



Integrated Transboundary River Basin Management for the Sustainable Development of the Limpopo River Basin

Part I: Project Information

GEF ID

10182

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT **No**

NGI **No**

Project Title

Integrated Transboundary River Basin Management for the Sustainable Development of the Limpopo River Basin

Countries

Regional, Botswana, Mozambique, South Africa, Zimbabwe

Agency(ies)

UNDP

Other Executing Partner(s)

Global Water Partnership ? Southern Africa (GWP-SA)

Executing Partner Type

Others

GEF Focal Area

International Waters

Taxonomy

Focal Areas, Gender Equality, Capacity, Knowledge and Research, Strengthen institutional capacity and decision-making, Influencing models, Demonstrate innovative approaches, Convene multi-stakeholder alliances, Type of Engagement, Stakeholders, Consultation, Participation, Partnership, Information Dissemination, Local Communities, Communications, Education, Public Campaigns, Behavior change, Awareness Raising, Private Sector, Individuals/Entrepreneurs, SMEs, Beneficiaries, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, International Waters, Transboundary Diagnostic Analysis and Strategic Action Plan Preparation, Pollution, Nutrient pollution from all sectors except wastewater, Coastal, Freshwater, River Basin, Gender results areas, Access to benefits and services, Participation and leadership, Capacity Development, Knowledge Generation and Exchange, Access and control over natural resources, Gender Mainstreaming, Gender-sensitive indicators, Sex-disaggregated indicators, Learning, Theory of change, Indicators to measure change, Knowledge Exchange, Knowledge Generation

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 1

Submission Date

6/17/2021

Expected Implementation Start

1/1/2022

Expected Completion Date

7/31/2026

Duration

54In Months

Agency Fee(\$)

570,000.00

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	1,814,286.00	6,000,000.00
IW-3-6	Enhance water security in freshwater ecosystems through enhanced regional and national cooperation on shared freshwater surface and groundwater basins	GET	3,485,714.00	9,625,954.00
IW-3-7	Enhance water security in freshwater ecosystems through investments in water, food, energy and environment security	GET	700,000.00	2,000,000.00
Total Project Cost(\$)			6,000,000.00	17,625,954.00

B. Project description summary

Project Objective

To achieve integrated, cross-sectoral, ecosystem-based management of the Limpopo River to uplift the living standards of the basin's population and conserve the basin's resources and ecosystem services.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Capacity Building of LIMCOM & its Member States for joint planning and the basin-wide SAP and IWRM implementation	Technical Assistance	1.1 - The capacity of LIMSEC and LIMCOM strengthened to enable improved basin-wide joint planning, development and management of water resources, and IWRM implementation	1.1.1 - Technical Capacity of LIMCOM and Member States strengthened 1.1.2 - Institutional Capacity at LIMCOM and its member states strengthened 1.1.3 - Operational Capacity of LIMCOM Secretariat strengthened 1.1.4 - Inclusive and participatory IWRM practices supported	GET	1,329,600.00	5,314,674.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2: Filling critical knowledge gaps to support joint planning and future development scenario analysis	Technical Assistance	<p>2.1: Critical data and information gaps filled to enable science-based planning, development and management for the Limpopo River Basin</p> <p>2.2: Basin-wide information and knowledge management tools used to create user-friendly products linking science to policy for decision makers</p>	<p>2.1.1 - Joint Basin Survey conducted for key river health indicators</p> <p>2.1.2 - Ecological water requirements (e-flow) established to support future water resources planning in a sustainable manner</p> <p>2.1.3 ? Sediment Transport Monitoring and Modelling capacity strengthened</p> <p>2.1.4 - Assessment of ecological impacts of alluvial aquifer abstraction practices</p> <p>2.1.5 - Review of policies, laws / regulations and governance relevant to IWRM within the Limpopo River Basin</p>	GET	2,379,629.00	3,147,474.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3: Informed Strategic Planning and Decision Making to implement the basin-wide IWRM (Science-to-Governance)	Technical Assistance	3.1: Transboundary and national priorities agreed and endorsed as SAP and NAPs to guide future development and investment	<p>3.1.1 - Long-term Strategic Action Programme (SAP) drafted, and 5-year Integrated Water Resources Management (IWRM) plans drafted and approved by LIMCOM</p> <p>3.1.2 - Four National Action Plans (one for each Member State) developed</p> <p>3.1.3 - SAP M&E framework developed based on the Theory of Change</p> <p>3.1.4 - SAP Investment Plan developed</p> <p>3.1.5 - SAP for the Limpopo River Basin, together with NAPs, endorsed by at least one Minister from each Member State</p> <p>3.1.6 - A</p>	GET	816,600.00	2,014,674.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
4: The IWRM Plan implementation pilots	Investment	4.1: Participatory IWRM practices demonstrated to address sedimentation issues	4.1.1 - Community-based Sustainable Land Management demonstrations piloted to reduce sedimentation and to improve land productivity	GET	700,000.00	3,144,784.00
			4.1.2 - Sustainable Land Management demonstration(s) piloted in partnership with private sector to reduce sedimentation and to improve economic productivity			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
5: Knowledge exchange and information sharing for replication and upscaling	Technical Assistance	5.1: Replication and Upscaling supported through exchange of knowledge, best practices and lessons learned	<p>5.1.1 - Exchanges with other RBOs and relevant regional institutions, in particular with OKACOM, ORASECOM, ZAMCOM, SADC Water Sector, and the Nairobi Convention, to support the effective and efficient delivery of Outcomes 1-4 and the source-to-sea approach</p> <p>5.1.2 - Project results and knowledge products developed and disseminated nationally, regionally and globally</p> <p>5.1.3 - Active contribution to the learning and knowledge sharing activities and events organized by the GEF IW:LEARN program</p> <p>5.1.4 - Timely Project M&E to inform adaptive</p>	GET	488,457.00	2,739,674.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Sub Total (\$)					5,714,286.00	16,361,280.00

Project Management Cost (PMC)

GET	285,714.00	1,264,674.00
Sub Total(\$)	285,714.00	1,264,674.00
Total Project Cost(\$)	6,000,000.00	17,625,954.00

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(\$)
Recipient Country Government	Government of Botswana (Dept. of Water and Sanitation)	In-kind	Recurrent expenditures	1,200,000.00
Recipient Country Government	Government of Mozambique (Natl. Directorate of Water Resources Management)	In-kind	Recurrent expenditures	1,000,000.00
Recipient Country Government	Government of Mozambique (Government of Massingir District)	In-kind	Recurrent expenditures	400,000.00
Recipient Country Government	Government of Mozambique (Ara-Sul)	In-kind	Recurrent expenditures	600,711.00
Recipient Country Government	Government of South Africa (Dept. of Water and Sanitation)	In-kind	Recurrent expenditures	3,521,333.00
Recipient Country Government	Government of Zimbabwe	Public Investment	Investment mobilized	440,110.00
Recipient Country Government	Government of Zimbabwe	In-kind	Recurrent expenditures	416,000.00
GEF Agency	UNDP Cap-Net	Grant	Investment mobilized	100,000.00
GEF Agency	UNDP South Africa	In-kind	Recurrent expenditures	200,000.00
GEF Agency	UNDP Zimbabwe	In-kind	Recurrent expenditures	200,000.00
GEF Agency	UNDP Botswana	In-kind	Recurrent expenditures	200,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	UNDP Mozambique	In-kind	Recurrent expenditures	200,000.00
GEF Agency	World Bank ? Southern Africa Drought Resilience Initiative	Grant	Investment mobilized	150,000.00
Other	Global Water Partnership ? Southern Africa	Grant	Investment mobilized	250,000.00
Civil Society Organization	Instituto Superior Polit?cnico de Gaza	In-kind	Recurrent expenditures	632,800.00
Civil Society Organization	Grid-Arendal	Grant	Investment mobilized	150,000.00
Civil Society Organization	Peace Parks Foundation	In-kind	Recurrent expenditures	800,000.00
Other	Southern African Development Community - Groundwater Management Institute (SADC-GMI)	Grant	Investment mobilized	100,000.00
Other	Southern African Development Community - WaterNet	Grant	Investment mobilized	975,000.00
Donor Agency	USAID ? Resilient Waters Program	In-kind	Recurrent expenditures	4,450,000.00
Donor Agency	UK-CRIDF	Grant	Investment mobilized	1,300,000.00
Donor Agency	GIZ	Grant	Investment mobilized	240,000.00
GEF Agency	UNDP Cap-Net	In-kind	Recurrent expenditures	100,000.00
Total Co-Financing(\$)				17,625,954.00

Describe how any "Investment Mobilized" was identified

? UNDP Cap-Net co-financing was identified through consultations during the PPG phase. This co-financing consists of dissemination and application of relevant guidelines and toolkits developed by Cap-Net, and support for various IWRM trainings at the local, national and transboundary levels either directly or through WaterNet, its network partner in the SADC region. ? Government of Zimbabwe co-financing was identified through extensive consultations during the PPG phase. This co-financing consists of contributions from programmes and projects being implemented by the Government of Zimbabwe in the Mzingwane catchment. ? GWPSA co-financing was identified through extensive consultations during the PPG phase. This co-financing will include activities that contribute to better knowledge management, enhanced governance, increasing understanding on gender transformation, promotion of Water-Energy-Food Nexus Assessment Studies that will be conducted in the Limpopo River Basin, which will contribute to the development of the TDA, SAP and the NAPs, and oversight from the GWP SA Board to support project management. ? UK-CRIDF co-financing was identified through extensive consultations during the PPG phase. This co-financing will support implementation of the LIMCOM IWRM Plan 2018-2022, including establishing an Early Warning Flood Forecasting System; planning support for LIMCOM to identify strategic water infrastructure; and developing climate scenarios (climate resilience development pathways) to guide strategic planning (including the TDA and future development scenario analyses, as well as SAP discussions and negotiations). ? GIZ co-financing was identified through consultations during the PPG phase. This co-financing of Euro 200,000 (approximately USD 240,000) comes from GIZ's phase 5 program of support for SADC from 2020 ? 2023 to strengthen the management of shared watercourses, and will support the implementation of the SLM pilots under Component 4 of the project. ? World Bank ? Southern Africa Drought Resilience Initiative co-financing was identified through consultations during the PPG phase. This co-financing will support project Component 2 (Filling critical knowledge gaps to support joint planning and future development scenario analysis) ? Grid-Arendal co-financing was identified through consultations during the PPG phase and will constitute general support for the project's objectives. ? SADC - GMI co-financing was identified through consultations during the PPG phase. This co-financing will support: 1) the activities of the LIMCOM Groundwater Committee in conjunctive surface and groundwater management; 2) development of Limpopo Basin Groundwater Strategy; and 3) provision of Technical Assistance and skills development on integrating groundwater issues for sustainable land management in the Limpopo River Basin ? SADC - WaterNet co-financing was identified through consultations during the PPG phase. This co-financing will support capacity building activities, including educational programmes (Masters in Integrated Water Resources Management); continuous professional development of practitioners and stakeholders; and experiential learning in terms of exchange with other similar institutions. ? USAID Resilient Waters co-financing is categorized as In-kind per the guidance received from USAID. However, this USAID program fully involves disbursement and spending of cash resources (to the entity US-AID is contracting), and in GEF terms should qualify as a part of the project's Grant co-financing.

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(\$)
UNDP	GET	Regional	International Waters	International Waters	6,000,000	570,000
Total Grant Resources(\$)					6,000,000.00	570,000.00

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 **false****PPG Amount (\$)**

200,000

PPG Agency Fee (\$)

19,000

Agency	Trust Fund	Country	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)
UNDP	GET	Regional	International Waters	International Waters	200,000	19,000
Total Project Costs(\$)					200,000.00	19,000.00

Please provide justification

For the regional project supporting the LIMCOM and its 4 contracting parties, we would definitely need \$200k to support the project development to ensure proper stakeholder engagement in the process.

Core Indicators

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	1600.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	1,200.00		

Indicator 3.2 Area of Forest and Forest Land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.3 Area of natural grass and shrublands restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	400.00		

Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	540.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	540.00		

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted
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Indicator 7 Number of shared water ecosystems (fresh or marine) 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	Limpopo Basin	Limpopo Basin		
Count	1	1	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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Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Limpopo Basin	1	1		
Select SWE				<input type="checkbox"/>

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)
Limpopo Basin	3	3		
Select SWE				<input type="checkbox"/>

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministeral 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)
Limpopo Basin	1	1		
Select SWE				<input type="checkbox"/>

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)
Limpopo Basin	1	1		
Select SWE				<input type="checkbox"/>

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	500,000	320		
Male	500,000	480		
Total	1000000	800	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

Part II. Project Justification

1a. Project Description

describe any changes in alignment with the project design with the original pif

The table below shows changes to the wording of some project outcomes and outputs since the submission of the PIF. In most cases, the changes are not substantive, but rather have been done in order to shorten the length and simplify the language of the outputs, in order to facilitate easier project management and better understanding among project partners and beneficiaries. It is important to note that the level of detail in the wording of the outputs in the PIF has not been lost, but rather has been put into the text describing each output and/or into the Results Framework. In addition, the project outcomes and outputs from Outcome 2.2 forward have been renumbered to improve clarity.

Text from PIF	Revised Text in CEO ER	Explanation for Change
Outcome 1: Capacity of LIMCOM & its Member States strengthened for the improved basin-wide joint planning & management and the IWRM implementation	Outcome 1.1 - The capacity of LIMSEC and LIMCOM strengthened to enable improved basin-wide joint planning, development and management of water resources, and IWRM implementation	The LIMCOM Secretariat (LIMSEC) is an important element of the capacity building under this outcome. Also, the Member States and LIMCOM are considered to be the same thing. And reference to development and management of water resources has been added as this is a key element of the capacity building.
Outcome 2: Priority knowledge gaps filled to update the Limpopo Monograph	Outcome 2.1: Critical data and information gaps filled to enable science-based planning, development and management for the Limpopo River Basin	Additional text has been added to clarify the purpose of addressing the information gaps
Output 2.5 Policy and Governance Review related to the Limpopo Basin IWRM to update the baseline	Output 2.1.5 - Review of policies, laws / regulations and governance relevant to IWRM within the Limpopo River Basin	Additional text has been added to include laws / regulations that need to be reviewed as these are often key elements of IWRM in the basin
Outcome 3: Newly acquired knowledge about the basin disseminated through the updated Monograph (TDA) and policy briefs, leading to the strategic decision making and the basin-wide IWRM implementation	Outcome 2.2: Basin-wide information and knowledge management tools used to create user-friendly products linking science to policy for decision makers	The wording has been simplified and the outputs (user-friendly products linking science to policy) have been made more explicit
Output 3.1 Limpopo Monograph updated, including the causal chain analysis and the future development scenario analysis	Output 2.2.1 - Transboundary Diagnostic Analysis of the Limpopo River Basin completed	As explained under Output 2.2.1, LIMCOM stakeholders have agreed that the TDA will be more comprehensive than a simple updating of the Monograph

	Output 2.2.2 - LIMCOM Environmental Monitoring Framework strengthened	LIMCOM stakeholders have added this output due to its importance for effective IWRM implementation in the basin
Output 3.2 All new data/knowledge fed into LIMIS to support DSS	Output 2.2.3 - All new data/knowledge fed into LIMIS	The wording has been simplified (it is widely understood among basin stakeholders that LIMIS is a decision support system)
Output 4.1 Limpopo IWRM Plan (equivalent to Strategic Action Programme: SAP) for the Limpopo River Basin drafted for negotiation	Output 3.1.1 - Long-term Strategic Action Programme (SAP) drafted, and 5-year Integrated Water Resources Management (IWRM) plans drafted and approved by LIMCOM	As explained under Output 3.1.1, LIMCOM's IWRM Plan is a short-term (5-year) plan, whereas the SAP is considered a long-term planning document. Therefore, the project will support development of both a new LIMCOM IWRM Plan and a SAP.
Output 5.2 SLM demo(s) piloted in partnership with private sector	Output 4.1.2 - Sustainable Land Management demonstration(s) piloted in partnership with private sector to reduce sedimentation and to improve economic productivity	Additional details have been added to the wording of the output to clarify its scope / purpose
Output 6.1 Exchanges with other RBOs and relevant regional institutions, in particular with OKACOM, ORASECOM, SADC Water Sector, and the Nairobi Convention, to support the effective and efficient delivery of Outcomes 1- 4 and the source-to-sea approach.	Output 5.1.1 - Exchanges with other RBOs and relevant regional institutions to support the effective and efficient delivery of Outcomes 1-4 and the source-to-sea approach	The wording of the output has been simplified (details on linkages with OKACOM, ORASECOM, SADC Water Sector, and the Nairobi Convention are provided in the description of Output 5.1.1)
Output 6.3 Active contribution to the learning and knowledge sharing activities and events organized by the GEF IW:LEARN, including the GEF IWC	Output 5.1.3 - Active contribution to the learning and knowledge sharing activities and events organized by the GEF IW:LEARN program	The wording of the output has been simplified (reference to the GEF IWC is provided in the activities under Output 5.1.3)
Output 6.4 Timely Project M&E to inform adaptive management for successful delivery of project results, including MTR and TE.	Output 5.1.4 - Timely Project M&E to inform adaptive management for successful delivery of project results, capturing best practices and lessons learned, including MTR and TE	Reference to best practices and lessons learned has been added in order to emphasize their importance in project monitoring and evaluation

1a. *Project Description.*

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

Global Environmental (and Transboundary) Problems and their Immediate Causes

Overview

The Limpopo River Basin is under severe water stress, with the high level of hydro-climatic variability in the basin leading to both frequent floods and droughts and the limited availability of water impacting the economic and social welfare of the basin's population, particularly that of poor and vulnerable groups. Investments in information, early warning systems and infrastructure are needed to manage the extreme variability of the hydro-climatic conditions in the basin, while coordinated transboundary management is required to address increasing water demand and pollution impacts and ensure that water resources are available to support development, water supply, and the requirements of the basin's ecological systems. The threats to the socio-economic and environmental services of the Limpopo River Basin, and their immediate underlying causes, can be summarized as follows:

Increasing water scarcity and hydrological variability, exacerbated by climate change

Located in southern Africa, where global circulation models indicate climate change impacts will be significant, the Limpopo River Basin is subject to adverse impacts from climate change and variability. The basin population suffers frequently from droughts and floods, and has limited capacity to cope with such events. Climate change impacts due to reduced rainfall, decreased recharge of aquifers, increased evapotranspiration, and saltwater intrusion can lead to a reduced availability of water for various uses including for agriculture, forestry, and human and animal consumption. Erosion and saltwater intrusion also reduce soil fertility affecting agricultural productivity; and food security is constrained by the threat of drought and desertification in the extremely degraded portions of the Basin, especially in the densely populated rural areas of South Africa.

