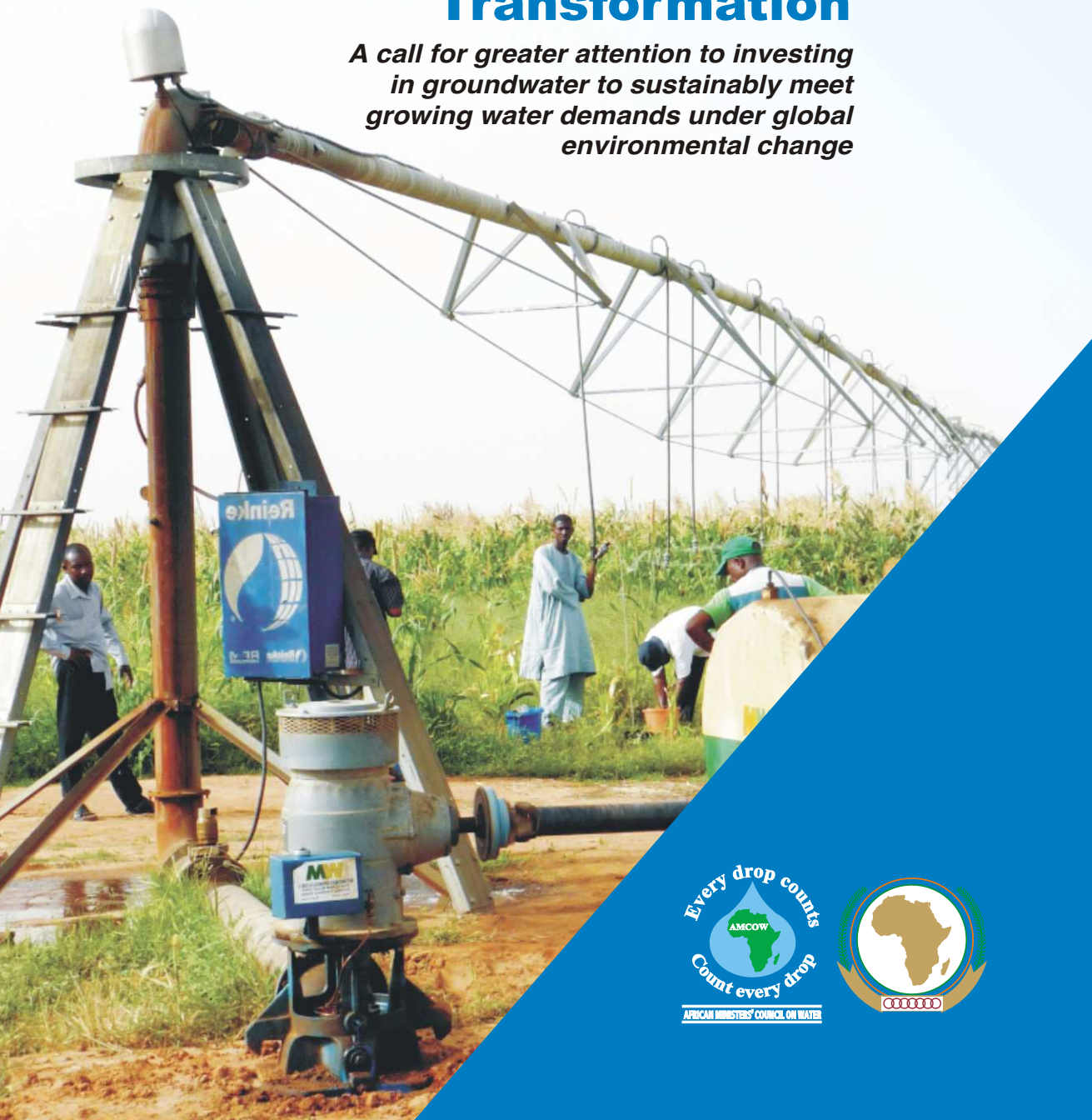


A HIGH LEVEL SUMMARY
WHITE PAPER

Groundwater for Africa's Resilience and Socioeconomic Transformation

*A call for greater attention to investing
in groundwater to sustainably meet
growing water demands under global
environmental change*



This is a High-Level Summary of the White Paper:

Groundwater for Africa's Resilience and Socioeconomic Transformation,
A call for greater attention to investing in groundwater to sustainably meet growing water demands under global environmental change

ISBN 978-978-56367-5-2

a publication of the

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Asokoro,
Abuja,
Nigeria.

March 2022

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1. RATIONALE FOR THE WHITE PAPER

This White Paper manifests the commitment of the African Ministers' Council on Water (AMCOW) and African Union Member States to prioritize concerted action on groundwater development and governance for securing resilience and socioeconomic transformation in Africa. The paper embodies and aligns with the vision and strategy of the AMCOW Pan-African Groundwater Program (APAGroP), established in 2019 on the back of a decade of incremental steps to drive the groundwater agenda forward.

