

# Going underground

Endemic droughts are placing the Southern African region under threat and it's the SADC Groundwater Management Institute's responsibility to find sustainable alternatives. Aquifers are part of the solution.

**T**he Southern African Development Community (SADC) is heavily reliant on groundwater resources, with an estimated 70% of the region's population dependant on this resource for basic water supplies. Moving into the future, population growth, climate change and the need to combat growing food insecurity are aggravating this situation, which is being compounded by increasing aridity and dwindling surface water resources. A study undertaken in 2011 revealed that 12 of the 15 SADC countries are directly and periodically affected by drought events.

With so much demand placed on groundwater, SADC needed an institute to carry the groundwater mandate in the region. To that end, the SADC Groundwater Management Institute (SADC-GMI), a subsidiary structure of the SADC Secretariat, was set up as the Centre of Excellence. SADC-GMI's role is to promote sustainable groundwater management, providing solutions via the creation of an enabling policy, legal and regulatory environment. Other focus areas include capacity building, advancing research, supporting infrastructure development, and enabling dialogue and accessibility to groundwater information.

In pursuit of its mandate, SADC-GMI is currently rolling out a series of key projects that support the sustainable development of groundwater resources in the region.

## SADC-Groundwater DataCoM

The Capacity Building on Groundwater Data Collection and Management in SADC Member States' (SADC-Groundwater DataCoM) initiative

officially commenced on 15 September 2017. The project focuses on capacity building and training at ministerial, departmental and agency level, and is being implemented by the International Groundwater Resources Assessment Centre (IGRAC) in the Netherlands and the Institute for Groundwater Studies (IGS) in South Africa on behalf of SADC-GMI.

As part of the implementation, the IGRAC/IGS project team was required to visit each SADC country and obtain an overview of the full chain of data and information relevant for groundwater governance (including groundwater development, use, protection, management, policy development and implementation).

The project team commenced with country visits in November 2017 and has managed to visit 10 countries thus far (Botswana, the DRC, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe). Using semi-structured interviews, the team was able to discover the different dynamics of data collection and management that exist in each Member State. The results of this first round of visits will be communicated through a report, which will be published on the SADC-GMI website in the near future.

The data collected through the project will also be uploaded and shared on the SADC-GMI Information Portal at [www.gip.sadc-gmi.org](http://www.gip.sadc-gmi.org).

## Engaging young professionals

The project implemented by IGRAC and IGS also includes the engagement of two young professionals from each SADC Member State.

This SADC-GMI initiative addresses the capacity gaps that exist within the groundwater fraternity in the region.

## Groundwater infrastructure development

SADC-GMI is also currently assisting Member States in the implementation of small-level pilot groundwater infrastructure projects. This initiative is backed by a US\$2.2 million World Bank sub-grant scheme.

Between November 2017 and March 2018, SADC-GMI embarked on a regional campaign to explain the modalities of the sub-grant scheme, encourage member participation, and provide guidance on the identification of qualifying pilot projects. To date, five proposals for pilot projects have been received and are undergoing the necessary screening processes prior to approval and implementation.

## Transboundary cooperation

It is estimated that there are around 30 transboundary aquifers in the SADC region; however, so far, the hydrological yields of at least 25 of these sites have not been studied.

SADC-GMI plans to address this by replicating the lessons and best practices learnt during two key transboundary projects – namely the Ramotswa aquifer, situated between Botswana and South Africa, and the Stampriet aquifer, which covers a wide area stretching from Central Namibia into Western Botswana and South Africa's Northern Cape.

All of these aquifers have the potential to be primary water sources for economic and social development.

In collaboration with other key players in the sector, including Member States, SADC-GMI will continue to advance the groundwater agenda in the region. **35**



For more information on the activities of SADC-GMI, visit [www.sadc-gmi.org](http://www.sadc-gmi.org)