The climate in the Limpopo River Basin ranges from tropical rainy along the coastal plain of Mozambique to tropical dry savannah and tropical dry desert further inland. The Limpopo River Basin experiences short rainfall seasons, except for some of the outer limits of the basin that have higher rainfall and longer seasons. Rainfall varies from a low of 200 mm in the hot dry areas to 1500 mm in the high rainfall areas. The majority of the basin receives less than 500 mm of rainfall per year. The hot dry areas, which receive an estimated 200-400 mm of annual rainfall, are located mostly within the main Limpopo River Valley itself. The rainfall concentration index has been estimated at 60% and above, and Rainfall is highly variable within and between seasons; it has been estimated that only two out of every five agricultural seasons in the Limpopo Basin produce reasonable crop yields. Rainfall is highly seasonal and unevenly distributed spatially, with about 95% occurring between October and April, typically concentrated in a number of isolated rain days and in isolated locations. Rainfall also varies significantly from year to year. Evaporation within the Limpopo River Basin varies from 1 600 mm/year to more than 2 600 mm/year. The highest evaporation occurs in the hot Limpopo River Valley. High levels of evaporation mean that the soil dries up quickly and this reduces the amount of water available for plant uptake, which results in crops being more prone to drought. Dryland subsistence farming is generally not viable in this condition, given the variable rainfall, high evaporation and high evapotranspiration. High rates of evapotranspiration also ensure that most of the rainfall does not contribute to river flow or groundwater recharge.

Water scarcity poses the greatest threat to livelihoods, economies and ecosystems of the Limpopo River Basin. As of 2000, the Limpopo had a Water Crowding Index (WCI) of 4,219, well beyond the level of 2,000 that is considered a marker of water stress and a barrier to human development. Water demand by sector and country is shown in the table below (Data source: LIMCOM Monograph[1]¹).

Country	Water Demand by Sector MCM/Year							Total MCM/Year
	Forestry	Livestock	Thermal Power	Mining	Industrial	Domestic	Irrigation	

Botswana		20	3	8		53	7	91
Mozambique		21				32	274	327
South Africa	83	45	223	285	327	901	1,974	3,838
Zimbabwe		14		6	1	86	96	203
Total	83	100	226	299	328	1,072	2,351	4,459

Water usage is currently dominated by irrigation (53%) followed by Municipal Water Supply (24%); mining and industrial use at 7% each, with rest divided evenly across the forestry, thermal power and livestock sectors. At the same time, the highly fragile catchment area, huge sediment loads, and extremely variable flow in the Limpopo River makes harvesting water for irrigation purposes highly unreliable. Denaturalized runoff is estimated at 4055 MCM/year, while the total demand is estimated at 4,459MCM/Year. Water demand in the basin is forecasted to increase by 46% by 2025, with urban demands rising the fastest[2]². There are also discussions around the diversion of significant amounts of water for proposed mining operations (e.g. in the Olifants sub-basin) that could undermine water security, particularly for the lower Limpopo basin.

Water scarcity is exacerbated by high human population density, land degradation, pollution, and climate-induced floods and droughts. Modification of the hydrological regime is prevalent in the Crocodile West and Olifants river systems, where irrigation and other water uses are directly impacting the availability of water for downstream ecosystems. Increased sedimentation in the river system is making the situation worse, causing the reduction of water storage capacity at manmade structures every year. Reduced water availability is expected to affect inland coastal salinity, and coastal integrity, with salt water intrusion in the Lower Limpopo Basin region expected to reach 30 km inland by 2030, covering an area as large as 83 sq. km.[3]³

In addition, the Limpopo River Basin is subject to frequent droughts, floods, and cyclones. Flooding is a major problem in the lower Limpopo River, across the coastal floodplain in Mozambique and in the Lower Limpopo?Chokwe basin. In wet times, the Gaza Province in Mozambique is at risk of floods due to upstream dams? operating rules and climate impacts upstream. The floods of 2000 were estimated to have had significant long-term impacts on the economy of Mozambique, with some experts suggesting as much as a 20% reduction in GDP as a direct result of the floods. The impacts of flooding in the Mozambican floodplains zone are exacerbated by cyclonic activity, which is also believed to be worsening as the regional climate changes, and Mozambique has suffered 53 natural disasters in the past 45 years[4]⁴. The exposure of the downstream areas of Mozambique to floods and droughts is exacerbated by upstream capture and release of water by dams, especially in South Africa and Zimbabwe. The two countries are among those with the most dams in the world.[5]⁵

The basin is also prone to droughts, which affect the livelihoods of millions of people in the four countries. In Zimbabwe (upper Umzingwane) for example, 50% of the costs relating to droughts are linked to ?impacts from increased weather risk?.[6]⁶ Increased dryness is expected to affect natural ecosystems such as wooded vegetation; this could impact the energy security of rural villager?s dependence on charcoal and firewood. In poverty-stricken areas in the Mozambican part of the Limpopo Basin, as well as drier parts of Botswana and Zimbabwe, increasing climate dryness could make access to potable water and sanitation more difficult, making seasonal drought early warning vital for the whole region.

Water quality degradation

The environmental status of the rivers in the basin varies from natural (in the national parks) to highly modified. Effluents from industrial and urban uses in the Olifants headwaters around Gauteng and from acid mine drainage from defunct coal mines on the Mpumalanga Highveld results in severe contamination of waters further downstream. The poor state of wastewater treatment plants leads to influxes of nutrient-enriched waters into river tributaries (e.g. from Gauteng Province into the Crocodile West River in South Africa). Return flows into the river from agricultural areas contribute pesticides, herbicides and nutrients to the waters, while metals precipitating into river sediments are released during floods and transported downstream. The expansion of mining operations in the basin threatens riparian zones and could also lead to greatly increased sediment loads in parts of the basin, including largely unregulated sand mining that reduces alluvial storage capacity and assimilative potential. Adverse effects from these pollution sources are experienced up to 300km away from the pollutant source, with consequences for ecosystem functioning over very large distances.

Land degradation

Land degradation has led to reduced ecosystem productivity, widespread poverty and poor health for people in this area. While data on the spatial distribution of land degradation and desertification in the basin is limited, it is widely agreed that rangelands, in particular communal grazing areas, are a significant cause of land degradation in the Limpopo River Basin. In the Upper Umzingwane, increased severity and occurrence of drought and highly erratic rainfall and water scarcity are drivers of degradation. More generally, the loss of vegetation in headwaters areas increases sediment load and often leads to dramatic changes in the character of the Limpopo tributaries to less stable, more seasonal rivers characterized by a rapidly shifting series of channels and amplified flooding. Climate variability and changes also have a profound effect on accelerating erosion and land degradation.

The links between land degradation due to agriculture and grazing activities, increased sediment loads, and impacts on the capacity of dams downstream are highly significant in the LRB. For example, South Africa, where more than 60% of the country under commercial and subsistence farming, has a high soil loss rate due to extensive tillage-based cultivation and overgrazing; excessively high soil erosion rates in South Africa normally occur under aggressive tillage-based cultivation practices. As a result of this erosion, South Africa is increasingly threatened by pollution and sedimentation of water bodies due to suspended sediment concentrations in streams. For example, siltation caused the storage capacity of the Welbedacht Dam near Dewetsdorp to reduce from 115 million cubic metres in 1973 to approximately 16 million cubic metres in 1993.[7]⁷ In addition, a 2010 study found that sediment loads in the Olifants River are very high due to poor agricultural land use management practices in this intensively farmed sub-basin, with sediment loads causing significant storage reductions in downstream dam reservoirs.[8]⁸ In Zimbabwe, the upper catchment of Umzingwane tributary generally has thin soils, and the intense utilization of catchment resources (including extensive agricultural production in the river flood plains) results in high levels of erosion and sediment transport in the river and its tributaries[9]⁹. Heavy livestock grazing pressure is also a significant source of soil erosion and sedimentation throughout the LRB, even in parts of the basin such as Botswana where population density is low.[10]¹⁰

Increasing pressures on groundwater resources

Groundwater plays a crucial role in supplying water for farming and domestic uses in the Limpopo River Basin, primarily because of the aridity of the basin. Important transboundary aquifers include the Ramotswa dolomite basin (an extension of the Transvaal Super group dolomites into Botswana) and the

Tuli Karoo Basin between Zimbabwe and Botswana. However, the Limpopo River Basin is the driest it has been for 35 years[1], and aquifers have been greatly depleted, contributing to water shortages that prevent farmers from fully cultivating all of their irrigable land. Groundwater in the Ramotswa dolomite basin has been severely polluted by inappropriate strategies for dealing with the sanitation needs of urban settlements and meat industries[2]. Transboundary aquifers are at high risk of over-extraction and contamination, due to lack of governance mechanisms as well as the lack of detailed data on groundwater uses, the location and extent of aquifers within the basin, and the effects of groundwater usage in one location on users elsewhere. Furthermore, groundwater supplies are a critical resource for combatting Covid-19 in the LRB, as most people, especially in rural areas, depend on it for handwashing and cleaning[3].

[1] <https://www.iwmi.cgiar.org/success-stories/striving-for-a-groundwater-secure-future-in-the-limpopo/>

[2] Tredoux, G. and Talama, A. S. (2006) Groundwater Pollution in Africa. Nitrate Pollution of groundwater in southern Africa, Ed. Taylor&Francis/Balkema, 15-36. 2006

[3] Ibid

Root Causes of Problems

Within the Limpopo River Basin, overall population growth and increasing population density in some areas, widespread poverty, development pressures, and limited policy and institutional frameworks to monitor and manage basin resources at the local, sub-national, national and transboundary levels, have all contributed to increasing water stress, water quality degradation, land degradation and pressures on ground water resources. These trends will continue to pose potential threats to future water, energy, and food security in the basin. At the same time, extreme weather events such as drought, floods and cyclones are expected to increase due to climate change and variability, which will put further stresses on the river ecosystem and the basin's population.

In addition, the uneven distribution of wealth, capacity, resources, and opportunities across the basin adds further complexities to addressing the basin's problems. The four states in the LRB are at various levels of economic development with varying levels of available economic and technical resources. Botswana and South Africa are more advanced in their economic development, with upper-middle income country status, the ability to attract foreign investment, and a relatively strong base of human resources capacity. Mozambique and Zimbabwe have least developed country status and more limited resources and development opportunities. This uneven socio-economic context in the basin, and the related disparity in countries' capacities to manage disaster risks and cope with disastrous events, has limited transboundary cooperation in developing hydrological and environmental data, water resources planning and management, and building resilience to current and potential climate change impacts.

Barriers to be addressed:

In order to address one of the most prevalent root causes – poverty and resource requirements for development – the basin states need to jointly build their respective capacity to plan for future development of the basin in a sustainable manner. Such efforts will support them in achieving their agreed Vision for the Limpopo River Basin and in addressing some of the immediate underlying problems identified at the local, the sub-basin, and the basin levels. Further, the growing development pressures, increasing potential for negative climate change impacts, and the transboundary nature of these challenges, the limited capacity of any one country within the basin to address these issues on their own is a significant threat to the economic and social well being of the basin's population. It is therefore critically important to address transboundary challenges through supporting existing and new

cooperative actions by the basin states, through the establishment of a harmonized, basin-wide approach to development as well as environmental conservation so that no one country is allowed to advance its development with costs borne by the others. This points to the importance of promoting and strengthening basin-wide cooperation through LIMCOM for the economically, socially and environmentally sustainable development of the LRB. However, a number of barriers exist to promoting and strengthening basin-wide cooperation among the four basin states, as described below.

Limited institutional, technical, financial capacity for joint planning and management at the transboundary basin level: Effective governance is a critical element for the coordination of transboundary river basin management, including the management of water flows and addressing climate change impacts. For example, the Limpopo River Basin relies heavily on the flows from the Oliphant river basin in the dry season, yet those flows in the Oliphant are declining as the lack of coordinated governance is leading to too much water uptake within the Oliphant river basin. Furthermore, coherent and coordinated legislative provisions among states, and the capacity to manage and enforce allocation requirements, is necessary to support effective governance. Unfortunately, policy, regulatory, institutional and financial frameworks to enable the development and implementation of transboundary management approaches in the Limpopo River Basin suffer from a variety of capacity constraints. Evidence suggests, for example, that the SADC Protocol on Shared Watercourses is virtually unknown outside the water sector, and yet it is other sectors of the economy that are inflicting the highest pressures on the basin's water resources. In addition, there are no clear guidelines for harmonized policies so that the basin's countries have differing approaches regarding IWRM principles and the ways that policies are translated into national legislation; in addition, the Limpopo Basin Agreement does not explicitly address water use priorities, and there are no criteria yet for water allocations within the basin, on agreed minimum border flows, or on guidelines or restrictions on the development of water-related infrastructure. LIMCOM as an organization of Member States has only limited capacity to support joint management, to coordinate member state activities, to implement its own IWRM Plan, and to mobilize and manage resources (both funding and people)[12]¹¹. More generally, institutional capacity constraints, both internally (staff) and externally (stakeholders), are significant in all four countries, and financial challenges have greatly limited institutional development across the region, including frameworks for transboundary cooperation.

Limited data, information, and knowledge of the resources and ecosystems in the basin and inadequate understanding of potential impacts of future development activities in the basin: In order to develop and sustainably manage the resources of the Limpopo River Basin, policy makers, resource managers, and other stakeholders need to have a clear understanding of the availability of water and other resources, how this availability changes over time, what factors impact this availability, and what factors contribute to maintaining a healthy system. However, existing levels of information and data in critical areas are lacking in the basin and prevent stakeholders from making optimal resource use decisions. These gaps include information on both surface water and groundwater; although deficits in both resources are widespread, accurate data is not very limited, and the interactions between surface and groundwater resources are poorly understood. Similarly, although climate change impacts are increasing throughout

the basin, their effect on surface and groundwater resources is still poorly understood[13]¹². Furthermore, while agricultural expansion, mining development, growth of urban centres and other factors that can increase water demand and contribute to the degradation of land and water resources are widely recognized throughout the basin, detailed information on the impacts of these trends is not generally available, and the causal links between human activities and the resource status and ecosystem functioning in the basin is not well understood. There is no basin-wide water resources modelling capacity to guide and manage current and future water resources development activities; instead water resources modelling and planning are mostly carried out at the national level and cannot predict or manage potential (and mostly unintended) transboundary impacts of water resources management decisions made by one country on other countries. For example, the absence of a basin-wide river flow forecasting system has limited the extent to which existing and planned reservoirs and dams can be operated to maximize water resources utilisation as well as efforts to regulate river flows to protect water resources and other infrastructure from flood destruction. Similarly, while it is known that groundwater resources are critically important to provide water security and support development in some parts of the basin, very little data exists on the location, extent, and recharge rate of the basin's aquifers, all of which is essential for the sustainable management of aquifer resources.

Lack of information and analyses focused on the management of issues at the basin level and insufficient mechanisms for enabling data and science to guide policies and resource management decision-making at the basin, national or local levels: Despite some successful efforts on basin-wide information gathering and analysis, the Limpopo River Basin has yet to be the focus of an integrated and widely participatory analysis of the key factors that impact transboundary conditions and the opportunities and strategies necessary for effective transboundary resource management. Furthermore, existing information and analyses of resource conditions, threats and impacts, and trends over time are frequently produced without discernible impact due to the highly limited mechanisms in the basin for linking science to governance and management decisions. Even where policy makers or resource managers are prepared to use relevant data and analyses, the rapid pace of development in the basin and the inadequacy of existing information dissemination mechanisms greatly limits their ability to use such information in order to guide planning decisions or develop and enforce effective policies and regulations at the transboundary, national, sub-national and local levels. Furthermore, there is no mechanism in place for joint strategic planning for the management of water and other resources in the Limpopo River Basin, nor are there financing mechanisms in place to support any such mechanisms if and when they are established.

