## Towards the implementation of the Sendai Framework for Disaster Risk Reduction ~ Expectation and role of academia and its initiatives~

Takako Izumi (Associate Profess of Tohoku University, Director of the APRU Multi-Hazards Program)





# Association of Pacific Rim Universities (APRU)



APRU is a network of 50 premier research universities from 16 economies in the Asia-Pacific region

- Established as an advisory body in 1997 to international organizations, governments and business on the development of science and innovation as well as on the boarder development of higher education.
- The secretariat is in Hong Kong University of Science and Technology (HKUST).
- Secretary General: Dr. Christopher Tremewan (University of Auckland)
- APRU set up the program hubs Global health, Multi-hazards, Population aging, Sustainable cities and landscape, Internet governance etc.







### APRU Multi-Hazards Program

- Established in April 2013. IRIDeS, Tohoku University hosts its Secretariat and provides the coordination and administrative services.
- The Core Group (12 members from *UC Davis, Univ. of Hawaii, Univ. of Chile, Chulalongkorn Univ. , National Taiwan Univ. , Univ. of Philippines, University of Tokyo., Tohoku Univ., Univ. of Melbourne*) is a driving force and decision making body.

#### **Main Objectives:**

- Harness the collective capabilities of APRU universities for cutting-edge research on DRR
- Contribute to the international and regional discussions to make an influence in a DRR policy making process.







#### Multi-Hazards Summer School

- Organized every year since 2013 by IRIDeS, Tohoku University
- Nearly 40-50 participants including students and faculty from all over the world
- Speakers from other sectors such as local governments, NGOs, the private sector are invited to learn each stakeholders' role and activities in disaster management

#### **Main objectives**:

- Share the experience and lessons-learn from the 2011 disaster
- Discuss the international DRR framework such as the Sendai Framework for DRR









### Campus Safety Program

#### **Objectives:**

- Strengthen the disaster preparedness capacity on campus
- Promote its importance at the international and regional levels

#### **Activities:**

- A survey on the current disaster preparedness status was conducted among the APRU universities
- The Campus Safety Workshop was held at IRIDeS, Tohoku University in February 2016 to share their experience and discuss how to overcome the challenges

Universities need to develop an adequate disaster management plan for responding to and recovering from any damage

One of the recommended actions in the outcome document from the UNISDR Asia Science & Technology Conference on DRR









# Contribution to discussions at regional/international levels – UNWCDRR, AMCDRR, Global Platform, World Bosai Forum

- Public Forum session at UNWCDRR "Science and Practical Disaster Risk Reduction ~ Role of Universities and Academia in DRR~
- Provide speakers with international and regional events – such as the UNISDR Asia Science and Technology Conference on DRR (August 2016 in Bangkok)
- Join the UNISDR Asia Science, Technology and Academia Advisory Group (ASTAAG)
- Organize a thematic session "Strengthening contributions to the international community through multi-disciplinary disaster science research" at the World Bosai Forum









# Collaboration with practitioners

#### ~MOU between IFRC and APRU~

- IFRC is the largest humanitarian network, and works before, during and after disasters/emergencies to meet the needs and improve the lives of vulnerable people.
- **Research:** Facilitate collaboration for joint research initiative to increase knowledge and science-based evidence in targeted contexts to influence policies and practices in disaster risk management.
- Policy dialogue and advocacy: Identify opportunities for advocacy in relevant forums and key events
- Cross-collaboration: Co-host events or invite one of the parties to events led by other one.









