



Roundtable Dialogue: Water Can't Wait,  
Accelerating Innovation for Water Security

# SYNTHESIS REPORT



**WORLD BANK GROUP**  
Water

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### **Acknowledgements**

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**As water risks are becoming more severe – in the face of climate change, the call to action is ever more urgent. Bottlenecks and possible solutions to the adoption, scaling, and acceleration of innovation, and technology to address water challenges are summarized below.**

About 150 participants professionally engaged in the water agenda met on 30 November 2022, at the World Bank’s Headquarters in Washington DC to discuss ways to accelerate the adoption of innovation and technology to address water challenges. The event was organized by the World Bank’s Water Global Practice and supported by the 2030 Water Resources Group (2030 WRG).

This note reflects the dialogue that took place among a wide range of representatives from the public and private sectors, foundations, non-profits, and international organizations. The findings from the dialogue are being shared widely to promote action and enhanced collaboration in the water community.

**Key take-aways:**

- a. There is a need to build and nurture multi-stakeholder platforms to promote innovation uptake at all levels – local and national. These platforms should involve a wide range of participants - involving the public and private sectors, as well as civil society associations – to build a coalition of partners to bring change.
- b. Support should be provided to entrepreneurs who promote water innovation so that new ways to effectively manage water emerges widely. The support could be provided by the public sector or through private corporations.
- c. Innovation on the use of technology and application of different institutional models should be an integral part of water financing to promote economic decisions on investments and efficiency in operations.

# A Priority Action Agenda: Reprofile Water within the Climate and Economic Debates

The following actions are a non-exhaustive list of potential avenues to accelerate action, encourage uptake of the latest applicable innovations, and inspire change and collaboration.

## *1. Addressing the factors behind risk avoidance and the reluctance to adopt new technologies and innovation*

There is an inherent hesitation holding back the adoption and application of innovations in the water sector. This inertia is found across companies, public organizations, and regulators.

Adoption of water innovations is perceived as a high-risk step. Frequently, innovators with transformative potential do not want to be held liable for decisions that may lead to failure, costly mistakes, or job insecurity. In this scenario, willingness to take risks based on incentives and regulations is a must and this needs to be embedded in the culture of organizations from both public and private sectors.

In addressing challenges, reactive action has become the norm. Societies have implemented big “band-aid” “solutions” to problems. However, this does not inherently address systemic issues. **Building local ecosystems that are conducive to innovation** is needed.

While water is a global asset, stewardship is a local concern. Policy and institutional innovation is as important as the use of technology. At national or subnational levels, innovation is also essential for legal and regulatory frameworks. This includes more open and flexible approaches that offer utilities, companies, and entrepreneurs the safe space required to try new ideas and use failures as a cumulative learning experience.

Additionally, there is need to help provide the enabling conditions for start-ups to collect the right data to test and validate their ideas and technologies with engaged support from partners. Many new innovations are emerging from the start-up community, but they face challenges in scaling-up. Many

promising solutions often do not receive sustained commitment and support. Many potential users of these innovations see risk associated with adopting specific technologies or products.

## *2. Increasing the number of innovators*

This requires broadening private sector engagement, attracting and retaining the right talent, and identifying and fostering champions among political leadership.

Innovations and innovators need champions to forge ahead. Although numerous innovations have been developed and tested in different parts of the world, there are gaps in adopting and scaling ground-breaking water solutions. It is crucial to identify and gain commitment from champions who can appreciate, advocate, and push the adoption of innovations. A good water champion typically has a genuine intent to change the system and can provide water stewardship at a systems level.

Organizational ecosystems face daunting structural limitations. These range from legacy management approaches to misaligned business, operational and innovation strategy. **To attract and retain the right talent**, innovation must be part of the organization's DNA. Encouraging the adoption of innovative long-lasting solutions requires multi-disciplinary talent working together with a pool of motivated individuals to develop initiatives on innovation.

Political leadership and political will in government are essential ingredients for increasing the reach of innovation. There is need for more elected leaders, policymakers, and local water caucuses to push hard on this innovation agenda. They need to communicate effectively to create a movement, especially together with the youth. They also need access to accurate data and knowledge to take a view and to make informed decisions.

## *3. Turning data into knowledge to inform decisions*

It is crucial to have accurate data at the right time in the right context. While platforms that collect and share data are in place, increasing collaboration and using data to inform systemic decisions is lacking. It is needed to turn data into knowledge that informs decisions and facilitates systemic solutions. Artificial intelligence is delivering positive results in the agriculture sector, and it could be applied more widely to the water sector.

Vast amounts of archived data need to be analyzed, and sophisticated and "smart" data and information systems will be crucial in managing water at all

levels. At the same time, data needs to be more open and transparent and available to both measure achievements and hold stakeholders accountable.