Limited participation of resource users and other stakeholders in IWRM planning and implementation to address basin wide and national/local challenges: Unplanned or poorly planned development activities in the Limpopo River Basin continue to cause land degradation and to reduce ecosystem services such as water retention, water recharge capacity, flood control, soil retention, etc. that are critical to the well-being of the basin's population. Where rain-fed agriculture is practiced, the lack of sustainable land management practices has led to the degradation of land and loss of productivity, which further exacerbates poverty and leaves those whose livelihoods depend on those lands more vulnerable. In many instances, the impacts from land degradation and poor management / protection of water resources are felt at sites located a significant distance away from the source of the problems, and yet there are few existing means or mechanisms to monitor, manage or control these transboundary impacts. In addition, the costs required to deal with such impacts, including for example the costs of water treatment or improved water storage capacity, are disproportionately borne by downstream users. Furthermore, these costs are typically borne by municipalities and public sectors, while private sector interests that utilize and benefit from water resources rarely make a proportional contribution. This disconnect between

local activities and basin wide or downstream impacts is exacerbated by several factors, including: very weak water accounting systems at the sub-national level; poor understanding of the linkages between development / economic activities and resource/ecosystem impacts; the lack of demonstrated models to make such activities more sustainable; the lack of demonstrated models of mechanisms (such as Payments for Ecosystem Services) that can establish a link between upstream activities and downstream impacts while simultaneously developing new tools for financing more sustainable approaches; and policy constraints, including for example South Africa's moratorium on water trading, which may constrain the application of PES mechanisms. The participation of stakeholder in IWRM throughout the basin is further constrained by limited awareness of effective approaches that have been demonstrated in the region or globally, including other river basins within SADC.

2) The baseline scenario and any associated baseline projects

The baseline scenario is highly complex for this transboundary river basin project. A detailed description of the baseline scenario, including descriptions of regional baseline initiatives, national investments in river basin management, baseline programs supported by international cooperating partners, baseline programs supported by technical partners in the sub-region, and coordination with other relevant GEF-financed projects, is provided in the Partnerships description in Section IV of the UNDP Prodoc.

3) The proposed alternative scenario with a brief description of expected outcomes and components of the project

Note: A more detailed description of the project outputs is provided in the UNDP Prodoc (Section IV ? Alternative Scenario)

Project Objective: To achieve integrated, cross-sectoral, ecosystem-based management of the Limpopo River to uplift the living standards of the basin's population and conserve the basin's resources and ecosystem services

Component 1: Capacity Building of LIMCOM & its Member States for joint planning and the basin-wide SAP and IWRM implementation: This component is largely linked to Programme 1 (Institutional Strengthening) of the LIMCOM IWRM Plan (2018-2022) and is essential to strengthen cooperation in the Limpopo River Basin and to support IWRM implementation at the basin level. Component 1 has been designed to address the most urgent institutional capacity needs to strengthen the LIMCOM's Secretariat function.

Outcome 1.1 - The capacity of LIMSEC and LIMCOM strengthened to enable improved basin-wide joint planning, development and management of water resources, and IWRM implementation: Capacity building under Component 1 will encompass many institutional stakeholders, ranging from LIMCOM and LIMSEC to key government departments directly involved with the management of the basin's resources (e.g. Departments of Water Resources Management; Departments of Environment; Catchment Management Authorities / Committees; Agriculture extension services; and local governments. Under this Outcome, Output 1.1.1 is focused on developing the technical skills (hydrological monitoring and

modelling; water quality sampling and analysis, etc.) of National Water Departments and various LIMCOM organs, as well as other relevant organizations and basin stakeholders. Output 1.1.2 is focused on strengthening the capacity of LIMCOM to implement transboundary cooperation and management, including establishing operational systems (rules and regulations); enhancing data and information sharing at the organizational level; establishing task teams in specialized areas; and revising the organizational structure of LIMCOM to effectively respond to the LIMCOM mandate. Output 1.1.3 is focused on strengthening the capacity of LIMSEC (e.g. finance and administration; communications and information management; project design & management; programme coordination, etc.), while Output 1.1.4 is focused on facilitating inclusive and participatory IWRM practices and governance capacities at the local level, in particular through Catchment Management Agencies in each country, as well as implementing project-wide plans for stakeholder engagement and communications. Outcome 1.1 includes the following outputs:

- ? Output 1.1.1 - Technical Capacity of LIMCOM and Member States strengthened
- ? Output 1.1.2 - Institutional Capacity at LIMCOM and its member states strengthened
- ? Output 1.1.3 - Operational Capacity of LIMCOM Secretariat strengthened
- ? Output 1.1.4 - Inclusive and participatory IWRM practices supported

Component 2: Filling critical knowledge gaps to support joint planning and future development scenario analysis: This component is largely linked to Programme 3: Environmental Water Management and Programme 4: Water Management and Development of the LIMCOM IWRM Plan (2018-2022); and was developed based on recommendations from the Limpopo River Basin Monograph Study (2013). Two Outcomes are included under Component 2.

Outcome 2.1: Critical data and information gaps filled to enable science-based planning, development and management for the Limpopo River Basin: The Limpopo Monograph Study (2013) is a baseline study that built upon the Joint Limpopo River Basin Study ? Scoping Phase (2010) and provided the basis for the development of the LIMCOM IWRM Plan (2018-2022). Through the activities described in the outputs below, critical knowledge gaps identified in the basin will be filled. Given the resource constraints of GEF and taking into account GEF-7 IW Strategies, LIMCOM identified that 1) sedimentation transport modelling and monitoring and 2) e-flow monitoring (to set the e-flow requirements) as priority activities to be supported by GEF to fill key knowledge gaps during the Transboundary Diagnostic Analysis (TDA) development process. Strengthening the knowledge base on these two issues will contribute to environmental sustainability in the joint management and planning effort at the transboundary level. In addition, many other activities for knowledge collection, updating information, and gap-filling of missing knowledge will be done by co-financing activities; UK CRIDF support will provide information related to Climate Change and Disaster Management (supporting Programme 2 of the LIMCOM IWRM Plan, 2018-2022), while USAID Resilience Waters will provide deepened knowledge on a transboundary aquifer within the basin, invasive aquatic weeds, etc. Outcome 2.1 includes the following outputs:

- ? Output 2.1.1 - Joint Basin Survey conducted for key river health indicators
- ? Output 2.1.2 - Ecological water requirements (e-flow) established to support future water resources planning in a sustainable manner
- ? Output 2.1.3 ? Sediment Transport Monitoring and Modelling capacity strengthened
- ? Output 2.1.4 - Assessment of ecological impacts of alluvial aquifer abstraction practices
- ? Output 2.1.5 - Review of policies, laws / regulations and governance relevant to IWRM within the Limpopo River Basin
- ? Output 2.1.6 - Future Water Resources development scenario analysis

Outcome 2.2: Basin-wide information and knowledge management tools used to create user-friendly products linking science to policy for decision makers: Outcome 2.2 is about the packaging of data and information for consumption by policy makers and other targeted audiences to raise understanding and awareness of issues critical to the sustainable management of the LRB. Under this outcome, the project

will support the development of a Transboundary Diagnostic Analysis (TDA), which will build upon the existing Limpopo Monograph. In addition, the LIMCOM environmental monitoring framework (Output 2.2.2) will establish the scope of and provide guidance for data collection on various environmental parameters, most notably those being done under Outputs 2.1.1 ? 2.1.4; this data will then be fed into the LIMIS under Output 2.2.3, from which it can be used to guide policy decisions. The LIMCOM member states have demonstrated their commitment to information and data sharing for joint management of the Limpopo River Basin in several ways. The LIMCOM Council of Ministers has prioritized the development of its data and information sharing protocol, facilitating data and information exchange as part of its institutional capacity strengthening efforts. In addition, the member states have signed the SADC Revised Protocol on Shared Watercourses, which provides the legal basis for the member states to cooperate for joint management of shared watercourses across the SADC sub-region. Article 7 of the protocol states that ?The Council shall advise the Contracting Parties on the following: 7.2 (d) all aspects related to the efficient and effective collection, processing and dissemination of data and information with regard to the Limpopo.? Because the LIMCOM member states have varying capacities for data collection and varying levels of information / database systems, and as such some countries have a greater ability to share data, the project will support investments in order to level the playing field in monitoring and data collection (see Output 2.2.2) as well as capacities for the consolidation of data and its use in guiding decision-making, planning and management (see Output 2.2.3). Outcome 2.2 includes the following outputs:

- ? Output 2.2.1 - Transboundary Diagnostic Analysis of the Limpopo River Basin completed
- ? Output 2.2.2 - LIMCOM Environmental Monitoring Framework strengthened
- ? Output 2.2.3 - All new data/knowledge fed into LIMIS
- ? Output 2.2.4 - Policy Briefs produced that connect science to management and policy discussions

Component 3: Informed Strategic Planning and Decision Making to implement the basin-wide IWRM (Science-to-Governance): The Limpopo Monograph Study recommended several steps after completion of the monograph, including development of a strategic vision for the basin followed by the creation of basin development scenarios and an IWRM Strategy. LIMCOM undertook a visioning exercise in 2018-2022 that produced the Vision Statement: ?A Dynamic, Prosperous and Sustainable River Basin for ALL?, and LIMCOM has developed several IWRM Plans (the most recent of which is the 2018-2022 plan). Outputs and activities under Component 3 will primarily address Programme 1: Institutional Strengthening in the LIMCOM IWRM Plan (2018-2022), and are essential to support efforts to realize the Vision for the basin shared by all Member States.

Outcome 3.1: Transboundary and national priorities agreed and endorsed as SAP and NAPs to guide future development and investment: The Strategic Action Programme (SAP) for the Limpopo River Basin will be a long-term strategic document that is negotiated by policy makers, has strong political commitment, and supports the Vision for the LRB. The SAP will function as the Long-Term IWRM Strategy recommended in the Monograph Study, presenting a list of transboundary priority issues, and actions to address those issues, based on the best available knowledge of the basin. The final SAP will receive ministerial endorsement by all LIMCOM Member States as a way of demonstrating strong political commitment for addressing the identified priorities. Complementing the SAP, LIMCOM will continue to update its 5-year IWRM Plans (which will facilitate on-going implementation of key activities in the SAP). The SAP also will be complemented by the development of National Action Plans (NAPs) for each of the Member States, which will link the transboundary priorities (described in the SAP) with national development and sectorial priorities in the countries. To ensure effective and sustainable implementation of these various plans, the project will support a program to develop long-term financial resources / partnerships for the SAP. Considerations of gender equality and social inclusion will be integrated into the development of the SAP, NAP and the LIMCOM IWRM Plan with guidance from a contracted Gender expert, as well as the inclusion of Gender Equality and Social Inclusion experts on the Basin working group for SAP formulation as well as national working groups in support of the formulation of the NPAs. Outcome 3.1 includes the following outputs:

- ? Output 3.1.1 - Long-term Strategic Action Programme (SAP) drafted, and 5-year Integrated Water Resources Management (IWRM) plans drafted and approved by LIMCOM
- ? Output 3.1.2 - Four National Action Plans (one for each Member State) developed
- ? Output 3.1.3 - SAP M&E framework developed based on the Theory of Change

- ? Output 3.1.4 - SAP Investment Plan developed
- ? Output 3.1.5 - SAP for the Limpopo River Basin, together with NAPs, **endorsed by at least one Minister from each Member State**
- ? Output 3.1.6 - A roundtable organized among investors and partners to support SAP implementation

Component 4: The IWRM Plan implementation pilots: In close partnership with communities and private sector partners in the basin, under this component the project will demonstrate on-the-ground sustainable land management activities at a pilot scale to reduce land degradation (including sedimentation) and to improve land productivity. In so doing, the project will pilot land degradation / sedimentation control measures not only to demonstrate their effectiveness but also to demonstrate a participatory approach to IWRM implementation. To facilitate this participatory approach, the Stakeholder Engagement Strategy and Communication Plan developed under Component 1 will be referred to closely during the implementation of Component 4.

Outcome 4.1: Participatory IWRM practices demonstrated to address sedimentation issues: The issue of sedimentation is critically important in the Limpopo River Basin for a variety of reasons, resulting in widespread impacts on physical, chemical and biological processes and conditions in the basin (see details under Output 2.1.3). In addition, SLM-related activities are a notable gap in the support provided by LIMCOM partners for the implementation of its existing IWRM Plan. Under Outcome 4.1, the project will build on the sedimentation transport monitoring and modelling activities carried out under Output 2.1.3 by implementing sustainable land management activities at a pilot scale with the goal of reducing land degradation, including sedimentation, at the pilot sites and promoting the replication and up-scaling of land degradation control activities in the near future. The pilot activities are intended to measure the impacts of SLM activities in reducing sedimentation. The objective of the pilot projects is not to make a significant difference in sedimentation levels in the river; rather the project is designed to pilot SLM activities that could help to reduce sedimentation, and then monitor the results of that either at outflow points below the pilot sites or in the dam reservoirs downstream, so as to determine if the SLM activities are effective in reducing sedimentation, and therefore a valuable model for replication elsewhere in the Limpopo River Basin. Measuring the effectiveness of SLM interventions in reducing sedimentation also will provide useful information to explore various options for creating potential Payment for Ecosystem Services (PES) schemes based on sedimentation control, as the quantitative data established with the project's biophysical monitoring activities will establish the degree to which SLM interventions are successful in reducing sedimentation, and therefore whether PES schemes have a strong potential to work. If the answer is yes, such PES schemes could constitute an important market-based incentive mechanism for the replication and up-scaling of erosion & sedimentation control activities in the basin. Finally, the results from this outcome will provide important inputs for the processes to develop the regional SAP, the four NAPs, the SAP investment plan, and the subsequent SAP investment discussions, including for the replication and up-scaling of successful pilot interventions. Outcome 4.1 includes the following outputs:

- ? Output 4.1.1 - Community-based Sustainable Land Management demonstrations piloted to reduce sedimentation and to improve land productivity
- ? Output 4.1.2 - Sustainable Land Management demonstration(s) piloted in partnership with private sector to reduce sedimentation and to improve economic productivity

Component 5: Knowledge exchange and information sharing for replication and upscaling: Component 5 will support knowledge exchange and information sharing with other RBOs in the region to support the effective and efficient delivery of project results. It will also support dialogue between the LIMCOM and the Nairobi Convention (in particular, the Nairobi Convention Focal Point of Mozambique) to start the Source-to-Sea partnership. Further, it will ensure the project's active participation in the knowledge exchange and information sharing activities organized by IW:LEARN, with at least 1% of the project budget allocated to such activities.

Outcome 5.1: Replication and Upscaling supported through exchange of knowledge, best practices and lessons learned. Outcome 5.1 includes the following outputs:

- ? Output 5.1.1 - Exchanges with other RBOs and relevant regional institutions to support the effective and efficient delivery of Outcomes 1-4 and the source-to-sea approach
- ? Output 5.1.2 - Project results and knowledge products developed and disseminated nationally, regionally and globally
- ? Output 5.1.3 - Active contribution to the learning and knowledge sharing activities and events organized by the GEF IW:LEARN program
- ? Output 5.1.4 - Timely Project M&E to inform adaptive management for successful delivery of project results, capturing best practices and lessons learned, including MTR and TE

4) Alignment with GEF focal area and/or Impact Program strategies

The project is fully aligned with Objective 3 of the International Waters Focal Area: Enhance water security in freshwater ecosystems in the GEF-7 Programming Directions. The proposed project interventions, especially including co-financing activities, will be relevant to all three areas of strategic actions under this objective. The Limpopo River basin is facing multiple stressors at the transboundary basin level, which presents both opportunities for cooperation and potential for conflicts. The countries sharing the basin have demonstrated their firm commitment to the transboundary cooperation through the establishment of the Limpopo Watercourse Commission (LIMCOM). Through the proposed project interventions, the countries will aim to enhance water security in freshwater ecosystems through advance information exchange (IW 3-5) and through regional and national cooperation on shared freshwater resources (IW 3-6). While investments in water, food, energy and environmental security (IW 3-7) are rather limited at this foundational phase of the GEF support to LIMCOM, the investments made during this foundational phase are expected to generate knowledge and the required enabling environment in terms of a strengthened transboundary water governance institution with adequate capacity for joint planning, development, management and implementation of its mandate, including effective replication and upscaling in the future of accumulated best practices from the current phase.

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Incremental Cost Reasoning and Expected Contributions from the baseline investments

The baseline investments from the basin countries have successfully established LIMCOM, a transboundary River Basin Organization to foster transboundary cooperation among the member states to realize basin-wide planning and management. The countries further have made commitments to contribute \$50,000 per country annually (as of 2019) to sustain the Permanent Secretariat of LIMCOM. The proposed regional project, to be financed by GEF, would not be successful without those baseline investments and political commitments made by the countries.

Building upon the baseline investments from the member states to LIMCOM, which are critically important to keep LIMCOM operational with a functional Secretariat, GEF support will enhance the institutional, operational and technical capacity of the LIMCOM Secretariat and ensure its sustainability through the LIMCOM sustainability plan, which will contribute to the long-lasting transboundary benefits. GEF support will also result in a long-term strategic document (SAP) for the LRB, which will guide future investments by the national governments, by international cooperating partners, and/or by the private sector in the basin so that they are aligned with strategic priorities agreed for the basin.

Building upon the Limpopo Monograph (which was a State of the Basin report rapidly put together based on already available data), LIMCOM requested GEF support through UNDP to develop the Transboundary Diagnostic Analysis (TDA). The TDA will not only fill some key knowledge gaps

identified during the Limpopo Monograph development, but also include a Causal Chain Analysis and the future development scenario analysis. While GEF support will fill priority knowledge gaps at the basin level (mostly through the activities under Component 2) to collect key data to be included in the TDA, the TDA could not be completed without the baseline investments made by the countries for various water resources monitoring activities and studies conducted at the national levels.