# Publication: Science and Technology in Disaster Risk Reduction in Asia - potentials and challenges-

- Papers based on the abstracts presented at the APRU MH Symposium in 2016 at Kyoto University
- Edited by Rajib Shaw (Keio University), Koichi Shiwaku (Kyoto University at that time), and Takako Izumi (Tohoku University)

#### **KEY FEATURES**

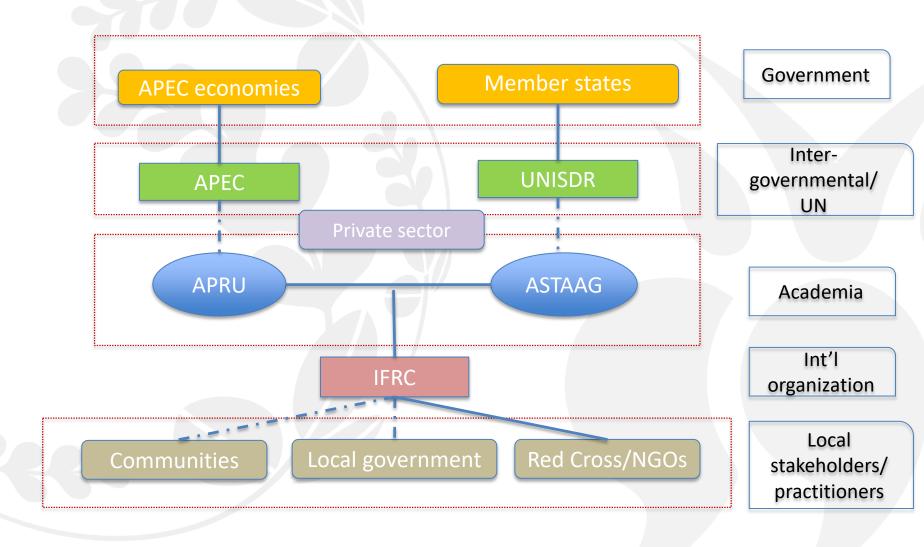
- Overs new research on the role of science in DRR and lessons learned when research has been applied
- Provides both a local and global perspective on how to implement the Sendai Framework for Disaster Risk Reduction (SFDRR).







### Collaborative framework









# Campus Safety Survey - Background



#### **United Nations Office of Disaster Risk Reduction (UNISDR)**

"Disaster risk reduction begins at school" in 2006-2007.



#### Sendai Framework for Disaster Risk Reduction

"Promote the resilience of new and existing critical infrastructure, including water, transportation and telecommunications infrastructure, educational facilities, hospitals and other health facilities, to ensure that they remain safe, effective and operational during and after disasters in order to provide live-saving and essential services."



Campus Safety Survey was conducted among the APRU member universities to understand the current status of disaster preparedness on campus. Questionnaire was distributed among 45 APRU member universities. 22 universities filled in the form and sent back to us.









# Survey Outline

#### **Objectives of Campus Safety Program**

- Promote the need for campus safety and provide learning opportunities on campus safety among the APRU member universities
- Support strengthening disaster preparedness capacity on campus
- Share the experience with non-APRU member universities and contribute to overall improvement of disaster preparedness capacity in the region.
- 1) Governance on action
- 2) Risk assessment
- 3) Disaster preparedness mechanism
- 4) Response capacity
- 5) Support system for students, faculty members and staff
- 6) Rehabilitation and recovery

