

## **Emerging trends that shape our water future: A series of online dialogues hosted by the GWP TEC**

### *Dialogue # 4 The digital transformation: in service of equitable and integrated water management*

April 16, 2024, 1300-1430 CET

Meeting link: Join Zoom Meeting

<https://gwp-org.zoom.us/j/84309086023?pwd=7RswIEpi6mFdCAJYmV8sEGhX9CuoKJ.1>

Meeting ID: 843 0908 6023

Passcode: 494762

### **Introducing the online dialogues**

As we emerge from the 2023 UN Water Conference, with some renewed focus and momentum, it is timely to take stock of the emerging trends and look ahead to the next decade of water management and explore the opportunities for GWP leadership.

With this in mind, the GWP TEC intends to organize a series of online dialogues with the GWP network to surface and explore some of the emerging trends where GWP could take a leadership position in developing and disseminating knowledge, developing partnerships and building capacity. The intended outcome of the dialogues is to identify and elaborate on areas of strategic importance for GWP to position itself as a leader within the global water community.

### **Dialogue #4 The digital transformation: in service of equitable, transparent and integrated water management**

Big data and AI are revolutionizing human life and unlocking a whole new world of innovation. Organizations such as GWP need to keep track of the developments and has a unique position to guide the network in this field of work to serve IWRM implementation in collaboration with key partners.

#### **Objectives of the dialogue**

- Highlight some key developments on big data, AI (e.g. Chat GPT), portals, modelling, and other relevant technologies, and their potential to support decision-making, transparency and equity.
- To get a sense from the network of what are the needs and demands for data platforms, modelling to support policy and decision-making and financing / implementation.
- Scope ideas that can be used as a base to develop collaborative work between GWP TEC organizations.

#### **Potential opportunities and initial ideas:**

- 1) **Big data and AI for good governance and implementing IWRM** - Governance provisions (legislation etc.) are often not sufficiently updated, due to complexity and lack of priority in the political system. Models can tell storylines of the bio-physical system – how multiple issues are linked and how the system will behave in the future. This can inform necessary integrations in governance and innovative financial arrangements to take measures in due time. AI can for example help support with best practices specific for each context. It can support the collaboration of many interests/sectors and levels of policymakers and experts. When needed integrations have been identified, this can in turn inform innovative financing arrangements.

**2) Climate change adaptation – adaptive management**

With changing water availability, we need to use resources more efficiently. This can be done by improved and more dynamic governance to be adaptive to the shifting water availability. For example, a water permit is often issued with no time limit and with a constant volume / allowance for extraction. More adaptive permitting, linked to operational models / monitoring can support more efficient use of resources adjusting according to available resources.

**3) Transformation in efficient and transparent transactions through blockchain technology**

A key challenge to IWRM implementation, such as restoring landscapes, is establishing efficient, transparent and sustainable systems to monitor its implementation and to distribute financial incentives to those who are actually restoring landscapes, such as smallholder farmers. Current distribution systems depend mainly on opaque cash transfers that are inefficient, slow, and vulnerable to fraud – and marginalized people may not actually receive the benefits. As a result, investors are hesitant to invest, and farmers, for example, have minimal incentive to act. Blockchain based applications can support the financing of landscape restoration and implementing nature-based solutions. It allows restoration actors (like farmers) to distribute, track and earn funds in a way that minimizes costs and maximizes impact. Blockchain applications allows investors to efficiently send money to landscape committees set up to receive the funds. Smart contracts distribute financial rewards to farmers and other beneficiaries in exchange for restoration activities verified by facilitators. The blockchain application is also able to send funds directly to individual implementors when conditions allow (for example, direct access to a smartphone).

This online dialogue will reflect on the digital transformation ongoing and developments within modelling, big data and AI and the opportunities this brings for better implementing more transparent and equitable integrated water management and discuss what GWP can do to bring these opportunities to the network.

## Agenda

Timing	Agenda Item	Notes
0-5	Welcome on behalf of GWP Technical Committee (GWP-TEC) <ul style="list-style-type: none"> <li>• <i>Jaehyang So, TEC Chair, Global Water Partnership</i></li> </ul>	<ul style="list-style-type: none"> <li>• Restate the role of the TEC</li> <li>• Introduce TEC members</li> <li>• General housekeeping</li> </ul>
5-12	Framing digital transformation <ul style="list-style-type: none"> <li>• <i>Alan Atkisson, GWP Executive Secretary and CEO</i></li> </ul>	<ul style="list-style-type: none"> <li>• GWP and digital transformation</li> </ul>
13-20	Reflections on the opportunities of the Digital Transformation, Big data and AI <ul style="list-style-type: none"> <li>• <i>Gualbert Oude Essink, Deltares</i></li> </ul>	<ul style="list-style-type: none"> <li>• What are the GWP network needs and demands on AI and Big Data?</li> </ul>
20-40	Discussion with TEC members <ul style="list-style-type: none"> <li>• <i>Åse Johannessen, Senior Researcher, Deltares</i></li> <li>• <i>Franz Rojas, Director, Water and Sanitation Analysis Division, CAF</i></li> <li>• <i>Kenji Nagata, Senior Advisor on Water Resources and Disaster, JICA</i></li> <li>• <i>Carolina McKinnon, Business Analyst – Digital Water, Brown and Caldwell, and GWP Steering Committee member</i></li> <li>• <i>Lance Gore, Principal Water Resource Specialist, Asian Development Bank (TBC)</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tom to moderate, questions to be developed in advanced and shaped with TEC members</li> </ul>
40-55	<ul style="list-style-type: none"> <li>• Open floor questions and remarks</li> </ul>	Tom to bring any questions or comments from the chat and also invite others to contribute
55-65	Summary of discussion and preview of next global dialogue <i>Jaehyang So, TEC Chair, Global Water Partnership</i>	Tom to summarize and also invite any reflections from Jae
65-70	Closing remarks <ul style="list-style-type: none"> <li>• <i>Abdoulaye Sene, Chair of Regional Chairs &amp; Chair, GWP-West Africa</i></li> </ul>	<ul style="list-style-type: none"> <li>• Regional dimensions of these discussions are important</li> <li>• Engagement with regional GWP critical</li> </ul>