



**GROUNDWATER MANAGEMENT INSTITUTE**



**NON-TECHNICAL SUMMARY**  
**ENVIRONMENTAL AND SOCIAL MANAGEMENT**  
**FRAMEWORK**  
**FOR THE**  
**SADC GROUNDWATER MANAGEMENT**  
**PROGRAMME 2021 – 2026**

## Introduction

This document contains the non-technical summary of the Environmental and Social Management Framework (ESMF) developed for Southern African Development Community Groundwater Management Institute (SADC-GMI) as part of Phase 2 of the “Sustainable Groundwater Management in SADC Member States” project. Phase 2 of the project entails expansion of programme elements from phase 1; in which SADC-GMI has been successful in mobilizing countries around cooperative action and where countries have expressed interest and need for further engagement.

An ESMF is an instrument that examines the risks to project donors, owners and implementers and impacts to stakeholders focusing on environmental and social issues that may pose risks or create impacts. The ESMF provides guidelines for screening of sub-projects for environmental and social risks and impacts and sets out the principles, rules, guidelines and procedures to assess and manage environmental and social (E&S) risks and impacts. It contains measures and plans to reduce, mitigate and/or offset adverse risks and impacts and provide guidance for estimating and budgeting costs associated with managing E&S risks and impacts. It also details the responsible parties and capacity development required to assess and manage E&S risks and impacts.

In general, a well-constructed ESMF has the following characteristics:

- It is contextualised to the specific project-type it will be used for;
- It is practical and contains implementable tools for different steps in the Environmental and Social Safeguard (ESS) screening and management process;
- It assimilates lessons learned from the implementation of previous similar projects;
- It provides clear guidelines to assist project implementers to identify material risks and/or impacts in a project; and
- It has a well-defined escalation mechanism through which project implementers can notify project managers of potential material risks and/or impacts in real time.

This ESMF was specifically developed for SADC-GMI sub-grantees who will be implementing the small-scale water infrastructure projects in the SADC Member States. It aligns with the third Key Result Area of the SADC-GMI's **Groundwater for resilience and socio-economic development in the SADC region** project, namely, to support resilient livelihoods through sustainable groundwater management capacity building and innovative infrastructure for socio-economic development. The aim of this ESMF is to guide SADC-GMI sub-grantees in undertaking projects in an environmentally and socially responsible manner in line with the World Bank ESS requirements set out in the Environmental and Social Framework (ESF) (World Bank, 2017).

This document summarizes the key components of the SADC-GMI ESMF and should be read in conjunction with the SADC-GMI ESMF and supporting appendices.

## Project overview

SADC-GMI is currently approaching the end of the implementation of Phase 1 of the, “*Sustainable Groundwater Management (SGM) in SADC Member States Project*”, funded by the Global Environmental Facility (GEF) and the Cooperation in International Waters in Africa (CIWA) through the World Bank. The SGM Phase 1 Project commenced in 2014 and will be concluded in June 2021, pending World Bank approval for a project extension.

SADC-GMI commissioned the project, “*Consultancy Services for Capturing Lessons Learnt and designing a new SADC groundwater programme*” to capture lessons learned from the SGM Project and develop a new regional groundwater programme building on identified lessons. The programme has a SADC-wide regional footprint and is designed to contribute to the sustainable management of groundwater at multiple levels, ranging from regional to local. In this context there are many

beneficiaries, some deriving direct benefit from the project and its activities and others enjoying indirect benefits. For most SADC Member States, groundwater is a vital resource that supports socio-economic development, contributes to water security and support resilience to the impact of climate change. As previously mentioned, the SADC-GMI's **Groundwater for resilience and socio-economic development in the SADC region 2021-2031** project has three key result areas (KRAs) namely:

- KRA 1: **Build capacity** of national and regional institutions as well as develop skills for groundwater management to improve resilience and support socio-economic development;
- KRA 2: **Generate knowledge** through analytics and data and information sharing; and
- KRA 3: **Support resilient livelihoods** through groundwater management and innovative infrastructure for socio-economic development.

To support SADC Member States to build on the sustainable management of groundwater and respond to emerging issues identified in Phase 1, additional funding is being sought from donors including the multi-donor trust fund CIWA for Phase 2. The project will be implemented by SADC-GMI, which is legally registered as a section 21 not-for-profit company, through various implementing agencies located in SADC Member States.

## The benefits of the project

The beneficiaries of the project consists of different stakeholders who are responsible and involved with management and monitoring of groundwater resources in the SADC Member States. . Table 1 provides an overview of possible beneficiaries of the project.

