

# UNISDR Asia Science, Technology, and Academia Advisory Group (ASTAAG)

## BACKGROUND

The increasing importance and role of science-based decision-making was strongly emphasized in the Sendai Framework for Disaster Risk Reduction (SFDRR). In response to that, the UNISDR Asia Pacific Office has formed the **Asia Science Technology and Academia Advisory Group (ASTAAG)** in May 2015. Academia, science, and technological communities have a responsibility to be an active partner for providing solutions to problems based on their research findings, to introduce new technology and innovations as well as to improve the dialogue and cooperation with other relevant stakeholders and policy makers.

## WHO WE ARE

ASTAAG comprises selected disaster experts from Asian countries: Bangladesh, China, India, Indonesia, Japan, Malaysia and Philippines. The Group provides policy advisory services to governments and other stakeholders on appropriate technology and its application in decision making. Advisory services include: Risk governance, Community-based Disaster Risk Management, Urban risk management, Earthquake risk mitigation, Private sector involvement, Climate change adaptation, Disaster and environmental education and Disaster resistant building design. The group also provides advices on higher education curriculum development in disaster risk reduction.

## MAJOR ACTIVITIES

- Periodic assessment of status and science and technology for DRR in the region
- Provide specific advices to national and local governments on science based decision making
- Assisting governments in reviewing the progress of the SFDRR implementation
- Recognition of networks of universities/center of excellences and engage them in sharing knowledge and experience

## KEY FOCUSES

1. Strengthen capacities of the Science, Technology and Academic community in disaster science
2. Support governments in science based decision making to implement SFDRR
3. Enhance networking among academic community and other stakeholders

## Priorities for action for the Sendai Framework for Disaster Risk Reduction (SFDRR)

1. Understanding disaster risk;
2. Strengthening disaster risk governance to manage disaster risk;
3. Investing in disaster risk reduction for resilience;
4. Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction.



# ASTAAG MEMBERS



Disaster Risk Governance

**Chairperson of ASTAAG:**  
Shi Peijun

Executive vice-president, Beijing Normal University; Vice chairman, the Expert Committee of the National Commission for Disaster Reduction, China.

He is a member of the UNISDR scientific and technical advisory group and a member of OECD's High Level Advisory Board on Financial Management of Large-scale Disasters. During 2008 China Wenchuan Earthquake, he was appointed as the vice chairman of the National Expert Committee for Wenchuan Earthquake to lead the scientific teams for the emergency response and post-disaster reconstruction.



Environment Disaster Management

**Co-chair of ASTAAG:**  
Rajib Shaw

Executive Director, Integrated Research on Disaster Risk (IRDR), China

He worked closely with the local communities, NGOs, governments and international organization, including United Nations, especially in the Asian countries. He is currently the President of Asian University Network of Environment and Disaster Management [AUEDM].



Disaster Risk Management

**Ali Ardalan**

Associate Professor and Chair, Department of Disaster and Emergency Health, School of Public Health, Tehran University of Medical Sciences, Iran.

He is a pioneer in DRM in Iran and the MENA region who created MPH and PhD programs in disaster health. He is a WHO Consultant, Senior Fellow at Harvard Humanitarian Initiative, faculty at European Master of Disaster Medicine, and representative of Central Asia in GNDP.



Disaster Preparedness and Resilience in Health

**Emily Ying Yang Chan**

Professor and Assistant Dean, Faculty of Medicine, The Chinese University of Hong Kong (CUHK) Director, Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC) Honorary Research Fellow (Emerging Infectious Diseases and Emergency Preparedness), University of Oxford Visiting Scholar, FXB Centre and Senior HHI Fellow Harvard School of Public Health, China.

Professor Chan's research expertise includes disaster preparedness and resilience in health, climate change and health, evidence based public health interventions, and disaster-based epidemiology. She has published more than 200 international peer-reviewed articles. She serves as technical advisors to various government and international non-government bodies.



Earthquake Risk Reduction

**Jamilur Reza Choudhury**

Vice Chancellor, University of Asia Pacific; Former Vice Chancellor, BRAC University and Former Professor of Civil Engineering, BUET, Dhaka, Bangladesh.

He has acted as Consultant to a large number of national and international agencies on projects related to tall buildings, industrial buildings, transmission towers, aircraft hangars, stadiums, ports and jetties, computerization of public and private sector organizations.



Multi-stakeholder Partnership

**Takako Izumi**

Associate Professor, the International Research Institute of Disaster Science (IRIDeS), Tohoku University, Japan.

She also serves as Program Coordinator of the Multi-Hazards Program under the Association of Pacific Lim Universities (APLU). Previously she worked for the UN Office for the Coordination of Humanitarian Affairs (UNOCHA), for disaster response coordination in Asia, and for an international NGO as general manager of the disaster response and DRR programs.



Private Sector Involvement

**Antonia Yulo Loyzaga**

Executive Director, Manila Observatory, Philippines.

She oversees collaboration on climate and disaster risk reduction with organizations such as NASA, JAXA, IDRC, UNISDR and APEC. She is a member of the Philippines Department of Science and Technology's Committee on Space Technology Applications as well as a Board Trustee of the Ateneo de Manila University and Ateneo de Naga University.



Climate Change Adaptation

**Joy Jacqueline Pereira**

Principal Research Fellow, Southeast Asia Disaster Prevention Research Initiative (SEADPRI-UKM), Universiti Kebangsaan Malaysia.

She led the team that developed the National Policy on Climate Change 2009 under the aegis of the Ministry of Natural Resources and Environment Malaysia and is currently involved in developing the Malaysian Disaster Risk Reduction Action Plan (MyDRR) in conjunction with the National Security Council of the Prime Minister's Department.



Drought Risk Reduction

**Vinod Kumar Sharma**

Senior Professor, Disaster Management/Consultant at Indian Institute Of Public Administration; Executive Vice Chairman, Sikkim State Disaster Management Authority, Govt. of Sikkim; Adjunct Professor of Disaster Management, Amrita University, India.

He has served in a number of Universities in India and Middle East before joining Indian Institute of Public Administration. He is founder Chairman of a non-profit organization, SEEDS India. He is also Visiting Professor, Kyoto University, Japan and many other Universities/institutions.



Disaster Governance

**Sugeng Triutomo**

Chairman, Disaster Risk Reduction Foundation; Lecturer, Indonesia Defense University; Advisory Board, National Platform for DRR, Indonesia.

Previously he has worked in the government as Deputy Chief/Minister for National Disaster Management Authority (BNPb) and Director of Disaster Mitigation at National Coordinating Board for Disaster Management (BAKORNAS PB). He is also founder of Indonesian Society for Disaster Management (MPBI), National Platform for Disaster Risk Reduction (Planas PRB), Academic Forum for Disaster Risk Reduction and Indonesian Disaster Experts Association (IABI).



Emergency management and disaster risk analysis

**Secretary of ASTAAG**  
Yang Saini

Professor, The State Key Laboratory of Earth Surface Processes and Resource Ecology; Director, International Center for Collaborative Research on Disaster Risk Reduction, Beijing Normal University, China.

She specializes in infrastructure risk analysis, emergency management and evacuation, multi-hazard spatial-temporal analysis, community-based disaster risk reduction and post disaster recovery. She is the PI of more than 8 national and international research projects and published over 30 peer-reviewed papers in recent five years. Previously she worked in Cleveland State University, the United States, as an assistant professor before join the Beijing Normal University in 2008.