

A COLLABORATIVE APPROACH
SIDE EVENT @ WORLD WATER FORUM

ENHANCING TRANSBOUNDARY WATER MANAGEMENT AND SDGs

 **21** May
2024

 **8:30-10 AM**
UTC

 World Water Forum,
Bali, Indonesia



Background

The session presented by the United Nations Institute for Training and Research (UNITAR), and its affiliated regional CIFAL Centres (CIFAL Singapore, and CIFAL Bangkok) aims to bridge two critical aspects of global water challenges: transboundary water management and the United Nations SDGs, particularly SDG 6. This aim acts in alignment with the overall vision of UNITAR's Global Water Academy (UGWA), which has the goal to identify capacity gaps that hinder the effective implementation of SDG 6 targets, and co-create innovative solutions to address them.

UGWA partners from Nanyang Technological University (CIFAL Singapore), and Asian Institute of Technology (CIFAL Bangkok), will address these capacity gaps by leveraging data-driven strategies and interdisciplinary collaborations. In particular, the event will explore actionable solutions to address water scarcity, pollution, and equitable access, with a focus on Southeast Asia. Recognizing the urgency of climate change impacts on water resources, the session will highlight the importance of hydro diplomacy, innovative engineering solutions, and inclusive governance mechanisms in achieving shared water prosperity. Through presentations and a dynamic panel discussion, participants will gain insights into cutting-edge research, successful case studies, and collaborative strategies to advance SDG 6 targets and foster sustainable water management practices.

A central focus of our session is to highlight new initiatives and research, emphasizing data-driven strategies for the enhancement of water resources management in the face of climate change. These efforts underscore a strong commitment to actionable solutions that empower stakeholders across various geographical divides. By sharing these insights, we aim to advance climate-resilient water management practices, tailored to suit a variety of transboundary situations.

Following the presentations, a dynamic, moderated discussion will encourage interaction with the audience, fostering an exchange of ideas, experiences, and perspectives. The panel discussion will shed light on the critical nexus between the UN SDGs, particularly SDG 6, and the future of global water resources. By leveraging scientific expertise, engineering ingenuity, and policy advocacy, the session aims to collectively work toward ensuring sustainable water management practices that leave no one behind.

Learning Objectives

- Increased awareness of the critical nexus between transboundary water management and SDGs.
- Enhanced understanding of data-driven strategies and scalable solutions for sustainable water management.
- Identification of opportunities for cross-sectoral collaboration and partnerships to accelerate progress on SDG 6 in Southeast Asia.
- Inspiration for actionable initiatives and policy reforms to address water challenges and promote shared water prosperity.



Speakers



Dr. Adam Switzer: is a Professor of Coastal Science at the Asian School of the Environment and Assistant Dean at the College of Science. He directs Undergraduate Research Experience on Campus (URECA), CIFAL Singapore, and serves as Principal Investigator at the Earth Observatory of Singapore (EOS). His interdisciplinary research applies geoscience to address coastal issues at local, regional, and international levels. His expertise includes marine inundation events, sea level changes, and coral reef evolution. With degrees from the University of Wollongong and experience at The University of Hong Kong, Adam is renowned for his work on coastal hazards and Quaternary geology across Asia. He aims to foster safer and more sustainable communities, earning recognition such as the Wing Ip medal from the Asia Oceania Geoscience Society. Adam has secured substantial research funding, authored numerous publications, and is committed to science communication through documentaries and international talks.



Dr. Sangam Shrestha: is a Dean of School of Engineering and Technology and Professor of Water Engineering and Management at the Asian Institute of Technology, Thailand. He is also founding Co-Director of Global Water & Sanitation Center at AIT. Dr. Shrestha is also a Visiting Professor of Beijing Normal University in China, University of Yamanashi, Japan, National University of Laos, and SEI Associate of Stockholm Environment Institute (SEI). His research interests are within the field of hydrology and water resources including, climate change impact assessment and adaptation in the water, integrated water resources management and groundwater assessment and management. Dr. Shrestha has published more than 200 papers in peer-reviewed international journals and presented more than 100 conference papers ranging from hydrological modelling to climate change impacts and adaptation in the water sector. Dr. Shrestha has been awarded 'Distinguished Research Leader Award' in 2015 and 2019 at AIT. Recently, he has been named as one of the world's top climate scientists in the 'Reuters Hot List' that identifies and ranks 1,000 climate academics according to how influential they are. Similarly, in 2020, 2021 & 2022 his name appeared in the top 2% list of scientists for research impact based on the most recent single year (2019, 2020 & 2021) achievement in a paper published by Stanford University researchers in PLOS Biology.