**Table 1: Classification of beneficiaries**

Beneficiary	Directly Impacted	Indirectly Impacted
<b>Local</b>	<ul style="list-style-type: none"> <li>• Sub-grant project and community level capacity building beneficiaries</li> <li>• SADC-GMI host institution</li> </ul>	<ul style="list-style-type: none"> <li>• Groundwater-using communities in Member States</li> <li>• Groundwater professionals working at community level</li> </ul>
<b>National</b>	<ul style="list-style-type: none"> <li>• Focal persons, focal groups members, trainees and interns</li> </ul>	<ul style="list-style-type: none"> <li>• National institutions responsible for water management</li> <li>• National academic institutions and water research agencies</li> <li>• Groundwater professionals working at national level</li> </ul>
<b>Transboundary and Regional</b>	<ul style="list-style-type: none"> <li>• SADC Secretariat and Secretariat structures addressing water resource management such as the Directorates for Food, Agriculture and Natural Recourses and Gender</li> </ul>	<ul style="list-style-type: none"> <li>• River Basin Organizations</li> <li>• Regional water resource management agencies</li> <li>• Groundwater professionals working at regional level</li> </ul>

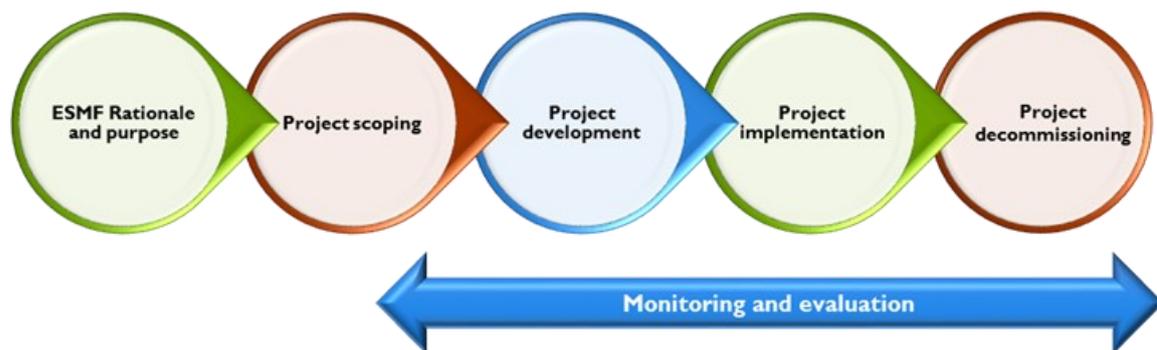
The beneficiaries of the project will benefit from its implementation through the strengthening of local capacity and knowledge and improved management and monitoring of groundwater in a sustainable and equitable manner to benefit communities and promote sustainable socio-economic development.

## Structure of the ESMF

The structure of the ESMF is aligned with the World Bank's ESF (2017) and the 10 ESSs. The ESF was developed to manage the environmental and social risks of the World Bank and Borrowers on projects, to manage environmental and social impacts proactively and to improve development outcomes. The ESSs set out specific requirements to address environmental and social issues. The SADC-GMI ESMF document provides guidance to the sub-grantee on managing potential risks and impacts during the implementation of the small scale pilot projects.

The SADC-GMI ESMF is divided into four sections which mimics the process a sub-grantee will follow from project concept to decommissioning. Figure 1 provides an overview of the sections of the ESMF document and indicates the integral part that monitoring and evaluation plays throughout the small-scale/ pilot project lifecycle, from scoping to project implementation.

Potential sub-grantees who are at the beginning of the project planning process are advised to follow the ESMF from the start to determine environmental and social risks and impacts at the outset of project conceptualisation. In addition, this framework seeks to provide guidelines for SADC-GMI sub-grantees who are preparing, planning and implementing groundwater-related small-scale/ pilot infrastructure projects to ensure that the project is undertaken in an environmentally and socially responsible manner in line with the World Bank ESS requirements.



