



TERMS OF REFERENCE

Senior Hydrogeology Consultant

Individual Consultant – 110 days input until 30 June 2026 Fixed Term

SADC GMI is established as a Section 21 Not-for-Profit Company under South African law, and it is a subsidiary structure of the SADC Secretariat. The vision of the SADC-GMI is to ensure the equitable and sustainable use and protection of groundwater, as well as being a Centre of Excellence in the areas of groundwater management and management of groundwater-dependent ecosystems in the region. The role of the SADC-GMI is to:

1. Promote sustainable groundwater management and provide solutions to groundwater challenges in the SADC region through building capacity, providing training, advancing research, supporting infrastructure development, and enabling dialogue and exchange of groundwater information.
2. Conduct and support the SADC Member States in groundwater research, and serve as a focal interlocutor with national, regional, and international groundwater initiatives.

The Global Water Partnership-Southern Africa (GWP- SA) partnered with the SADC-GMI to undertake a "Comprehensive Groundwater Quality and Availability Assessment for the Cuvelai and Kunene River Basins." Groundwater supports communities, agriculture, and ecosystems in the Cuvelai and Kunene River basins. However, the availability, quality, and accessibility of these resources remain insufficiently understood. Both countries have conducted isolated studies and monitoring efforts, but the data collected remains fragmented and lacks the necessary basin-wide perspective required for transboundary cooperation and sustainable resource management. The project seeks to comprehensively assess groundwater quality and availability in the Cuvelai River basin and document the knowledge baseline on groundwater resources in the Kunene River basin. This assessment is essential for ensuring the sustainable management of groundwater resources to enhance water security, especially for vulnerable communities relying on these resources for their livelihoods. The assessment intends to consolidate existing data, conduct field reconnaissance, and utilise geophysical investigations to build comprehensive models for groundwater management in both countries.



Contact Details

+27 12 051 0419
info@sadc-gmi.org
www.sadc-gmi.org



Postal Address

Suite 262
Private Bag X025
Lynwood Ridge 0040
South Africa



Physical Address

Building 24,
CSIR Campus
24 Meiring Naude Road
Brummeria
Pretoria 0184



These ToRs are for the position of Senior Hydrogeology Consultant. This position is for an Individual Consultant who will work from their station with frequent travel to the SADC-GMI offices hosted by the Centre for Scientific and Industrial Research (CSIR) Campus, Pretoria, South Africa, with expected visits to the project sites in the two riparian states of Angola and Namibia.

A Senior Hydrogeologist, in liaison with the team leader, will be responsible for data collection, the conceptualisation of the hydrogeology of the basin, planning and execution of the fieldwork, and contributing to geophysics assessment and conceptual modelling compilation of reports. She/he will be expected to input into the basin's Transboundary Diagnostics Analysis (TDA) and Joint Strategic Action Planning (JSAP). The Senior Hydrogeologist will be responsible for coordinating the inputs of other experts and will be accountable to the team leader.

Key duties and responsibilities

The Senior Hydrogeology Consultant is the lead technical specialist on the project and will lead all the technical tasks. The non-exhaustive key duties and responsibilities will include leading the following:

1. Engage with BGR, the Institute Politecnico da Tundavala and other stakeholders to ensure alignment of ongoing and planned activities related to groundwater research. As part of this task, undertake a thorough Stakeholder mapping and seek bilateral meetings with the concerned institutions to understand previous work done and how to access it.
2. Conduct a desktop review of groundwater studies and reports from Angola and Namibia, including ongoing studies by BGR, to compile a consolidated, georeferenced groundwater database.
3. Produce a comprehensive report outlining the alignment and complementarities between CUVKUN's work and BGR's studies to avoid duplication and ensure synergy.
4. Review and map all existing groundwater data, including water levels and quality from current boreholes and wells, identifying gaps for field reconnaissance.
5. Coordinate preliminary field reconnaissance activities, including water level monitoring, sample collection from boreholes, and geophysical investigation planning.
6. Conduct geophysical surveys and build refined conceptual groundwater models based on the initial analysis and fieldwork. Further investigations and drilling may be conducted if required.
7. Give technical inputs into the process of Prioritising transboundary issues for consideration in the Cuvelai and Kunene Transboundary Diagnostic Analytics (TDA)



