

ASIA WATER FORUM 2018





2-5 October • ADB HQ, Manila, Philippines

Updated Program as of 28 Sep



Supplying Water



Sanitation and Water Quality



SESSION LEGEND

Water for Food



Water for Energy



Auditorium Zones B and C

DAY ONE - Tuesday, 2 October

9:00 a.m.-10:00 a.m.

1 Leadership Perspective: Innovating the Future of Water

Welcome and Opening Remarks: Bambang Susantono, Vice President (Knowledge Management and Sustainable Development), ADB

Moderator: Cathy Yang, Anchor and Managing Editor, ABS-CBN News Channel

Leadership Panel:

Takehiko Nakao, President, ADB

Seung-soo Han, Former Prime Minister, Republic of Korea

Isher Judge Ahluwalia, Chairperson, Board of Governors, Indian Council for Research on International Economic Relations (ICRIER)

Annelise Avril, CEO, Suez Consulting

10:00 a.m.-10:30 a.m.

Auditorium Hallway

MORNING BREAK

10:30 a.m.-12:00 p.m.

1.1 Innovation in Water **Production and Diversification of** Resources



Technologies for Wastewater



Chair: Robert Guild, Chief Sector Officer. Sustainable Development and Climate Change Department, ADB

- Highly Efficient Low-Carbon Low-Cost Desalination. Oceanit
- Innovation for Desalination Plants in Remote Areas (Marshall Islands), Osmoflo
- Artificial Recharge as a Solution

1.2 Innovative Treatment

Chair: Stephane Bessadi, Senior Water Utility Specialist, Sustainable **Development and Climate Change** Department, ADB

- Innovative Wastewater Infrastructure for Sustainable Communities, Organica Water
- Aerobic Granular Sludge and Micro-screening: New Compact Solutions for the Energy-neutral

1.3 Innovative Tools for **Integrated Water**



East Asia Environment, Natural Resources, and Agriculture Division, ADB

- Real-time Delivery of Big Data for Flood Management. U.S. Geological Survey (USGS)
- Data Clearing House for IWRM, Government of Punjab (Pakistan)

for Water Shortage, **World Waternet**

- Increasing Water Supply by Reducing Losses, *Innovyze*
- Water Ownership in the Age of Changing Climate Pattern, Zero Mass Water
- Wastewater Treatment Plant, VA Tech WABAG
- R&D and Innovative
 Technologies in Wastewater
 Treatment, Public Utilities
 Board (PUB) Singapore
- Nakhchivan's Urban Water Overhaul, ADB
- Wastewater Recovery in 3 countries, ARCOWA
- Improved Solutions for Mitigation and Risk Management, International Water Management Institute (IWMI)
- COMPASS-using Near Realtime Comprehensive Water Assessments, Water Future Programme
- Managed Aquifer Recharge and Aquifer Storage and Recovery, Ministry of Energy and Water (Afghanistan)

12:00 p.m.-1:30 p.m.

Executive Dining Room | Auditorium Zones A and D for Exhibit

LUNCH AND VIEWING OF TECHNOLOGY & INNOVATION EXHIBITION

1:30 p.m.-3:00 p.m.

1.4 More Tools for Integrated Water Resources Management



1.5 Innovations in Energy for Water



1.6 Guiding Investment Decisions Based on Water Productivity



Chair: **Robert Carr**, Chief Executive, eWater

- Lessons from the Mahaweli Water Security Investment Program, Government of Sri Lanka
- Online Portal Supporting Flood and Drought Management in Asia. DHI
- Web-based Platform for Managing Water Resources Allocation, Stockholm Environment Institute
- Integration of Flood Risk Assessment into Urban Planning, *Inclam*
- Basin Futures Big Data Supporting Rapid Basin Scale Water Assessments,
 Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Chair: **Priyantha Wijayatunga**, Director, South Asia Energy Division. ADB

- Why Should Irrigation
 Managers Worry About Energy
 Access?, International Food
 Policy Research Institute
 (IFPRI)
- Solar Photovoltaic Pumping for Irrigation, Bangladesh Rural Electrification Board
- Maximizing Recovery –
 Anaerobic Co-digestion of Food Waste and Municipal Wastewater Sludge, *Anaergia Singapore*
- Advanced Energy Saving
 Wastewater Treatment System
 for Sound Sanitation
 Development in Developing
 Countries, Japan Sewage
 Works Agency