The inclusion of the future water resources development scenario analysis in the TDA is a practice piloted successfully for the Cubango-Okavango River basin, and will be included in the Limpopo TDA as it is considered equally important and relevant for the Limpopo River basin. The natural resources of the Limpopo River basin will need to be utilized further to support the development needs of the basin countries and their populations in order for the countries to achieve their respective SDG targets. In order to ensure future development activities are sustainable and improve all three pillars of sustainable development (economic, social and environmental) and achieve a balance between development goals and efforts to maintain or restore ecosystem integrity, analyses of trade-offs will provide useful information to policy decision makers to determine future development trajectories. GEF support on the future water resources development scenario analysis will inform LIMCOM's technical advice to its member states and influence future decision-making for the basin's sustainable development.

6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The project will directly address the need for multinational cooperation supported by LIMCOM, and more broadly by SADC. The project, together with co-financing partners, will strengthen LIMCOM's institutional, technical and coordination capacity so that it can function effectively as a hub for harnessing, coordinating and channelling political and economic interests from both public and private sectors in the basin. In addition, the participating countries will significantly benefit from capacity building activities planned at both regional and national levels, collection of more knowledge about the transboundary basin, knowledge sharing activities across the countries through LIMCOM, strengthened science-to-governance linkages both at the national and regional level, and strengthened regional collaboration and coordination through LIMCOM, all included in the expected results, outcomes and outputs to be delivered through the proposed project interventions.

Through the development of the Transboundary Diagnostic Analysis and Strategic Action Programme, the countries will agree on a set of transboundary priorities for the basin, which will guide both transboundary and national investments in the future. Securing political commitment to the transboundary priorities for the basin will provide a strong foundation for future cooperation and collaboration among the basin states to realize various benefits to be generated in the basin. Political commitment from all member states to LIMCOM SAP as well as to the SADC Revised Protocol on Shared Watercourses will become particularly important when national policies need to be adjusted to achieve better harmonization at the basin level.

The project will promote effective IWRM (SDG 6, target 6.5) at the transboundary, national and local levels. It will ensure the inclusion of the improved knowledge of two transboundary aquifers in the basin and climate information, produced by the co-financing activities, into the Limpopo River basin TDA, which will support the promotion of the conjunctive management of surface and groundwater resources as well as climate-resilient basin planning in the basin. The project also will support the participating countries to carry out informed policy dialogue at the basin level to address increasing water, energy, food demands in the future and how these needs can be met in an environmentally sustainable and socially inclusive manner for the basin's population. The tangible contributions to be made by GEF investment to this policy dialogue are the development of the future water resources development scenarios and the inclusion of the findings from the future development scenarios in the Limpopo TDA. The project also will support the countries to establish the ecological flow of the

Limpopo River basin, understanding of which can provide environmental safeguards to the riverine ecosystems (another GEB expected from the project) as well as social safeguards to those populations whose livelihoods depend on the healthy and productive ecosystems in the basin.

Other benefits expected to accrue to the basin's population include: reduced fish kills and spread of disease due to improved water quality monitoring, which will improve livelihoods and food security; benefits for downstream agriculture and fisheries, as well as water storage and hydroelectric infrastructure, from reduced levels of sedimentation; increased levels of fisheries production and of materials necessary for weaving mats and baskets (a practice commonly done by women in the basin) through management of e-flows; and finally, increased financing of priority interventions in the Basin based on the SAP and its associated financing strategy, which will result in increased availability of water for that is essential for economic development and livelihoods improvements in the basin over the long term.

7) Innovativeness, sustainability and potential for scaling up

Innovation

The project will promote adoption of a 'Source to Sea' approach intended to 'upscale' the prevailing IWRM narrative that is confined to just freshwater resources by also considering the interface between freshwater, coastal and marine ecosystems in the Limpopo River Basin and the western Indian Ocean. This will be the first attempt to provide an institutional linkage between the institution guiding management of the Limpopo River Basin (LIMCOM) and that guiding management of the Western Indian Ocean Large Marine Ecosystem (the Secretariat of the Nairobi Convention). The project will support knowledge sharing and collaborative actions between LIMCOM and the Nairobi Convention Secretariat, and the strengthening of governance and management links and knowledge management networks in the target ecosystems for the improved and sustainable management of land, water, and coastal and marine resources. The shape of this potential collaboration will be explored during the project implementation through discussions and information exchange between the two organizations, through scientific knowledge to be collected during the TDA development process, and by the project's proposed activities to expand the concept of e-flows in the Limpopo River Basin to take into account estuarine water requirements, which will provide technical and scientific information and context to support the source to sea approach. The process for promoting the source-to-sea approach will seek to emulate and learn lessons from a similar process between the ORASECOM and the Benguela Current Commission that has linked the Orange-Senqu River basin ecosystem and the Benguela Current Large Marine Ecosystem (the very first application of the Source-to-Sea in Africa).

Sustainability

The continued commitment to LIMCOM of the four basin states provides a strong basis for the sustainability of impacts, in particular potential transboundary benefits, delivered by this project. Therefore, the project interventions will be designed to support and catalyse the on-going efforts of the Member States to strengthen LIMCOM's institutional, technical and operational capacity. For each intervention proposed in this project, how the expected results delivered by the intervention will be sustained beyond the project duration has been considered.

Various outputs proposed in this project will directly contribute to the sustainability of LIMCOM. The Strategic Action Programme will provide a long-term strategy that will guide future investments in the basin by the governments, private sector, and international cooperation partners so that these investments will collectively contribute to the achievement of the Vision for the basin. The future development scenario analysis, to be included in the TDA, will also influence policy discussions and decisions on the future development trajectory and strategy at the basin level, which will have a long-lasting impact. The sustainability of LIMCOM as a RBO will need to be critically examined through the institutional functional analysis, and the financial implications of all recommendations will be taken fully into account when developing LIMCOM's Sustainability Plan, which will be costed and negotiated well in advance of the project's closure.

Overall, the project will ensure a strong sense of ownership by the countries over the project deliverables. This was the key aspect of the success in ensuring the sustainability of the project results that we observed through the UNDP-GEF support to the Cubango-Okavango River basin, working closely with OKACOM, as well as through the UNDP-GEF support to the Orange-Senqu River basin, working closely with ORASECOM.

Potential for scaling up

The proposed demonstration activities under Component 4 linking sustainable land management practices with reduced land degradation and reduced sedimentation (as well as improved groundwater recharge, baseflow augmentation and reduced flood risk) of the Limpopo River have been designed with replicability and scalability in mind. The demonstration projects, with their limited investment scale and limited geographical scope, will not be expected to yield significant stress reduction results at the basin scale, but they will be expected to present quantifiable evidence during the project's implementation to support potential environmental and transboundary benefits from these investments, if replicated and upscaled across the basin at a scale that matters. It will also aim to demonstrate how various stakeholders in the basin can actively take part in the IWRM implementation in practice in general, and in stress reduction activities in particular. The best practices and lessons learned from the demonstration projects will be codified and disseminated to further promote the replication potential.

[1] Limpopo River Basin Monograph (2013) LRBMS-81137945 Final Monograph; Report No.: 8520; Prepared for LIMCOM with the support of GIZ by Aurecon

[2] USAID (2015) Risk, Vulnerability & Resilience in the Limpopo River Basin; Climate change, water and biodiversity ? a synthesis

[3] INGC (2009) Synthesis report. INGC Climate Change Report: Study on the impact of climate change on disaster risk in Mozambique. [van Logchem B and Brito R (ed.)]. INGC, Mozambique

[4] Limpopo River Awareness Kit

[5] Limpopo River Basin: Atlas of Our Changing Environment
(<https://www.arcgis.com/apps/Cascade/index.html?appid=22287abd11ce4afd82fb4bfecbf11885>)

[6] Elbers, Gunning, and kinsey (2007) Growth and Risk: Methodology and Micro Evidence, The World Bank Economic Review 2007.

[7] Soil erosion in South Africa - its nature and distribution. JAY LE ROUX, lecturer: Department of Geography, University of the Free State and HENDRIK SMITH, conservation agriculture facilitator, Grain SA. November 2014

[8] Limpopo River Awareness Kit

[9] Petrie, B., Chapman, A., Midgley, A. and Parker, R. (2014) Risk, Vulnerability and Resilience in the Limpopo River Basin System: Climate change, water and biodiversity ? a synthesis. For the USAID Southern Africa ?Resilience in the Limpopo River Basin? (RESILIM) Program. OneWorld Sustainable Investments, Cape Town, South Africa. Page 42

[10] Ibid

[11] Tredoux, G. and Talama, A. S. (2006) Groundwater Pollution in Africa. Nitrate Pollution of groundwater in southern Africa, Ed. Taylor&Francis/Balkema, 15-36. 2006

[12] LIMCOM, USAID RESILIM, GWP SA, GRID-Arendal and SARDC. 2017. Limpopo River Basin: changes, challenges and opportunities. LIMCOM, USAID RESILIM, GWP SA, GRID-Arendal and SARDC; Maputo, Pretoria, Arendal and Harare

[13] One useful analysis is: Schulze R.E. & Davis N.S. (2019). Development of a Framework and Methodology for Undertaking a Risk and Vulnerability Assessment in All Nine Water Management Areas of South Africa. Practitioners? Handbook for Undertaking Current and Projected Future Climate Related Risk and Vulnerability Modelling Assessments. Schulze and Associates, Pietermaritzburg, Report to GIZ, Pretoria.

1b. Project Map and Coordinates

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

See Annex E.

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

During project preparation, a stakeholder analysis and stakeholder engagement plan were elaborated (Annex 8). The PMU will coordinate implementation of the stakeholder engagement plan and will monitor and assess the indicators in the plan. The stakeholder engagement plan includes the grievance mechanism for the project.

The project will implement several strategies to ensure stakeholder engagement throughout the project implementation period. First, the project will support multi-sectorial coordination across different government institutions, at national, sub-national, and local levels; while LIMCOM was established as a water commission, it requires constructive interactions with other sector ministries to achieve its vision effectively and to support the sustainable development of the basin population. Thus, in order to ensure that the participation of stakeholders from multiple sectors is fully encouraged and enabled, the project will support LIMCOM in establishing National Stakeholder Coordination Committees (NASCs); and a Basin-wide Stakeholder Committee (BASC)[1], which will include stakeholders from the water sector but also from other sectors including agriculture, environment, physical planning, mining, etc., and will convene regularly to address specific issues relevant to the implementation of the SAP, NAPs, and LIMCOM IWRM Plan (in line with the LIMCOM Agreement). The NASCs shall provide platforms for structured consultations to enable Basin stakeholders to provide input into Basin-wide processes and decisions; to serve as a vehicle for dissemination of information; and to function as a body for coordinating and harmonising Basin-wide stakeholder involvement and participation. The BASC shall be made up of NASC focal points and regional partners active in the Basin, and will (i) coordinate NASC inputs into Basin-wide LIMCOM processes; (ii) plan and organise an annual Limpopo Basin Stakeholders' Forum; and (iii) serve as the nucleus of a Basin-wide consultative platform. Parallel efforts will be made to strengthen existing multi-stakeholder dialogue platforms such as the Regional Water Administrations as well as River Basin Committees and varying catchment management structures in each of the Member States.

[1] The concept of the NASCs and the BASC is adopted from lessons learned in the Zambezi River Basin. ZAMCOM has established the NASC and BASC to facilitate dialogue and consensus building on issues pertaining to the planning, development and management of water and related resources in the Zambezi Basin.

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

Select what role civil society will play in the project:

Consulted only; No

Member of Advisory Body; Contractor; Yes

Co-financier; Yes

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

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Gender, inequality, land management, water resources management and sustainable environmental conservation are intimately linked as women, men, the youth and people living with disability have unique dependencies and expertise regarding their environment in the Limpopo River Basin. Women in particular play a significant role in providing, managing and safeguarding land, water and environmental resources. It is thus imperative for any planned projects and programmes implemented in the Limpopo River Basin to identify solutions aimed at enhancing the participation of women, youth and other disadvantaged groups in the planning and management of water and other natural resources in the Basin. Annex 9 provides a detailed Gender Equity and Social Inclusion Report and Gender Action Plan for the project, including a detailed analysis of how the project will contribute to 1) closing gender gaps in access to and control over natural resources; 2) improving women's participation and decision making; and 3) generating socio-economic benefits or services for women.

The main gender gaps identified during project preparation are:

- The gender inequality index (GII), which provides insights into gender disparities in health, empowerment, and the labour market, shows very low values for the four countries within the LRB: Out of 162 countries, Botswana's ranking is 111, Mozambique is 142, South Africa is 97, and Zimbabwe is 126
- Despite the legislative and policy frameworks that acknowledge the important role played by women in the planning and management of water resources, women's representation is low in water resources management governing bodies ranging from local water point committees to sub-catchment councils, catchment councils and the basin level.
- There are no special consideration to ensure that youth and people with the disabilities are represented and their voices are heard in the planning and management of water resources at the Basin scale.
- Largely patriarchal societies in the region make it difficult for women to obtain land or water use rights due to long standing beliefs and practices that value and respect allocation of such rights along male lineages. In addition, where women and other vulnerable populations have rights to land and water within the LRB, their access and use is usually at the discretion of traditional (patriarchal) authorities who still have the power to allocate these resources
- Commercial and small-scale agriculture is one of the three main livelihoods in the LRB, but women and youth do not have equitable access to information and extension services on good agricultural practices and access to markets

The project will contribute to the gender mainstreaming efforts in the basin by LIMCOM and its Member States. The Gender Analysis completed during the project preparation phase has informed the Project's Results Framework and the design of the project interventions. The Results Framework includes effective gender-sensitive indicators, and the project interventions include gender-responsive measures to address gender gaps identified through the Gender Analysis and to promote gender equality and women's empowerment in the basin. In addition, the Social and Environmental Safeguard Screening conducted during the project preparation phase has informed the project design to ensure that the project is gender-responsive. The project will include gender-responsive measures to address gender gaps and promote gender equality and women's empowerment, including closing gender gaps in access to and control over natural resources; improving women's participation and decision making; and generating socio-economic benefits or services for women. A Gender Specialist consultant will be hired to lead the implementation of the Gender Action Plan and will coordinate with the PMU team to implement the activities.

The proposed project will focus on strengthening the role of women in IWRM in the Limpopo River Basin, with emphasis on their role on governance and decision making of future projects and investments in the basin. It will collect data on problems faced by women in water management and the use of natural resources in the basin. The project also will strengthen women's capacities to participate in and benefit from project activities at the institutional / policy level down to field activities for sustainable land management, assessments of water resources and environmental issues in the basin, processes for basin-wide planning and management, information activities, etc. A number of Priority Action Steps were identified in the Gender Action Plan; these will be reviewed and fine-tuned during the project inception phase:

1. Strengthen and or develop gender policies and related legislative instruments to facilitate the enforcement of gender strategies and actions in the LRB
2. Develop capacities of WRM institutions and personnel at local, national and regional levels to support coordination and cooperation on gender approaches to basin-wide water resources management.
3. Establish or strengthen institutional structures across all levels to promote establishment of platforms for inclusive participation of previously excluded groups including poor men, women, and persons with disabilities.
4. Promote collaborative research across Member States to better understand the varying and contextual gender and social needs for improved inclusiveness of water resources management and beneficiation within the basin.
5. Develop platforms at grassroots WRM structures to advance inclusive community participation, data gathering and sharing arrangements between the four riparian states.
6. Establish inclusive process and gender budgeting in water resources management processes.

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 private sector and civil society organizations (CSO) are involved to varying degrees in the sustainable planning and management of water resources in all of the riparian Member States of the Limpopo River Basin; these stakeholders play a significant role in South Africa in particular, and to a lesser degree are also involved in Botswana, Mozambique, and Zimbabwe. The project will seek to collaborate with and build on existing platforms that support such engagement, including: the proposed Stakeholder Participation Committee or Forum for Botswana's Integrated Water Resources Management and Water Efficiency Plan; the Water and Sanitation Group of Mozambique, which is a forum for consultation, technical discussions, and recommendations in support of the efforts of the Government of Mozambique to achieve the goals of water and sanitation expressed in the Five Year Plan and the Sustainable Development Goals; the Strategic Water Partners Network (SWPN) in South Africa, which is a multi-stakeholder platform, chaired by the Department of Water and Sanitation (DWS) and co-chaired by South African Breweries (SAB) on behalf of business, that brings together senior government representatives, leading private sector corporations, and other key stakeholders to discuss South Africa's water challenges; and finally, in Zimbabwe the National Action Committee (NAC) in support of the Water Sanitation and Hygiene (WASH) sub-sector, which provides an open, formal platform for all WASH actors to work together including government, civil society, international cooperating partners and the private sector. Additional details on these platforms are provided in Annex 8.

In addition to the broad collaboration noted above, private sector engagement will be explored in several ways through activities under the specific project components. Under Components 1 & 2, LIMCOM will explore innovative ways to include private sector partners in water resources planning, development and management, including the creation of future water resources development scenarios and exploring partnerships in water resources management & monitoring in relation to point and non-point sources emanating from commercial agriculture, mining, tourism, and the emerging aquaculture sector. In undertaking these activities, LIMCOM will not only engage those sectors traditionally active in the basin (agriculture, mining, industry), but also emerging sectors such as tourism and aquaculture. Under Component 3, the project will reach out to private sector partners to participate in the SAP and NAP development and as well as to provide support for SAP and NAP implementation through the SAP Investment Plan. Under Component 5, the project will seek to incorporate lessons learnt and models for engagement from programmes that have successfully engaged the private sector in the management of water resources and other natural resources. One of these is the Natural Resources Stewardship Programme (NatuReS) for Growth^[1] supported by GIZ, which is a partnership comprising governments, private companies and local communities that work together to reduce social and economic risks associated with the growing scarcity or endangerment of natural resources, through the identification, development and implementation of collective measures. The private sector plays an important role in implementing these partnerships. The project can also learn from success stories related to engaging communities and the private sector in paying for ecosystem services as demonstrated through the 'Working for Water' programme described above, as well as the work of the Strategic Water Partners Network (SWPN) in South Africa.

