Second UN Special Thematic Session on Water and Disasters

Science and Technology to Advance DRR on Water

*moderated by*

Science Council of Japan (SCJ) and

International Centre for Water Hazard and Risk Management (ICHARM)
Our Present Status

- Human factors such as population growth, poverty, urbanization and changes in land use are aggravating negative consequences of water hazards which become more intensive and frequent by climate change. The critical losses happen in both developed and developing countries.

- The trans-boundary river matters are critically challengeable. In addition, the impact of an event immediately crosses borders and can lead to cascading consequences in this inter-connected world.

- Although we have increased scientific knowledge and technology, we have not been successful in demonstrating concrete methodologies for flood and drought risk reduction.
Concerted Action is Required

- The world knows that countries cannot act in isolation to address these risks.
Sustainable Development

Management of Disaster & Environmental Risks
- Preventing New Risk
- Reducing Current Risk
- Building Resilience

What and How Can Science and Technology Contribute to the DRR?

Human Security Well-being

Development

Associated Risk to Development

Human-induced Issues
- Population: Increase, Decrease, Aging
- Economy: Poverty, Inequity, Globalization
- Destabilized Governance
- Pollution
- Land Use: Deforestation, Desertification
- Disorganized Urbanization

Security → Damage
- Water
- Food
- Health
- Energy
- Biodiversity
- Climate Change
- Disaster
- Hazard

Human Security Well-being
Key Questions

1. How can we activate regional and inter-agency cooperation for flood and drought risk reduction? We could try to identify the barriers and ways for getting over them.

2. How can we realize the SDGs through the way for disaster risk reduction? We would identify model cases and summarize our concept.
Panelists

1. National and Regional Flood and Drought Issues
   • Dr. Carlos Nobre, President of CAPES, Agency for Graduate and Post-Graduate Education of Brazil
   • Dr. Wadid Erian, Senior Advisor, League of Arab States

2. Contribution by the Earth Observation Communities
   • Mr. Kiyoshi Higuchi, Senior Technical Advisor, Japan Aerospace Exploration Agency (JAXA) and President, International Astronautical Federation (IAF)

3. Activating International Initiatives
   • Dr. Johannes Cullmann, Director, Climate and Water Department, WMO
   • Dr. Blanca Jimenez-Cisneros, Director, Division of Water Sciences, Secretary of the International Hydrological Programme, UNESCO