

Event Session – Operationalizing the WEFE Nexus for Climate-Resilient and Equitable Water Security

Day Date: Monday 24/08/2026 | **Time:** 09:00–10:30 (Sweden Time)

Session ID: 12610 | **Gold Standard:** Yes | **Format:** Panel

Session Contact:

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Session Type:

- On-site and Online

Session Leads/Convenors

- Asia Pacific Water Forum (APWF)
- Asian Development Bank (ADB)
- FutureWater
- International Food Policy Research Institute (IFPRI)
- International Rice Research Institute (IRRI)
- International Union for Conservation of Nature (IUCN)
- International Water Management Institute (IWMI)

Key Messages

- **Water security is the foundation of Asia's food security, climate resilience, and agricultural transformation.** Agriculture accounts for nearly 70% of freshwater withdrawals in the region, while increasing water scarcity, groundwater depletion, climate variability, and competing demands from urban and industrial sectors are placing unprecedented pressure on water resources. These interconnected challenges demand an urgent action to improve water productivity and strengthen resilient irrigation systems.
- **Transforming and scaling agricultural water management requires evidence-driven policies, digital innovation, and smart investments.** Scientific evidence, climate-smart technologies, data-driven decision-making, and inclusive financing can unlock sustainable growth, protect water resources, and improve farmer livelihoods across Asia.
- **Operationalizing the Water-Energy-Food-Ecosystem (WEFE) Nexus requires integrated governance that connects water, energy, food, and ecosystems.** Breaking sectoral silos through basin-scale planning, digital intelligence, nature-based solutions (NbS), and inclusive institutions will enable more equitable, resilient, and climate-responsive resource management across Asia.
- **Achieving climate-resilient and equitable water security demands implementation at scale.** This session will showcase practical solutions, strengthen regional collaboration, and identify actionable pathways to translate WEFE commitments into investments, policies, and measurable impact across Asia.
- **Regional partnerships will be key to accelerating sustainable water investments.** The session will catalyze regional partnerships and deliver actionable policy recommendations, grounded in scientific evidence, to accelerate sustainable water investments and build climate-resilient, food-secure, and water-secure futures across Asia.

Summary

This Asia-focused session examines Water for People and Progress through the WEFE Nexus, turning commitments into practical action. Showcases of integrated basin management highlight governance reforms, participatory decision-making, and climate-responsive strategies to enhance

equitable water allocation, safeguard livelihoods, and build resilient, low-carbon food, energy, and environment systems.

Session Description

This session will focus on Asia, examining progress on Water for People through the WEFE Nexus, emphasizing the shift from commitments to practical implementation. Drawing on regional showcases, it will highlight policy lessons and operational practices from integrated water cycle management – from upper catchments to downstream basins – to advance equitable, climate-resilient water security.

River basins underpin food production, climate adaptation, water and energy security, ecosystem services, and economic activities. However, climate change, rising demand, and ecosystem degradation are intensifying hydrological variability, increasing flood and drought risks, and placing growing pressure on livelihoods, food systems, and regional stability. Groundwater stress – driven by irrigation dependence, industrial expansion, and digital-sector growth – heightens competition for water resources and challenges long-term resilience across sectors and communities.

Discussions will identify priority policy actions to strengthen basin-scale climate coordination, align environmental flows with sectoral demands, including climate-responsive food production, and implement allocation and planning models capable of managing compound risks. Emphasis will be placed on inclusive governance, equitable benefit-sharing, and protection of vulnerable communities.

The session will advance operational guidelines developed for actionable pathways for climate-responsive water management – integrating NbS, technical and digital innovation, and basin governance – to operationalize low-carbon, equitable, and resilient WEFE systems across Asia beyond 2030.

Objectives

- Align policymakers, investors, and practitioners around priority actions to scale irrigation for food security and climate resilience.
- Review progress on scaling of irrigation as well as financial models in use: what works and what needs to be improved?
- Learn from successful WEFE implementation across Asia while drawing South-South lessons from Africa.
- Launch flagship knowledge products on irrigation in Asia.
- Generate actionable messages and new partnerships to inform the SWWW 2026 forum and mobilize coordinated investment at the water-food nexus.

