Keynote Speech, UN Sendai Framework for Disaster Risk Reduction 2015-2030: Role of Science and Technology in Perspective.

August 2017

Prof. Dilanthi Amaratunga delivered the keynote speech at the recently held 4TH INTERNATIONAL CONFERENCE ON EARTH SCIENCES AND ENGINEERING, Andalas University, Padang, INDONESIA, from 29TH -31ST AUGUST 2017

Key note speech Synopsis:

UN Sendai Framework for Disaster Risk Reduction 2015-2030: Science and Technology in Perspective

The Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) is the first major agreement of the post-2015 development agenda, with seven targets and four priorities for action. It was endorsed by the UN General Assembly, following the 2015 Third UN World Conference on Disaster Risk Reduction. The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters. It is the outcome of stakeholder consultations initiated in March 2012 and inter-governmental negotiations held from July 2014 to March 2015, which were supported by the UNISDR upon the request of the UN General Assembly.

The Sendai Framework is a 15-year, voluntary, non-binding agreement which recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders. It aims for the following outcome: "*The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries*" The four priorities for action focus on:
   1. A better understanding of risk;
   2. Strengthened disaster risk governance;
   3. Increased investment in disaster risk reduction (DRR); and
   4. More effective disaster preparedness and embedding the "build back better" principle into recovery, rehabilitation and reconstruction.

The SFDRR includes seven global targets and sets out four priority areas for further action. The seven targets are:

1. Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 (compared to 2005-2015).
2. Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015.
3. Reduce direct disaster economic loss in relation to global gross domestic product by 2030.
4. Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
5. Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
6. Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.
7. Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

SFDRR underlines the importance of Science and Technology (S&T) and S&T networks for effective disaster risk reduction (DRR). A main feature of SFDRR, in comparison to its predecessor (the Hyogo Framework of Action), is the shift of focus from managing 'disasters' to managing 'risks'. Such a shift requires a better understanding of risk in all its dimensions of hazards, exposure and vulnerability. Therefore the role of science and technology in providing the evidence and knowledge on risk features heavily in the Sendai Framework. It calls on the science and technology community to focus on understanding disaster risk factors and scenarios, support action by local communities and authorities, and enhance the interface between policy and science for decision-making. Achieving disaster risk reduction and increased resilience require increased collaboration across governments and key actors to generate, share and make a more effective use of scientific data and information, identify knowledge and capacity gaps, and co-produce solutions that can effectively support decisions and actions towards disaster risk reduction and resilience building. SFDRR also includes requests from Member States for science and technology knowledge transfer and capacity development. As members of the scientific community among those objectives and priorities, we hope that there would be strong recognition of science and also identification of a need to strengthen the relevance and use of science for DRR from the global to local scales.

It is immediately apparent that the SFDRR has an enhanced role for science and knowledge, including explicit mention of coproduction. Science is called to action repeatedly, be it in DRR education and training, post-disaster reviews, research into disaster scenarios or early warning systems. Modelling and early warning are especially emphasised, but there is also recognition of wider social processes, including culture. There is also renewed emphasis on training and, within this, on integrated approaches.

It will take time to determine the most important outcomes and scientific activities that will support implementation, which will be the focus of this key note address.