



Groundwater for aDvancing Resilience in Africa (G4DR in Africa)



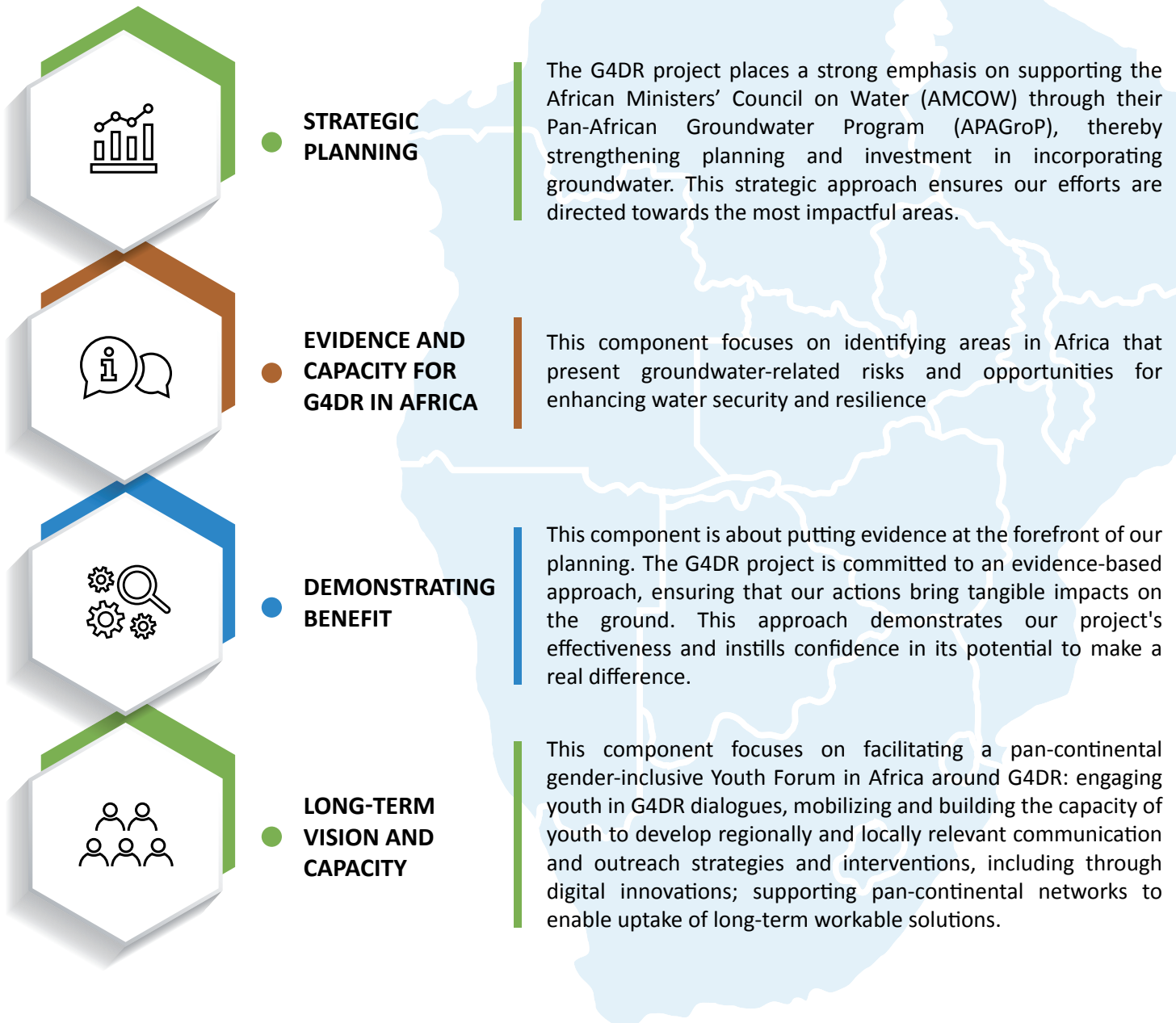
PROJECT BACKGROUND

Groundwater, Africa's most significant water resource, has the potential to bring substantial social, economic, and environmental benefits to the continent. These include improving water supply coverage and reliability, promoting agricultural development, and aiding in climate change adaptation. The G4DR project aims to unlock these benefits and opportunities by actively considering groundwater in planning and management.

