



GROUNDWATER MANAGEMENT INSTITUTE

# SADC-GMI BROCHURE

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# BACKGROUND TO GROUNDWATER IN THE SADC REGION

Groundwater plays a pivotal role in the social, economic, and environmental sustainability of the 16 SADC Member States. Yet, expanding populations, economic activities and urban growth are exerting pressure on the region's water resources. Groundwater is crucial for human welfare, livelihoods, food security, ecosystems, nature reserves, industries, and burgeoning cities.

Although SADC Member States have plentiful renewable groundwater resources (estimated at 2,491m<sup>3</sup>/capita/year), only about 1.5% is exploited, even though there is over-abstraction in some aquifers.

Furthermore, there are approximately 30 transboundary aquifers in the region and their physical properties and groundwater potential remain largely unexplored. As climate change intensifies, groundwater is emerging as the primary water source for 70% of the 345 million people residing in the SADC region.



## OUR VISION

“To be a Centre of Excellence in Promoting Equitable and Sustainable Groundwater Management in the SADC Region”



# SADC-GMI'S MANDATE

The SADC-GMI's creation stemmed from recognizing groundwater's significance in the region and the need for a personalized institution to focus on its sustainable development. The mandate of the SADC-GMI is catergorised into three tiers:



## PROMOTING SUSTAINABLE GROUNDWATER MANAGEMENT

Supporting the development and implementation of national, regional groundwater policies and regulations, providing technical assistance to Member States on groundwater management and engaging in advocacy and awareness raising activities.

## PROVIDE SOLUTIONS TO GROUNDWATER CHALLENGES

Supporting the development of groundwater management plans, the improvement of groundwater monitoring and data collection, and the development of groundwater technologies and infrastructure.

## BUILD CAPACITY

Providing training and capacity building programs for groundwater professionals and developing educational resources on groundwater management.





# OUR VALUES



## **Integrity:**

As an advisory institution, SADC-GMI will act with integrity.



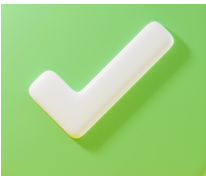
## **Equity:**

Groundwater resources are often shared resources and the benefits arising from their use will be equitable.



## **Diversity:**

The diversity (gender and social inclusion) of SADC and its people is valued as a strength and will be promoted during decision-making.



## **Excellence:**

SADC-GMI will demonstrate leadership and excellence in groundwater management in the SADC region.



## **Professionalism:**

SADC-GMI will behave in a professional manner in all interactions



## **Collaboration & Partnership:**

SADC-GMI will lead collaborative groundwater initiatives for national and regional groundwater management and will develop strong partnerships with key stakeholders in the sector.



## **Accountability & Transparency:**

To act as a trusted advisor for groundwater management in SADC, the SADC-GMI will have transparent communication and decision-making and be accou



## KEY FOCUS AREAS

### CREATING AN ENABLING POLICY, LEGAL, AND REGULATORY ENVIRONMENT FOR GROUNDWATER MANAGEMENT

To raise the prominence of groundwater in the national and regional policy, legal, and regulatory frameworks, SADC-GMI is continuing to implement various initiatives which include the Policy.

Legal and Institutional (PLI) to create an enabling environment through the development of Roadmaps and the implementation of PLI Quick-win interventions in selected Member States and at the SADC regional level.

In this regard, SADC-GMI conducts gap analyses, benchmarking, action planning, and advocacy, as well as rendering national-level technical assistance for closing the gaps.

Additionally, this effort focuses on aligning with the Revised SADC Protocol on Shared Watercourses of 2000 and river basin agreements across the region. Transboundary water cooperation through Transboundary Aquifers and shared River Basin Organizations is also a key focus area under this cluster.

### UNDERTAKING RESEARCH

Aligned with its central objective of developing a comprehensive understanding of regional groundwater resources, SADC-GMI emphasizes research aimed at exploring geophysical and scientific attributes, as well as the potential of the approximately 30 Transboundary Aquifers found in the region.

This research includes Transboundary Diagnostic Analyses which focus on subjects such as conjunctive water resources management, environmental sustainability, groundwater-dependent ecosystems, biodiversity, stakeholder engagement, and transboundary policy, legal and institutional collaboration. The research component also incorporates groundwater data collection, analysis, and information sharing to support the application of research findings.

In this regard, SADC-GMI collaborates with other regional and global partners to undertake and disseminate groundwater research.

## KEYWORDS ABOUT OUR ACTIVE SEARCH FOR PARTNERSHIPS INCLUDE

Transboundary Aquifers; Conjunctive Management; Climate Change; Drought; Water Resources; Policy/Administration/Management; Water Resources Protection; Groundwater and Agriculture; Groundwater Capacity Building; Groundwater Governance; Groundwater Modelling; Groundwater Research; Transboundary Diagnostic Analysis and Strategic Planning; Groundwater Data Collection and Management; Water Quality/Pollution; Groundwater Research, Regional Socioeconomic Development, Biodiversity, Drought Mitigation, Groundwater Dependant Ecosystems and Diversity.

