



Part I: Project Information

GEF ID

10797

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT **No**

NGI **No**

Project Title

GEF Sustainable Groundwater Management In SADC Member States Project Phase 2

Countries

Regional, Comoros, Eswatini, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia, Zimbabwe, Mauritius, Angola, Botswana, Congo DR

Agency(ies)

World Bank

Other Executing Partner(s)

SADC-Groundwater Management Institute (SADC-GMI)

Executing Partner Type

Others

GEF Focal Area

International Waters

Sector

Taxonomy

Focal Areas, International Waters, Strategic Action Plan Implementation, Freshwater, Aquifer, River Basin, Learning, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Stakeholders, Local Communities, Type of Engagement, Consultation, Participation, Information Dissemination, Civil Society, Academia, Non-Governmental Organization, Communications, Education, Public Campaigns, Awareness Raising, Beneficiaries, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Knowledge Generation and Exchange, Capacity, Knowledge and Research, Knowledge Exchange, Capacity Development, Knowledge Generation, Professional Development, Innovation

Rio Markers

Climate Change Mitigation

No Contribution 0

Climate Change Adaptation

No Contribution 0

Biodiversity

No Contribution 0

Land Degradation

No Contribution 0

Submission Date

3/24/2021

Expected Implementation Start

3/1/2023

Expected Completion Date

2/28/2028

Duration

70In Months

Agency Fee(\$)

433,790.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
IW-3-5	Enhance water security in freshwater ecosystems through advance information exchange and early warning	GET	2,110,000.00	44,000,000.00
IW-3-6	Enhance water security in freshwater ecosystems through enhanced regional and national cooperation on shared freshwater surface and groundwater basins	GET	610,000.00	13,000,000.00
IW-3-7	Enhance water security in freshwater ecosystems through investments in water, food, energy and environment security	GET	1,846,210.00	38,000,000.00
Total Project Cost(\$)			4,566,210.00	95,000,000.00

B. Project description summary

Project Objective

The objective of the project is to develop capacity and knowledge for inclusive groundwater management and use in the SADC region at national and transboundary levels specifically shared aquifers

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing(\$)
Capacity building	Technical Assistance	Capacity building for sustainable groundwater management	<ol style="list-style-type: none">1. Institutional capacity at the national and regional level strengthened.2. SADC-GMI performing as SADC region's center of excellence for sustainable groundwater development and management3. SADC-GMI enabled successful implementation of regional and TB activities by MSs and RBOs, including project monitoring & evaluation (includes 83,000 allocation to M&E)	GET	1,138,400.00	23,684,412.00

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing(\$)
Knowledge development, dissemination and advocacy	Technical Assistance	Knowledge development, dissemination and advocacy will support the generation and dissemination of knowledge on groundwater resources in the SADC-region	<ol style="list-style-type: none"> 1. support the development of groundwater-related knowledge and information and its dissemination to stakeholders 2. support towards IWLEARN advocacy and outreach 	GET	2,100,300.00	43,696,742.00

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing (\$)
Building resilient livelihoods and inclusive groundwater management	Investment	Build resilient livelihoods and inclusive groundwater management	<ol style="list-style-type: none"> 1. Information and technical capacity provided for improved law enforcement 2. Guidelines on the preparation of the NAPs for the implementation of the Minamata convention incorporate considerations related to the local context 3. Participatory monitoring system designed and implemented to support joint action to minimize water pollution of the Putumayo-Ica basin 4. Actions implemented in priority areas to reduce potential impacts from contamination 	GET	1,110,072.00	23,095,048.00
Sub Total (\$)					4,348,772.00	90,476,202.00
Project Management Cost (PMC)						
GET			217,438.00	4,523,798.00		

Project Management Cost (PMC)

Sub Total(\$)	217,438.00	4,523,798.00
Total Project Cost(\$)	4,566,210.00	95,000,000.00

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	World Bank	Grant	Investment mobilized	9,000,000.00
GEF Agency	World Bank	Loans	Investment mobilized	24,000,000.00
GEF Agency	World Bank	Loans	Investment mobilized	62,000,000.00
Total Co-Financing(\$)				95,000,000.00