Chair: **Lance Gore**, Senior Water Resources Specialist, South Asia Environment, Natural Resources, and Agriculture Division, ADB

- Variability of Field Scale Water Productivity in Different Crops on Policy, IHE Delft
- Evolving Thinking on Agricultural Water Productivity: Objectives, Concepts, and Contexts for Effective Water Conservation, IWMI
- Water Productivity Openaccess Portal: A Tool to Monitor Water Productivity, Food and Agriculture Organization (FAO)
- Where to Invest in the Indus Basin Irrigation System in Pakistan to Improve Land and Water Productivity?, IFPRI

3:00 p.m.–3:30 p.m. Auditorium Hallway

3:30 p.m.-4:30 p.m.

Auditorium Zones B and C

1.7 High-Level Panel on Information, Innovation, and Technology and the Water-Food-Energy Nexus

Chair: Stephen Groff, Vice President (Operations 2), ADB

High-Level Panel:

Lucie Pluschke, Food-Water-Energy Nexus Specialist, FAO

Mark Smith, Deputy Director General, IWMI

Kala Vairavamoorthy, CEO, International Water Association

Changhua Wu, Vice-Chair, APWF

4:30 p.m.-4:45 p.m.

Auditorium Zones B and C

1.8 A Conversation About Emerging Technologies and Water

Chair: Thomas Panella, Chief of Water Sector Group, ADB

Stephen Coulson, Head, Sustainable Initiatives Office, Directorate of Earth Observations Programs, European Space Agency (ESA)

4:45 p.m.-5:55 p.m.

Auditorium Zones A to D

Technology Demonstrations and Exhibition Visitation

Demonstrations by Xylem Analytics, ILF Consulting Engineers (Asia) Ltd., Stantec Inc., Jain Irrigation Systems Ltd., Mij Co. Ltd.

5:30 p.m.-7:45 p.m.

Auditorium Hallway

WELCOME COCKTAILS

DAY TWO - Wednesday, 3 October

9:00 a.m.-10:00 a.m.

Auditorium Zones B and C

2 Leadership Perspective: Information, Innovation, and Technology for Water and the Private Sector

Moderator: Ravi Narayanan, Chair, APWF

Leadership Panel:

Diwakar Gupta, Vice President (Private Sector and Cofinancing Operations), ADB

Yumiko Noda, President, Veolia Japan

Stuart Orr, Practice Lead (Freshwater), World Wide Fund for Nature (WWF)

Ger Bergkamp, President and CEO, ARCOWA

10:00 a.m.-10:30 a.m.

Auditorium Hallway

MORNING BREAK

10:30 a.m.-12:00 p.m.

2.1 Resilient Water Supply Systems



2.2 Irrigation Advisory
Services for the 21st
Century



2.3 Modeling for Risk and Resilience in IWRM



Chair: **Emma Veve**, Director, Pacific Urban, Social Development, and Management Division, ADB

- Women Participation and Access to Safe Drinking Water Supply, Environment and Population Research Centre
- Building Resilience of Small Island Communities to Climate Change, Government of Kiribati
- Innovative Water Supply Solutions: Electronic Payment Water Kiosks, IMC Worldwide
- Integrated Urban Services for Low-Income Communities,
 Eau et Vie
- Improving Financial Resilience of Public Water Utilities in Lao PDR, Ministry of Public Works and Transport (Lao PDR)

Chair: **Akmal Siddiq**, Chief of Rural Development and Food Security (Agriculture) Thematic Group, ADB

- Mainstreaming Satellite Earth Observation and Smart Technology for Addressing Water-Food Security Challenges of Asia, *University* of Washington
- Earth Observation Information Services to Support Agricultural Planning, Monitoring, and Management, eLeaf
- Simulation of Rain-fed Rice Yields under Climate Change (Cambodia), Thoeung Puthearam
- Blinded by Technologies Refocusing on Stakeholders' Needs to Improve Water Management in Irrigated Rice Systems, International Rice Research Institute (IRRI)
- Digital Agriculture-based
 Advisories for Water Use
 Efficiency and Sustainable
 Agriculture, Microsoft/
 International Crops Research
 Institute for the Semi-Arid
 Tropics (ICRISAT)

Chair: **Kim Wium Olesen**, Head of Water Resources Department, DHI

- Flash Flood Intelligence in the Age of Instant Communication, BMT
- Real-time Urban Flood Monitoring and Management System, Nihon Suido
- Novel Technique and Instrument for Early Warning of Pollution and Identification of Pollution Discharge Source, Tsinghua University
- Innovation and Resilience in Managing Scarce Water Resources for the United Kingdom, Ricardo Energy
- Visualization of Groundwater Flow for IWRM, Yachiyo Engineering Co. Ltd.