**Figure 1: Sections in the SADC-GMI's ESMF**

## Policy and legal framework

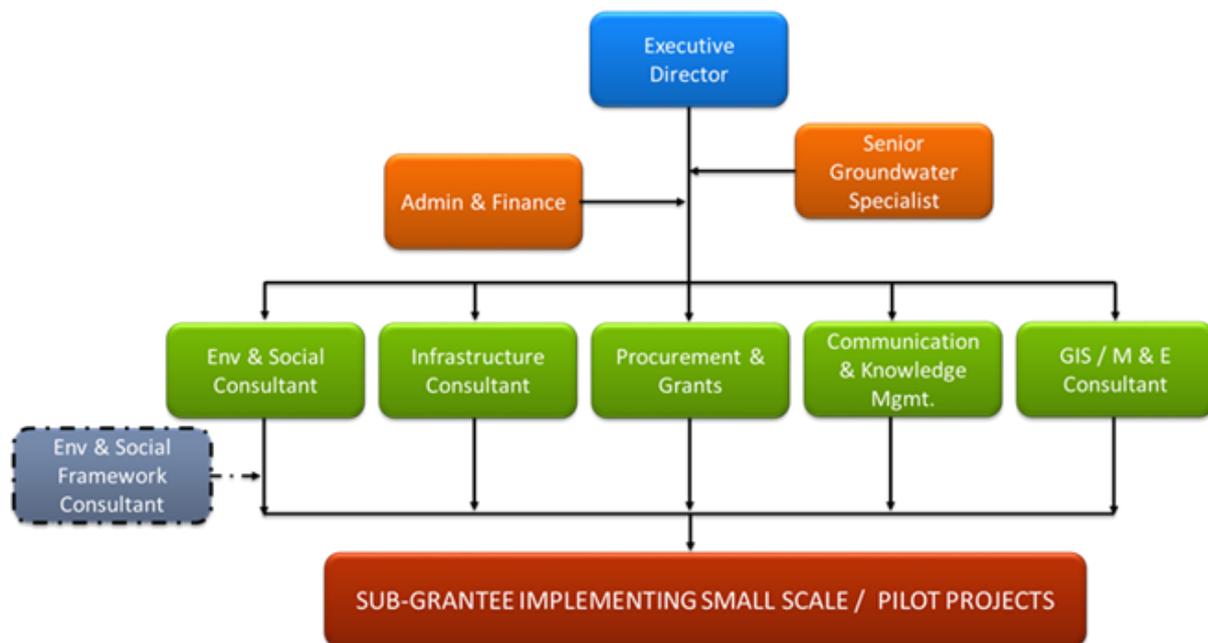
As part of the project preparation phase for the sub-grantee projects, it will be necessary to determine which national legislation should be adhered to for permitting purposes. SADC also has several protocols and strategic plans that are relevant for the SADC Groundwater Programme for SADC-GMI. Many SADC countries have developed policies, laws, strategies and plans for the conservation and management of natural resources including land, water and biodiversity. Some governments in SADC countries have also developed policies, laws and plans on climate change, gender, HIV/AIDS, compensation and involuntary resettlement and indigenous peoples' rights. All sub-grantee projects are required to ensure that the relevant policies, laws, strategies and ESF World Bank requirements are considered and applied to all aspects of the project.

A summary of relevant environmental and social policies, protocols and laws at regional and national level in each SADC Member States is provided in the ESMF and these sub-grantees will be required to identify any additional legislative requirements that may be applicable to the small scale pilot project. As funders of the small-scale/ pilot groundwater project may have additional environmental and social

requirements above what is required by country policies and legislation, the sub-grantee will be required to identify these additional requirements and assess it against the legislative framework of the relevant SADC Member State. Where gaps are identified the sub-grantee will be required to implement whichever requirement is more stringent.

## Institutional arrangement

Sub-grantees who are planning and/or implementing projects within the SADC-GMI pilot infrastructure programme will be subject to SADC-GMI's existing institutional structure and arrangements. For the purpose of the ESMF process, Figure 2 indicates the sub-grantee's position within the SADC-GMI institutional structure.



**Figure 2: SADC-GMI Institutional arrangements**

As indicated in Figure 2, the small-scale/pilot infrastructure sub-grantees will report primarily to the SADC-GMI infrastructure specialist during the lifetime of their projects. Under the direction of the infrastructure specialist, the sub-grantees will have contact with the SADC-GMI procurement manager, gender equality and social inclusion specialist, the monitoring and evaluation specialist, and occasionally, independent consultants. At project inception, SADC-GMI will confirm the communication protocol and specific institutional arrangements related to the sub-grantee project.

SADC-GMI has identified that there is a resource gap within its organization for managing environmental and social components of its projects. SADC-GMI intends to close this gap with the appointment of an in-house ESS specialist. This specialist will oversee the implementation of this ESMF framework and will initially be strongly supported by external consultants. It is estimated that ESMF external consulting support will be gradually phased out over a two-year period as SADC-GMI grows this capacity in-house.

## Potential environmental and social risks and impacts

Risks and impacts will span the development, implementation and decommissioning phases of a sub-grantee project. The process to be followed in identifying, assessing and managing potential risks and impacts using the ESMF document is illustrated in **Error! Reference source not found..** Each sub-project will be screened using screening tools provided in the ESMF to identify the sub-project specific environmental and social risks and impacts.

A number of environmental and social risks and impacts (both positive and negative) may arise from the implementation of small-scale/ pilot groundwater projects and is briefly summarized below:

**Potential environmental risks and impacts include:**

- Air pollution due to the dust and fugitive emissions due to drilling and use of diesel pumps;
- Soil erosion/ disturbance caused by drilling activities;
- Water pollution from use of chemicals and grease for drilling activities;
- Loss of biodiversity/ vegetation due to vegetation clearance;
- Hydrocarbon spillages from equipment and vehicles;
- Impact on up and downstream users due to dewatering of aquifers; and
- Contamination of the aquifer.