Desired Impact

This session aims to catalyze tangible progress in translating Water for People commitments into operational outcomes across Asia. By sharing policy lessons and operational practices from integrated basin management, it will enhance understanding of how climate-responsive WEFE Nexus strengthens equitable water allocation, safeguards livelihoods, and secures food, energy, and ecosystem services.

Participants will gain actionable insights into managing compound risks while balancing competing sectoral demands. The discussion will equip policymakers, practitioners, and basin authorities to implement inclusive governance, participatory decision-making, adaptive policies, and capacity-building strategies to ensure fair water access, particularly for marginalized communities in Asia.

Emphasizing governance innovation, monitoring and evaluation, and policy instruments alongside nature-based solutions and targeted digital tools, the session will foster scalable, operational approaches. By the end, participants will be able to advance integrated, equitable, and sustainable water management strategies that enhance basin resilience, reduce vulnerability, and strengthen socio-economic stability across Asia's river basins.

By the end of the session, participants will have;

- Identified the most critical barriers to WEFE implementation in Asia.
- Prioritized scalable policy and investment solutions.
- Defined opportunities for regional collaboration and knowledge exchange.
- Contributed to a concise **Asia WEFE Action Message** for wider policy dialogue.
- Connected with organizations working on finance, governance, data, ecosystems, and implementation.

Theme

This equity-centered session directly supports the four themes of the 2026 UN Water Conference by advancing **Water for People** through climate-resilient, inclusive implementation of the WEFE nexus. It contributes to **Water for Prosperity** and **Water for Planet** by linking basin management with food systems, ecosystem protection, and low-carbon development, while strengthening **Water for Cooperation** through transboundary and multi-stakeholder governance. By prioritizing equitable allocation, vulnerable communities, and climate adaptation, it supports Sustainable Development Goals (SDG) progress and responds to calls for just, climate-responsive water management under accelerating hydrological stress.

Audience engagement

Medium – Mentimeter poll.

Session Outline

This 90-minute hybrid session includes regional operational showcases and a moderated panel with interactive Q&A. The Mentimeter will be used to gather audience feedback by asking questions about (i) operationalization of the WEFE Nexus, (ii) constraints in its adoption, and (iii) it's potential for future uptake. It concludes with actionable pathways to operationalize the WEFE nexus and strengthen climate-resilient and equitable basin management across Asia.

Region Relevance

- Central Asia
- East Asia (incl. Southeast Asia)
- South Asia
- West Asia

Tags

- Ecosystems
- Energy
- Nexus
- Water management
- Food and nutrition security
- Asia

Run-of-the-Show (Minute-by-Minute)

Time	Activity	Responsibility
09:00 – 09:04	Moderator	Dr. Novaira Junaid , Socio-Economist, IWMI
09:05 – 09:09	Opening Remarks	Mr. Satoshi Ishii , Director Strategy and Partnerships Team, Water and Urban Development Sector Office, ADB
Case Studies by Partners		
09:10 – 09:16	Case Study by International Water Management Institute (IWMI)	Dr. Mohsin Hafeez , Strategic Program Director – Water, Food and Ecosystems (WFE), IWMI
09:17 – 09:23	Case Study by Asia Pacific Water Forum (APWF)	Ms. Yumiko Asayama , Chief Manager, APWF Secretariat
09:24 – 09:30	Case Study by FutureWater	Ms. Tania Imran , Water Management Expert, FutureWater
09:31 – 09:37	Case Study by Asian Development Bank (ADB)	Ms. Tanya Huizer , Senior Water Resilience Specialist, ADB
09:38 – 09:44	Case Study by International Food Policy Research Institute (IFPRI)	Dr. Claudia Ringler , Director, Agrifood Innovation and Resilience, IFPRI
09:45 – 09:51	Case Study by International Union for Conservation of Nature (IUCN)	Mr. Vishwa Ranjan Sinha , Senior Programme Officer, Water and Wetlands – South Asia, IUCN
09:52 – 09:58	Case Study by International Rice Research Institute (IRRI)	Dr. Anton Urfel , Senior Water Scientist, IRRI
09:59 – 10:10	Mentimeter Poll	All participants
10:11 – 10:24	Q&A Session with the Audience	
10:25 – 10:30	Closing Remarks	Dr. Mark Smith , Director General, IWMI