"Perspectives of Science and Technology in Disaster Risk Reduction of Asia" by Rajib et al. 2016

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Title: Progress of science and technology for disaster reduction in Asia

This article goes through the progress of the application of science and technology to DRR. Although it exists well-known scientists and engineers in Asian region that could be effectively used to reduce disaster impacts, it is still a challenge for Asian countries to integrate science into decision making or policy making at the national level. However, it is recognized that decision making based on science and technology is well-managed. Looking at the rising levels of material and mortality losses that disasters continue to inflict to Asia, it becomes unacceptable for the region. This led to the proclamation of the International Decade for Natural Disaster Reduction (IDNDR) (1990–1999).

Due to IDNDR, national and local government were opened on the issues of disaster that they need to get prepared before event transform to disaster by bringing in board sciences, technology, stakeholders and academia.

The Hyogo Framework for Action (2005) came to reinforce awareness of the use of science and technology for disaster reduction. Thus, it invites government to support research, partnerships, training and technical capacity-building and invite them to bring science into national and local government decision making in the Asian countries; and encourage innovative research and education linked to field practices.

Then came the "Tokyo Conference on International Study for Disaster Reduction and Resilience". The outcome of this conference is that; need to empower national platforms so that they can practice evidence-based disaster risk reduction for sustainable development. It was before the Sendai Framework.

Although Sendai framework came as a conscientious Framework for change in Asian countries, one should acknowledge that there is no major work that looks at science and technology application in Asia in a holistic. The integration of science into decision making or policy making at the national level, remain challenging at the local level. Thus, an advisory group (Asia Science Technology Academia Advisory Group (ASTAAG)) was formed in May 2015 to help resolve this issue. Their key mission was to bridge the gap between regional discussion and national and local policy making, decision making, and implementation.

To effectively see how to implement the recommendation of the Sendai Framework, scientists, government, non-governmental agencies and private sectors met together to understand and levirate key issue faced while implementing the Sendai Framework recommendations.

Government understood that Science and technology can provide innovative solutions and that a wellprepared disaster risk reduction (DRR) approach and environmental management can reduce the impacts of disasters on development and can make development gains sustainable.

However, they invited the science community to make further efforts specially to strengthen the link of science and technology to people as it often appears that the messages and results from academic and scientific researchers are difficult to understand and these data require translation into user-friendly terms.

Summary

- Decision making based on science and technology is well-managed
- There remain challenges to the integration of science into decision making or policy making at the national level, as well as to implementation at the local level.
- There is a great commitment at Asian regional to promote a functional science-policy interface for evidence-based policy making in DRR