Describe how any "Investment Mobilized" was identified

Sources of co-financing have been identified from other existing country/regional initiatives that aim at filling knowledge, capacity and institutional gaps that impede sustainable groundwater development. Within each program activities have been identified that can strengthen Project results through collaboration and coordination or that provide opportunities for expanding and upscaling of results of Project pilots. The 9 MU\$ CIWA grant funded Sustainable Groundwater Management in SADC Member States Project Phase 2 finances SADC-GMI core tasks during the first 4 years of Project implementation and similar knowledge and capacity building activities in the SADC region, strengthens groundwater management in the regional institutions and promotes transboundary water resources management. Full coordination of Project activities allows for scaling up of sustainable groundwater management pilots, ensures increased impact and allows to keep PMC to a minimum. For examples, the admin, finance, and procurement staff will be funded through CIWA. CIWA -Sustainable Groundwater Management in SADC Member States Project Phase 2 ? P175355: The 9 MU\$ Trust Fund Cooperation in International Waters in Africa (CIWA) grant funded Sustainable Groundwater Management in SADC Member States Project Phase 2 finances similar knowledge and capacity building activities in the SADC region, strengthens groundwater management in the regional institutions and promotes transboundary w?ter resources management. Full coordination of Project activities allows for scaling up of sustainable groundwater management pilots and ensures increased impact. World Bank / AFD Funded- Climate Resilience and Water Security in Angola-RECLIMA ? P177004 (300 MU\$ World Bank and 150 MU\$ AFD): The 450 MU\$ World Bank / AFD Funded- Climate Resilience and Water Security in Angola (RECLIMA) Project aims at increasing w?ter security of urban and rural populations in the South of Angola through improved knowledge and capacity for water resources management, the promotion of nature based solutions, conjunctive use and local water resource management and the investment in w?ter supply infrastructure. A budget of 24 MU\$ (0 MU\$ grant) is dedicated to project activities that focus on building the knowledge and capacity base for groundwater management and promote the implementation of innovative groundwater infrastructure and management solutions and provide opportunities for co-financing have been identified. Besides the possibilities for collaboration and cross-fertilization the RECLIMA Project

also provides the opportunity to scale up some of the pilot solutions tested under the Project. Horn of Africa - Groundwater for Resilience Program Phase 1 ? P174867 (250 MU\$ IDA grant and 135 MU\$ IDA credit): The 385 MU\$ Horn of Africa - Groundwater for Resilience Program (GW4R) Phase 1 has many similarities to the SADC Project, both in its objectives and structure, with the difference that it also contains a significant groundwater infrastructure investment component. The Program that involves Ethiopia, Somalia, Kenya and the regional authority IGAD dedicates 62 MU\$ (including 17 MU\$ grant) to the promotion of sustainable groundwater development in the region through the setting up of a regional groundwater center, strengthening of regional groundwater institutions, building capacity, expanding the knowledge base and promoting transboundary collaboration. Opportunities have been identified for collaboration between SADC-GMI and IGAD-GWC, including joint knowledge sharing and capacity building events, the exchange of experiences and study tours. The HoA-GW4R Program also provides opportunities to inform, complement and scale up pilot schemes taken up under both Projects. During further stages of Project preparation new negotiations will be conducted to secure additional cofinancing.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
World Bank	GET	Regional	International Waters	International Waters	4,566,210	433,790	5,000,000.00
Total Grant Resources(\$)					4,566,210.00	433,790.00	5,000,000.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)
PPG Required **true**

PPG Amount (\$)

PPG Agency Fee (\$)

Agenc y	Trust Fund	Country	Foca l Area	Programmin g of Funds	Amount(\$)	Fee(\$)	Total(\$)
Total Project Costs(\$)					0.00	0.00	0.00

Core Indicators

Indicator 7 Shared water ecosystems under new or improved cooperative management

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Shared water Ecosystem	Sand and Gravel Aquifer, Coastal Sedimentary Basin III	Sand and Gravel Aquifer, Coastal Sedimentary Basin III		
Count	2	2	0	0

Indicator 7.1 Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
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Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Sand and Gravel Aquifer	3	3		
Coastal Sedimentary Basin III	3	3		

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministerial Committees (IMC; scale 1 to 4; See Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Sand and Gravel Aquifer	2	2		
Coastal Sedimentary Basin III	2	2		

Indicator 7.4 Level of engagement in IWLEARN through participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Coastal Sedimentary Basin III	2	2		
Sand and Gravel Aquifer	2	2		

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	55,825	70,490		
Male	45,675	62,510		
Total	101500	133000	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

The first SADC Groundwater project supported the establishment of cooperative management of groundwater in 5 shared ecosystems (3 river basins and 2 TBAs) which is taken as baseline for this Project (at Council approval). The target for this project is to strengthen cooperative management in 3 additional shared ecosystems in the SADC region.

7.1 Level of Transboundary Diagnostic Analysis and Strategic Action Program formulation and implementation. Under Component 2, TDAs and JSAPs will be conducted under this sub-component. Data and information generated from these studies will be disseminated through the SADC-GIP and SADC-GLA, through TBA specific datasets hosted on the SADC-GIP. Work in the TBAs will include, i), detailed hydrogeological investigations in selected TBAs ii) further projects to generate TDAs and JSAPs. Activities will be conducted in collaboration with institutions and agencies in charge of national groundwater management, represent major groundwater users and international river basins to promote equitable and inclusive data sharing, and increase groundwater knowledge in planning at national and regional levels. 7.2. Level of Regional Legal Agreements and Regional Management Institution(s) to support its implementation. SADC-GMI undertook Gap Analysis as part of a review of the regional Policy, Legal and Institutional framework for groundwater management in the SADC Member States (GMI-PLI). The project aim to address the gaps that have been identified at the planning level, listing the need for improvement in the conjunctive water resources management regimes and integration of

