



Role of various stakeholders in disaster risk reduction

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Multi-Hazards Program

Disaster Management Cycle

APRU

 Emergency response plan, Evacuation drills, Trainings, Education, Early warning

事前準備

Preparedness

 Rescue, evacuation, relief goods distribution, response to immediate needs

災害対応 Response

災害軽減

Mitigation

 Improved infrastructure, Building code, Hazard and vulnerability assessment 復興

Recovery

 Economic and livelihood recovery, Health and safety, Housing



From Response to DRR Association of Pacific Rim Universities

The Indian Ocean Tsunami in 2004:

Casualties: nearly 230,000

What made the damage worsen?

- Lack of early warning system
- Limited knowledge on tsunami



The Hyogo Framework for Action (HFA) in 2005:

- Adopted by 168 countries
- A guideline for 10-year DRR strategy



International / Regional levels

UN agencies:

- UNISDR to support the implementation, follow-up and review of the coordinate the DRR initiatives.
- Other UN agencies to support disaster response coordination (UNOCHA) and recovery (UNDP) *USD 1 for DRR can save spending USD 7 for response.*

International NGO: Advocacy, Fundraising, Project implementation

Regional organizations (ASEAN, ADRC etc): Focus on regional and cross boundary issues, Strengthen regional collaboration and Identify regional solutions/guidelines

Donor agencies (USAID, AUSAID, DFID etc): Improve quality and accountability of humanitarian aid/DRR

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National level

Government:

- States have the overall responsibility for reducing disaster risk. DRR is a common concern for all States and the extent to which developing countries are able to effectively enhance and implement national DRR policies and measures(SFDRR).
- Necessary to empower local authorities and local communities to reduce risks including through resources, incentives and decision making responsibilities.

National NGO: Project implementation; Close to communities and understand local culture.



Local level

Local government:

- Lead local DRR planning and implementation
- Develop policies and guidelines related to DRR including a disaster management plan

Communities:

- Participate in discussion and implementation of DRR policies and programs
- Organize awareness raising campaign and activities as well as evacuation drill

Others



Academia:

- Focus on the disaster risk factors and scenarios
- Support action by local communities and authorities
- Support the interface between policy and science for decisionmaking

Media:

- Contribute to the raising of public awareness and disseminate accurate disaster risk, hazard and disaster information
- Support early warning systems
- Stimulate a culture of prevention and strong community involvement in public education campaigns and consultations

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Others

Private sector:

- Integrate disaster risk management into business models and practices
- Engage in awareness raising and training for their employees and customers
- Engage in and support research and innovation for disaster risk management
- Share and disseminate knowledge, practices and nonsensitive data
- Actively participate in the development of normative frameworks and technical standards that incorporate disaster risk management

Role of academia/universities

• SFDRR calls for "Academia, science and research entities and networks to: focus on the disaster risk factors and scenarios; increase research for regional, national and local application; support action by local communities and authorities; and support the interface between policy and science for decision-making"



Specifically, what are the expected roles and actions of academia and universities?

Challenges and Needs in Science and Technology

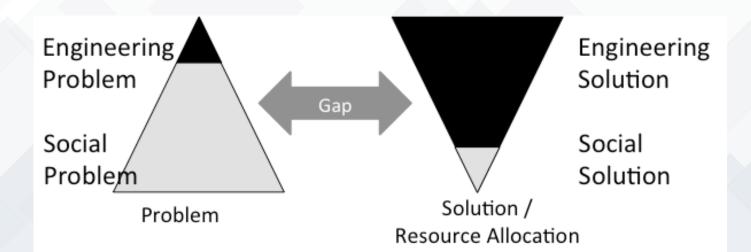
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(from the UNISDR Science and Technology Conference on DRR)

- Scientific findings should be framed and presented in a concise and understandable fashion;
- 2. Assumptions and uncertainties need to be better clarified and communicated;
- 3. There is a need for translating scientific findings into concrete actionable steps and tools for science-based decision-making;
- 4. There is a need for enhancing the role of social science to better understand the governance of disaster risks.

UNWCDRR APRU session of Pacific Rim University

- Enhance collaboration, especially between the private sector and academia;
- Multi-stakeholder collaboration including with local schools and communities is necessary for making data and technology useful, sable and accessible;
- Social science elements as such as psychology, cultural studies, communications, ethics and history must be incorporated because most problems are currently considered to involve social rather than engineering aspects.





APRU Multi-Hazards: Kyoto declaration

- Strengthen capacities of scientific community through fostering young researchers and encouraging multi-disciplinary / trans-disciplinary implementation research
- 2. Continue our support to S-T innovations to be included into national policy / decision making on DRR
- 3. Foster greater collaboration with local institutions and local governments for S-T based decision making
- 4. Learn from the experiences of good practices in the regional and to foster further collaboration with various stakeholders
- 5. Contribute to organizing/supporting periodic Science and Technology conferences/events on DRR at national/regional levels.



APRU universities case studies

- Education/training for DRR (Tohoku University, University of the Philippines, University of Hawaii Manoa)
- Learning from events (sharing lessons-learnt from major disasters) (Tohoku University)
- Providing early warning systems and disaster management tools (University of California Davis, University of Oregon, University of Hawaii Manoa)
- Strengthening disaster risk governance (Tohoku University)
- Engineering solutions for disaster relief (University of Malaya)

Key objectives and goal of the MH program



Contribute to developing a disaster resilient society

1. Contribute to international and regional discussions and DRR related policy making

Process; (Participated in the discussions at the Asian Ministerial Conference on DRR and the UN World Conference on DRR and being a member of UNISDR-Asia Science, Technology and Academia Advisory Group (ASTAAG)

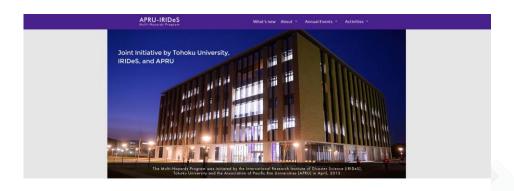
2. Strengthen DRR research and education in collaboration with APRU member universities.

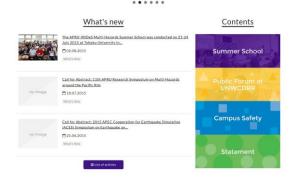
(Summer school, Annual symposium, campus safety program)



MH Program Website









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http://aprumh.irides.tohoku.ac.jp/app-def/S-102/apru/

THANK YOU





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