A Report for

Tokyo Conference on International Study for Disaster Risk Reduction and Resilience-Towards a new science and technology to consolidate disaster risk reduction and sustainable development

> By Orgnizing Committee Takashi ONISHI Chirman, Orgnizing Committee President, Science Council of Japan

Panelists of High Level Panel

Mr. Rolf Alter, Director, Public Governance and Territorial Development, OECD / Member, Global Agenda Council of the World Economic Forum

Mr. Kiyoshi Higuchi, Senior Vice President, JAXA

Ms. Sari Soderstrom, Director for Strategy and Operations of the Global Practice for Social, Urban, Rural and Resilience, the World Bank

Prof. David Johnston, Director of the Joint Centre for Disaster Research, Massey University

Mr. Shigeru Kiyama, Vice President, JICA

Mr. Jerry Lengoasa, Deputy Secretary General, WMO

Dr. Bindu N. Lohani, Vice President, ADB

Dr. Anisul Islam Mahmud, MP Honorable Minister of Water Resources, Bangladesh

Ms. Flavia Schlegel, Assistant Director-General for the Natural Sciences, UNESCO

Ms. Vivi Stavrou, Senior Executive Manager, ISSC

A Country of Disasters, Japan

Hanshin-Awaji Great Earthquake, January 17, 1995. 6,400 persons lost. 20th anniversary, this year.

Great East Japan Earthquake, March 11, 2011. 18,000 persons lost or missing. 4th anniversary, this year.

Typhoons, Local Rainfalls • •

Thank you for your disasters, and we have to convey our lessons drown from them to the world people, to reduce damages from natural hazards.

What should we do?

Policy-makers and practitioners are requested to be fully aware of the latest scientific knowledge on disasters, and be capable of utilizing those scientific findings.

We should empower national platforms as focal fora to incorporate science and technology into real practice.

■ National and local governments should improve their preparedness for better response and better recovery of households and communities.

Disaster Reduction, Sustainable Development, and Future Earth

First of all, it is highly likely that the global loss by natural disasters increases in the future, with the economic loss predicted to rise to US\$ 20 billion per year by 2030.

Considering that it is vital for the sustainable development to take early action in recognition of disaster risks and build secure, healthy, wealthy and resilient nations and communities, we seek the possibilities to collaborate with the "Future Earth" in the field of earth environmental sciences, and with the Group on Earth Observations (GEO).

Then, we should consolidate cooperatively a concept to contribute to the SDGs goal-setting for disaster reduction.

Disaster Preventive Measures, showing Best Practices

Secondly, to reduce disaster risks, it is necessary to implement disaster preventive measures based on scientific findings at regional, national, local, community levels and even at residential neighborhoods.

However, real practices at any of these levels are below our expectations.

We will demonstrate several tested "best practices" of disaster reduction that are based on scientific findings and simultaneously organize discussions with participants from all relevant stakeholder groups, which is called trans-disciplinary study approach.

Multi-hazards Approach, Indicators to Measure the Progress

Thirdly, we have learned from the recovery processes after the GEJE that it is essential to take a comprehensive multi-hazards approach in order to implement effective and efficient disaster preventive measures in our society.

We would like to identify better ways of scientific collaboration for avoiding hazards being converted to disaster risks, and for upgrading disaster risk awareness to decision-making & implementation process.

We would like to propose concrete initiatives to support such processes and discuss our directions for the scientific community in this regard.

■ We will also discuss common indicators to measure our progress based on science and to drive HFA2 forward.

Expected Results

Close coordination should be established between sustainable development and disaster risk reduction at all aspects of policy-making, planning and programming of infrastructure and social systems, human resources mobilization,

Creation of structures and mechanisms to implement disaster risk reduction are necessary at all levels of society, and

Incubating innovative science and technology would guide us in all phases of disaster management cycle.



Session Constitution

Two reports, by

•Dr. Anisul Islam Mahmud from government side,

•Dr. Bindu N. Lohani from donor side, on their practices to strengthen the DRR activities.

Then the panelists' comments on the following points.

- What are constraints to apply appropriate science and technology to DRR activities
- How can we overcome those constraints to build resilient society.

Finally, discussions over two things:

First, how we can support national platforms to practice evidence-based disaster risk reduction.

Second, how we can mobilize existing networks of scientific and research institutions at national, regional and international levels.