Dr. Thanapon Piman: is a Senior Research Fellow at SEI Asia with over 15 years of expertise in hydrology, water resources planning, and climate change adaptation. He previously served at the Mekong River Commission (MRC), focusing on sustainable water management and basin development strategies. Thanapon's work involves assessing the impacts of water development and climate change in the Mekong Basin using various tools and techniques. He has collaborated on projects across several countries and held research positions at universities in Thailand and New Zealand. Thanapon holds a Ph.D. in Water Resources Engineering and Management from the Asian Institute of Technology, among other degrees in civil and water resources engineering.





Dr. Dominique Berod: Dominique is responsible for overseeing monitoring and information systems related to water, cryosphere, and ocean at the World Meteorological Organization (WMO). Prior to joining WMO in 2016, he served as a senior expert for water-related activities at the Intergovernmental Group on Earth Observations (GEO) Secretariat in 2015. From 2008 to 2014, he led the Swiss National Hydrological Service, overseeing water monitoring, flow forecasting, information systems, and applied research. Additionally, he held positions such as President of the Swiss Commission of Hydrology and Regional Hydrological Advisor for Europe, the Middle East, and the Caucasus at WMO. Before that, he managed flood protection initiatives in Switzerland, focusing on mitigation, river restoration projects, flood forecasting, warning systems, and hazard mapping. Dominique Berod holds a Master's degree in Environmental Engineering and a PhD in Hydrology from the Swiss Institute of Technology at Lausanne (EPFL), in collaboration with Louisiana State University in Baton Rouge, USA.



Mr. Santi Baran: is Chief Strategy and Partnership Officer of the Mekong River Commission (MRC) Secretariat.

He oversees the organization's strategic planning, monitoring and evaluation (M&E), communications, stakeholder engagement, and partnership development.

Prior to this role, Mr Baran was a Planning, M&E Programme Officer, and an M&E Specialist with the MRC Secretariat. Working for the MRC over the past 12 years, he has led the formulation of the Results Chain and Indicator Framework for three MRC Strategic Plans: Strategic Plan 2011–2015; Strategic Plan 2016–2020; and Strategic Plan 2021–2025. He also leads the preparing the MRC Annual Work Plans and Multiyear Work Plans to implement MRC Strategic Plans.

Mr Baran's experience with various strategy developments for international organizations and the private sector makes him an ideal expert in Strategic Planning and Partnership. Notably, he led MRC preparation efforts for the 1st ASEAN-MRC Water Security Dialogue, and steers a number of key initiatives of the organization, such as the MRC River Monitoring Competition, MRC App and the like.

He holds a Master of Management in Organizational Development from Assumption University in Thailand, and speaks English and Thai.



Dr. Chong Tzyy Haur: is affiliated with the School of Civil and Environmental Engineering, Nanyang Technological University. Dr. Chong Tzyy Haur is currently providing services as an Assistant Professor. Dr. Chong Tzyy Haur has authored and co-authored multiple peer-reviewed scientific papers and presented works at many national and International conferences. Dr. Chong Tzyy Haur's contributions have acclaimed recognition from honorable subject experts around the world. Dr. Chong Tzyy Haur is actively associated with different societies and academies. Dr. Chong Tzyy Haur's academic career is decorated with several reputed awards and funding. Dr. Chong Tzyy Haur's research interests include Water and wastewater treatment, seawater desalination and water reclamation, food application, Membrane fouling and cleaning; sensors for membrane processes, Module design and hydrodynamics, and Energy related to membrane processes.



Agenda

8:30 AM

Open Remarks & Moderator



Dr. Adam Switzer

Professor of Coastal Science, Asian School of the Environment, Nanyang Technological University; Director, CIFAL Singapore; Associated Fellow, UNITAR

8:40 AM

Panelists



Dr. Sangam Shrestha

Dean, Director, School of Engineering and Technology / Global Water Sanitation Center, Asian Institute of Technology



Dr. Thanapon Piman

Senior Research Fellow at the Stockholm Environment Institute, Asia Center in Thailand



Dr. Dominique Berod

Head of the Earth System Monitoring Division, World Meteorological Organization Secretariat



Mr. Santi Baran

Chief Strategy and Partnership Officer, Office of Chief Executive Officer, Mekong River Commission For Sustainable Development



Prof. Chong Tzyy Haur

Associate Professor, School of Civil and Environmental Engineering, Nanyang Technological University

9:30 AM

Q&A

9:50-10 AM

Closing Remarks

Join us!