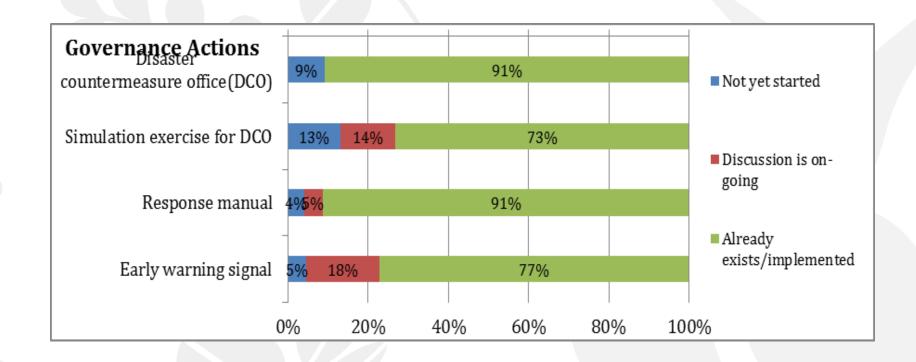








### Governance Action



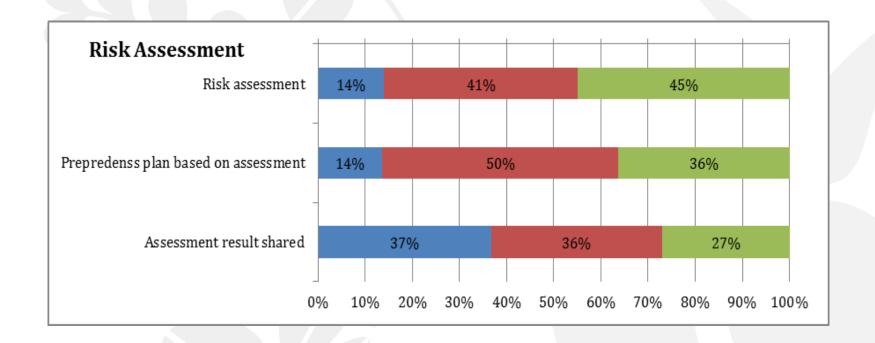








### Risk Assessment





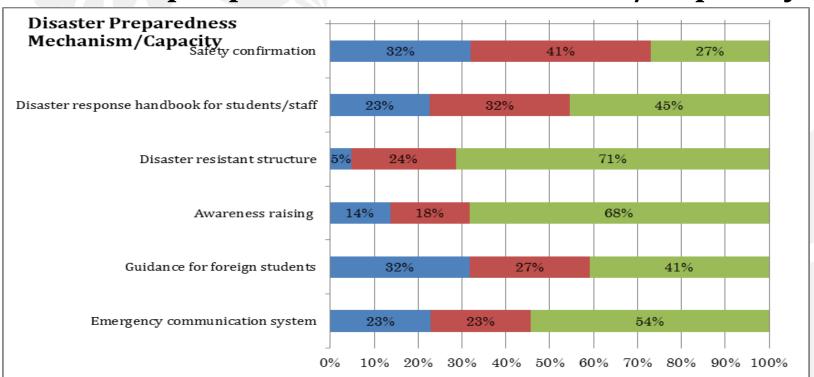








### Disaster preparedness mechanism/capacity



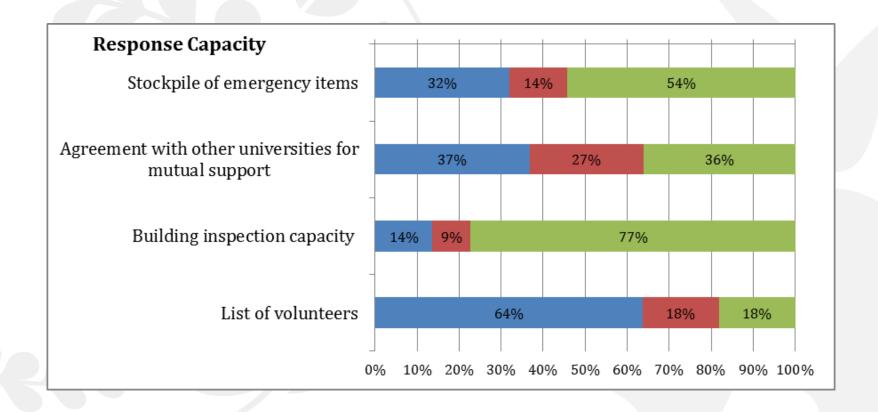
The following awareness activities have been initiated:

- Disaster response exercises for incident command staff
- Workshops on lab-safety
- Evacuation drills
- Annual preparedness fairs, quarterly tests of the emergency notification systems