Building on this headway, and responding to the Windhoek Multi-Stakeholder Declaration 2021, this paper specifically provides a rationale and advocates for priority investments in groundwater development, use, protection and management based on the critical role groundwater plays and will continue to play in socioeconomic transformation in Africa, as a vehicle for achieving multiple continental and global development goals.



Photo: IWMI

2. THE ROLE OF GROUNDWATER ACROSS DEVELOPMENT IMPERATIVES

In line with **Agenda 2063: The Africa We Want**, groundwater is a strategic resource that underpins fundamental development goals across climate resilience, water and food security, human health, biodiversity and ecosystem services, and regional integration. These imperatives are summarized below.

Climate Change Resilience through Adaptive Groundwater Management

Groundwater will be increasingly relied on in a changing climate with more extreme weather, manifested in more frequent and severe floods and droughts. During droughts, groundwater provides a semi-resilient source of water, and human dependency on it increases as evidenced in Cape Town during the 'Day Zero' drought¹. The drought proofing role of groundwater in Africa will intensify as climate change progresses, creating risks for undercutting the very same resilience provided by groundwater. Minimizing these risks will require better drought management, explicitly accounting for groundwater as part of long-term sustainable and adaptive planning.

Groundwater for Water Security, Health and Economic Growth

Groundwater provides a relatively inexpensive, off-grid, distributed and readily available source of water for dispersed rural communities throughout Africa. Several hundred million people currently living in Africa, especially rural sub-Saharan Africa (SSA), depend on groundwater for drinking purposes. In urban settings, groundwater also plays a significant role through reticulated public utility supply, vendor supply, packaged water, or self-supply.² Strategic investment and management support to both public and private groundwater supply will be critical to increasing water security and climate resilience of rapidly increasing urban populations. Basic water supplies are essential to support sanitation, human health and hygiene, and more specifically for combatting COVID-19.

Groundwater will remain central for expansion of economic activity and industrialization in African urban hubs, as knowledge and technological advances in groundwater exploration and development enhance the reach of

¹<https://blogs.agu.org/waterunderground/2019/06/03/update-on-the-groundwater-situation-in-cape-town/>

²'Self-supply' is defined as water supply in urban areas developed through private means, typically as a borehole on household premises and typically serving a single household.

*Photo: WaterAlternatives*

public utilities and the private sector. Realizing that groundwater is not a separate, isolated, or 'new' resource, but rather connected to surface water systems with interlinked risks of over-exploitation and quality degradation, it is vital that integrated sustainability considerations are incorporated into groundwater development plans and activities.

Agricultural Transformation Based on Groundwater

Agriculture is still a primary sector of Africa's economy and accounts for the majority of livelihoods across the continent. The agricultural economy employs approximately 53% of SSA's labor force and typically accounts for 15% of gross domestic product (GDP) (2019-2020 data³), and research shows that there is scope for expanding the area irrigated with groundwater from renewable resources in Africa by about 40-fold. Hence, prudent investments in groundwater irrigation and the supporting value chain, in an integrated water-energy-food nexus approach, are a critical component of the rollout of AMCOW-supported strategies for resilient and sustainable agricultural development Africa.

³https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=ZG&name_desc=true

Groundwater-sensitive Nature-based Solutions

Promoting investment and implementation that incorporates management, restoration and sustainability of 'natural infrastructure' – the ecosystem services provided by healthy watersheds and coastal zones – is pivotal to enhancing water security and resilience. Solutions inherently often hinge on groundwater as a critical component of the natural system, providing ecosystem services in the form of attenuating and absorbing floodwaters underground, retaining and degrading many pollutants, including disease-causing microorganisms, and supporting critical water storages and environmental flows in rivers, and by virtue, habitats and biodiversity, especially during dry periods and droughts.

Transboundary Aquifers for Regional Integration and Stability

International cooperation on shared water resources is increasingly acknowledged as a critical aspect of development goals, as exemplified by Indicator 6.5.2 of the United Nations Sustainable Development Goals (SDGs)⁴. While Africa remains a continent with relatively good progress on transboundary aquifer cooperation, it is imperative that further work on these resources is promoted and supported, and that efforts synergize and generate better national-level integrated (ground)water resources management as well as positive development outcomes locally, in order to achieve the development vision for Africa.



Photo: IRD

⁴<https://www.unwater.org/publications/progress-on-transboundary-water-cooperation-652-2021-update/>

3. ADDRESSING GROUNDWATER PROTECTION, SUSTAINABILITY AND EQUITY

While groundwater holds significant development potential for human needs (water supply, agriculture, industry, etc.), it is paramount to weigh and assess the benefits and risks of groundwater development. Intensive development of groundwater and lack of accounting for potential resultant loss of ecosystem services may undermine the original gains from developing the resource. Protection of groundwater resources, through targeted land use planning and regulation, and waste management, is critical to ensuring long-term clean and sufficient replenishment of the resource.

The provision of essential services and delivery of groundwater, as a means of socioeconomic transformation, do not just require a technical solution but also involves a social dimension. This has been highlighted particularly around issues pertaining to gender equality and social inclusion, and water, sanitation and hygiene (WASH), the impacts of climate change on vulnerable communities, and the varying degrees of access to resources in rural settlements versus urban centers. Sustaining and expanding societal and economic benefits from groundwater will require effective, informed and inclusive governance of the resource, well-managed infrastructure within a resource-to-source paradigm, sustainable financing and partnerships, and enhanced knowledge and capacity at all levels – key focal areas of APAGroP.

