



**International Centre on  
Water Hazard and Risk Management  
& its new training course on  
“Flood Hazard Mapping”**

**Public Works Research Institute (PWRI)**

**Tsukuba, Japan**

**International Symposium on Living with Risk**

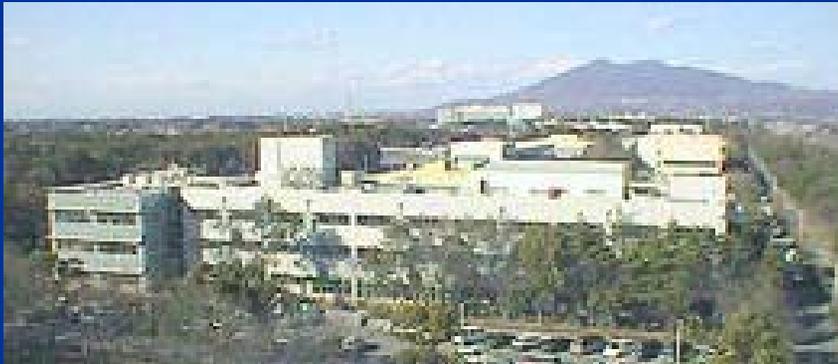
**September 22, 2004**

**Seoul, KOREA**



# Public Works Research Institute (PWRI)

- **History**
  - 1927: Established
  - 1979: Relocated to Tsukuba
  - 2001: Re-organized into two institutes (PWRI and NILIM)
- **Staff : 219 (including 151 researchers)**
- **Land area: about 560,000m<sup>2</sup>**
- **Number of research topics: 200**
- **Budget (FY 2004): 6 bil. JPY (55 mil. US\$)**

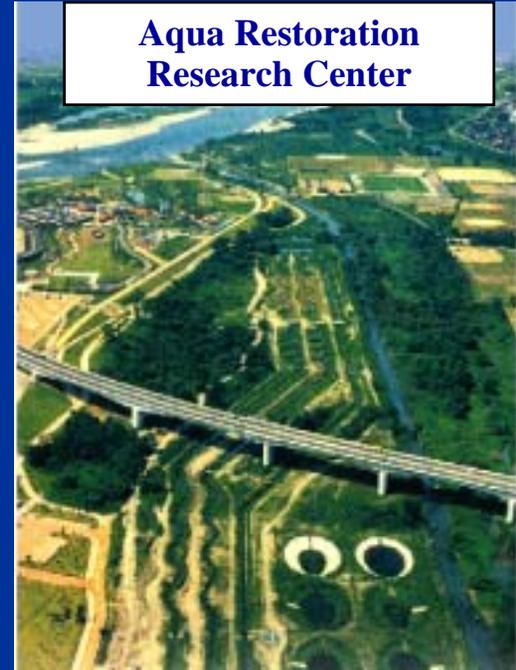




# PWRI's activities

- **Numerous water-related research & development projects** such as hydrologic & hydraulic research, dam engineering, Sabo and sediment control, and river restoration among others.
- **Joint research, workshops & personnel exchanges** through arrangements with:
  - Korea institutes (KICT & KOWACO/KIWE)
  - China Institute of Water Resources and Hydropower Research,
  - Mekong River Commission, among others...

Aqua Restoration  
Research Center



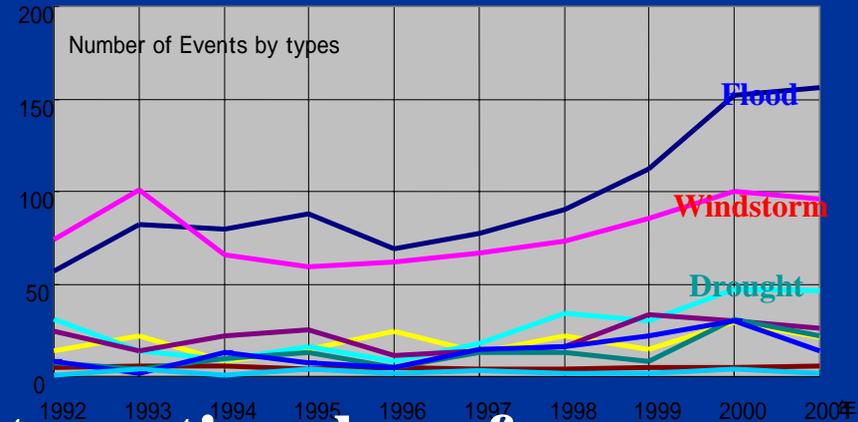
Large-Scale Laboratories  
(Dam hydraulic)





# Water-related disasters as a major challenge

**The number of water related disasters is still increasing.**



As emphasized at numerous international conferences such as WSSD (2002) and WWF3 (2003), it is needed to improve risk management measures & technologies and to promote capacity building on water-related disasters for poverty alleviation and sustainable development.