12:00 p.m.-1:30 p.m.

Executive Dining Room | Auditorium Zones A and D for Exhibit

LUNCH AND VIEWING OF TECHNOLOGY & INNOVATION EXHIBITION

1:30 p.m.-3:00 p.m.

2.4 Innovative Contractual Modalities



2.5 Reforming Irrigation at Various Spatial Scales



2.6 Water Quality and Monitoring



Chair: Vijay Padmanabhan, Director, Southeast Asia Urban Development and Water Division, ADB

- Design-Build-Operate Contracting in the Water Sector, Exequatur
- Procurement of a Large-Scale Desalination Plant, ADB
- Contracting for Water Losses Reduction, *Manila Water*
- Contractual Innovations for Water Supply, Suez
- Rural-Urban Water
 Management: An Innovative
 Business Model, IWMI

Chair: **Mio Oka**, Director, South Asia Environment, Natural Resources, and Agriculture Division. ADB

- Moving from Data to Improving Irrigation Services: Irrigation Benchmarking for Irrigation Professionals, IWMI
- Role of Innovative Systems
 Design for Large-Scale
 Development of Micro-irrigation
 (Kundalia Irrigation Project),
 Lahmeyer, ADB
- High-Tech Integrated Irrigation Management Solution for Increasing Irrigable Area Coverage, Farm Productivity, and Income, Jain Irrigation
- Climate-Smart Irrigation, FAO
- Sustainable Use of Groundwater in Water Scarce Irrigation Systems in Dry Zone of Sri Lanka, ADB

Chair: **Sonia Chand Sandhu**, Senior Advisor to the Vice President (Knowledge Management and Sustainable Development), ADB

- Sanitation and Sustainable Development in Japan, Japan Sanitation Consortium
- Jaipur (Rajasthan): Water Scarcity and the Role of Sustainability and Transformation Plans (STPs) in Minimizing Groundwater Contamination, Manipal University Jaipur
- Decision Support for Watershed-scale Real-time Water Quality Monitoring to Determine Impacts of Urbanization on Water Treatment, USGS
- Making Water Transparent: Innovative Water Monitoring Networks to Support Water Managers in Quickly Developing Economies, s::can Messtechnik GmbH

3:00 p.m.-3:30 p.m.

Auditorium Hallway

AFTERNOON BREAK

3:30 p.m.-5:00 p.m.

2.7 Earth
Observation
and Remote
Sensing Technology

2.8 Smarter Use of Water for Energy

Chair: Sujata Gupta,



2.9 Fecal Sludge Management (FSM)



2.10 Utility Asset Management



Chair: **Paolo Manunta**, Infrastructure Specialist (Earth Observation), Urban Sector Group, ADB

- alist Director, East Asia
 Sustainable Infrastructure
 Division, ADB
 - Water-Energy Nexus: Case of People's Republic of China (PRC), ADB
 - Bankable Hydropower Projects Using Monte

Chair: Jingmin Huang, Principal Urban Development Specialist, South Asia Urban Development and Water Division, ADB

- Sustainable Fecal Sludge Business in Developing Countries, IWMI
- Mainstreaming FSM in Rajasthan, ADB

Chair: **Stefan Rau**, Senior Urban Development Specialist, East Asia Urban and Social Sectors Division, ADB

- Trenchless
 Technologies for
 Water Networks
 Laying, Bessac
- Smart Solutions for Efficient Water

- Bathymetric Airborne LiDAR Pilot Project for Irrigation, Leica Geosystems/PTMI
- Applying Remote Sensing and GIS

- Technologies for Causality Analysis of Groundwater, Pasco Corporation
- Satellite Data Related to Water Sector. Japan Aerospace Exploration Agency
- Potential of Remote Sensing Tools for Resource Monitoring, Indian Institute of Technology Bombay
- Water Sector Reform Challenge in Pyanj River Basin with Comprehensive Approach and Innovative Technology, Government of Tajikistan

- Carlo Simulations, ILF Consultina
- Restoration Hydro: Using Powered. Nature-based Hydrological Structures to Enhance the Resilience of, and Improve Access to, Linked Energy, Water and Food Systems,
 - Natel Energy
- Greening Hydro: A Project on Upgrading of PRC Small **Hydropower Capacity** Project, *United* Nations Industrial Development Organization (UNIDO)
- Upgrading Dam under Operation with Dam Piercing, *Nippon* Koei Co. Ltd.