surface and groundwater planning. At the legal level the SADC-RPSW does not consistently consider the linkages between surface and groundwater while also at institutional level, the identified gaps include uncoordinated data sets and the need for River Basin Organizations (RBOs) to better coordinate TBA management. 7.3. Level of national/local reforms and active participation of Inter-Ministerial Committees. National partnerships and ownership of the project activities in the SADC Member States will be enhanced through the rolling-out of support for the establishment and operationalization of the National Focus Groups (NFGs). NFGs will play an important role in prioritizing and facilitating in-country capacity-building efforts. 7.4. Level of engagement in IW: Learn through participation and delivery of key products. The project aims to upscale dissemination of data and information to support sustainable and resilient livelihoods and equitable economic development and in building resilience against climate-related shocks like floods and droughts by e.g. direct engagement with stakeholders in TBAs and engagement with national, regional and global stakeholders to increase collaboration and cross support to investments and processes, through IW-LEARN. 11. Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment Expected ? PIF stage: Total: 133,000 (Female: 53%)

Part II. Project Justification

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

The project covers the SADC Region comprising of 16 Member States namely, Angola, Botswana, Comoros, Democratic Republic of Congo (DRC), Eswatini, Lesotho, Malawi, Madagascar, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia and Zimbabwe. The SADC Region has an estimated 30 Transboundary Aquifers (TBAs) and 15 River Basins variously that are shared among the 12 SADC Mainland Member States.



2. Stakeholders

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Stakeholders for this project are identified in the SADC-GMI Stakeholder Engagement Plan (SEP) as people impacted directly or indirectly by the project activities at local, national, and transboundary/regional levels. Consultations with key stakeholders, beneficiaries, and local communities will be systematically carried out during project preparation using existing consultation and participation mechanisms. The SADC-GMI will implement the project in synergy with regional, national, and local stakeholders. The SEP identifies direct and indirect stakeholders at local, national, and regional levels and defines the frequency and modalities of engagement.

A Stakeholder Engagement Plan (SEP) was developed, reviewed and cleared by WB's specialists and available in English posted as part of the consultation/socialization process in the project's website <https://sadc-gmi.org/wp-content/uploads/2022/05/Stakeholder-Engagement-Plan-SEP-P175355.pdf>.

The plan complies with the need to: (i) establish a systematic approach to allow the project to identify, build and maintain a constructive relationship with key stakeholders, (ii) assess the level of stakeholder interest in and support for the project, and establishes a mechanism to incorporate their views in project design and environmental and social performance; (iii) promote the inclusive and effective participation of affected parties throughout the project cycle with regard to issues that could have an impact on them, and describe the necessary means for such participation; and, (iv) ensure that adequate, accessible, timely, understandable and appropriate information on environmental and social risks and impacts is disclosed to stakeholders.

Table 1 shows the categories of stakeholders identified for this project.

Local	? Communities, individuals and institutions benefitting from community-level capacity building and grants.	? Communities in Member States using groundwater. ? Groundwater professionals working at the community level.
National	? Focal persons, focal groups members, trainees and interns ? National institutions responsible for water management.	? National academic institutions and water research agencies. ? Groundwater professionals working at the national level.

Transboundary and Regional	? SADC Secretariat and Secretariat structures addressing water resource management such as the Directorates for Food, Agriculture and Natural Resources and Gender.	? River Basin Organizations ? Regional water resource management agencies ? Groundwater professionals working at the regional level.
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The project's continued support for institutional development around groundwater will contribute to these objectives by promoting development and livelihood models that are resilient to the growing climate variabilities and consider the needs of women and vulnerable groups in the community. The theory of change outlines the expected outcomes generated from activities under each of the project components. The expected outcome from component 1 (capacity building) is to support groundwater management institutions to be effective in planning and regulating groundwater uses at the local, national and regional level. Component 2 (knowledge development and dissemination) is expected to enable evidence-based decision making on sustainable groundwater management using an accessible and up-to-date knowledge base from SADC Member States. Finally, component 3 (grants to Member States) will promote sustainable and innovative groundwater solutions to improve public health and climate resilience consciousness in the communities for both women and men.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

The SADC-Groundwater Management Institute (GMI) is the executing agency for the project. SADC-Sub-Committee on Hydrogeology provides the strategic support and serves as the connector between the regional body and the 16 Member States. At the national level, the multi-stakeholder National Focal Groups (NFGs) serve as an entity and its individual members from each member state, the National Focal Point Persons (NFPs) and their parent ministries, national water institutions responsible for water management, academic institutions, sub-grantees, groundwater professionals as well as national level NGOs operating in the field. At the transboundary level, SADC-GMI has signed memoranda of understanding (MoUs) with several RBOs (LIMCOM, ZAMCOM, ORASECOM and OKACOM and CUVECOM), and it is actively collaborating with four more to establish groundwater committees and deliver specific training programs.