Of particular note will be the project's cooperation with private sector partners under Component 4. LIMCOM will explore the potential for public-private partnerships (PPPs) to address sedimentation concerns at a demonstration scale in order to catalyse private sector financing to address the issue. The project will assess the potential for demonstrating various approaches to private sector involvement in SLM, building on experiences within the basin or region, including corporate water stewardship, certification for growers based on SLM standards and linked to Alliance for Water Stewardship (AWS) standards, etc. Such demonstrations will be designed with the potential for future replication and up-scaling in mind, as the intention for these demonstration PPPs is to influence future investment decisions of the private sector to support a more water secure future for the basin. At least one partnership under this output will involve cooperation with mining companies and relevant government departments at the Mapochs mining site in the Olifants sub-basin in South Africa to undertake sustainable land management activities to rehabilitate degraded landscapes. Also under Component 4, the project also will investigate options for the establishment of Payment for Ecosystem Services (PES) schemes where downstream stakeholders provide payments for upstream sedimentation control that reduces sediment transport in river systems and minimises siltation of water bodies such as dam reservoirs and rivers. Development of PES Schemes will focus on private sector partners such as dam / water management authorities and working through Water User Associations, since the potential for participation of public sector entities in the region in PES schemes is limited by the heavy subsidies for public sector water pricing. In undertaking this activity, the project will investigate lessons learned from the Working for Water programme[2] that has been implemented in South Africa since 1995, which provides a long-standing and successful example of a PES scheme where workers remove invasive species and thereby provide the 'service' of increased water flow that results from the reduction in invasive plants. While many of the payments provided by 'Working for Water' have been made by the government using poverty relief funds, private entities are becoming more frequent purchasers of this ecosystem service as well (additional details on this program are provided in Annex 11c.

[1] GIZ (n.d) <https://www.giz.de/en/worldwide/81450.html>

[2] https://www.ecosystemmarketplace.com/wp-content/uploads/archive/documents/Doc_172.pdf

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Project Risk Management Matrix

Risk	Rating	Risk Mitigation Strategy
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Risk	Rating	Risk Mitigation Strategy
<p>1. Basin states may not be willing to release data for use by LIMCOM, posing a significant risk to the achievement of project outcomes that depend heavily on up-to-date and complete data, including the TDA, LIMIS, and joint basin planning activities in general</p>	<p>Low (Likelihood: 1; Impact: 4)</p>	<p>The LIMCOM member states have demonstrated their commitment to information and data sharing for joint planning, development and management of the Limpopo River Basin in several ways. The member states have established the LIMCOM Commission, which is a concrete commitment to transboundary water cooperation specifically directed to the joint planning, management and development of the resources of the LRB. Article 7 (7.2d) of the 2003 LIMCOM Agreement prioritizes the development of LIMCOM's data and information sharing protocol and the facilitation of data and information exchange as part of its institutional capacity strengthening efforts. In addition, all of LIMCOM's member states have signed and ratified the SADC Revised Protocol on Shared Watercourses, which provides the legal basis for the member states to cooperate for joint management of shared watercourses across the SADC sub-region. The underlying assumption behind all of these regional protocols and agreements is that data and information will be made available and shared at a transboundary scale to feed informed planning, development and management and thereby foster transboundary cooperation. The member states have varying capacities for data collection, storage and analysis and varying levels of information / database systems, and as such some countries have a greater ability to share data. The project will support investments in order to level the playing field in data collection, storage and analysis through well-established transboundary environmental monitoring frameworks with harmonized standards amongst involved cooperating Member States; joint basin surveys/expeditions; and accelerating the on-going processes to establish the LIMPOPO Transboundary Flood Forecasting & Early Warning System (FFEWS) and to strengthen the institutional capacity of LIMCOM Member States to sustain the FFEWS.</p>

Risk	Rating	Risk Mitigation Strategy
2. Level, quality and consistency of LIMCOM member states engagement with and commitment to LIMCOM as a multi-country river basin management and governance mechanism	Moderate (Likelihood: 2; Impact: 4)	<p>The commitments by its member states to LIMCOM are very strong. Although South Africa experienced internal challenges that led to the temporary absence of South African delegations in ALL regional fora, including LIMCOM, South Africa has demonstrated its commitment to LIMCOM and continues to contribute to the sustainability of the organization. Currently, South Africa is fully engaged in LIMCOM regional activities and participates in all LIMCOM Task Teams, including acting as the leader of both the Flood Forecasting Task Team and the Legal Task Team that is guiding the update of the LIMCOM Agreement. Furthermore, South Africa's support for LIMCOM's agenda is illustrated by its agreement to provide the LIMCOM Secretariat with a seconded Senior Financial Officer to support the on-going effort for institutional strengthening of the LIMCOM Secretariat. Similarly, despite its significant internal political challenges, Zimbabwe plays an active part in LIMCOM and other regional institutions. The commitment of all member states to LIMCOM is further demonstrated by the recent decision to establish the LIMCOM Council of Ministers as the highest new decision-making body of LIMCOM, and the decision by all of the member states to sign the SADC Revised Protocol on Shared Watercourses, which provides the legal basis for the member states to cooperate for joint management of shared watercourses across the SADC sub-region. The project will further mitigate any risks of low engagement and commitment to LIMCOM by the Member States by strengthening the capacities of both LIMCOM and its Member States (under Output 1.1.2), including strengthening the governance capacities of Member State institutions (e.g. National Water and Environmental Departments; Catchment Management Authorities; Agricultural Extension Services; Municipalities; Local Governments; etc.) to undertake planning and implementation of priority actions in the SAP and IWRM plans, thereby further integrating the priorities and actions of Member State institutions within LIMCOM's basin-wide planning and management framework, as well as providing positive benefits to the participating Member States from their active participation in LIMCOM.</p>
3. Political commitment on the SAP, developed based on the TDA, will not be secured by the end of the project	Low (Likelihood: 1; Impact: 4)	<p>There is some risk that the process for securing ministerial endorsement by the Member States of the SAP and NAPs may prevent those plans from being endorsed before the project ends. However, LIMCOM and its member states are clear about the need to make a political commitment to the Limpopo SAP through endorsement at the ministerial level by all member states, and two of the member states (Botswana and South Africa) are already familiar with the TDA-SAP approach and its requirements through their involvement in the Cubango-Okavango and Orange-Senqu river basins. Furthermore, there is on-going high-level political momentum among the member states to establish the LIMCOM Ministerial Council as the highest decision making body of LIMCOM, and if this body is established before or during the SAP development process, it will provide an additional important mechanism for relevant Ministers to be part of the SAP development process, thereby building a sense of ownership and significantly increasing the chances of the timely approval and signing of the SAP and related documents. Finally, the project will engage multiple sectors and high-level government officials from the early stages of the TDA-SAP process to increase the strong sense of ownership on the SAP.</p>

Risk	Rating	Risk Mitigation Strategy
<p>4. Lack of inter-sectorial coordination and consultation is the major hurdle to IWRM implementation and every effort needs to be made to overcome it at the local, national and basin-wide levels.</p>	<p>Moderate (Likelihood: 2; Impact: 4)</p>	<p>The project will support LIMCOM in establishing National Stakeholder Coordination Committees (NASCs) in each Member State as well as a Basin-wide Stakeholder Committee (BASC). The NASCs will provide platforms to enable Basin stakeholders to provide input into Basin-wide processes and decisions; to serve as a vehicle for dissemination of information; and to function as a body for coordinating and harmonising Basin-wide stakeholder involvement and participation. The BASC shall be made up of NASC focal points and regional partners active in the Basin, including stakeholders from the water sector but also from other sectors including agriculture, environment, physical planning, mining, etc. Some of the functions of the BASC could include (i) coordinating NASC inputs into Basin-wide LIMCOM processes; (ii) planning and organising an annual Limpopo Basin Stakeholders' Forum; and (iii) serving as the nucleus of a Basin-wide consultative platform. Parallel efforts will be made to strengthen existing multi-stakeholder dialogue platforms such as the Regional Water Administrations as well as River Basin Committees and varying catchment management structures in each of the Member States. With regard to the latter, the project will work to strengthen the capacities of existing catchment management structures in each Member State, which typically include representatives of local governments, traditional leaders, different types of basin resource users, and water resource management agencies at the basin level, to enable them to work closely with LIMSEC and to be effective partners in the development and implementation of the SAP and NAPs as well as the LIMCOM 5-year IWRM plans. At present, various forms of catchment management structures exist within the Limpopo River Basin in both Zimbabwe and Mozambique, and South Africa is moving towards the establishment of a structure in the basin (at least two catchment management structures exist already in other parts of South Africa). Currently there is little information sharing or collaboration among the existing catchment management structures in the LRB, but the project will work to strengthen such activities and to link the existing catchment level management plans with the transboundary approaches to be identified in the SAP (using the National Action Plans as a mechanism to do this). Finally, the LRB is one of the basins that is most severely affected by the impacts of extreme weather events, and all Member States are very much aware of the critical importance of inter-sectorial coordination for disaster management, and thus familiar with the approaches and benefits of basin-wide inter-sectorial coordination to manage natural resources related challenges. For this reason, the project will seek to learn from the existing high-level inter-sectorial coordination in the basin on disaster management and how it can be oriented to a much broader IWRM perspective.</p>

Risk	Rating	Risk Mitigation Strategy
5. Poor coordination among various projects supporting LIMCOM that are funded by different entities, leading to sub-optimal results delivery or duplication of work	Low (Likelihood: 1; Impact: 3)	LIMCOM's IWRM Overview, finalized and included in its latest IWRM Plan of 2018-2022 (a 5-year implementation plan for LIMCOM), is the guiding document used by LIMCOM to coordinate various initiatives supporting LIMCOM. The proposed project will strengthen LIMCOM's coordination capacity through activities under Component 1 so that all future initiatives will be coordinated with on-going initiatives effectively for the maximum synergies and to avoid duplication. LIMCOM has the advantage of receiving support from partners (GEF-UNDP; USAID; UK-CRIDF, BMZ-GIZ, etc.) with a long tradition in engaging with RBOs in southern Africa, including ORASECOM, OKACOM, and ZAMCOM. During project development, extensive consultations were carried out with USAID and UK-CRIDF, and detailed plans for collaboration with those programs have been developed (see Partnerships and Alternative Scenario sections in the Prodoc for details). SADC has also established a solid platform for optimized coordination of the RBO agenda in the sub-region through the regularly organized RBO workshops, SADC Water Dialogue and the SADC Water Resources Technical Committee (SADC WRTC) that are supported by a SADC Water Technical Reference Group (WTRG). In addition, LIMCOM is in the process of establishing an International Cooperating Partners (ICP) Forum to facilitate strategic cooperation with international development partners active within the LRB. Together, these platforms provide a solid foundation for minimizing the risk for poor coordination among LIMCOM's partners.
6. Further ecosystem and water quality degradation due to development pressures in the basin and the fact that major development decisions are often made without consulting LIMCOM	Substantial (Likelihood: 4; Impact: 4)	The project will undertake several activities to reduce the negative impacts of development pressures on water quality and ecosystem functions in the basin. By supporting the establishment of new LIMCOM Task Teams on Environment and Ecosystems, and Water Resources Planning and Management, the project will strengthen LIMCOM's technical and consultative capacities related to the monitoring of key ecological functions / trends and the consideration of the entire water cycle in the basin's information management and decision support systems and by extension policy making processes related to development. The project also will support LIMCOM in the development of future water resources development scenarios, taking into account e-flow requirements, potential impacts from climate change and variability. This exercise, to be included in the TDA, will inform policy makers beyond the water sector about potential positive and negative impacts from different water resources development scenarios and help establish common knowledge base across the member states. With this information, LIMCOM can support policy makers directly involved in LIMCOM as well as those who are not, to make more informed decisions about potential future development options that are supported by the basin resources and that would affect the basin resources at the same time. In addition, this information will assist LIMCOM in collaborating with SADC in enforcing the existing SADC Revised Protocol on Shared Watercourses. Finally, project activities under Output 1.1.4 and 5.1.1-5.1.3 to raise public awareness and understanding and disseminate information about the interactions between development and natural resources management on the one hand, and water flows, water quality, sediment flows and aquatic ecosystem functioning on the other hand, will increase public support for more sustainable development models and programs for the basin.

Risk	Rating	Risk Mitigation Strategy
7. Impacts on project implementation from restriction measures established by national and local authorities related to the Covid 19 pandemic.	Substantial (Likelihood: 4; Impact: 4)	<p>The impact of the COVID-19 virus has been global in scale and could continue to impact the four LIMCOM Member States for an undetermined amount of time, including potential impacts on transboundary cooperation between the states. The project team will work hand in hand with the LIMCOM Secretariat to assess the risks related with the closing of borders and other travel restrictions, as well as any other emerging barriers to project implementation. Furthermore, during project inception, UNDP will assist the project team in accessing remote project supervision and M&E tools/options that have been rolled out in various development agencies (including those developed for DRM ? Disaster Risk Management; FCV countries ? Fragile, Conflict and Violence programs) in response to the Covid-19 pandemic. The project will develop measures to increase the flexibility of project management approaches and to ensure that LIMCOM's functions as a RBO can continue to be effectively carried out. For example, UNDP may sign letters of agreement with CSO / NGOs who have field staff in geographic areas targeted by the project to carry out various project activities, which can help to mitigate restrictions on the mobility of staff of UNDP, the LIMCOM Secretariat, GWP SA, and other partners in a pandemic context. The project also will support PMU staff and key partners (e.g. LIMSEC staff) with remote internet access options, and UNDP will assist the project management team in developing, planning and executing virtual meetings and working groups as needed, and the project will support stakeholders in having access to such events. In the case of pandemic-related travel restrictions, local consultants will be recruited to support international consultants responsible for the Mid Term Review, Terminal Evaluation, and other technical consultancies in terms of ground data collection, physical meetings with stakeholders, etc. The use of necessary protective measures (e.g. masks and other personal protection equipment) and compliance with required social distancing measures will be standard for all project personnel and activities. Particular attention will be paid to the protection of rural communities with minimal access to health care. Under Component 1, the project will look in detail at capacity building measures to assist LIMCOM in managing for COVID-19 impacts over the longer term. Furthermore, although the COVID-19 pandemic is a health issue, its impact is felt throughout all sectors and actions to curb it must be multi-sectorial, so activities under this component to establish a Basin-wide Stakeholder Committee (BASC) as well as National Stakeholder Coordination Committees (NASCs) will help to strengthen capacities to manage risks related to the pandemic. Because the pandemic has had a wide range of impacts on the basin's population, not only in terms of social and health aspects, but also on the trade, export, tourism and other economic sectors, under Component 2 the TDA will consider these impacts of the COVID-19 pandemic and their potential impact on effective IWRM approaches in the basin, while under Component 3 the SAP will integrate, as much as possible, regional and national CIVID recovery strategies[1]. Under Component 4, the SLM pilots will document any impacts from COVID-19 on the implementation of SLM activities in order to provide inputs to the TDA/SAP process, while under Component 5 any relevant information on COVID-19 impacts on IWRM in the Limpopo River Basin will be integrated into knowledge management products and shared with national, regional and global stakeholders. Finally, by supporting IWRM interventions that will help to protect and restore natural systems and their ecological functionality, including the freshwater ecosystems that are critical underpinnings to the social, economic and human health conditions in the Limpopo River Basin, and by promoting sustainable land use practices production landscapes, the project will help to both build the resilience of human populations in the basin to the existing pandemic and potential future pandemics. To give just one example, Water, Sanitation and Hygiene (WASH) related measures, such as handwashing with soap, have</p>

Risk	Rating	Risk Mitigation Strategy
8. Impacts from climate change (e.g. drought / flooding; water quality declines, sedimentation, riverbank erosion, saline water intrusion in the Limpopo River estuary, etc.), could have a significant impact on the LRB hydrological cycle and could negatively impact the achievement of project objectives (e.g. to reduce sedimentation through SLM measures)	Substantial (Likelihood: 4; Impact: 4)	By developing a Strategic Action Program for the Limpopo River Basin (LRB) jointly implemented by the LIMCOM Member States, the project aims to conserve the basin's resources and ecosystem services, thus increasing their resilience to the impacts of climate change. The project will include climate change considerations as part of strategic IWRM planning in the project countries in a number of ways. For example, the project will formulate various water resources development scenarios, including climate change scenarios that take into account data and information on the climate and hydrology of the Limpopo River Basin, as well as the risks and threats, water resources, populations and infrastructure exposed to potential climate change impacts (e.g. flooding, drought, stream flow impacts, etc.); and different investment options (e.g. water demand management or WDM, conjunctive use and management of surface water and groundwater resources) and sector development options. The climate change elements of this activity will build on the CRIDF-supported project 'Development of Climate Change Scenarios for the Limpopo River Basin', which is developing climate change scenarios based on the review of climate change projections undertaken under the Limpopo Monograph study. The project also will support strengthening of the Limpopo Transboundary Flood Forecasting & Early Warning System, which will strengthen resilience to flooding and other climate change impacts in the basin. In addition, the project will assess both the ecological impacts and potential climate change adaptation benefits of alluvial aquifer abstraction, which is frequently used by communities in the basin as a means to secure water resources needs during the dry season when there is little or no surface flow. The potential impacts of climate change on the ecosystems of each pilot site will be assessed during the process of selecting and implementing specific SLM activities. Furthermore, the pilot SLM activities, including exploration of PES mechanisms where downstream users would pay for activities to reduce upstream sedimentation and preserve hydrological flows, are designed with the objective of improving ecosystem resilience, including to the impacts of climate change. Finally, the project will strengthen information management capacities of the project stakeholders including collecting, inputting, and processing data regarding the status of vulnerable ecosystems and ecosystem services.

