UN 2023 Water Conference Side Event

Groundwater: Potential and Pitfalls for Africa

March 20, 2023: 8:00-9:30AM EDT

Organized by:


Background on the event

Groundwater development is key to accelerating agricultural and overall economic growth, fight climate change, and generate employment in Africa. However, there is also a need to improve groundwater institutions to grow equity and environmental sustainability in groundwater use. This session discusses the African Ministers’ Council on Water’s (AMCOW) groundwater program with case studies on the benefits of groundwater development as well as institutional advances in several African countries.

Water Action Agenda (one paragraph, if possible, please include the link to your commitment in the Water Action Agenda database)

AMCOW and partner organizations participating in this virtual event commit to help increase sustainable groundwater development in Africa through scientific research on groundwater resources, their extraction, profitable management, access by poorer water users, and the development of groundwater governance systems that support long-term sustainable use of groundwater resources on the continent.

Key Issues discussed

- H.E. Dr. Seleshi Bekele (Ambassador of Ethiopia to the US), emphasized the potential of groundwater to transform the lives of millions of people lacking access to clean water and food security in Africa.
- Moshood Tijani (African Ministers’ Council on Water (AMCOW)) described AMCOW’s Groundwater Strategic Program which focuses on strengthening policies, governance, and institutional systems and establishing partnerships for investments. AMCOW is committed to creating an enabling environment for sustainable development in Africa.
• Ramon Brentführer (Policy Advisor for Groundwater at the German Federal Institute for Geosciences and Natural Resources (BGR)), spoke about the advantages of groundwater as a green and sustainable resource available across Africa and focused on its climate resilience role. He also noted that groundwater recharge is high in most regions and well productivity low, which prevents overuse.

• Angga Pradesha (senior scientist at the International Food Policy Research Institute (IFPRI)), presented a study on the benefits of accelerating groundwater development in Senegal and Uganda. The study found that both countries have considerable groundwater potential and accelerated development could significantly increase GDP, generate millions of jobs, and reduce poverty and hunger by providing clean water to millions of people.

• Hagar El Didi (senior research analyst at IFPRI), presented the groundwater governance toolbox of NEXUS Gains and examples from the Innovation Laboratory for Small Scale Irrigation’s use of social learning interventions to increase groundwater stewardship in rural areas. Equipped with the right knowledge and tools, community-based governance can fulfill the role of ensuring sustainable and equitable use of this resource.

• Mure Agbonlahor (Agricultural Production and Marketing Officer of the African Union Commission (AUC) and lead on Africa’s irrigation strategy for AUC), emphasized the importance of increasing access to groundwater in Africa, citing positive examples from Morocco and Ethiopia where high-value crops are being grown sustainably with the use of groundwater.

• Ruth Meinzen-Dick (senior research fellow, IFPRI) emphasized the critical importance of establishing functioning governance and frameworks for ensuring equal and fair access to groundwater for all citizens in Africa.

Key recommendations for action

• Concerted investment in groundwater development is warranted for agricultural and economic growth, as well as increased water and food security in Africa.

• Groundwater development needs to go hand in hand with the expansion of groundwater institutions; to achieve this, it is crucial to put mechanisms, processes, and institutions in place that support citizens and provide them with legal rights and protection. Collaborative processes involving people, government officials, and technical experts are also essential to ensure that everybody benefits from investments in groundwater. Effective governance mechanisms can ensure that groundwater resources are managed sustainably, and that access is equitable and transparent.

• More efforts need to go into the development of data on groundwater resources as well as into sharing knowledge about groundwater; frameworks for knowledge-sharing should be developed and implemented as soon as possible.

• As most groundwater is used for food production, there is a need to link groundwater development with food security strategies and nutrition. Ethiopia provided an example by expanding groundwater fed wheat production in response to the war on Ukraine.

• Important to make groundwater development gender-sensitive and pro-poor; to make equal and fair access to groundwater a reality.