A network of key partners and stakeholders at the national, regional and international level has been established, including USAID, IWMI, the International Groundwater Resources Assessment Centre (IGRAC), Global Water Partnership Southern Africa (GWP-SA), the British Geological Survey, the International Fund for Agricultural Development (IFAD), AU/Nepad Southern African Network for

Water Centers of Excellence (SANWATCE), Southern African Research and Documentation Centre (SARDC) and Africa Groundwater Network (AGW-Net). SADC-GMI continues to engage with the International Cooperating Partners (ICPs) by leveraging ongoing initiatives and programs in the SADC region and globally. Engagements with the ICPs will also include partnerships in for example research projects of mutual interest, importation of innovations in the areas of infrastructure, data collections and manage remote operations, water kiosk, and so on. Coordination with WB led groundwater projects will be facilitated and the WB will play an important role be facilitating and promoting coordination.

Select what role civil society will play in the project:

Consulted only; No

Member of Advisory Body; Contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain) Yes

CSOs/NGOs will work on implementing the sub-projects.

Sub-Component 2b will support advocacy and outreach. Activities under this sub-component aim to raise awareness (advocacy) on the critical role of groundwater in supporting sustainable and resilient livelihoods and equitable economic development and in building resilience against climate-related shocks like floods and droughts. Activities will be implemented with the National Focal Persons (NFPs) as well as other enablers (for example, officials, academics, practitioners, civil society) to promote knowledge sharing in the region through data/information sharing events, platforms and networks and will seek to promote equal representation of women in these events.

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

The role of women in transboundary water resource management is almost unrecognized as a priority compared to other water sectors. Yet like men, women have a unique role in providing technical expertise, convening dialogues, and influencing investment prioritization based on their livelihoods and water uses. Thus, the project will implement deliberate strategies to mainstream gender through women's empowerment and social inclusion actions along thematic areas on policy and strategy,

M&E, training and capacity building, knowledge products, implementation of activities, and participation in expert panels. The project will make use of the SADC-GMI Gender Equality, and Social Inclusion (GESI) Strategy that is being developed with support from the USAID funded Resilient Waters Program (RWP) seconded a GESI Consultant to SADC-GMI who is tasked with the development of a SADC-GMI GESI mainstreaming strategy, a GESI Implementation plan and documentation of a GESI compliance report for a sample of 6 of the 14 Pilot Infrastructure projects implemented by the SADC-GMI in the current project. In addition, lessons learnt from mainstreaming of GESI into groundwater management initiatives will be documented and disseminated. Overall, the scope of work consolidates the work from the first phase and seeks to build the capacity of SADC-GMI and its stakeholders to effectively mainstream GESI issues in all future work.

? Component 1 ? Capacity building for sustainable groundwater management: Capacity-building efforts will seek to be inclusive by considering the special needs and challenges of women and other vulnerable populations.

? Component 2 ? Knowledge development, dissemination and advocacy will support the generation and dissemination of knowledge on groundwater resources in the SADC-region: The knowledge products will promote inputs from women who have accumulated considerable knowledge about water resources, including location quality and storage methods.

? Component 3 ? Building resilient livelihoods and inclusive groundwater management: The project will deliberately focus on supporting the poor communities to adapt to the unavoidable impacts of climate change on water resources. To achieve this objective, the project will support management approaches that consider the key role that communities, including women and vulnerable populations, play as the principal promoters, educators and leaders of home and community-based water and sanitation practices.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources; Yes

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

The project intends to explore alternative delivery models and optimal use of the existing strong partnerships with regional implementation partners and the private sector to complement efforts at the national level.

The private sector will play an important role in the implementation of the various project components. These have been mapped variously in the project's Stakeholder Engagement Plan. Continuation on the engagement of borehole drillers will be intensified under this proposed new project to harmonize drilling practices through capacity building and improved enforcement of regulations. Engaging this stakeholder group is expected to improve groundwater data collection and management and hence improve decision-making information. Through the improved data and information sharing on the SADC Groundwater Information Portal, it is expected that more private sector actors from the mining, agriculture and researchers will contribute to both generation of more groundwater information and raise revenue for SADC-GMi through the purchase of data and knowledge products. The private sector will also participate in the generation of knowledge products in collaboration with SADC-GMI.

5. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	Medium/Moderate		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

The environmental risk rating is moderate, based on the project's anticipated environmental risks and impacts and consideration of SADC-GMI's current limited in-house capacity at this stage to manage environmental risks. The GEF grant will support knowledge exchange and institutional capacity strengthening (Component 1 and 2) to enhance the proposed investments under component 3 supported by the CIWA-grant under P175355. Component 1 and 2 will only support technical assistance and will not have any physical footprint. The investments under component 3 include small-scale infrastructure developments, which are expected to be limited in scope with small and localized environmental footprints such as test drilling, ground water level monitoring, river infiltration banks, shallow hand