[1] The Southern African Development Community and the governments of all 4 Member States have produced a variety of plans and strategies for responding to and recovering from the COVID- 19 pandemic; details on these are provided in the UNDP Prodoc section on Consistency with National Strategies and Plans.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

Note: Additional details on institutional arrangements and coordination are provided in Section VII of the UNDP Prodoc

Roles and responsibilities of the project's governance mechanism

Implementing Partner: The **UNDP** Implementing Partner (IP) for this project is the Global Water Partnership Southern Africa. The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

Global Water Partnership (GWP) is a well-established inter-governmental organisation, headquartered in Sweden. Formed in 2002, it links agencies of the United Nations, government institutions, bi- and multi-lateral development banks, professional associations, research institutions, non-governmental organisations, and the private sector. An MOU exists between UNDP and GWP (signed in 2014). GWP's Southern Africa branch has a strong system of policies and procedures, including internal operational controls for project management, governance, reporting and budget management and administration. It maintains yearly audited accounts of its financial performance and position. The UNDP South Africa Country Office conducted a HACT-based micro assessment for GWP Southern Africa in Q3 2020 with no concerns, and completed a PCAT for GWP Southern Africa in December 2020.

The **UNDP** Implementing Partner is responsible for **project execution (as defined by the GEF)**. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Risk management as outlined in this Project Document;
- Procurement of goods and services, including human resources;
- Financial management, including overseeing financial expenditures against project budgets;
- Approving and signing the multiyear workplan (developed by the Project Coordinator);
- Approving and signing the combined delivery report at the end of the year (developed by the Project Coordinator); and,
- Signing the financial report or the funding authorization and certificate of expenditures (developed by the Project Coordinator)

Due to its current limited capacity and limited track record on financial management, LIMCOM is not yet eligible to be selected as an Implementing Partner (IP) by UNDP. **For this reason**, GWP-SA will perform as the UNDP IP (= GEF Executing Agency or EA) for this project and execute the project on behalf of the LIMCOM and its member states. GWP as the **UNDP** Implementing Partner will support the implementation of the programme through providing quality assurance and supporting financial and administrative functions for the project. Based on consultations with GEFSEC during the development of the PIF, GWP-SA will build the LIMCOM Secretariat's execution capacity throughout the project implementation period so that by the time the project is completed, the LIMCOM Secretariat's capacity will be sufficient to start executing donor-funded projects directly without the involvement of a third party as GEF Executing Agency.

Supervision and monitoring responsibilities:

The Limpopo Water Course Commission (LIMCOM) was established by the Republics of Botswana, Mozambique, South Africa and Zimbabwe through the LIMCOM Agreement signed in November 2003 in

Maputo, Mozambique. Article 3.1 of the LIMCOM 2003 Agreement, stipulates that the objective of the Commission is to 'advise the Contracting Parties and provide recommendations on the uses of the Limpopo, its tributaries and its waters for purposes and measures of protection, preservation and management of the Limpopo'. The principal organ of the Commission is the Council composed by not more than 3 delegates per country (CSOs, NGOs and private sector partners are stakeholders that can be consulted as and when required). The Council established the LIMCOM Secretariat (LIMSEC) in 2014, led by an Executive Secretary, formally hosted by the Republic of Mozambique, and progressing from an Interim Secretariat into a Permanent one. The currently established internal governance bodies that constitute the LIMCOM Organisational Structure include:

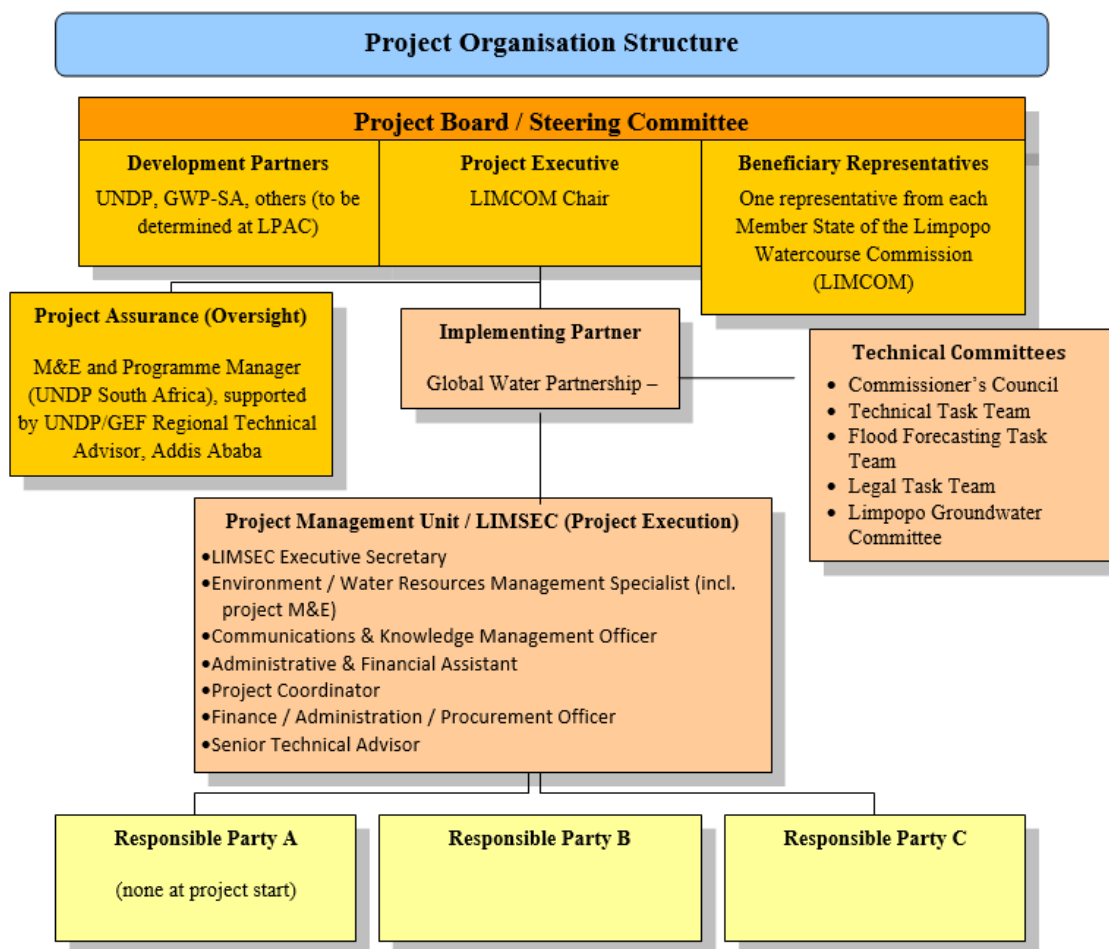
- Commissioner's Council ? made up of three Senior Officials from each of the riparian states
- Technical Task Team ? with Senior Technical Officials from each of the riparian states
- Flood Forecasting Task Team ? with two persons from each of the riparian states
- Legal Task Team ? with two legal experts from each of the riparian states
- Limpopo Groundwater Committee ? with two experts from each of the riparian states, working closely with the SADC Ground Water Management Institute (SADC-GMI)

LIMCOM will be a key driver in the implementation of the project, as it is the originator and focal custodian of the project on behalf of the 4 LRB Member States, with the convening power to bring together all key stakeholders in the Limpopo River Basin. Many of the outputs proposed under Component 1 are aimed at strengthening the capacities of LIMCOM, LIMSEC, and the various governance bodies under LIMCOM (listed above), through the provision of training, technical assistance and material support. The project will support LIMCOM in potentially establishing new governance bodies (i.e. a new Environment and Ecosystems Task Team and/or a new Water Resources Task Team), and in developing its next Integrated Water Resources Management (IWRM) Plan for 2023-2027. The Project Management Unit (PMU) will be located in the offices of LIMSEC, and the project will provide it with equipment and resources to strengthen its capacity to work for the management of the LRB. Regular and extraordinary sessions of LIMCOM will be supported by the project.

The LIMCOM Secretariat (LIMSEC) is a relatively new organization and needs significant support to build its institutional capacity and human resources, and therefore the proposed GEF investment will put a strong focus in strengthening the institutional, and individual capacities of LIMSEC. LIMSEC currently has a full-time Executive Secretary (funded by contributions from the Member States). Currently, LIMSEC is also supported by two full-time technical experts, a Senior Technical Advisor and a Water and Environment Expert, both of whom are funded by the USAID Resilience Waters program through the end of 2021. GEF funds through the proposed project will support continuity of these technical expert functions from 2022 forward.

Project organisation structure^[1]:

^[1] The UNDP Implementing Partner is 'the entity to which the Administrator has entrusted the implementation of UNDP assistance specified in a signed document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in such document.'; this is equivalent to what is often referred to by the GEF as a project 'Executing Agency', e.g. the organization delegated by the GEF agency to execute the project.



7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

The proposed project is consistent with the national priorities of the participating countries as stipulated in their respective national and sectorial development plans and strategies. The project is also consistent with and will support national commitments to relevant regional and international programs and priorities, including the Rio Conventions and their associated programs, as detailed below.

National Programs

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Botswana: Long-term development planning in Botswana is guided by the Vision 2036, which emphasizes that water resources management, planning and development need to be fully integrated in the economic development of the country. The Department of Water & Sanitation developed a National Water and Wastewater Policy for the country in 2012 that was approved by Parliament in 2016 and is firmly based on IWRM principles. Botswana has also developed an IWRM and Water Efficiency Plan (2013) supported by an UNDP-GEF IWRM project, which has been instrumental in driving water resources management. The Government of Botswana is party to four River Basin Organisations (RBOs) with other riparian states within the SADC to enable the management of transboundary water resources for protection and equitable sharing as per the SADC Revised Protocol on Shared Water Courses (2000).

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Mozambique: In its Agenda 2025 - The Nation's Vision and Strategies, Mozambique emphasizes as development priorities water supply, water security, and ensuring that the country receives fair benefits from the international rivers that flow through its territory. With respect to water resources management, the Vision recognizes that the country is extremely vulnerable to natural disasters and environmental changes resulting from climate change and variability, such as droughts, floods, or cyclones, with serious consequences for the living quality of the country's citizens. The impacts of climate change are recognized as a major barrier to the country's development efforts, and climate change adaptation and vulnerability reduction are the country's key development priorities. Mozambique produced a National Adaptation Programme of Action (NAPA) in 2007, which identified key vulnerabilities to droughts (frequent in central and southern regions of the country), desertification, flooding, and tropical cyclones affecting the coastal regions. The NAPA identifies four key priorities: i) strengthening early warning systems; ii) strengthening the capacity of farmers to deal with climate change; iii) reduction of the impacts of climate change along the coastal zone; and iv) water resources management; the proposed project will contribute to all four of these priorities. The Mozambique National Water Policy (2007) aims to decentralize water resources management to autonomous entities at the basin and provincial levels. Five Regional Water Authorities (ARAs) in Mozambique are responsible for the management of water resources. ARA-SUL is responsible for the Limpopo basin and undertakes a suite of water resource management and related functions, including operation and maintenance of dams, monitoring, flood management, and water use licensing. Mozambique intends to establish river basin management institutions (UGBs) to manage water resources at a catchment scale, and river basin management committees (RBCs) as consultative bodies to work with the UGBs. The proposed project is consistent with and will support the country's increasing efforts to decentralize governance mechanisms for water management to the catchment level.

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South Africa: South Africa's National Development Plan (NDP) - Vision for 2030 is a long-term national development framework with the aim of eliminating poverty and reducing inequalities, and Chapter 4 of the NDP on economic infrastructure deals with the development of water resources. Water Resources Management is primarily governed by the National Water Act (36 of 1998) (NWA). In the context of transboundary water management, 'meeting international obligations' is stipulated as one of the purposes of the Act. The Department of Water and Sanitation (DWS) has nine DWA regional offices. Within the Limpopo basin three regional offices, namely the Mpumalanga Regional Office, the Limpopo Regional Office and the North West Regional Office are responsible for the Olifants, Limpopo and Crocodile West water management area (WMAs) respectively. The NWA makes provision for the establishment of Catchment Management Agencies (CMAs) and Water User Associations (WUAs). The CMA will eventually have powers and delegated functions to enable the CMA to issue water use authorizations and to

issue compliance monitoring and enforcement directives. WUAs are an important element of the framework in that they manage local resources and operate localized infrastructure in this regard. The project is consistent with and will support the country's efforts to strengthen capacity of those CMAs and WUAs in the basin.

Zimbabwe: Both the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZimAsset): 'Towards an Empowered Society and a Growing Economy' (2013-2018) and the Zimbabwe's '10-Point Plan for Economic Growth' list water security as a priority for their development. Further, they emphasize the importance of increasing agricultural productivity and investments in water infrastructure. In 1998, a new Water Act and the Zimbabwe National Water Authority Act (ZINWA Act) were passed, representing a shift from centralized water management to a decentralized system of water management based on river basins and a strong degree of stakeholder participation. The Zimbabwe National Water Authority Act of 1998, Section 5(1)d, states a primary goal is to 'Promote an equitable, efficient and sustainable allocation and distribution of water resources'. The Water Act (1998) sets the parameters for access to and use of water as well as providing for the establishment of catchment and sub-catchment councils composed of elected representatives. The Ministry of Lands, Agriculture, Water and Rural Resettlement is responsible for policies on water resources planning, development and management, while the Zimbabwe National Water Authority (ZINWA) is the implementing arm of the ministry. The Zimbabwe National Water Policy (2013) embraces IWRM as one of the key policy statements for promoting stakeholder participation in the planning, implementation and management of water resources so as to ensure sustainability in the management of the water resources. The Zimbabwe National Water Authority (ZINWA) was established by the Water Act, and is responsible for the development and management of the national water resources in Zimbabwe. Catchment and sub-catchment councils are responsible for water resources management at local level. The project is consistent with and will support the country's efforts to manage water resources in a decentralized manner at the basin and catchment level and will contribute to the capacity building and engagement of the relevant bodies.

Rio Conventions and associated Plans and Communications

The Project is consistent with implementation of the three Rio conventions ratified by all basin countries. All Limpopo basin countries are parties to the UNFCCC and have signed and ratified the Kyoto Protocol. By ratifying the UNFCCC, the Basin states have committed to the implementation of measures to adapt to climate change. The project will contribute to the achievement of country commitments—more so, the NDCs, NAPA, the national climate change strategies, and the national disaster risk management strategies. Linking the project interventions to NDCs will help align investments and mainstream climate investment needs into broader growth plans within the basin. By reducing economic losses and increasing productivity, the programme will directly support climate resilient growth.

All basin countries are also Parties to the UNCCD and have developed and submitted their National Action Programmes (NAPs). Thematic actions in support of the UNCCD in the Limpopo basin countries include: Integrated water management; Agro-forestry; Soil conservation; Rangeland management; Ecological monitoring and early warning systems and Sustainable agricultural farming systems. The proposed project is consistent with the NAPs as tools for operationalizing the implementation of the objectives of the convention.

The basin countries are also Parties to the UNCBD convention and are committed to the implementation of the SADC regional biodiversity strategy as well as individual country strategies on the conservation of biological diversity. The SADC Regional Biodiversity Strategy aims to provide a framework for cooperation and implementation of provisions toward sustaining the region's biodiversity. The Strategy outlines tactics for addressing focal areas that cut across several sectors – forestry, wildlife, agriculture etc. This is based on a scope of developing programmes to enhance economic development without compromising sustainable use. The Strategy also suggests activities for its funding and implementation, encouraging SADC Member States to develop projects in biodiversity focal areas.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

Component 5, with a budget of \$533,802, is dedicated to knowledge management, reflecting the importance that the project puts on the knowledge management and information sharing to achieve the project's intended results. The PMU and the LIMCOM Secretariat will ensure all technical information is shared with the stakeholders on a regular basis. The project's knowledge management approach will consist of the following (additional details are found in the description of Component 5 in the Alternative Scenario):

– Under Output 5.1.1 (Exchanges with other RBOs and relevant regional institutions to support the effective and efficient delivery of Outcomes 1-4 and the source-to-sea approach), activities including: i) participate in the SADC RBO Dialogue and SADC Multi-Stakeholder Dialogues; ii) participate in regional (SADC) meetings of River Basin Organizations (e.g. workshops and technical events organized by the SADC Water Division); participate in and provide information to digital platforms on transboundary river management; and carry out exchange visits with other River Basin Organizations on technical issues around transboundary river management, including the "source-to-sea" approach

– Under Output 5.1.2 (Project results and knowledge products developed and disseminated nationally, regionally and globally), activities including: i) consolidate project knowledge products in formats suitable for sharing with national, regional and international partners / audiences; many of these knowledge products will be technical, policy and planning products resulting from project activities under Outcomes 2.1, 2.2, 3.1 and 4.1; ii) develop and implement a strategy to disseminate project knowledge products through SADC, UNDP and other partners; and iii) enhance visibility and consideration of groundwater issues in the LRB and produce related materials / strategies

Under Output 5.1.3 (Active contribution to the learning and knowledge sharing activities and events organized by the GEF IW:LEARN program), activities including: i) participation of the project team and national focal points in IW:LEARN activities, including the GEF International Waters Conference (IWC) held every two years; ii) production of at least 2 GEF IW Experience Notes (including one on surface water and groundwater in the LRB) for IW:LEARN covering project activities and lessons learnt; and iii) uploading of key project documents and reports to the existing LIMCOM website (developed with support from the USAID Resilient Waters programme), and development of linkages between the LIMCOM website and the IW:LEARN site (<https://iwlearn.net/>).

