

3rd Asia-Pacific Water Summit Thematic Session

WATER AND DISASTERS IN THE CONTEXT OF CLIMATE CHANGE - From the Mountains to the Islands -

Monday, December 11, 2017

MINDON ROOM, Sedona Hotel,
Yangon, Myanmar



United Nations
Educational, Scientific and
Cultural Organization



International Centre for
Water Hazard and Risk Management
under the auspices of UNESCO



Public Works Research Institute,
National Research and Development
Agency, Japan

ICIMOD



Pacific
Community
Communauté
du Pacifique

[PART 1] Keynote Speeches

Moderator: Dr. David Molden, Director General, ICIMOD

- Climate Change: increase in intensity & frequency of extreme water related disasters (floods & droughts)
- Commitments to the SDGs
- Knowledge sharing and many examples of good cooperation
- Importance of last mile connectivity from the generators to the users
- H2O: Himalaya To Ocean, Regional Collaboration,

H. E. Dr. José Ramos-Horta, Senior Minister and National Security Advisor, Timor-Leste

- Globalized 21st
- Enhance partnership with the private sector
- Financing and investment from the private sectors as well as the public sectors.
- Education and awareness/capacity building are critically important.
- Regional commonality.

H. E. Mr. Keiichi Ishii, Minister of Land, Infrastructure, Transport and Tourism, Japan

- So frequent and severe water-related disasters due to un-experienced heavy rainfall.
- Japan's new policy: Rebuilding Flood Conscious Society- structural & non-structural.
- Exchange knowledge and adoption of a collaborative approach
- International Leaders Dialogue on "Water and Disasters" during Water Decade.

H.E. Dr. Swarnim Wagle, Vice Chair, National Planning Commission, Nepal

- Intensified rainfall and the glacier shrinking on people and ecosystem due to CC.
- A three pronged resilience framework: Differential impacts of disasters: women are affected by disasters
- Risk communication for preparedness, early warning, rescue and recovery.
- Systematic assessment, coping mechanism, gender and insurance.
- Institutional, literacy, ancillary measures, preparedness, deep reform.
- Capacity building at various levels from the national to the local is essential for risk reduction

[PART 2] Country Presentations

Moderator: Ms. Rhonda Robinson, Pacific Community

Myanmar:

Dr. Kyaw Moe Oo, Ministry of Transport and Communications

U Kyaw Myint Hlaing, Ministry of Agriculture, Livestock and Irrigation

U Ko Ko Oo, Ministry of Transport and Communications

U Than Htut Swe, Ministry of Social Welfare, Relief and Resettlement

Bhutan: Ms. Tenzin Wangmo, National Environment Commission

Japan: Prof. Akiyuki Kawasaki, University of Tokyo

Korea: Dr. Hong Ilpyo, Korea Institute of Civil Engineering and Building Technology

Indonesia: Mr. Hary Suprayogi, Ministry of Public Works and Housing

Sri Lanka: Mr. Wasantha Bandara Palugaswewa, Irrigation Department

Tonga: Mr. Paula Ma'u, Ministry of Meteorology, Energy, Information, Disaster Management, Climate Change and Communications

[PART 2] Country Presentations

Key findings:

- Common Asia-Pacific experience of climate change impacts from the mountains to the islands, including experience of “new normal” conditions of temperature, rainfall, extreme events and the timing of seasons.
- Flow on effect of climate change, impacting intensity and frequency of water-related hazards, environment and infrastructure, and in turn livelihoods and national economies.
- Critical importance of *evidence-based* investment in resilient infrastructure and systems to address these impacts;
- Excellent examples exist of applying evidence-based investment to significantly reduce disaster impacts compared to the past, even with the emerging impacts of climate change.
- The use of multi-sector, multi-hazard approaches is critical, and IWRM has proved effective across the region in bringing together the many stakeholders, tools and considerations needed to address impacts.
- Given the commonality of issues and the innovative approaches being applied across the region, there is tremendous scope for collaboration and knowledge sharing between Asia-Pacific countries, from the mountains to the islands.

	Status & Issues	Direction	Actions
Myanmar DMH	cyclone , floods, monsoon shrinking	early warning End-to-end	flood forecast hazard mapping
Myanmar IWUMD	flood and sedimentation	improvement of dyke & drainage facilities	review safety of dam monitoring
Myanmar DWRI	river bank erosion & sedimentation	conceptional framework socio-economic impacts	river works, prediction
Myanmar RRD	flood, drought	NDMC: preparedness and response measures	evacuation camp
Bhutan	Lack of investments in tech, infra, manage.	mainstream, visualization, interagency coordination	IWRM: legal & institutional Water Security System
Japan	preparedness to total budget for DRR	keep proactive DRR, S&T, systematic assessment	standardized damage statistics structural + non-structural
Korea	drought, flood	drought and flood management policy	water use efficiency Linkage: urban to nation
Indonesia	flood, drought, water scarcity, pollution	IWRM work in a network	water resources programs structural + non-structural
Sri Lanka	dry-wet contrast flood, drought	CC Secretariat National Strategy & Policy	seasonal forecast & plan, study, EW, increase of storage
Tonga	slr, cyclone, tsunami, drought, flood, disease	coordinating mechanism, mainstream, trust funds	dainage system, community, IWRM, National Portal

[PART 3] Panel Discussion

Co-Chairs: Dr. Kyaw Moe Oo, Director General, DMH, Myanmar

Prof. Toshio Koike, Director, ICHARM

Dr. Mandira Shrestha, ICIMOD

- Commonality: intensified multi-hazards, cascading disasters, up-stream and downstream interactions, strengthening governance, standardized data collection and assessment, knowledge sharing and regional cooperation (ICIMOD: regional flood information systems, cross-boundary flood early warning)
- Investment

Mr. David Hebblethwaite, SPC

- Commonality: sifting climate parameters, evidenced-based policy, people
- Pacific community: fail off MDG due to population growth
- Collaboration and coordination

Dr. Hans Thulstrup, UNESCO-Jakarta

- Diversity and commonality: Geography, resources, knowledge, experiences -> solutions
- Visualization, sharing, communication and dialogue, working together.

Prof. Atsushi Sunami, Vice President, GRIPS

- UN Science & policy partnership including data integration and EW, forecast.
- SDG #14 Ocean: holistic approach
- Capacity building: S&T - policy study, economics, social science

Mr. Eugene Ban, Senior Executive and Director of Programs for the USACE POD

- Multi-stakeholder approach for flood risk reduction including zoning, insurance, building code, conflict reduction
- Collaboration: nation-wide, interdisciplinary