dug wells and fitment of solar driven pumps and other climate smart technologies. Since the GEF grant will support the enhancement of physical activities under the CIWA-grant P175355, the risk rating for the project will remain the same. Even though the exact locations of the proposed investments are not yet known, it is expected to take place within already established community areas and are therefore not likely to impact on sensitive ecosystems, as these areas will be excluded during the sub-project screening. Anticipated environmental impacts and risks typically associated with the investment activities are expected to be low to moderate, predictable and site specific. The impacts will be temporary as they will occur mainly during the construction phase and may lead to localized loss of vegetation, soil erosion and degradation, soil and surface water pollution, dust and noise emissions, generation and disposal of small- scale construction waste, occupational health and safety concerns to contracted workers and community health and safety risks. During the execution of activities such as the construction of the small scale infrastructure, stakeholder engagement and monitoring of ground water levels risks may also include exposure to COVID-19. Due to the small-scale nature of the works and the expected depth of drilling, the implementation of the project is not likely to have an adverse impacts on the availability or quality of groundwater or transboundary groundwater resources. OP 7.50 applies to the project as the project will support groundwater studies through technical assistance to enhance management and monitoring of transboundary boundary aquifers. Risk associated with mismanagement of transboundary aquifers may include deterioration of groundwater quality due to pollution and lack of availability of water resources which may lead to social conflict.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Appraisal ESRS	CEO Endorsement ESS	
Concept Environmental and Social Review Summary (ESRS)	Project PIF ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Table below shows the results framework and associated project components. Annex 1, page 34, includes additional gender-specific targets per project component.

Project Development Objective Indicators							
Indicator Name	Baseline	Year 1	Year 2	Year 3	Year 4	End Target	Affiliated Project (Sub-) Component
Percentage of stakeholders reporting using capacity and knowledge products developed by the project for their work (Percentage)	0	<u>0</u>	<u>10</u>	<u>25</u>	<u>45</u>	60	1 & 2
Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment (Number)	83,000.00	<u>0</u>	<u>88,000</u>	<u>95,000</u>	<u>120,000</u>	133,000.00	1, 2 & 3
Direct female project beneficiaries (Percentage) ? (Percentage)	53	<u>53</u>	<u>53</u>	<u>53</u>	<u>53</u>	53	1, 2 & 3
Intermediate Results Indicators by Components							
Indicator Name	Baseline	Year 1	Year 2	Year 3	Year 4	End Target	Affiliated Project (Sub-) Component
Number of National Focal Groups established and operational in SADC Member States (Number)	5	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	8	1.1

Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (Number)	0	<u>1</u>	<u>3</u>	<u>4</u>	<u>5</u>	6	2.1
Level of Regional Legal Agreements and Regional Management Institution(s) to support its implementation (Number)	5	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	8	1.1
Level of engagement in IWLEARN through participation and delivery of key products-Number of joint activities completed (Number)	0	<u>5</u>	<u>10</u>	<u>13</u>	<u>17</u>	20	1.2
Number of quick win activities implemented from the TDAs and SAPs in selected TBAs) (Number)	0	<u>0</u>	<u>2</u>	<u>4</u>	<u>5</u>	6	2.1
Number of groundwater studies at national, transboundary and regional level to understand groundwater challenges (Number)	12	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	16	2.1
Number of innovative sub-grant projects at SADC Member States level completed with satisfactory outcome (Number)	13	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	17	3

Number of communities (women and men) organized and trained for participatory groundwater management (Number)	3	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	6	3
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ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Regional, Comoros, Eswatini, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia, Zimbabwe, Mauritius. GEF Sustainable Groundwater Management in SADC Member States Project Phase 2 (GEF ID 10797). Agency: IBRD; GEF Financing: \$ 4,566,210; Co-financing: \$ 35,000,000.

? Germany Comments

Germany approves the following PIF in the work program but asks that the following comments are taken into account:

Germany welcomes this proposal to strengthen groundwater management in Southern Africa. The project aligns with and contributes to the fifth Regional Strategic Action Plan on Integrated Water Resources Development and Management (RSAP V). This was developed with support from the German Technical Cooperation.

Suggestions for improvements to be made during the drafting of the final project proposal:

GEF Council Comment	Response
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<p>In order to track progress, it would be helpful for the proposal to explain how the intended second phase builds on the lessons generated during Phase 1.</p>	<p>Many lessons Learned from the Phase 1 project have been captured and Reflected in the new Project Design. The new project builds on these lessons to consolidate the SADC-GMI's role as a center of excellence on groundwater in the region and its ability to respond to the capacity and knowledge needs of the SADC Member States and regional institutions. The following are the key lessons learned and reflected in the design of this second phase.</p> <ol style="list-style-type: none"> 1. The capacity to coordinate groundwater programs is critical for effective development and cooperation in the sector. Coordination capacity is as important as technical knowledge. This second phase of the SADC-SGWMP will establish and build the capacity of NFGs. These efforts should enable the NFGs to play a pivotal role in integrating sustainable groundwater management principles in policies and strategies at the national level and articulating their national groundwater needs and interests at the transboundary level. The project will support SADC-GMI to collaborate and build partnerships with RBOs and other transboundary water institutions to enhance the conjunctive surface/groundwater management in SADC. 2. Professional capacity needs to be supported by well-designed academic programs and by continuing education opportunities for professionals. The lessons learned report prepared under the SADC-SGWMP identifies the capacity weaknesses of professionals working on groundwater as a key constraint for the sector's development. Under the second phase, the SADC-GMI will continue to strengthen its Young Professional program and its collaboration with academia to strengthen capacity among professionals, with particular attention to targeting more women. 3. Quantity, quality and timing of data improve groundwater management. Data and information improve management and planning of groundwater at the local, national, and transboundary levels since the availability of reliable data are necessary for well-informed, and fact-based decision-making on water resources use. The project will support the enhancement of groundwater data collection and management by expanding the SADC Groundwater Information Portal (GIP). 4. Limited access to literature constrains knowledge on groundwater. The literature on groundwater in the SADC region is limited, curbing the ability of practitioners and experts to expand their knowledge and find information when needed. To fill the gaps, SADC-GMI has created the SADC Groundwater Literature Archive (GLA). The archive collects and makes available to users both published and unpublished literature to expand the knowledge base around groundwater in the region. Additionally, SADC-GMI will extend its partnerships with SADC-based universities to enhance SADC-GMI's capacity to undertake and disseminate research. 5. Sub-grant projects have been successful in both piloting innovation and improving local livelihoods. The 12 national pilots funded by the sub-grant component of the current project have exceeded expectations, reaching a much higher number of beneficiaries than envisaged initially, of which many are women. They have also proved to be an effective platform for dialogue with Member States around groundwater. Based on the first sub-grant schemes' experience, the second phase will support both base-grants and innovation-grants to foster innovation and synergies with scalable projects in the Member States. 6. Implementation of the sub-grant schemes under the ongoing project posed challenges primarily attributed to an initial lack of capacity by SADC-GMI and Member States' entities. Lessons were learned and processes streamlined to expedite project conceptualization, signing of sub-grant agreements and procurement. SADC-GMI developed template project concept notes and proposals as well as manuals and training modules. They also supported capacity building around environmental and social risk management which can be used in this phase of the project. The SADC-GMI can assist Member States with procurement to circumvent lengthy government procurement processes or use local NGOs to implement the projects. Further workshops will be organized to capacitate in-country project managers to manage Environmental and Social risks and impacts. 7. To enhance the accessibility to SADC-GMI, location is of prime importance. For SADC-GMI to cost-effectively perform its mandate, it should be conveniently located. The location of SADC-GMI was assessed using a Cost-Benefit Analysis (CBA) and an Organizational Capacity Assessment Tool under the SADC-SGWMP. Considering that SADC-GMI is a regional institution that needs to be readily accessible by the SADC Member States and other cooperating partners, the CBA recommended that the SADC-GMI move to Gauteng Province in South Africa, which is accessible with one flight to and from most capitals of most SADC Member
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<p>Several multilateral and bilateral International Cooperation Partners (ICP), including the German programme ?Transboundary Water management in the SADC region?, collaborate with SADC and its subsidiary organisations in the water sector. The proposal could be strengthened by mapping linkages to other international investments, especially in the areas of capacity building of RBOs and the establishment of monitoring systems.</p>	<p>During the proposed phase 2 project, SADC-GMI will intensify its engagement with the International Cooperating Partners (ICPs) by leveraging ongoing initiatives and programs in the SADC region and globally. This will help SADC GMI stretch its limited financial and human resources to extend its footprint to other areas that would not have been possible. Some measures to achieve this will include participation at the International Water Conferences such as World Water Week, the annual International Association of Hydrogeologists conference as well as playing a role in coordinating some activities on the African Ministers Council on Water (AMCOW) Pan-Africa Groundwater Program (APAGroP), where a host of other ICPs converge. In the current phase, a network of key partners and stakeholders at the national, regional and international level has been established, including USAID, IWMI, the International Groundwater Resources Assessment Centre (IGRAC), Global Water Partnership Southern Africa (GWP-SA), the British Geological Survey, the International Fund for Agricultural Development (IFAD), AU/Nepad Southern African Network for Water Centers of Excellence (SANWATCE), Southern African Research and Documentation Centre (SARDC) and Africa Groundwater Network (AGW-Net). Engagements with the ICPs will also include partnerships in for example research projects of mutual interest, importation of innovations in the areas of infrastructure, data collections and manage remote operations, water kiosk, and so on. This area includes typical projects such as the USAID funded Resilient Waters Program, the GEF Funded Limpopo Transboundary Water project, the Bundesanstalt f?r Geowissenschaften und Rohstoffe (BGR, Institute for Geosciences and Natural Resources of Germany) of the German Cooperation supported CUVECOM project as well as the United Nations Educational, Scientific and Cultural Organization- Intergovernmental Hydrological Program (UNESCO-IHP) Governance of Groundwater Resources in Transboundary Aquifers (GGRETA) 3 project, to mention but a few.</p>
<p>Germany is funding large research projects in the water sector (Water Security in Africa WaSA and Sasscal) with a focus on Southern Africa that might offer opportunities for synergies and cooperation.</p>	<p>SADC-GMI is actively participating in the African-German Joint Cooperation in Research and Innovation for Water Security in Africa (WaSA) as well as Sasscal where synergies for training and capacity building are being explored. Initially SADC-GMI joined 2 consortia that applied and failed to access the BMBF funding under WaSA. However, due to its strategic positioning, SADC-GMI was approached to collaborate with one of the successful applicants to the WaSA programme where detailed proposals are being developed for activities to be implemented in collaboration with other regional and international partners and programs</p>