Water professionals are good communicators among themselves, but would need to reach out more with others, particularly those making policies and decisions within governments, utilities, and companies. The water sector needs to be more nimble in sharing knowledge with intersecting sectors.

#### *4. Amplifying and reframing water narrative*

Water is climate. Unfortunately, the link between water and climate is not so obvious to decision-makers nor the general public. To bring a sense of urgency and hope to inspire, activate, and engage audiences, we need to reposition and elevate water's role in the global climate, economic, health and other dialogues.

This can be done through more purposeful communication, education, and storytelling based on science and data, building on the great efforts of and among water professionals. Shaping the narrative should be a participatory and inclusive process to go beyond the water community to drive wider changes and build and sustain public support.

#### *5. Defining concrete commitments and actions to drive systemic, timely changes*

As water is a pivotal driving force at the nexus of food, energy, and climate, there is a need to identify interdependencies to employ systems thinking and respond proactively to tackle comprehensively using innovation. Such systems change requires thoughtful and responsive measures, not reactive ones. People's experience of systems change should also be documented and validated to capture lessons learned for the future.

There is a **need to shift the thinking around the value of water and how funding is mobilized and applied**. Innovation is perceived as expensive. However, access to funds might not be the most pressing problem if the financial benefits to innovate are clear. While there may be cashflow issues that may hinder the application of new technology and innovations, the overall growth in goodwill of utilities in serving customers should be looked at in investing for innovation and technology. Scarce public financing should also be used to test new ideas and "de-risk" their initial adoption.

Governments cannot afford to continue subsidizing the water sector. Therefore, reducing subsidies through efficient operations and economic investments will be key. Where possible, private finance should be introduced to lessen the burden on public resources.

At the country level, it is necessary to have goals and a timeline in place for the adoption of technologies. It is important to define exactly how and by when goals should be reached. This will allow early action to address water issues that can be more expensive and complex to solve if decisions are delayed.

## *6. Engaging in inclusive collaboration*

To move forward, we must acknowledge that: 1) there are working silos that need to be integrated in a systems approach; and 2) no one company or organization can solve the world's sustainability problems on its own – only by joining forces will it be possible to have a larger impact. Such collaboration – which may require new behaviors born out of crisis – is not only essential but will potentially be a “win-win” for engaged parties.

To make innovation available at the country level, cross-cutting collaboration is necessary. For instance, start-ups hold tremendous potential to enhance value chains in the water sector without reinventing the wheel: via energy transition, carbon sequestration, smart and regenerative agriculture, alternative foods, circular packaging, biodiversity, inclusive growth, etc. Encouraging collaboration between them and companies or utilities could increase the chances of adoption and learning exchange.

Multi-stakeholder platforms involving public institutions, private entities, and civil society can be vehicles for collaboration and open dialogue at the local, regional, and global levels. **They can be change drivers and collaboration advocates.** They enable all stakeholders – especially those facing similar challenges – to connect, exchange experiences, and collect feedback to accelerate learning and change. They leverage diverse capabilities, skills and resources.

We must recognize the special role that the private sector plays. Innovation is much easier with the support of organized industry. With this, innovators get ease of engagement, visibility, scale, and continuity.

## And what next...

Water risks — floods, droughts, pollution — are becoming debilitating realities worldwide in the face of climate change, and the call to action is urgent. As participants noted, “the pain is real.” Companies are facing disruptions in supply chains that operate in water-stressed regions, governments are being called upon to build resiliency in water systems and management, NGOs and institutions are seeking new ways to engage and activate solutions on the ground, and communities are demanding persistent and transformative climate action.

Converging global water crises are an imperative invitation to innovate – be it innovations in technology, policy, or finance, and regulation. They also make more urgent to place water at the core of the climate and economic dialogue at the local, national, regional, and global level.

The World Bank Group (WBG) is working across many fronts to bring the know-how of innovators together with potential end-users and to help countries develop the policies, incentives, and regulations needed to mainstream and scale up innovative solutions.

This roundtable provided valuable insights to inform WBG efforts to scale and tailor innovations in the water sector across the world where they are needed most. It opened the floor for a more sustained multisectoral dialogue to transform the way water-related players operate and collaborate within the sector and with others, such as agriculture.

Since 2023 is a pivotal year for the present and future of water security, collaborative action, concrete commitments, and strategic investments are essential at this game-changing point. It is not too late to act, because water can't wait.

### Further reading/resources as recommended by attendees:

- 100+ Accelerator
- One Water Initiative/Hub
- World Economic Forum UpLink Platform
- State of Global Water Resources 2021 report (WMO, 2022)