The Groundwater for Advancing Resilience (G4DR) in Africa project is a comprehensive initiative that addresses the current lack of consideration for groundwater in planning and management. It is a collaborative effort to significantly enhance water

security and resilience across the African continent through the strategic and sustainable development and management of groundwater resources. This four-year GEF-funded project is implemented by a consortium of partners including the African Minister's Council on Water (AMCOW), the International Water Management Institute, the International Institute for Applied Systems Analysis (IIASA), the Ministries of Water and Mining (Benin), Ministry of Water Resources (Malawi), Ministry of Water Resources Management (Mozambique), Ministry of Water and Village Hydraulics (Togo), Ministry of Water and Environment (Uganda), and the Southern African Development Community Groundwater Management Institute (SADC-GMI).

PROJECT COMPONENTS:



THE PROJECT AIMS TO ADDRESS THE FOLLOWING BARRIERS:

- Governance and Capacity for Groundwater Management
- Limited data and tools to monitor and support resilient and sustainable groundwater planning and management
- Limited experience and demonstration in groundwater planning.
- Limited involvement of young professionals in groundwater management
- Limited compilation, synthesis, and evaluation of the effectiveness of groundwater-based solutions in planning processes



The contribution of SADC Groundwater Management Institute (SADC-GMI) in the project.

The SADC-GMI is the regional Center of Excellence for groundwater development and management in the Southern African Development Community. The Institute is responsible for implementing regional groundwater programmes working with the 16 SADC Member States and other stakeholders and partners. Its mandate involves national, transboundary, regional and international capacity building, knowledge generation through research and knowledge management, data collection and management as well as infrastructure development for the development and management of groundwater resources. . In this project, SADC-GMI will undertake the following activities to ensure the success of the project:



Data logger installation in selected boreholes and analysis of measured data in Malawi and Mozambique

In collaboration with the Member States of Malawi and Mozambique, SADC-GMI will undertake a comprehensive hydro-census/survey. The primary objective of this initiative is to meticulously identify boreholes that need rehabilitation and subsequently integrate them into the harmonized groundwater monitoring network. As part of this endeavour, SADC-GMI will also drill two monitoring boreholes in each country. These monitoring boreholes will be crucial in confirming the aquifer potential, thus providing valuable insights into the groundwater resources within the respective regions.

Knowledge exchange, study tours and Communities of Practice to support cross-pilot learning

The SADC-GMI will implement a comprehensive peer-to-peer learning experiment to foster knowledge exchange among the five participating countries of Malawi, Mozambique, Uganda, Benin, and Togo. The primary objective of this initiative is to facilitate the sharing of best practices and practical experiences among these five countries, with the ultimate goal of scaling up successful approaches throughout the African continent. This ambitious endeavour will involve organizing in-depth study tours, allowing technical specialists and practitioners from other African nations to visit the pilot case studies and gain firsthand practical insights. These study tours will provide an invaluable opportunity for participants to engage directly with the implemented strategies, learn from the experiences of the hosting countries, and transfer this knowledge back to their respective contexts.

Furthermore, the initiative will establish a robust community of practice to serve as a platform for ongoing knowledge exchange, collaboration, and support among the participating countries and other regional stakeholders. Through this community of practice, experts, practitioners, and policymakers will have the opportunity to engage in continuous dialogue, share lessons learned, and collectively work toward advancing sustainable groundwater management practices across Africa.

Synthesis and dissemination of lessons learned

The successful implementation of the project hinges on the comprehensive synthesis and dissemination of valuable insights and knowledge acquired throughout the process. SADC-GMI will play a pivotal role in gathering, analyzing and sharing the lessons learned from the project. This will involve developing detailed briefs and in-depth blogs that thoroughly compare experiences, including analysing of the strengths and weaknesses in preparing, designing, and implementing the three pilot case studies. Additionally, the synthesis and dissemination process will encompass a comprehensive examination of the implementation challenges encountered and an in-depth analysis of groundwater level trends across the case studies. Furthermore, SADC-GMI will leverage social media platforms such as LinkedIn, X, TikTok, and the project website to disseminate the highlights and insights from the case studies effectively.



Key outcomes of the project will include:

- Coordinative framework for cross-scale interaction on groundwater in Africa that accelerates the adoption of groundwater resilience solutions.
- The Groundwater function at the AMCOW Secretariat is fully operationalized and provides the anchor for APAGroP and G4DR objectives within AMCOW.
- Enhanced evidence that guides improved decision-making on groundwater opportunity and risk in Africa.
- Groundwater incorporated into basin planning in 3 case studies.
- Groundwater data platforms established in 3 case studies.
- More than 26,000 Ha under improved water management.
- More than 34,200 direct beneficiaries of capacity enhancement and improved water management.



Project Duration:

The comprehensive four-year project commenced on August 1, 2024, and is scheduled for completion on July 31, 2028. This timeline allows for thorough planning, meticulous execution, and comprehensive project evaluation.

Project Team

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