9. Monitoring and Evaluation

Describe the budgeted M and E plan

The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. If

baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. The Monitoring Plan included in Annex 5 details the roles, responsibilities, and frequency of monitoring project results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements.

Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the [GEF Monitoring Policy](#) and the [GEF Evaluation Policy](#) and other [relevant GEF policies](#)[1]. The costed M&E plan included below, and the Monitoring plan in Annex 5, will guide the GEF-specific M&E activities to be undertaken by this project.

In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report.

Additional GEF monitoring and reporting requirements:

- Inception Workshop and Report: A project inception workshop will be held within 60 days of project CEO endorsement, with the aim to:

1. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
2. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
3. Review the results framework and monitoring plan.
4. Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP and other stakeholders in project-level M&E.
5. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
6. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
7. Plan and schedule Project Board meetings and finalize the first-year annual work plan.
8. Formally launch the Project.

- GEF Project Implementation Report (PIR): The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR. The PIR submitted to the GEF will be shared with the Project Board. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

- GEF Core Indicators: The GEF Core indicators included as Annex will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent groundtruthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF [website](#).

Independent Mid-term Review (MTR): The terms of reference, the review process and the final MTR report will follow the standard templates and guidance for GEF-financed projects available on the [UNDP Evaluation Resource Center](#) (ERC). The evaluation will be "independent, impartial and rigorous". The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate. The final MTR report and MTR TOR will be publicly available in English and will be posted on the UNDP ERC by November 2025. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's completion.

Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the [UNDP Evaluation Resource Center](#). The evaluation will be "independent, impartial and rigorous". The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate. The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by *(add date included on cover page of this project document)*. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion.

Final Report: The project's terminal GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information: To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy[2] and the GEF policy on public involvement[3].

GEF M&E requirements	Indicative costs (US\$)	Time frame
Inception Workshop	10,000	Within 60 days of CEO endorsement of this project
Inception Report	None	Within 90 days of CEO endorsement of this project.
M&E of GEF core indicators and project results framework	34,500	Annually and at mid-point and closure
GEF Project Implementation Report (PIR)	None	Annually typically between June-August
Monitoring all risks (UNDP risk register)	None	On-going.
Monitoring of Social and Environmental Safeguards	7,500	On-going
Supervision missions	None[4]	Annually

GEF M&E requirements	Indicative costs (US\$)	Time frame
Oversight/troubleshooting missions	None ^[5]	Troubleshooting as needed
Mid-term GEF Core indicators	5,000	Before mid-term review mission takes place
Independent Mid-term Review (MTR)	50,000	Between 2 nd and 3 rd PIR (by November 2023)
Terminal GEF Core indicators	5,000	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE)	55,000	At least three months before operational closure (by November 2025)
Translation of Mid-Term Review and Terminal Evaluation	7,757	
TOTAL INDICATIVE COST	174,757	

[1] See https://www.thegef.org/gef/policies_guidelines

[2] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

[3] See https://www.thegef.org/gef/policies_guidelines

[4] The costs of UNDP CO and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

[5] Ibid

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCE/SCCF)?

The project will directly address the need for multinational cooperation supported by LIMCOM, and more broadly by SADC. The project, together with co-financing partners, will strengthen LIMCOM's institutional, technical and coordination capacity so that it can function effectively as a hub for harnessing, coordinating and channelling political and economic interests from both public and private sectors in the basin. In addition, the participating countries will significantly benefit from capacity building activities planned at both regional and national levels, collection of more knowledge about the transboundary basin, knowledge sharing activities across the countries through LIMCOM, strengthened science-to-governance linkages both at the national and regional level, and strengthened regional collaboration and coordination through LIMCOM, all included in the expected results, outcomes and outputs to be delivered through the proposed project interventions.

Through the development of the Transboundary Diagnostic Analysis and Strategic Action Programme, the countries will agree on a set of transboundary priorities for the basin, which will guide both transboundary and national investments in the future. Securing political commitment to the transboundary priorities for the basin will provide a strong foundation for future cooperation and collaboration among the basin states to realize various benefits to be generated in the basin. Political commitment from all member states to LIMCOM SAP as well as to the SADC Revised Protocol on Shared Watercourses will become particularly important when national policies need to be adjusted to achieve better harmonization at the basin level.

The project will promote effective IWRM (SDG 6, target 6.5) at the transboundary, national and local levels. It will ensure the inclusion of the improved knowledge of two transboundary aquifers in the basin and climate information, produced by the co-financing activities, into the Limpopo River basin TDA, which will support the promotion of the conjunctive management of surface and groundwater resources as well as climate-resilient basin planning in the basin. The project also will support the participating countries to carry out informed policy dialogue at the basin level to address increasing water, energy, food demands in the future and how these needs can be met in an environmentally sustainable and socially inclusive manner for the basin's population. The tangible contributions to be made by GEF investment to this policy dialogue are the development of the future water resources development scenarios and the inclusion of the findings from the future development scenarios in the Limpopo TDA. The project also will support the countries to establish the ecological flow of the Limpopo River basin, understanding of which can provide environmental safeguards to the riverine ecosystems (another GEB expected from the project) as well as social safeguards to those populations whose livelihoods depend on the healthy and productive ecosystems in the basin.

Other benefits expected to accrue to the basin's population include: reduced fish kills and spread of disease due to improved water quality monitoring, which will improve livelihoods and food security; benefits for downstream agriculture and fisheries, as well as water storage and hydroelectric infrastructure, from reduced levels of sedimentation; increased levels of fisheries production and of materials necessary for weaving mats and baskets (a practice commonly done by women in the basin) through management of e-flows; and finally, increased financing of priority interventions in the Basin based on the SAP and its associated financing strategy, which will result in increased availability of water for that is essential for economic development and livelihoods improvements in the basin over the long term.

11. 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			

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.

Project Information

<i>Project Information</i>	
1. Project Title	Integrated Transboundary River Basin Management for the sustainable development of the Limpopo River Basin
2. Project Number (i.e. Atlas project ID, PIMS+)	Project ID 10182; UNDP-GEF PIMS ID 6224
3. Location (Global/Region/Country)	Botswana, Mozambique, South Africa, Zimbabwe
4. Project stage (Design or Implementation)	Prodoc
5. Date	

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the project mainstreams the human rights-based approach

Participation and inclusion: The primary objective of this project is to develop and implement a Strategic Action Programme for the Limpopo River Basin (LRB), utilizing evidence-based planning, development and management to uplift the living standards of the basin's population and conserve the basin's resources and ecosystem services.

Strong stakeholder engagement, through enhancing capacity and knowledge of relevant regional and national governmental institutions as well as relevant stakeholders at the catchment level in the four countries, is a key element of the project. Building the capacity of stakeholders to sustainably manage water and key ecosystems is one of the strategic objectives of the project. As such, strong stakeholder engagement is a key design feature of the project. From its very conception the project was developed with guidance and inputs from stakeholders at the multilateral (LIMCOM) national (the four governments and their relevant agencies) and sub-national stakeholders. Prior to the PIF development, a LIMCOM Visioning Exercise was organised in January 2019, involving national consultations in all four basin states. Basin stakeholders were mapped during the LIMCOM's visioning exercise including local communities, CSOs, Private Sectors (farmers, mining companies, etc.) active in the basin and utilizing resources of the basin. Further, UK CRIDF, USAID Resilient Water project, and GWP-Southern Africa were directly consulted during the development to ensure good synergies and complementarity across all its support to LIMCOM.

As part of the Project Preparation Grant, a Stakeholder Engagement Plan has been developed with recommendations to ensure inclusive and participatory IWRM implementation during the project's implementation. A wide range of stakeholders have been consulted and engaged in the process of defining details of project interventions during the project preparation and will be participating in the project implementation. A number of civil society organizations (including national and international NGOs) are active in the basin with activities relevant to IWRM, working in partnership with governments, local communities, and/or private sectors. They will be invited to local, national and/or regional workshops where proposed project interventions will be discussed for their inputs and comments.

Furthermore, a Gender Equality and Social Inclusion Analysis and resulting a Gender Action Plan were developed as part of the PPG phase. These documents identify some of the structural challenges that vulnerable groups, including women, youth, the elderly and people with disabilities face in the project countries and formulate recommendations to ensure that the project will contribute to the gender mainstreaming efforts in the basin by LIMCOM and its Member States. The present SESP builds on these documents and reflects their findings and recommendations.

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

The governments of the four project countries have already identified and trained Gender Focal Points in Ministries in charge of water as part of a broader SADC initiative. The participation and engagement of those Gender Focal Points during the project implementation phase will be ensured. Several components of the project also include specific activities focused on gender mainstreaming, inclusiveness and participation (output 1.1.2, output 1.1.4).

? Under output 1.1.2, the project will support institutional strengthening for transboundary river basin management and effective implementation of the Strategic Action Program (SAP) and the LIMCOM 5-year IWRM plans. The most relevant activity under this output is the mobilization of youth and incorporation of gender dynamics and social inclusion expertise for the development of extension services that promote capacity building at the grassroots level.

? Under output 1.1.4, the project will focus on empowering local institutions to develop and implement resource management decisions, with the resources and capacities (both technical and financial) needed to enact change at the local level. Most notably, the project will strengthen the capacities of catchment management structures in each Member State to enable them to work closely with LIMSEC. To further facilitate inclusive and participatory management of resources in the LRB through the GEF project, the project will implement the Stakeholder Engagement Plan developed during the PPG phase that will ensure, among other things, gender mainstreaming and women and youth empowerment and engagement in activities organized and/or coordinated by LIMCOM (under Programme 5 of the LIMCOM IWRM Plan).

The Gender Equality and Social Inclusion Action Plan includes gender-responsive measures to address gender gaps identified through the GESI Analysis. The recommendations from the GESI Action Plan are structured in 6 broad action areas:

- 1) Strengthen and or develop gender policies and related legislative instruments to facilitate the enforcement of gender strategies and actions in the LRB
- 2) Develop capacities of WRM institutions and personnel at local, national and regional levels to support coordination and cooperation on gender approaches to basin-wide water resources management.
- 3) Establish or strengthen institutional structures across all levels to promote establishment of platforms for inclusive participation of previously excluded groups including poor men, women, and persons with disabilities.
- 4) Promote collaborative research across Member States to better understand the varying and contextual gender and social needs for improved inclusiveness of water resources management and beneficiation within the basin.
- 5) Develop platforms at grassroots WRM structures to advance inclusive community participation, data gathering and sharing arrangements between the four riparian states.
- 6) Establish inclusive process and gender budgeting in water resources management processes

The GESI Action Plan will also inform the Project's Results Framework and the design of the project interventions so that the Results Framework includes effective gender-sensitive indicators.

Briefly describe in the space below how the project mainstreams sustainability and resilience

The very objective of the project is focused on sustainability and resilience by promoting sustainable development in the Limpopo River basin. The goal is to develop and implement a Strategic Action Program for the Limpopo River Basin (LRB) jointly implemented by the LIMCOM Member States that will utilize evidence-based planning and management to uplift the living standards of the basin's population and conserve the basin's resources and ecosystem services. All the project components are therefore geared to sustainability and resilience, by improving capacities (technical, operational) and participation, developing knowledge (surveys, assessments, models, scenarios) and actions (priorities, action plan, investment plan, pilots) to implement a basin wide IWRM.

By improving the capacity and knowledge of governmental institutions as well as relevant stakeholders at the catchment level in the four countries, the project will contribute to the improved management of water and key ecosystems. Such an approach aims to improve the ability of the governments in the four countries to identify key challenges and better manage shocks (for more detail, see Section IV. Results and Partnerships in the Project Document). Furthermore, pilot Sustainable Land Management activities in selected sites in the four countries aim to address site-specific challenges linked to water supply, accessibility and quality, such as soil erosion and related sedimentation. This in turn is designed to improve the resilience of the site-specific communities to potential shocks from disruptions to water supply and from degradation of ecosystem services provided by agricultural and rangeland areas as well as aquatic ecosystems (for more detail, see Component 4 under Section IV in the Project Document).

Briefly describe in the space below how the project strengthens accountability to stakeholders

As mentioned above, the project relies on strong stakeholder engagement to determine its activities. Inputs were received from stakeholders at the multilateral level (LIMCOM), national level (the four governments and their relevant agencies), and sub-national level (including local communities, CSOs, Private Sectors, farmers, mining companies, etc.). as well as international partners, from the start of the conception stage (LIMCOM Visioning Exercise, stakeholder mapping, PIF development).

As part of the Project Preparation Grant, a Stakeholder Engagement Plan (Prodoc Annex 8) has been developed with recommendations to ensure inclusive and participatory IWRM implementation during the project's implementation. The project's Grievance Mechanism, which is described on pages 41-45 of the Stakeholder Engagement Plan, is an important mechanism for accountability to stakeholders, and the project implementation team will ensure that project stakeholders and person impacted by the project are informed of the Grievance Mechanism.

A wide range of stakeholders have been consulted and engaged in the process of defining details of project interventions during the project preparation and will be participating in the project implementation. A number of civil society organizations (including national and international NGOs) are active in the basin with activities relevant to IWRM, working in partnership with governments, local communities, and/or private sectors. They will be invited to local, national and/or regional workshops where proposed project interventions will be discussed for their inputs and comments.

Part B. Identifying and Managing Social and Environmental Risks

<p>QUESTION 2: What are the Potential Social and Environmental Risks?</p> <p><i>Note: Complete SESP Attachment 1 before responding to Question 2.</i></p>	<p>QUESTION 3: What is the level of significance of the potential social and environmental risks?</p> <p><i>Note: Respond to Questions 4 and 5 below before proceeding to Question 5</i></p>			<p>QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High</p>
<p>Risk Description <i>(broken down by event, cause, impact)</i></p>	<p>Impact and Likelihood <i>(1-5)</i></p>	<p>Significance <i>(Low, Moderate Substantial, High)</i></p>	<p>Comments (optional)</p>	<p>Description of assessment and management measures for risks rated as Moderate, Substantial or High</p>

