCE, Okinawa, 14-16 June 2007
Workshop C**

**“Construction of Secure and Safe Society
against Global Changes of Natural Disasters”**

Proposal of Establishing the Disaster Preparedness ISO

Kuniyoshi TAKEUCHI

International Center for Water Hazard and Risk
Management (ICHARM)

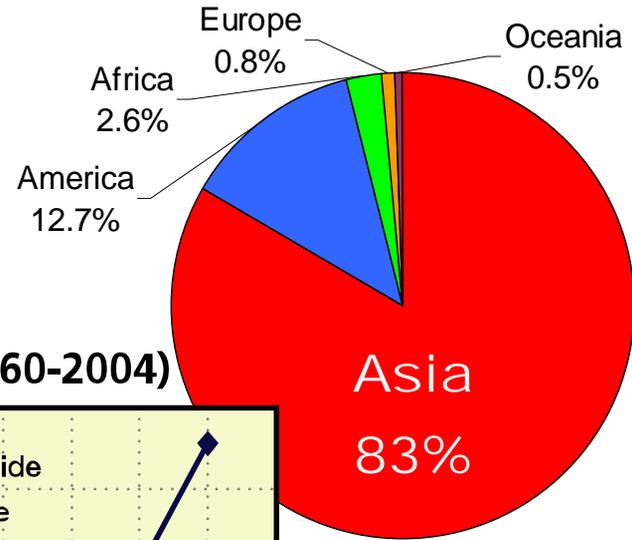
under the auspices of UNESCO

Tsukuba, Japan

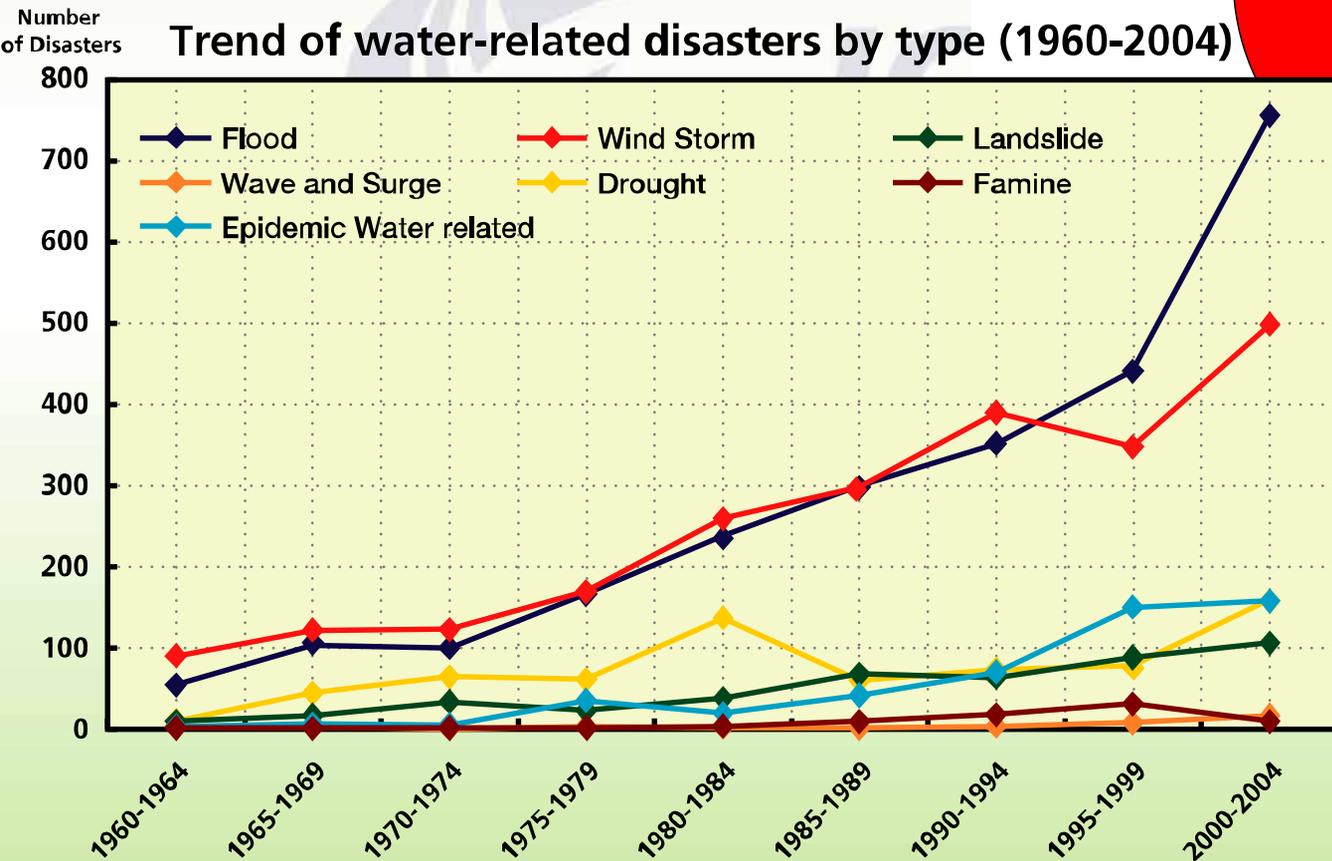


Disaster Risk
= Natural Hazards
x Societal Vulnerability
/ Coping Capacity

Percentage of Killed People by Water-related Disasters (1980-2006)



Trend of water-related disasters by type (1960-2004)



Vulnerability by Development and Life Style



Fukuoka Flood in 1999

(Source : MLIT)

Vulnerability by Poverty and Governance



Jakarta, May 2007 by K. Takeuchi

People are not well prepared

- What to do before, during and after hazards?
- People/communities know hazards are coming and like to do preparation. But they either do not know what to do properly or have not committed to do so.
- We need some instructions and mutual encouragement for preparedness to save large human and economic losses.

The Hyogo Framework for Action Priorities for Action

1. Ensure that disaster risk reduction is a national and a local priority with a **strong institutional basis** for implementation.
2. Identify, assess and monitor disaster risks and enhance **early warning**.
3. Use knowledge, innovation and **education** to build a culture of safety and resilience at all levels.
4. **Reduce the underlying risk factors.**
5. Strengthen **disaster preparedness** for effective response at all levels.

Strong institutional basis for disaster preparedness

It is necessary to establish a **common mechanism by which a community is encouraged, directed and learn each other to take a rational procedure to make themselves prepared** for warning, information dissemination, evacuation, refugee sheltering, refugee support, recovery, receiving official and volunteer helps, etc. etc.

Disaster Preparedness ISO