**Potential social risks and impact include:**

- Loss of arable land or loss of access to land due to borehole drilling and water infrastructure;
- Noise nuisance to surrounding communities from drilling activities;
- Loss/destruction of cultural heritage resources (graves, sacred sites and plants) due to drilling activities;
- Safety concerns for surrounding communities during drilling activities due to the operation heavy machinery and non-barricaded pipeline excavations;
- Impact on the health of surrounding communities due to potential spread of communicable diseases from influx of labourers;
- Potential for economic displacement due to borehole placement;
- Safe and secure, access to clean water in close proximity to the surrounding communities which will reduce cases of water borne diseases;
- Community upliftment due to local employment opportunities and skill development; and
- Enhanced local economic development due to access to clean and safe drinking water.

## **Managing risks and impacts**

Decision-making regarding how to manage risks and impacts in small-scale / pilot projects depend on various factors such as regulatory requirements, donor specific ESS requirements, the scale of the project and stakeholder feedback. The SADC-GMI ESMF provides guidance on various scenarios requiring different levels of management intervention. These include:

- A high-level environmental and social management and monitoring action register for projects with minimal risks and impacts; and
- A generic Environmental and Social Management Plan template for use and further development by sub-grantees for projects with moderate risks and impacts.;

Occasionally a small-scale /pilot project will require an independent Environmental and Social Impact Assessment (ESIA). The need for an ESIA and related studies is usually triggered by regulatory requirements and/or the presence of indigenous people in the project area or if the project requires resettlement of communities. In cases where an ESIA and related studies are required, the SADC-GMI

ESMF provides guidance to the sub-grantee for the preparation of terms of references for undertaking the ESIA, resettlement and social impact assessment, stakeholder engagements and screening for potential indigenous people who may occur within the project area.

The SADC-GMI ESMF further provides guidance and tools on the preparation of management plans for specific social and environmental aspects such as labour and working conditions, resource efficiency and pollution prevention, community health, safety and security management, biodiversity management and cultural heritage in accordance with the WB ESF requirements

## Stakeholder engagement

Stakeholders are individuals or groups who are affected or likely to be affected by the project (project - affected parties) and may have an interest in the project (other interested parties) (IFC, 2007). For the purpose of the small-scale/ pilot projects, stakeholders have been identified as people who are directly affected by the implementation of small-scale/ pilot groundwater infrastructure projects and other individuals or groups that may have an interest in the project as “other interested parties”.

According to the World Bank (2016) stakeholder engagement is an inclusive process which needs to be conducted throughout the project life cycle. SADC-GMI developed a stakeholder engagement plan (SEP) which includes protocols and procedures for both internal and external engagement with stakeholders. The SEP includes a grievance mechanism which indicates the procedure on how to escalate grievances from sub-grantees to SADC-GMI.

Stakeholder engagement is most effective when conducted at the earliest possible stage of the project as it plays an integral part of the early decision-making as well as the assessment, management and monitoring of the project’s environmental and social risks and impacts. The ESMF provides guidance to the sub-grantee on the identification of stakeholders, preparing of a stakeholder engagement plan in line with the SADC-GMI SEP, conducting stakeholder engagements and provides a framework for developing a grievances readiness mechanism for receiving and addressing grievances at sub-project level.

## Monitoring and reporting

Monitoring of and reporting on all activities a sub-grantee undertakes during the project lifecycle is not only important for technical aspects of a project, but also to ensure compliance with the funder’s ESS requirements. E&S monitoring implies that the sub-grantee takes responsibility to ensure, on at least a weekly basis that all activities related to the project are inspected and complies with the ESMP. Sometimes during the implementation of a project when activities peak, daily monitoring might be necessary. Regular site visits with a specific focus on monitoring E&S performance requirements can help sub-grantees to identify and manage unforeseen E&S risks early on and prevent escalation. The ESMF sets out specific steps required to be taken by the sub-grantees to monitor its E&S performance and to ensure that they comply with the monitoring and reporting requirements of SADC-GMI’s ESMF.

## Conclusion

As sub-grantees embark on the process of developing a water infrastructure small-scale / pilot project in SADC Member States, the ESMF will assist to screen, manage and monitor potential risks and impacts. The ESMF also provides additional information to enhance understanding regarding ‘why’, ‘when’ and ‘how’ to apply the World Bank ESS requirements.

Throughout the project lifecycle the SADC-GMI ESMF will serve as an environmental and social compass to ensure that sub-grantees do not steer off course, but consciously and continuously manage the environmental and social risks and impacts of their small-scale / pilot water infrastructure projects.