



Tokyo Statement

-Towards a new science and technology to consolidate disaster risk reduction and sustainable development-

1. Our assessment of the 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 disaster risk reduction and sustainable development.

2. Our key directions for addressing problems through solidarity towards building resilience

- Policy-makers and practitioners should be fully aware of the latest scientific knowledge on disasters, and be capable of utilizing those scientific findings.
- National platforms should be empowered as focal fora to incorporate science and technology into real practice.
- Science should play an important role in disaster risk reduction by developing collaborative frameworks with Earth environmental sciences and global Earth observations, thus promoting inter- and trans-disciplinary approaches for human well-being.
- National and local governments should improve their preparedness for better response and better recovery of households and communities.

3. Our findings and recommendation

- We need to adopt a common methodology on data collection and economic analysis of disasters which can be practiced by national and local platforms to realize evidence-based policy making on disaster risk reduction to be practiced globally.
- We need to enhance numerical pre-assessments of damage by various hazards based on inter-disciplinary knowledge to formulate preventive policies and strategies
- We need to fully share these valuable “best practices” of disaster risk reduction that are based on scientific findings.

4. Our proposals for concrete initiatives to be taken in cooperation with national and international stakeholders

- Governments need to empower national platforms so that they can practice evidence-based disaster risk reduction for sustainable development
- The science community needs to enhance forecasting and visualization capabilities of new risks and their potential social impacts in order to prevent further disasters due to intensification of hazards.
- The disaster management community and the Earth observation community need to collaboratively enhance their capability to monitor existing risks and their social impacts and to mitigate disasters due to augmentation of vulnerabilities.
- Science communities on disaster risk reduction, Earth environment and health need to bring practitioners and researchers together in collaborative efforts to improve disaster resilience.
- The international community needs to set up a process of encouraging existing and future programs and initiatives to create research networks and practices for promoting evidence-based disaster risk reduction for sustainable development.

To realize our proposals, we discussed the Tokyo Action Agenda as attached.



Tokyo Action Agenda (draft)

- (1) How to support national platforms to practice evidence-based disaster risk reduction?
 - 1) Collect and archive disaster damage data and potential impact on populations (health, social) and to identify the nature of vulnerable groups ahead of a disaster through in-situ and satellite observations and model integration : **Monitoring**
 - 2) Maintain national disaster damage statistics : **Monitoring**
 - 3) Monitor disaster risk changes through in-situ, satellite and model integration : **Monitoring**
 - 4) Assess current and future risks on economic growth, public health and social equality and demonstrate effects of investment in collaboration with donors: **Assessment**
 - 5) Conduct capacity building activities and enhance education on disaster damage data collection, statistics maintenance, risk monitoring, risk assessment and information sharing, synthesis, and forensic approach beyond disciplines, : **Capacity building**

- (2) How to mobilize existing networks of scientific and research institutions at national, regional and international levels?
 - 1) Create a regular, independent, authoritative, policy-relevant international assessment of science on disaster risks, resilience and transformation: **Assessment**
 - 2) Provide a clear and unambiguous scientific view on the current state of knowledge in disaster risk, the potential socio-economic impacts of natural hazards, and the ways to reduce significant human and economic losses for international policy use: **Synthesis**
 - 3) Conduct co-designed and policy-relevant integrated research by promoting inter-disciplinary and trans-disciplinary programs : **Communication and engagement**
 - 4) Activate coordination between governments and science and technology communities at national, regional and global levels: **Communication and engagement**
 - 5) Empower international scientific advisory functions to offer effective assessments and syntheses in collaboration with UN agencies, countries and donors: **Advice**