**Contact
Details**

+27 12 051 0419
info@sadc-gmi.org
www.sadc-gmi.org



**Postal
Address**

Suite 262
Private Bag X025
Lynwood Ridge 0040
South Africa



**Physical
Address**

Building 24,
CSIR Campus
24 Meiring Naude Road
Brummeria
Pretoria 0184

8. Contribute hydrogeological inputs into the process of defining strategic interventions for the Cuvelai and Kunene Strategic Action Programme (SAP)
9. Strengthening the capacity of the Cuvelai Kunene Commissions on Groundwater management and conjunctive surface and groundwater management

Expected deliverables

Deliverable	Description	Level of Effort (person-days)	Deadline delivery date
Work programme report	Lead the elaboration of the works programme detailing (i) the stakeholder mapping and engagement approach, (ii) the technical approach to the groundwater assessment, (iii) project expertise, project management and coordination arrangements, (iv) synergies with other components of the project and (v) project risks and mitigation plan.	10	31 March 2025
Groundwater study alignment report	Report on how the CUVKUN Project complements existing groundwater studies, especially those by BGR.	20	31 May 2025
Georeferenced database	Prepare consolidated groundwater quality, levels and groundwater use data.	5	30 June 2025
Preliminary field reconnaissance report for Cuvelai basin	Prepare a summary of findings from field reconnaissance, including water level and quality data and a plan for geophysical investigations. The report will also discuss the existing monitoring regime and its adequacy.	20	31 July 2025
Geophysical investigation report for the Cuvelai basin	Report on geophysical investigations based on field reconnaissance.	10	30 August 2025
Technical working paper and PowerPoint presentation	Report on preliminary findings for the hydrogeological characterisation of the Cuvelai and Kunene Basins, including identification of hotspots, transboundary aquifers, and other issues of significance for presenting the TDA process to stakeholders.	15	28 February 2026
TDA thematic report	Prepare a TDA thematic report on groundwater for both the Cuvelai and	5	31 March 2026

Deliverable	Description	Level of Effort (person-days)	Deadline delivery date
	Kunene basins to inform priority transboundary issues on groundwater and highlight them in the Cuvelai and Kunene TDAs.		
SAP thematic chapters on groundwater for both Cuvelai and Kunene basins	Prepare SAP thematic chapters on groundwater for both Cuvelai and Kunene basins - for input into the Cuvelai and Kunene SAPs highlighting priority interventions and Project Concept notes on groundwater	5	30 May 2026
Final report	Develop a comprehensive groundwater assessment for the Cuvelai basin, including refined conceptual models and recommendations for further investigation or drilling if necessary.	5	
GWTC Terms of reference	Prepare terms of reference – Joint Water Commission Technical Committee on groundwater	5	
Groundwater Technical Committee Capacity Development Report	Develop capacity assessment, capacity development plan, work plan and budget, completion report	10	

NB: The Client will meet the Consultant's direct costs for work-related travel using the Client's standard policies. Payment of Professional fees will be based on deliverables as shown above.

Required Qualifications and Experience

The successful candidate should be a SADC citizen with at least a master's degree in hydrogeology/geohydrology, with the following competencies:

1. Knowledge of key issues about managing groundwater resources in national and transboundary aquifers of the SADC region.
2. Specific knowledge of recharge evaluations, climate change pollution and impacts, groundwater-surface water interactions, and groundwater-dependent ecosystems (in particular, the CUVKUN Basins).
3. Understanding of water resources conceptualisation and modelling in an interdisciplinary setting.



4. Familiarity with Transboundary Diagnostic Analysis, Joint Strategic Action Plans, and Transboundary Groundwater Governance in River Basin Organisations.
5. Demonstrated experience on at least 3 similar projects, 1 of which should have been in the SADC region at the Member State or regional level.
6. 10 years of working experience in the groundwater field, 5 of which should have been in the SADC region.
7. Fluency in English is mandatory, and working knowledge of Portuguese is desirable.

Duration of Assignment

The successful Senior Hydrogeology Consultant will be offered a performance-based contract for 110 person-days deployed between 1 March 2025 and 30 June 2026.

Required documents

Interested individual consultants must submit a detailed curriculum vitae demonstrating their qualifications (maximum 5 pages) to conduct the work with a cover letter explaining why they are the most suitable (maximum 1 page).

How to apply

To apply, please e-mail your application on or before 7 March 2025, before midnight, to litlhare@sadc-gmi.org



Contact Details

+27 12 051 0419
info@sadc-gmi.org
www.sadc-gmi.org



Postal Address

Suite 262
Private Bag X025
Lynwood Ridge 0040
South Africa



Physical Address

Building 24,
CSIR Campus
24 Meiring Naude Road
Brummeria
Pretoria 0184