

**WORLD SCIENCE FORUM BUDAPEST**

**Science and Technology  
for  
Disaster Risk Reduction**

Organized by  
Science Council of Japan and the Royal Society  
with advice from UNESCO SC/EES/EGR

# OUR PRESENT STATUS

- **Human factors** such as globalization, population growth, poverty, urbanization and changes in land use are aggravating negative consequences of natural hazards. The losses are increasing in both developed and developing countries.
- In this **inter-connected world**, the impact of an event immediately crosses borders and can lead to cascading consequences, even to geographically remote areas.
- Although we have increased scientific knowledge and technology, **we have not been successful** in demonstrating concrete methodologies for disaster risk reduction and in convincing those who are not familiar with disaster risk.
- In pursuit of human security, we need to consolidate **sustainable development, disaster risk reduction and climate change mitigation and adaptation.**

# Key Questions

1. How can we **promote inter-disciplinary** research on disaster risk reduction?  
We would 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.

# PRESENTATIONS

1. Professor Takashi ONISHI, President, Science Council of Japan and President, Toyohashi University of Technology: *“The Contribution of Science and Technology to Disaster Risk Reduction -What should we learn the past experiences?”*
2. Professor Hugo ROMERO, Department of Geography, University of Chili: *“Disaster Risk Reduction and Challenges for Internationally Applied Research in Latin America”*
3. Professor Paul Bates, University of Bristol and Royal Society Working Group Member: *“End-to-end scientific support for Disaster Risk Reduction”*
4. Professor Susan L. Cutter, Department of Geography, University of South Carolina: *“The Role of Integrated Science for Disaster Risk Management Policy and Practice”*

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Sustainable  
Development

Management of Disaster & Environmental Risks

Preventing  
New Risk

Reducing  
Current Risk

Building  
Resilience

**Science and Technology**

Human  
Security

Development

Inherent 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

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