## **BUILDING CAPACITY AT NATIONAL AND REGIONAL LEVELS**

Capacity development is a central component of SADC-GMI's strategy. Independently or in collaboration with other key partners in the water sector, SADC-GMI implements a variety of capacity-building initiatives, targeting both public and private sector professionals involved in groundwater management across 16 SADC member States. During Phase 1 of the Sustainable Groundwater Management project, SADC-GMI initiated numerous capacity-building programs. For the 2024/2025 period, SADC-GMI plans to extend its capacity-building efforts with programs on Operation and Maintenance of Groundwater Infrastructure, Gender Equality and Social Inclusion, and the integration of Environmental and Social Management in transboundary groundwater governance, Transboundary Groundwater Governance and Management in River Basin Organisations. Furthermore, SADC-GMI guarantees the relevance of its capacity-development initiatives by carrying out and responding to the region's Capacity Needs Assessment studies, which ensure the training fits the specific needs of the stakeholders.

## **LEAD AND PROMOTE REGIONAL COORDINATION, ACROSS VARIOUS SPECIAL SCALES FOR GROUNDWATER MANAGEMENT AND DEVELOPMENT**

Cooperation at the regional or transboundary levels is often compounded with perceived and changing risks and opportunities among parties. In this regard, SADC-GMI focuses on both policy and technical aspects of groundwater to inform regional and transboundary dialogue on cooperation. Equally important, SADC-GMI invests in analytical research, dialogue, and cooperation that can help generate knowledge to unlock solutions for SADC Member States who share challenges and can benefit from opportunities derived from groundwater management in transboundary aquifers.

## **SADC-GMI FINANCIAL STABILITY**

The primary objective of the SADC-GMI's Financial Sustainability Strategy is to diversify its funding model to gradually reduce the dependency on one source of funding to less than 50% of its total annual operational budget. SADC-GMI is therefore actively seeking opportunities to diversify its funding models to realize the set objective.

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## Key Stakeholders

SADC-GMI caters to a diverse array of stakeholders. This group includes hydrogeological experts and water authorities and encompasses support agencies and communities that rely on or could potentially rely on, groundwater.

SADC-GMI is committed to partaking in projects that effectively address the distinctive needs of these stakeholders in our region. As a regional institution, we make concerted efforts to engage with our stakeholders across the region. We utilize several communication platforms to gain insights into their daily struggles and devise the most suitable solutions to combat them.

### Key Stakeholders

- Communities
- Water Authorities
- Groundwater Experts
- Non-Governmental Organizations
- Research Institutions
- Media Organisations
- Education Institutions/Universities
- Decision makers
- Groundwater Agencies
- International Cooperating Partners
- Donors.

## Delivery Through Partnership

SADC-GMI recognizes the importance of establishing partnerships to effectively deliver to both existing and new stakeholders, including the 16 SADC Member States, and extends its footprint in the region. To this end, SADC-GMI has forged relationships with partners at national, regional, and international levels.

### Partners include:

- UNESCO's International Hydrological Programme,
- the Institute for Groundwater Studies at the University of the Free State,
- WaterNet,
- the African Groundwater Network,
- Deutsche Gesellschaft für Internationale Zusammenarbeit,
- United States Agency for International Development,
- the International Water Management Institute,
- International Groundwater Resources Assessment Centre,
- Global Water Partnerships for Southern Africa (GWP-SA),
- Southern African Research and Documentation Centre (SARDC),
- the South African Research Commission (WRC) and River Basin Organizations in the region.

SADC-GMI will continue to form strategic partnerships with key players in the water sector to advance the groundwater agenda in the region.

## SADC-GMI's outlook

SADC-GMI is continuing to strengthen its role as a SADC Secretary subsidiary institution by implementing the SADC regional groundwater program as purposed in the Regional Strategic Action Plan (RSAP V) 2021 – 2025 implemented under three key components:

- Capacity Building for Sustainable Groundwater Management
- Knowledge Development, Dissemination and Advocacy
- Building Resilient Livelihoods and Inclusive Groundwater Management

SADC-GMI aims to continue to fortify its reputation as a Centre of Excellence for groundwater management and development, building on past and ongoing achievements within the region. In strengthening this brand, it will provide specialized services in training, research, project management, advocacy, and institutional development. These efforts will also contribute to ensuring the institute's long-term financial sustainability.



**SADC-GMI is implementing the Sustainable Groundwater Management in SADC Member States Project, funded by the Multi Donor Cooperation in International Waters in Africa (CIWA) and the Global Environment Facility (GEF).**