# Disaster response capacity





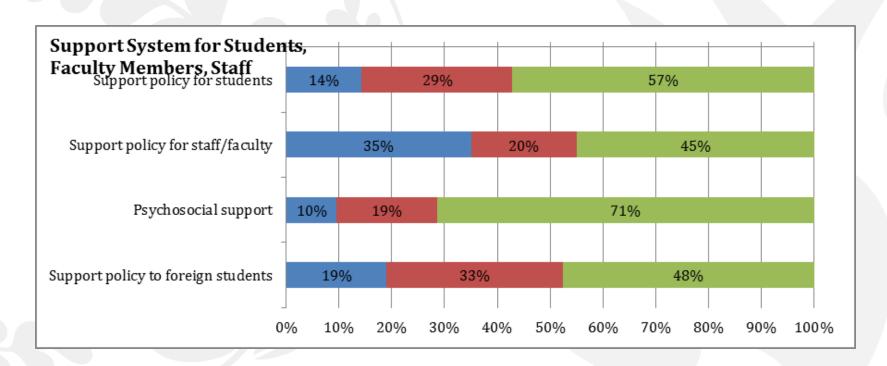








# Support system for students, faculty members, and staff





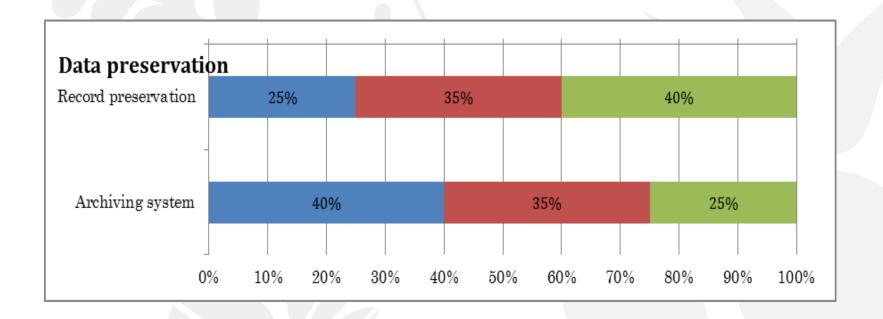








## Data preservation







# Campus Safety Survey – Summary

Area	Strength	Potential
Governance Action	<ul><li>Countermeasure office</li><li>Response plan</li></ul>	<ul> <li>Simulation exercise of countermeasure office</li> <li>Information sharing and early warning</li> </ul>
Risk Assessment	None	Risk assessment     Strategies and action based on risk

Strategies and action based on risk assessment
 Assessment result to be shared
 Emergency communication system
 Disaster Preparedness
 Disaster-resistant structure
 Awareness-raising activities
 Guidance for foreign students
 Safety confirmation
 Response handbook and its distribution

Capacity
 Emergency stockpile
 Building inspection implementation and capacity
 Mutual agreement with neighboring universities
 Volunteers list
 Support System
 Support system for foreign students

Policies for support to students
 Support system for foreign students
 Support system for foreign students
 Support system for faculty members, and staff, as well as their families
 Data and information gathering after disasters
 Archival system for preservation of records and information



# Campus Safety Survey – The Good, The Bad, The Ugly

- + Mechanism in place to establish a counter-measure office and have developed a response manual and plan.
- Physical structure areas, such as disaster-resistant structures, emergency communication, and emergency stockpiles, have been progressed.
- + Support toward **psychosocial aspects** has been provided after disasters.

- The area of risk assessment requires more attention and effort.
- Conducting simulation
   exercise of
   preparedness/response plan is
   required.
- Early warning and alert systems have not been installed widely.
- Further support and consideration for foreign students is required.







# Campus Safety Survey – Challenges of Universities

- Financial constraints,
- human resources challenges,
- difficulties understanding risks and safety issues,
- and a lack of participation by faculty and staff.





# Keys to campus safety

- 1) Involving a policy group consisting of the executive leadership of the university to make crucial policy decisions
- 2) Developing an disaster/emergency management/preparedness plan
- 3) Conducting exercises, drills, or simulations using the existing plan to assess its efficacy
- 4) Reviewing the plan every year or following any emergency event to determine whether it can cope with emergencies and whether it suits the current university structure.





# Developing a campus safety checklist is one of the objectives of this workshop





### Thank you for your attention.

http://aprumh.irides.tohoku.ac.jp/izumi@irides.tohoku.ac.jp