- The Circular Sanitation Economy, The Toilet Board Coalition
- Transformative Sanitation Technologies: A New Path to Safe Sanitation for All, Bill and Melinda Gates Foundation
- Networks, Georg **Fischer**
- · Innovations for Circular Economy: **Asset Management** for Water, Stantec
- High-Performance Utilities through GIS and Advanced Asset Management, Altereo
- The Business Value of GIS in Managing Water Systems, **Nobel Systems**

5:00 p.m.-5:45 p.m. Auditorium Zones A to D

Technology Demonstrations and Exhibition Visitation

Demonstrations by Nippon Koei Co. Ltd., Britishwater Inc., K-water, Aurea Imaging, In-Situ Inc., Veragon Water Solutions Ltd.

5:30 p.m.-7:45 p.m. **Auditorium Hallway**

NETWORKING COCKTAILS

6:00 p.m.-6:30 p.m. **Auditorium Zone B**

Special Film Screening: A Plastic Ocean

Chair: Daniele Ponzi, Chief of Environment Thematic Group, ADB

Introduction by documentary director Craig Leeson, Global Chief Evangelist, Plastic Oceans International

DAY THREE - Thursday, 4 October

9:00 a.m.-10:00 a.m.

Auditorium Zones B and C

3 Leadership Perspective: Information, Innovation, and Technology and the Enabling Environment

Moderator: **Ravi Narayanan**, Chair, APWF Session Opening: **Hak-soo Lee**, CEO, K-water

Leadership Panel:

Amy Leung, Director General, East Asia Department, ADB

Don Blackmore, Chair, eWater

Ek Sonn Chan, Secretary of State, Ministry of Industry and Handicraft, Government of Cambodia

Seong-Han Kim, Vice President and Chief Research Officer, K-water

10:00 a.m.-10:30 a.m.

Auditorium Hallway

MORNING BREAK

10:30 a.m.-12:00 p.m.

3.1 Building Leaders and Capacities for Water Utilities



3.2 Innovative Tools for Water Resources
Assessment

Division, ADB



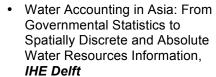
3.3 Enhancing Climate Resilience



Chair: **Ye Yong**, Director, Central and West Asia Urban Development and Water Division, ADB

- A New Serious Game to Simulate Strategic Management for Utilities, Agro Paris Tech, HueWaco
- Tomorrow's Women Water Leaders of Lao PDR and the Gender and Development Cooperation Fund, Ministry of Public Works and Transport (Lao PDR)
- Improving Water Services through Integrity Mechanism, Stockholm International Water Institute (SIWI)
- Operational Management and Capacity Building, Suez
- Financial Transformation of Utilities: The Cambodia Experience, Government of Cambodia

Chair: **Jiangfeng Zhang**, Director, Southeast Asia Environment, Natural Resources. and Agriculture



- Piloting Australia's Water Tools to Improve Drought Resilience in Cambodia: Support for the UN ESCAP Drought Mechanism. eWater
- WA+ Framework: Case Study from Cambodia, Government of Cambodia
- Characterizing Flood-based Farming Systems in the Ayerwaddy Delta of Myanmar, IWMI

Chair: **Donneth Walton**, Director, Central and West Asia Environment, Natural Resources, and Agriculture Division, ADB

- The Journey toward Resilient Rivers: Embracing Innovation, International RiverFoundation (IRF)
- Innovative Governance for Cloudburst Resilience: Upscaling, World Waternet
- Resilient Asian Deltas: Protecting One Billion People from Climate Change, WWF
- Contribution on Water-related Disaster Risk Reduction in Asia Pacific, International Centre for Water Hazard and Risk Management (ICHARM)
- Structural Solutions to Mitigate Flood and Riverbank Erosion Disasters, ADB

12:00 p.m.-1:30 p.m.

Executive Dining Room | Auditorium Zones A and D for Exhibit

LUNCH AND VIEWING OF TECHNOLOGY & INNOVATION EXHIBITION

1:30 p.m.-3:00 p.m.