<p>The project objectives require a transboundary approach that operates across intervention levels (regional, basin, national), geographical boundaries (member states) and hydrological units (basins). The proposal could be strengthened by explaining how the complementary mandates and roles of stakeholders will be reflected during implementation.</p>	<p>Within the SADC region, the complementary mandates for groundwater development and management are reflected through the SADC Protocol on Shared Watercourses which defines the policy, legal and institutional enabling framework for both surface and groundwater resources management. These frameworks are operationalized through the Regional Strategic Action Plans (RSAP V) of 2021 ? 2025 which gives the SADC Water Division the accountability for driving this process and SADC-GMI as the implementing entity for groundwater programmes in collaboration and consultation with RBOs and national governments in the SADC Member States. The RBO and Member State governments are meso-level vehicles for transmitting project benefits to the local level stakeholders. In order to ensure that all stakeholders at transboundary, national and local level adequately contribute to the project's success, this project will ride on the Stakeholder Engagement Plan (SEP) developed by SADC-GMI for implementation of the phase 2 project. This way the complementary mandates and roles of the stakeholders will be incorporated in the implementation of this project. Moreover, the sub-Grant Manual developed under the phase 2 project will also ensure that stakeholder mandates and roles are effectively aligned.</p>
<p>A broad coverage of Member States is politically desirable to enable much needed inter-basin dialogue and promote coordination among riparian states. However, the investment level through the grant may need to be limited to Outputs 2 and 3, with country co-financing allocated to Component 3 (pilot projects).</p>	<p>The investments foreseen in the Member States under Component 1 is minimal as it basically entails capacity building their respective institutions and individuals to enhance the sustainability of the investments under components 2 and 3. Component 2 has a huge aspect of technical research which is done by experts for knowledge generation, whereas component 3 entails participatory infrastructure development at grassroot levels which involves some capacity building on specific infrastructure related aspects. As such, maintaining the foreseen minimum investments on capacity building under Component 1 is very strategic to benchmark best practices and enhance efficiency in line with the regional vision for integration, sustainable and equitable development.</p>

<p>The complex nature of the project requires a sound management set-up for effective oversight and efficient operations. This includes the provision of adequate management capacity and ensuring alignment of the cofinancing by recipient countries. It would be desirable if the proposal would provide greater clarity in this respect.</p>	<p>Direct funding to recipient countries will be through the sub-grant projects. The modalities for the receipt and deployment of these funds are adequately provided for in the sub-Grant Manual. Clarity on the management of the grant and co-financing is covered in the checklists in the sub-Grant Manual</p>
<p>The connection and synergies to the AMCOW Panafrican Groundwater Programme could be outlined in more detail.</p>	<p>Noted. As the most advanced REC on the African continent to establish a Centre of Excellence for groundwater development and management, AMCOW anchored the collection and dissemination of best practices on the SADC-GMI experiences. As such, SADC-GMI is at the core of implementing the APaGroP through coordinating the Policy and Institutional development component. This role provides an opportunity to upscale the project results continentally.</p>

STAP Review	Response
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Minor issues to be considered during project design.

STAP acknowledges this project from the World Bank to promote sustainable groundwater management in the SADC region.

The project focuses on capacity and knowledge for inclusive groundwater management in the SADC region at the national and transboundary levels. It is a very modest objective in relation to the severity of the problems addressed (likely to intensify with land use and future climate change). The project would benefit from making use of readily available data on climate scenarios for this region to better inform and support each of the components. Project description section (1a) missing, thus difficult to assess innovation and potential for scaling. The TOC diagram is merely a visual graphic of the various outcomes, outputs, etc. but it doesn't include underlying assumptions, causal pathways, barriers, etc. which could also help explain why past efforts have not been successful or need to be bolstered.

Gender equality dimensions are well specified, with attention to multiple aspects including policy, capacity building approach, community engagement and communications. This is a strength and could indeed be an area of substantial innovation and learning.

This recommendation is well accepted. As part of knowledge generation for the Transboundary Aquifers and resilience studies, the project uses readily available climate data including from Remote sensing. The proposed improvement of the SADC Groundwater Information portal foresees use of climate data to generate time series data and to undertake Transboundary Diagnostic Analyses leading to Joint Strategic Action Plans.

There is an elaboration in the PAD for the phase 2 project explaining that the Results Chain is anchored on existing policy and strategic instruments operational with the SADC region. As such the project augments regional efforts especially in the context of SADC Regional Strategic Action Plan (RSAP V (2021-2025) and other Policy, Legal and Institutional frameworks already analysed in the SADC instruments and in the previous project phase.

