

NATURAL DISASTERS – A GLOBAL CHALLENGE –

The risks of natural disasters are getting much higher and more serious than ever and will continue to be so in the future due to recent growing challenges such as climate change, population density, urbanization, and environmental degradation.

2017

335 natural disasters events

95.6 million people affected

9,697 people killed

US \$ **335 billion** economic loss

ASIA

44% of all disaster events, 58% of total deaths, 70% of the total people affected

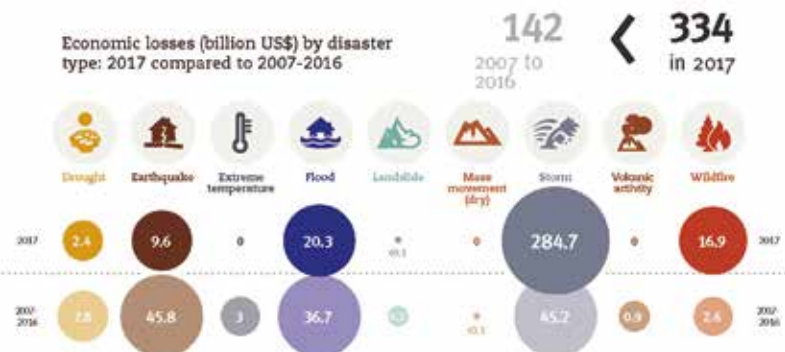
The Americas

highest economic losses, 88% of the total cost from 93 disasters

China, US and India

hardest hit countries in terms of occurrence

(UCL, CRED, and UNISDR 2017)



APRU Membership is comprised of leading universities from 17 economies of the Pacific Rim known worldwide for their academic and research excellence.



APRU (Association of Pacific Rim Universities)

As a network of leading universities linking the Americas, Asia and Australasia, APRU is the Voice of Knowledge and Innovation for the Asia-Pacific region. We bring together leaders, researchers, and policy-makers to exchange ideas and collaborate on effective solutions to the challenges of the 21st century.



IRIDeS (International Research Institute of Disaster Science), Tohoku University in Japan

IRIDeS was established in 2012 to conduct world-leading research on natural disaster science in collaboration with various stakeholders. It also aims to contribute to creating the disaster resilient societies that enable to mitigate the risks and impacts to be caused by future natural disasters. IRIDeS consists of various divisions related to disaster science – humanities, natural and social sciences, engineering, and medicine to achieve interdisciplinary and practical researches that contribute to policy-making process.

CONTACT

IRIDeS, Tohoku University

468-1-S401 Aoba, Aramaki, Aoba-ku, Sendai 980-8572, Japan

Tel: +81-22-752-2073

Email: application_apruss@irides.tohoku.ac.jp

Website: <http://aprums.irides.tohoku.ac.jp/>



MULTI-HAZARDS PROGRAM



MULTI-HAZARDS PROGRAM

IRIDeS of Tohoku University provides the secretariat services as the program hub since 2013. The universities are expected to contribute to reducing disaster vulnerability and risks based on science, technology and innovation. The program is aimed to:

- ❖ harness the collective capacities of APRU universities for cutting-edge research on DRR and promote interdisciplinary and collaborative/joint research
- ❖ contribute to science-based DRR policymaking and international and regional discussions on the implementation of the SFDRR

The Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030 strongly encourages an innovative approach to DRR and science- and evidence-based policymaking.

Education/Capacity development:
sharing experience and knowledge

MAJOR
ACTIVITIES

1

MULTI-HAZARDS SUMMER SCHOOL:

This is held annually at Tohoku University in Japan to share the experiences and lessons learned from the 2011 Great East Japan Earthquake and Tsunami and to learn from a variety of recent disaster science researches. It also ensures that a network among these students and faculty from other universities is nurtured.

CAMPUS SAFETY PROGRAM:

This program is aimed to assist universities in strengthening their disaster preparedness and response capacities to maintain an environment where students can continue their studies as well as take effective response measures. The program hosts a biannual workshop to share and learn from their experiences in disaster preparedness and to discuss issues, challenges, and solutions.

Contributing to discussions and policymaking processes at international and regional levels:

addressing academic perspectives and voices within higher-level discussions through:

MAJOR
ACTIVITIES

2

- ▶ Asia Science and Technology Conference on Disaster Risk Reduction
- ▶ Asian Ministerial Conference on Disaster Risk Reduction
- ▶ Global Navigation Satellite System Early Warning System Workshop
- ▶ Global Platform for Disaster Risk Reduction
- ▶ United Nations World Conference on Disaster Risk Reduction
- ▶ World Bosai Forum

MAJOR
ACTIVITIES

3

Research/Knowledge sharing:
encouraging collaborative and interdisciplinary research

ANNUAL RESEARCH SYMPOSIUM:

One of the APRU member universities hosts this annual symposium, bringing together researchers, practitioners, government officials, and the private sector to discuss trends and challenges in disaster science research, learn from each other's research findings and practices, and build networks.

PROGRESS IN DISASTER SCIENCE:

This international academic journal focuses on integrating research and policy in disaster research. It publishes original research papers and invited viewpoint articles on disaster risk reduction, response, emergency management, and recovery.

A SERIES OF PUBLICATIONS AND PAPERS

- Global Outlook on Disaster Science
 - 30 Innovations for DRR
 - Science and Technology in DRR in Asia: potentials and challenges
- All the publications can be downloaded at <http://aprumh.irides.tohoku.ac.jp/>