3.4 Efficient Water
Distribution and Smart
Systems



3.5 Governance and Financing



3.6 Curbing Marine Pollution



Chair: **Hisaka Kimura**, Advisor, Private Sector Operations Department, ADB

- Smart and Internet of Things Innovations for Water Supply, Schneider-Aveva
- Application of Smart Grids to Drinking Water Monitoring, ICUWHRI
- Transitioning to Safely Managed Rural Drinking Water for SDG Delivery, *University of* Oxford
- Shenzhen PRC Smart Solutions, ADB
- Appropriate Smart Water Management Application Procedures and Cases, Kwater

Chair: **Chiara Bronchi**, Deputy Director General concurrently Chief Thematic Officer, Sustainable Development and Climate Change Department, ADB

- Youth for Water and Climate, Global Water Partnership (GWP)
- Financing to Support Sound Water Cycle Management, Japan Water Forum
- An Operational Framework for Climate Resilient Water Management, Oxford Policy Management
- Improving the Bagmati River, the Lifeline of Kathmandu City,
 ADB, Ministry of Urban Development (Nepal)
- Application of River Chief System for Ecological Protection, ADB

Chair: **Daniele Ponzi**, Chief of Environment Thematic Group, ADB

- Source-to-Sea Approach: An Innovation in Governance, SIWI
- Opportunities and Constraints for Addressing Marine Pollution in East Asia, Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)
- The Manila Bay Rehabilitation Program: Evolving through Time, Manila Bay Coordinating Office
- Tackling Marine Pollution: Future Directions, ADB
- Rethink Plastics, Plastic
 Oceans International

3:00 p.m.-3:30 p.m.

Auditorium Hallway

AFTERNOON BREAK

3:30 p.m.-4:30 p.m.

Auditorium Zones B and C

3.7 High-Level Panel on Attaining the SDGs through Information, Innovation, and Technology

Chair: **WooChong Um**, Director General, Sustainable Development and Climate Change Department, ADB Moderator: **Ravi Narayanan**, Chair, APWF

High-Level Panel:

Isher Judge Ahluwalia, Chairperson, Board of Governors, ICRIER

Ross Hamilton, Interim Chair, GWP

Eva Abal, CEO, IRF

Tagsem Khan, Managing Director, Dhaka Water Supply and Sewerage Authority, Government of Bangladesh

4:30 p.m.-4:55 p.m.

Auditorium Zones B and C

3.8 Closing Address and Awarding of the #WaterYouDoing Youth Photo Competition

Awarding Presider: **Bambang Susantono**, Vice President (Knowledge Management and Sustainable Development), ADB

Chair and Closing Address: **WooChong Um**, Director General, Sustainable Development and Climate Change Department, ADB

DAY FOUR - Friday, 5 October (Parallel Workshops)

9:00 a.m.-3:30 p.m.

Multifunction Hall 2

1 Boosting Effectiveness for Water Operators Partnerships

Global WOPs Alliance, UN-HABITAT, ADB

In this workshop, participants will learn from Asian Water Operators' Partnerships (WOPs) practitioners' own experiences and will be introduced to various tools being produced through the "Boosting Effectiveness of WOPs (BEWOP)" Program.

9:00 a.m.-3:30 p.m.

Multifunction Hall 3

2 Nonrevenue Water Management

Suez Consulting, Suez Technical Center, Suez Southeast India

The workshop provides a holistic approach for water utilities to manage nonrevenue water. Suez will discuss tools that address both technical and organization issues within the water utility and deliver sustainable outcomes.

9:00 a.m.-3:30 p.m.

Lecture Theater 2

3 Earth Observation for Water Resources Management

European Space Agency, eLeaf, DHI GRAS

This seminar will seek to demonstrate how earth observation can support water resources management, agriculture, and international development assistance including the monitoring and reporting requirements of the Sustainable Development Goals.

9:00 a.m.-12:00 p.m.

Auditorium Zone B

4 Australian WaterTools for Water Management

eWater, Bureau of Meteorology (BOM), Geosciences Australia

This workshop will present Australia's core national-scale modeling tools which have underpinned policy development and implementation, and outlined a pathway for engagement with countries who wish to more rapidly improve their management of water scarcity.

9:00 a.m.-12:00 p.m.

Auditorium Zone C

5 Water Price Regulation in New South Wales, Australia

IPART New South Wales

This workshop includes discussions on water pricing, external benefits and subsidies, efficiency incentive mechanisms, supply volatility mechanisms, and customer engagement in price determination.