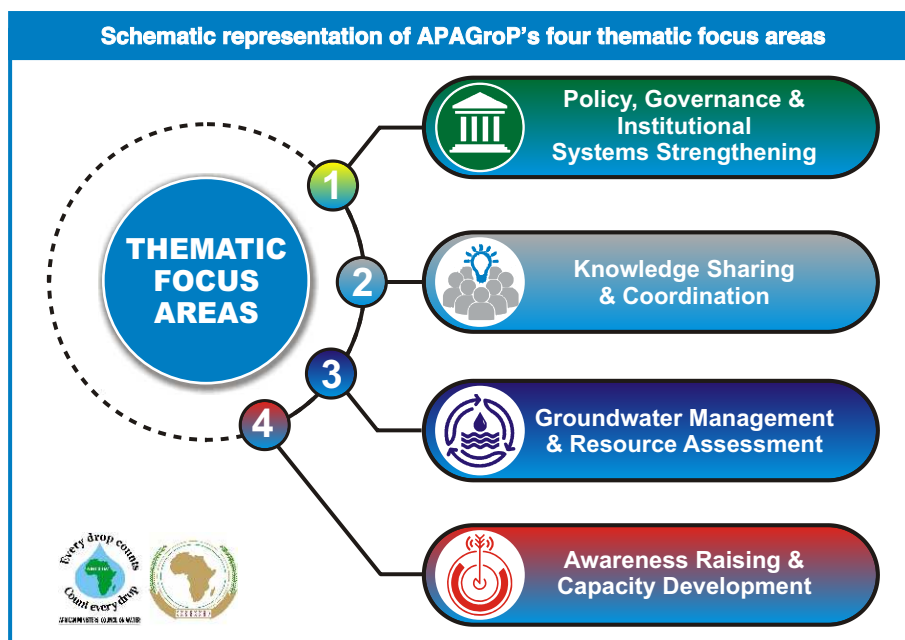
A CALL FOR GREATER ATTENTION AND INVESTMENT IN GROUNDWATER

To achieve APAGroP's vision of increasing water and food security, resilience, and better lives and livelihoods for people in Africa, AMCOW engages to provide strategic, programmatic, and technical support to Member States in support of improved groundwater management and governance linked to all water-dependent sectors.

The White Paper calls on African Heads of State and Governments to endorse the vision and to make adequate commitments, through subscribing to the call below.

Considering that:

1. In 2013, African Union (AU) in its thrust to attain its vision of 'An integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the global arena, embarked on the **Agenda 2063: The**



Africa We Want, which presents a strategic framework for Africa's long-term socioeconomic and integrative transformation, aligned to the SDGs.

2. AMCOW's vision of a water-secure Africa explicitly encompasses groundwater, water found underground, as a key component. AMCOW provides continental thought leadership and counselling on groundwater governance through its Member States-driven APAGroP.
3. African Member States reference groundwater in their national growth, adaptation and poverty reduction strategies, and with support from AMCOW, are increasingly cooperating to better manage and govern their water and other natural resources in order to underpin sustainable and equitable development.
4. Water resources are distributed in a non-uniform manner across the continent, and many river basins and aquifers are shared between two or more Member States requiring enhanced transboundary and regional cooperation.
5. Groundwater is widely available and comprises the largest fraction of freshwater in the continent with appreciable untapped potential for

development, while also being vulnerable to over-development and contamination.

6. Sustaining and expanding societal benefits from groundwater requires investments in infrastructure and technology, knowledge base development, resource monitoring, human capacity, institutional and policy development, cooperation and governance.
7. Governing aquifer resources from the perspective of efficiency, accountability, transparency and equity will leave a long-lasting positive impact on socioeconomic development in Africa.

Heads of States and Governments are requested to pronounce their commitment and action toward:

- A** Recognizing the critical role of groundwater to support resilience and socioeconomic transformation in pursuit of Agenda 2063.
- B** Taking action to increase investment that builds capacity and strengthens the enabling environment to realize the full potential of groundwater in line with national development priorities.
- C** Enhancing national and regional cooperation around groundwater and transboundary aquifers within a broader goal of international water cooperation and regional integration for peace and political stability.
- D** Engaging with APAGroP as a key mechanism for supporting Member States towards equitable and sustainable use of groundwater for achieving multiple development goals, recognizing the need for diverse context-specific pathways.



Photo: BGS/AMCOW
(MacDonald & Tjian)

This White Paper manifests the commitment of the African Ministers' Council on Water (AMCOW) and African Union Member States to prioritize concerted action on groundwater development and governance for securing resilience and socioeconomic transformation in Africa. The paper embodies and aligns with the vision and strategy of the AMCOW Pan-African Groundwater Program (APAGroP), established in 2019 on the back of a decade of incremental steps to drive the groundwater agenda forward.

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