**PWRI plans to contribute to this challenging area by establishing a new centre in this field.**



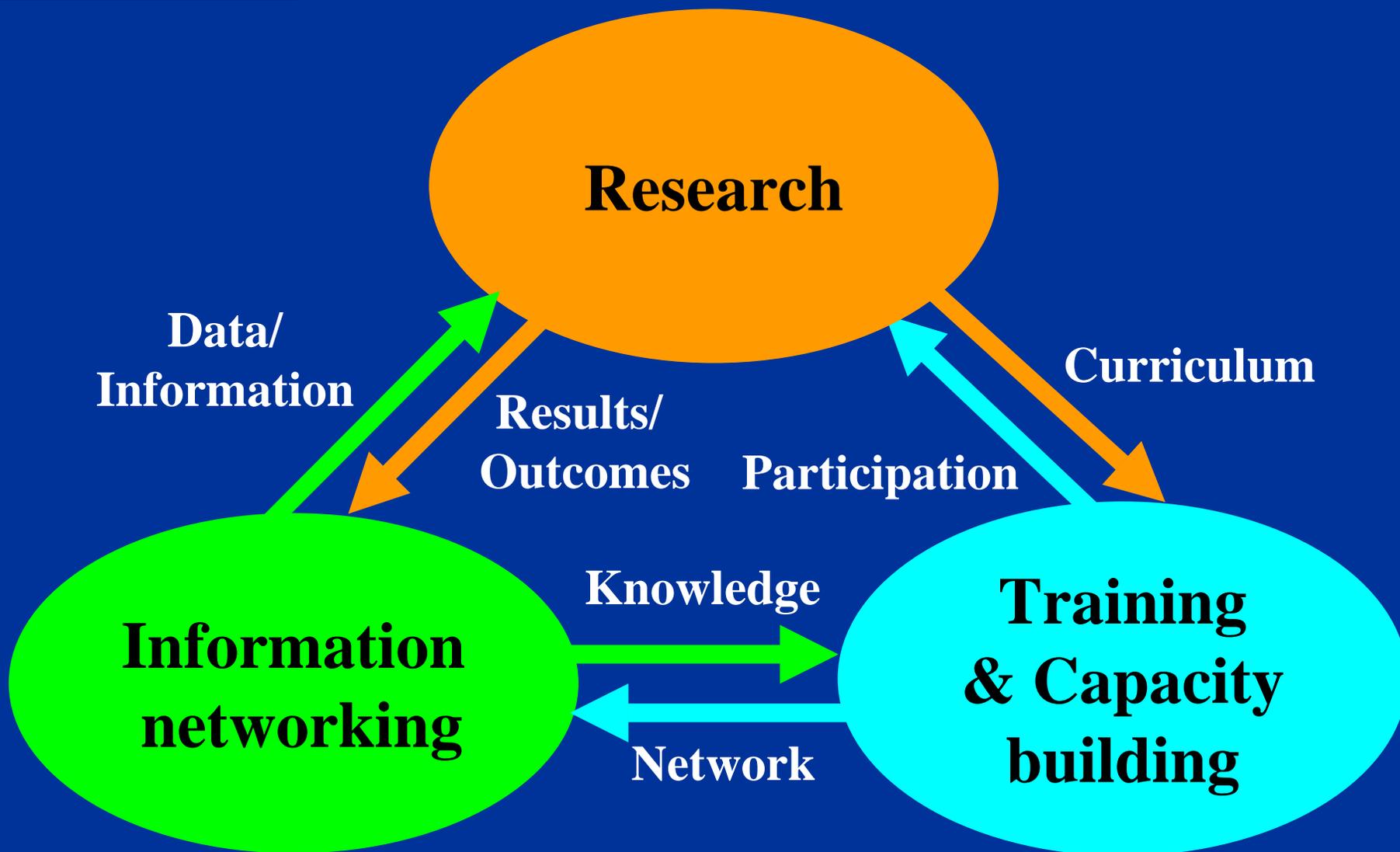
# Framework of the Centre

- Proposed to establish within PWRI as a global center under the auspices of UNESCO in autumn 2005
- Mission theme: **Water hazard and risk management**
- Activities:
  - Research, Training, and Information networking**
- Partnership with UNESCO-IHP Networks, UN agencies & other key organizations of the world.





