

UN 2023 Water Conference Side Event

The Hidden Wealth of Nations: Groundwater in Times of Climate Change

March 22nd, 2023, 5-6.15PM, UN HQ Conference room # 6 Organized by: The World Bank, The Danish Water Forum, the OECD

Background on the event (one paragraph)

The session achieved its goals to (1) raise the profile of groundwater as underpinning resilient growth and development; (2) to mobilizing non-water audiences and high-level policymakers around the needed cross-sectoral reforms to ensure the sustainable and equitable use of the groundwater resource. The presentation of the results of new research from the World Bank on the economics of groundwater offered new insights on the value of groundwater, the costs of mismanagement, and the opportunities to leverage its potential for food security, reducing poverty and boosting resilient growth. This presentation set the stage for a subsequent discussion moderated by the Danish Water Forum (DWF) engaging the Minister of Sanitation and Water Resource from Ghana (Hon. Ms. Cecilia Abena Dapaah), the Minister of Environment from Denmark (Magnus Heunicke), the World Bank Global Director for Water (M. Saroj Jha), a commissioner and lead expert from the Global Commission for the Economics of Water (M. Aromar Revi) and the audience.

Key Issues discussed (5-8 bullet points)

- Groundwater is nature's insurance: importance of valuing groundwater and the many benefits and services it brings —when well managed. Groundwater can help protect food security, reduce poverty, and boost resilient growth.
- Spectrum of use but shared need to integrate cross-sectoral action: some regions are in a situation of underuse while other are in a situation of overexploitation all regions need to prioritize groundwater management in face of climate risks.
- Efficiency in consumption and production is possible but maximizing groundwater requires valuing for all costs and benefits, including understanding local contexts and unintended consequences. It implies moving away from a water efficiency narrative prioritizing technological change over demand management.
- Multi-sectoral action is needed and requires political leadership and concerted efforts including some difficult but needed reforms of producer support subsidies.

Key recommendations for action (5 - 6 bullet points)

- Whether countries have underused the resource and have yet to harness its potential; or
 overexploited groundwater and suffering the damaging consequences, all countries need
 urgent cross-sectoral action and high-level political mobilization.
- In areas that underuse the resource, well-managed local shallow groundwater could be key to improving food security and poverty reduction for millions. This would require improving knowledge of the resource and prioritizing the development of rapidly renewable local shallow aquifers, the ultimate "no-regret" value for farmer-led irrigation
- In those of moderate use of the resource, protection of groundwater quality and aquifer recharge for sustainability will be key. Refining policy and institutions and adjusting to aquifer characteristics and socio-economic context will be essential while prioritizing the protection of groundwater quality and quantity.
- In countries where groundwater is overexploited, diversifying the portfolio of water sources and managing demand will take center stage.
- Asymmetric information constrains what policymakers can achieve in managing groundwater.
 They often operate with imperfect information about resource availability, and due to asymmetric information, monitoring groundwater use and abstraction rates is limited.
- Central to managing groundwater sustainably is thus how to reconcile the private costs of abstraction being different from the social cost of abstraction under this asymmetric information. Climate change makes this conundrum even more pressing.