Intention to populate the SADC-GIP with time series data will assist in generating information for climate resilience decision making

N/A

Please attach the geographical location of the project area, if possible.



*PMC costs include administrative and project management, finance, procurement, and audit costs. The PMC will also partially fund procurement, admin and finance staff, however the majority of the costs will be covered by CIWA.

Appendix A: Indicative Project Budget Template													
Expen diture Catego ry	Detailed Descripti on	Component (USDeq.)							To tal (US De q.)	Resp onsib le Entit y (Exe cutin g Entit y recei ving funds from the GEF Agen cy)[1]			
		Component 1 - Capacity Building and strengthening for sustainable groundwater management			Component 2 - Knowledge Development and Raising Awareness		Component 3 - Building resilient and inclusive livelihoods through improved skills and promotion of innovative groundwater management solutions and infrastructure				Su b- Tot al	S A D C- G M I M & E	P M C
		1.1 Cap acity in Key Insti tutio ns acro ss SAD C regi on to regu late and man age GW use	1.2 Cap acit y of SA DC GM I to act and perf orm as a cent er of exce llen ce over time	1.3 Cap acit y of SA DC GM I to impl eme nt the Proj ect and prog ram s	2.1 Devel opme nt of grou ndwa ter relate d know ledge and infor matio n and maki ng it avail able to decisi on- make rs and stake holde rs	2.2 Sup port awa rene ss raisi ng and outr eac h	3.1 Imple mentat ion of Small Grant project s throug h the Basic Grant	3.2 Imple mentat ion of Small Grant project s throug h the innova tive Grant					

Contra ctual Service s ? Compa ny	Logistics support for training, workshops, meetings, including venues, facilitation, materials, and translation services, as applicable .	240,400	-	-	-	-	-	-	240,400	-	-	240,400	SAD C-GMI
	National Groundwater Assessments & studies to assess status of groundwater resources and address pertinent groundwater challenges in the region	-	-	-	1,600,000	-	-	-	1,600,000	-	-	1,600,000	SAD C-GMI
	SADC-Groundwater Information Portal, Data and information generation	-	-	-	-	74,547	-	-	74,547	-	-	74,547	SAD C-GMI

Contractual Services ? Individual / International Consultants	International consultants to support the implementation of the knowledge generation and management strategy, as well as information management, including Monitoring and Evaluation Consultant and Communications and Knowledge Management Specialist	73,826	117,620	-	-	-	-	-	191,446	60,000	-	251,446	SAD C-GMI
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	Technical/ specialized consultants will be hired to support the implementation activities related to technical & capacity building, including Senior Groundwater Specialist, Environmental and Social Management Specialist, & Infrastructure Consultant	-	316,000	297,000	404,750	-	-	-	1,017,750	-	-	1,017,750	SAD C-GMI
	Independent Financial Auditor engaged to conduct financial auditing	-	-	-	-	-	-	-	-	-	-	5,000	SAD C-GMI
Project M&E (subcomponent 1.3)	Workshops and capacity-building activities	-	-	-	-	-	-	-	-	8,000	-	8,000	SAD C-GMI

	Project monitoring and learning, including site visits, annual reporting, midterm and terminal evaluations. With additional financing allocation to IW learn	-	-	-	-	-	-	-	-	14,170		14,170	SAD C-GMI
Subprojects to Member States sub-grantees	Sub-projects to conduct basin-scales studies and analyses that are relevant for IWRM, including baseline studies.	-	-	-	-	-	257,472	841,500	1,098,972	-	-	1,098,972	SAD C-GMI
IW Learn (1%)	IW Learn (1%)	3,174	4,380	3,000	20,250	753	2,600	8,500	42,657	830	2,174	45,661	SAD C-GMI

Salary and benefits / Staff costs	Project manager funded through the CIWA grant (CIWA Co-financing) . Additional project staff funded 80% through CIWA and supplemented at 20% by GEF PMC costs. These project staff include Procurement & Grants Management Specialist s, Administration and Finance officer, Project Assistant.	-	-	-	-	-	-	-	-	-	10 0,0 00	100 ,00 0	SAD C-GMI
Travel	International and Domestic travel and transportation (air, terrestrial, and fluvial), as needed, directly related to the major activities.	-	-	-	-	-	-	-	-	-	25, 00 0	25, 000	SAD C-GMI

Office Supplies	Consumables and office equipment /supplies to be used in the performance of the project	-	-	-	-	-	-	-	-	-	40,000	40,000	SAD C-GMI
Other Operating Costs	Operating costs associated with project operation on a day-to-day basis related to technical and capacity building activities and administrative management, as bank charges, office costs (rents, utilities, communications, insurance) , among others.	-	-	-	-	-	-	-	-	-	45,264	45,264	SAD C-GMI
Grand Total		317,400	438,000	300,000	2,025,000	75,300	260,072	850,000	4,265,772	83,000	217,438	4,566,210	

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agency is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).