# Pillar Activities





# Research Activities

**Scientific & academic research in the field of water-related hazards & its risk management;**

- **Contributing to major global initiatives (such as WWAP and UNESCO/WMO joint IFI/P)**
- **Developing hydraulic / hydrological prediction, observation, modeling and analysis; for example development of Global Flood Alert System (GFAS)**
- **Promoting risk assessment and risk management technologies for water-related hazards including the impacts of climate change**

• • • and others



# Information Networking

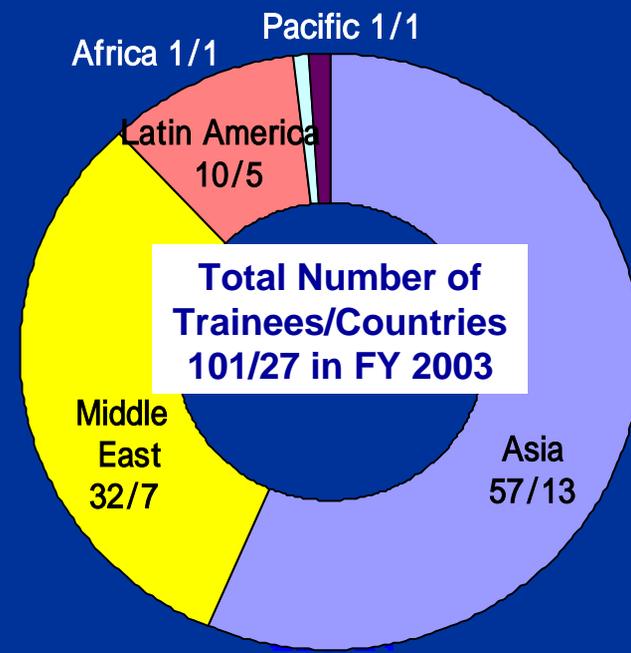
- **Creating knowledge base & information network by:**
  - Collecting, compiling & providing useful information and practices
  - Contacting UN systems & any other int'l resource organizations collaborating with IHP and WWAP
  - Interacting with existing networks (IFNet, JWF, etc.)
- **Information networking will generate synergies to research & training to enhance integration/coordination**
  - Research outcomes will be widely disseminated, and feedbacks will be sent back to research
  - Trainees will develop links in their own regions, and local needs for training will be recognized



# Training Activities

## - PWRI's experiences and plans -

- Long experiences for over 35 years, including **River & dam engineering, Sabo engineering** and others.
- Starting a new JICA training course on **“Flood Hazard Mapping”** & improving the existing courses in response to the mission of the Centre
- Long- & short-term training for experts/ practitioners (students & professionals exchange, Internship)





# New training course on Flood Hazard Mapping (1)

## Objective

- Acquire professional knowledge necessary to produce flood hazard maps
- Enhance understanding of its effectiveness
- Understand the way to apply in his/her own country

## Framework

- Regionally focused on **East & Southeast Asia** for 5 yrs (JFY 2004-2008) to be conducted by JICA and PWRI
- 16 trainees from 8 countries each year
- Targeting **technical managers or engineers** engaged in river/ flood management in the public sector (experienced more than 5 years and aged under 40 )



# New training course on Flood Hazard Mapping (2)

## Planning

- Date: January 26 – February 18, 2005 (4 weeks)
- Place: Tsukuba, Japan (PWRI / JICA TSUKUBA)
- Curriculum: Lectures, Field study and Site visits
- Lecturers: Professionals from MLIT, NILIM, IDI...

## Procedure

- General Information (GI) already sent to the JICA regional offices, and application will start soon.
- Deadline of nomination to JICA or Embassy of Japan by **November 22, 2004** (N.F & Flood report required)

**We are welcoming active application!**



# Future milestones of preparatory works

- Now communicating with UNESCO and developing pilot projects, as well as actively participating in the international discussions :
  - Nov 2004: IHP in Southeast Asia (Adelaide, AUSTRALIA)
  - Dec 2004: IWRM International Conf. (Tokyo, JAPAN) & Int'l Conf. on Water & Disasters (London, CANADA)
  - Jan 2005: World Conf. on Disaster Reduction (Kobe, JAPAN)
  - Apr 2005: UN CSD-13 (New York, USA) & UNESCO Executive Board (Paris, FRANCE)
  - Autumn 2005: UNESCO 33<sup>rd</sup> General Conference

**Thank you very much for your attention.**

**<http://www.unesco.pwri.go.jp>**