A set of International Standards to guide communities to prepare for their anticipated hazards to minimize their negative impacts on people, properties and activities and lead quick recovery after they occur.

Such standards should not be like a building code or thresholds of infrastructure levels or facilities/equipments to be installed but rather a set of institutional procedure and daily exercises for communities to commit to follow.

Design of Disaster Preparedness ISO

Such standard procedure may be designed under the following principles:

- (1) Designed according to the **local reality** and manageable within the local context and administrative framework
- (2) Decided, implemented, checked and revised by the community authorities regularly and have a built-in mechanism for continuous improvement in a **positive spiral based on plan-do-check-action cycle**.
- (3) Linked with and **consistent with the national** and regional emergency management **scheme**.
- (4) **Supported by the best practicable disaster forecasting system** of the nation/region.
- (5) **Internally reviewed** and checked regularly by the responsible committee chaired by the city mayor/provincial governor.
- (6) **Externally reviewed** regularly by the competent experts group.

Steps to Be Taken for Designing Local Disaster Preparedness ISO

Such procedure may be designed by the following steps:

- (1) Community defense **committee**
- (2) **Goal** of the locality
- (3) Annual or biannual objective of **improvement action**
- (4) Administrative, technical and financial **resources**
- (5) **Role share and procedure** centered at the local disaster management office
- (6) **Exercises** and training
- (6) **Reviewed** regularly and licensed/**re-licensed**

Societal paradigm shift is necessary to adapt for higher risk environment

- Climate change is a matter of the present and not of the future.
- CO₂ reduction is a must but not a cure.
- Society is becoming increasingly vulnerable to all natural disasters.
- **Adaptation to the new higher risk environment by Disaster Risk Reduction is the only option available for us.**

**Let us paradigm-shift for
better prepared disaster
conscious society!**



Thank you