<p>Risk 1: There is a risk that stakeholders, in particular marginalized groups, are excluded from project activities, including those that focus on building capacities of catchment management structures as well as from participation in and potential benefits resulting from Sustainable Land Management (SLM) pilots.</p> <p>Overarching Principle P.3 P. 6, P.13</p>	<p>I = 3</p> <p>L = 3</p>	<p>Moderate</p>	<p>Existing customs and traditions have a significant influence over access to knowledge and participation in decision making. The Gender Equality and Social Inclusion Analysis identifies women and vulnerable groups (including people living with disabilities) as most at risk of exclusion from the benefits of participation in project activities and therefore most in need of appropriate consultation and capacity building.</p> <p>In addition, women and vulnerable groups generally lack knowledge and self-confidence to articulate their own issues. These barriers are especially evident with elderly women and people living with disability, who have not attended formal education.</p> <p>There are currently no special considerations to ensure that youth are represented, and their voices are heard in the planning and management of water resources at the Basin scale. Stakeholder feedback has generally reported that the youth lack interest in land management (farming etc.)</p>	<p>A Gender Equality and Social Inclusion Analysis was conducted as part of the PPG phase to better understand this risk and to identify specific mitigation measures in relation to women, youth, people with disabilities, and other vulnerable groups in a Gender Equality and Social Inclusion (GESI) Action Plan (see Annex 9). The implementation of the Plan will need to be ensured during project implementation</p>
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<p>Risk 2: There is a risk that, in the absence of specific measures to ensure the contrary, women may be discriminated against/excluded from participating in or benefiting from the activities of this project, including capacity-building and the SLM site activities.</p> <p>Overarching Principle P.10, P.11</p>	<p>I = 3</p> <p>L = 3</p>	<p>Moderate</p>	<p>Gender equality and mainstreaming must be included in the project design or there is a risk that women's views and concerns will not be integrated into the project and that women will not benefit from the project interventions in an equal manner. This is particularly important given that:</p> <p>? Institutions related to the management of water are gender biased. While women are generally responsible for ensuring household water supply to meet domestic needs. Their representation in water resources management governing bodies is relatively low.</p> <p>? Despite the existence of policies and legislation to ensure participation and representation of women, there is very poor enforcement mechanisms in place as a starting point</p> <p>? Even where women are represented in water management structures, decisions in those structures still tend to be taken by men</p> <p>? Government gender balance quota policies usually apply to political appointments at higher levels of government, rather than governing bodies at the catchment or sub catchment levels.</p> <p>? Despite a higher proportion of women being engaged in farming and reforms have been made to remove discriminatory legal provisions relating to land ownership and use in the project countries, discriminatory practices under customary law remain, with land traditionally transferred</p>	<p>As noted above, a Gender Equality and Social Inclusion Analysis was conducted as part of the PPG phase to better understand this risk and to identify specific mitigation measures in a Gender Equality and Social Inclusion (GESI) Action Plan (see Annex 9). The implementation of the Plan will need to be ensured during project implementation.</p>
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<p>Risk 3: There is a risk that, in the absence of mitigation measures, stakeholders whose livelihoods rely on direct use of the water basin may be negatively affected (economic displacement e.g., loss of assets or access to resources due to access restrictions) due to pilot project activities.</p> <p>Standard 5 q (2) and q (4)</p>	<p>I = 4 L = 2</p>	<p>Moderate</p>	<p>The SLM pilot activities described below are indicative and will be confirmed and developed in more detail during project inception[1]</p> <p>Botswana: Possible SLM activities for Mogobane SLM pilot site</p> <p>? Land reclamation / erosion control (e.g., installation of gabions; use of stones)</p> <p>? Conservation and/or restoration of overgrazed pastures through better communal grazing land management practices (especially during the dry season); demarcation of communal grazing lands by erecting fences to control and manage grazing; and communal agreements to control stock numbers.</p> <p>Mozambique: Possible SLM activities for Massingir SLM pilot site:</p> <p>? Capacity building of local communities (through rural extension services) in sustainable land management practices, including: 1) conservation agriculture practices; 2) agroforestry; 3) planting of selected tree species to halt soil erosion (e.g., <i>gully erosion</i>) in identified critical spots around selected communities; and 4) establishment and maintenance of a forested buffer zone all around the Massingir reservoir</p> <p>Additional potential activities identified include:</p>	<p>Stakeholders consulted during initial pilot site discussions generally emphasized the importance of timely consultation, provision of appropriate information and inclusive capacity building to ensure understanding and buy-in..</p> <p>Specific recommendations for the development of a communication plan and consultation measures that addresses varying needs by men, women, persons with disabilities and other vulnerable groups are included in the GESI and should be implemented prior to the implementation of any SLM pilot activities.</p> <p>Given the current general nature of proposed SLM activities, further site-specific assessments will be required in the inception phase to determine the site-specific risks and necessary mitigation measures.</p> <p>-</p> <p>All SLM pilot site activities will have to be screened prior to final selection and subsequent implementation using the social and environmental risk screening checklist contained in the present document.</p> <p>? The screening checklist will need to be filled out by the project proponent</p> <p>? Where the project proponent has answered 'yes' to any of the questions in the checklist, Part B of the SESP (describing the risk, impact, likelihood and significance) will need to be filled out and shared with the Project Manager and UNDP for review/clearance and confirmation of any necessary additional site-specific assessments and the most appropriate mitigation measures.</p> <p>? Such site-specific assessments (specific to the identified potential</p>
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<p>Risk 4: There is a risk that, in the absence of mitigation measures, some SLM pilot activities could be implemented within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g., nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities.</p>	<p>I= 3 L=2</p>	<p>Moderate</p>	<p>Protected Areas (term used as a general description of natural area that has a protected status under national law) in or near SLM pilot sites:</p> <p>Botswana (SLM pilot site Mogobane dam in the area Southeast District). Relevant natural sites:</p> <p>? Mokolodi nature reserve</p> <p>? Manyelanong game reserve</p> <p>Mozambique (SLM pilot site area, Massingir dam area, Gaza Province). Relevant natural sites:</p> <p>? A portion of the Limpopo National Park (2,100 Km2) is in the Massingir District, along the northern part of the Dam.[3]</p> <p>? Several private nature-based tourism sites are in the area, including game farms (Xinguile Game Park; Fazenda do Massingir Safari and Twin City) and a community driven tourism venture at the Covane Lodge.[4]</p> <p>South Africa (SLM pilot area Molemane, A31C catchment of the Marico sub-basin). Relevant natural sites:</p> <p>? Molemane nature reserve[5]</p>	<p>As noted above, all SLM pilot site activities will have to be screened prior to final selection and subsequent implementation using the social and environmental risk screening checklist contained in the present document.</p> <p>Prior to the selection of any SLM activities, the site-specific screening (outlined above) will be carried out and shared with the project manager and UNDP for review/clearance. Where a proposed SLM activity could be implemented in or adjacent to critical habitats and/or environmentally sensitive areas and the risks have been identified and their impact, likelihood and significance have been estimated, and despite the cost of mitigation the project proponent wishes to move forward with them, then a site-specific Environmental and Social Management Plan would be required and would need to be disclosed and cleared prior to implementation of the pilot activities.</p>
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<p>Risk 5: There is a risk that, in the absence of mitigation measures, some SLM pilot activities could cause changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods</p> <p>Standard 1 q (3) q(8)</p>	<p>I= 3 L= 1</p>	<p>Moderate</p>	<p>Specific activities related to these potential risks include:</p> <p>? Afforestation</p> <p>? Establishment of forest plantations for charcoal production</p>	<p>. Activities such as afforestation and establishment of forest plantations for charcoal production carry particularly high risks of adverse impacts on habitats, ecosystems, and/or livelihoods. Prior to the selection of any such activities, the site-specific screening (outlined above) will be carried out and shared with the project manager and UNDP for review/clearance</p> <p>If, once the risks have been identified and their impact, likelihood and significance have been estimated, and despite the cost of mitigation the project proponent wishes to move forward with them, then a site-specific Environmental and Social Management Plan would be required and would need to be disclosed and cleared prior to implementation of the pilot activities.</p>
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<p>Risk 6: There is a risk that, in the absence of mitigation measures, some SLM pilot activities could include the use of pesticides that may have a negative effect on the environment or human health</p> <p>Standard 8 q (5)</p>	<p>I= 3 L= 1</p>	<p>Moderate</p>	<p>Specific activities related to these potential risks include:</p> <p>? Management of invasive alien species (populus reeds, poplars) that are invading the river and are affecting river flow</p>	<p>Due to the potential negative impact linked to the mentioned activity and the limited funds available to mitigate these risks, the project will seek to avoid SLM pilot activities that employ biological and chemical controls of invasive alien species.</p> <p>If after having considered such approaches recourse to pesticide use is deemed necessary, a safe, effective and environmentally sound pest management approach in accordance with the WHO/FAO International Code of Conduct on Pesticide Management should be adopted.[6] An Integrated Pest Management (IPM) approach should be utilized to prevent unacceptable levels of pest damage. A Pest Management Plan should be developed, to demonstrate how IPM will be promoted to reduce reliance on pesticides and to describes measures to minimize risks of pesticide use.</p>
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<p>Risk 7: There is a risk that in the absence of mitigation measures, some SLM pilot activities could be implemented in areas adjacent to or within a Cultural Heritage site, or include alterations to landscapes and natural features with cultural significance</p> <p>Standard 4 q (1) and (4)</p>	<p>I=3 L=1</p>	<p>Low</p>	<p>Due to the remaining uncertainty surrounding the specific locations of the pilot sites, the risk of SLM activities being carried out adjacent to or potentially having an impact on sites with cultural significance needs to be mentioned.</p>	<p>All SLM pilot site activities will have to be screened prior to final selection and subsequent implementation following the procedure outlined above.</p> <p>As such, any activities that could be carried out adjacent to or potentially have an impact on sites with cultural significance will be identified prior to clearance. Due to the limited funds available to mitigate these risks if identified, the project will seek to avoid SLM pilot activities in such locations.</p> <p>If such activities are determined to be justified due to the potential benefits, site-specific assessment(s) and management plan(s) will need to be developed.</p>
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<p>Risk 8. The project activities are located in areas that may experience climate and disaster hazards, such as flooding.</p>	<p>I=2 L=4</p>	<p>Moderate</p>	<p>While project activities are located in areas that may be susceptible to flooding, it is not anticipated that project activities themselves will exacerbate, accelerate or increase exposure to climate and disaster hazards. Therefore, the ?Impact? of potential project-induced hazard risk is rated ?Minor? as there are minor to negligible anticipated adverse hazard related impacts on communities and the environment as a result of project activities, particularly considering that the project does not involve infrastructure or physical interventions that could increase hazard-risk in the event of a flood. However, because the Likelihood of flooding is high in the context, a related risk is also noted in the Project Risk Log (see Risk 8) to consider the effectiveness and delivery of the project in achieving its objectives related to the effects of climate change.</p>	<p>Potential site-specific climate and disaster hazards will be screened through the SLM pilot screenings to identify if any activities proposed at a site may exacerbate these risks or present hazards (including in the event of a flood), in which case those activities would be avoided where possible. In cases where it is deemed such activities are necessary for the objectives of the project, site-specific risk management and mitigation measures would be developed and in place prior to implementation of the pilot.</p>
	<p>QUESTION 4: What is the overall project risk categorization?</p>			
	<p><i>Low Risk</i></p>	<p>?</p>		

	<i>Moderate Risk</i>	X	<p>Due to the current general nature and wide range of possible SLM pilot activities, the project risk categorization is 'Moderate'?</p> <p>A screening procedure for pilot projects has been outlined above and is included in the Prodoc. This procedure is designed so as to identify, in particular, any risk of physical or economic displacement linked to possible SLM pilot activities during the activity design stage. Given the low budget for SLM pilot activities, pilot activities that carry such risks are avoided.</p> <p>If such activities are nevertheless chosen or other social and environmental risks identified, relevant site-specific assessment(s) and management plan(s) will need to be developed, consulted, disclosed and cleared prior to implementation of the pilot activities.</p>		
	<i>Substantial Risk</i>	?			
	<i>High Risk</i>	?			
	QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)				
	Question only required for Moderate, Substantial and High-Risk projects				
	<i><u>Is assessment required? (check if 'yes?')</u></i>	-			<i>Status? (completed, planned)</i>

	<i>if yes, indicate overall type and status</i>		X	Targeted assessment(s)	The need for further site-specific assessments will be determined through subsequent screening of proposed pilot projects.
			?	ESIA (Environmental and Social Impact Assessment)	
			?	SESA (Strategic Environmental and Social Assessment)	
	<i>Are management plans required? (check if ?yes)</i>	X			
	<i>If yes, indicate overall type</i>		X	Targeted management plans (e.g., Gender Action Plan, Emergency Response Plan, Waste Management Plan, others)	The need for site-specific ESMPs will be determined through subsequent screening of proposed pilot projects.
			X	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	The need for site-specific ESMPs will be determined through subsequent screening of proposed pilot projects.

		?	ESMF (Environmental and Social Management Framework)	
<i>Based on identified <u>risks</u>, which Principles/Project-level Standards triggered?</i>			Comments (not required)	
<i>Overarching Principle: Leave No One Behind</i>				
<i>Human Rights</i>	X		See comment on risk 1	
<i>Gender Equality and Women's Empowerment</i>	X		See comment on risk 2	
<i>Accountability</i>	X		See comment on risk 1	
<i>1. Biodiversity Conservation and Sustainable Natural Resource Management</i>	X		See comment on risk 4	
<i>2. Climate Change and Disaster Risks</i>	?			
<i>3. Community Health, Safety and Security</i>	?			
<i>4. Cultural Heritage</i>	?			
<i>5. Displacement and Resettlement</i>	X		See comment on risk 3	
<i>6. Indigenous Peoples</i>	?		Following due diligence by the SES consultant, no nationally recognized Indigenous Peoples were identified in any of the selected pilot sites. This includes Indigenous Peoples as defined under international law (in particular ILO Convention N°169 and UNDRIP) and UNDP's SES. While impacts on indigenous peoples are not anticipated, site specific screenings for Component 4 will confirm if indigenous peoples may be affected and if so, to ensure the requirements of Standard 6 are met.	
<i>7. Labour and Working Conditions</i>	?			

	8. Pollution Prevention and Resource Efficiency	X	See comment on risk 5
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[1] Information drawn from the GESI Analysis and Action plan, the SLM pilot site workshop reports and safeguard assessment tools for Botswana, Mozambique, South Africa, Zimbabwe and the Annex on project SLM pilot sites.

[2] See in general https://info.undp.org/sites/bpps/SES_Toolkit/Pages/Homepage.aspx and specifically in relation to assessment and management of SES risks and impacts https://info.undp.org/sites/bpps/SES_Toolkit/SitePages/Policy%20Delivery.aspx

[3] Mozambique SLM site report p. 8

[4] Ibid

[5] South Africa SLM site report p.1

[6] FAO/WHO, *The International Code of Conduct on Pesticide Management* (2014).

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
SESP_UNDP PIMS 6224_LIMCOM TDA SAP_11_ June 2021	CEO Endorsement 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).

Annex A: Project Results Framework[\[1\]](#)

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Project Objective: To achieve integrated, cross-sectoral, ecosystem-based management of the Limpopo River to uplift the living standards of the basin's population and conserve the basin's resources and ecosystem services	<u>Indicator 1 (GEF7 core indicator 11):</u> # of direct project beneficiaries disaggregated by gender (individual people)	0 persons directly benefitting from project activities	400 persons directly benefitting from project activities: ? Men: 240 ? Women: 160	800 persons directly benefitting from project activities: ? Men: 480 ? Women: 320
	<u>Indicator 2 (GEF7 core indicator 11):</u> # of indirect project beneficiaries disaggregated by gender (individual people)	0 persons indirectly benefitting from project activities	5,700,000 persons indirectly benefitting from project activities: ? Men: 2,565,000 ? Women: 3,135,000	11,400,000 persons indirectly benefitting from project activities: ? Men: 5,130,000 ? Women: 6,270,000
	<u>Indicator 3 (GEF7 Core Indicator 4):</u> Area of land restored (Hectares)	0 hectares of land restored at project pilot sites	Land restoration plans finalized for at least 4 pilot sites	1,600 hectares of land being actively restored at 4 pilot sites
	<u>Indicator 4 (GEF7 Core Indicator 5):</u> Area of landscapes under improved practices (excluding protected areas) (Hectares)	0 hectares of land under improved practices at project pilot sites	At least 270 ha of land are under improved practices at project pilot sites	At least 540 hectares of land are under improved practices at project pilot sites
	<u>Indicator 5 (GEF7 Core Indicator 7):</u> Number of shared water ecosystems under new or improved cooperative management (7.1 Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP))	No TDA or SAP	TDA finalized; SAP submitted for review	SAP completed and endorsed by at least one Minister from each Member State
Project Component 1	Capacity Building of LIMCOM & its Member States for joint planning and the basin-wide SAP and IWRM implementation			

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Project Outcome 1.1: The capacity of LIMSEC and LIMCOM strengthened to enable improved basin-wide joint planning, development and management of water resources, and IWRM implementation	Indicator 6: A fully operational LIMCOM that is able to coordinate initiatives, institutions and International Cooperating Partners (ICPs) in a harmonized manner and promote IWRM principles in the Limpopo River Basin.	LIMCOM has established a Secretariat (LIMSEC) with 4 full-time staff. The LIMCOM Council and Technical Task Team (TTT) both meet on a regular basis. LIMSEC has no information management system to share available data and information; lacks critical competencies in finance, administration, and communications; and lacks internal governance policies and regulations necessary for any RBO	Meetings & working sessions of the LIMCOM Council and Technical Task Teams undertaken and documented in a timely manner; finance & administration manager and communications & information management specialist hired and associated managerial systems fully functional; LIMCOM internal governance policy & regulatory documents developed and approved by Council and operationalized	LIMCOM sufficiently strengthened to coordinate its intervention strategy to effectively promote implementation of IWRM principles in the basin, and supported by a LIMCOM Sustainability Plan to ensure long-term financing
	Indicator 7: Data sharing protocol to support joint planning and management and address three core challenges for the Limpopo River Basin (disasters; water quality problems; water scarcity)	There is no established mechanism for sharing information throughout the basin and across sectors, or for analysing data in an integrated manner	A draft LIMCOM Data Sharing Protocol fully developed and endorsed by all Member States	The approved LIMCOM Data Sharing Protocol in place and being adhered to by all Member States

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
	Indicator 8: National Stakeholder Coordination Committees (NASCs) in each Member State, and a Basin-wide Stakeholder Committee (BASC), established to guide SAP and NAP development and negotiation and to make basin management decisions based on those documents	No national or regional structures exist to coordinate multi-sectorial stakeholders on issues specific to the Limpopo River Basin	4 NASCs and the BASC operating and leading the SAP and NAP development and negotiation processes, with women constituting at least 40% of committee members	At least 4 recommendations on stakeholder priorities for management of resources in the LRB made annually by each NASC and the BASC to LIMCOM
Outputs to achieve Outcome 1	1.1.1 Technical Capacity of LIMCOM and Member States strengthened 1.1.2 Institutional Capacity at LIMCOM and its member states strengthened 1.1.3 Operational Capacity of LIMCOM Secretariat strengthened 1.1.4 Inclusive and participatory IWRM practices supported			
Project Component 2	Filling critical knowledge gaps to support joint planning and future development scenario analysis			
Outcome 2.1: Critical data and information gaps filled to enable science-based planning, development and management for the Limpopo River Basin	Indicator 9: Critical knowledge gaps filled in the following areas to support joint planning and analysis of the Limpopo River Basin: ? Ecological water requirements ? Sediment transport ? Alluvial aquifer abstraction practices ? Future water resources development	? Ecological water requirements: Limpopo Monograph identified 12 inland freshwater sites & 8 estuarine sites ? Sediment Transport: Data very limited (only available for Mzingwane catchment in Zimbabwe, Notwane sub-catchment in Botswana, and some areas in South Africa) ? Alluvial aquifer abstraction: Very limited data for the LRB ? Future water resources: Limpopo Monograph has data on national levels of water use	At least two technical reports completed: ? Joint Basin Survey on river health indicators ? Sediment transport monitoring training manual for the LRB	Four technical reports completed providing the status on basin: ? Ecological water requirements ? Sedimentation Transport Monitoring and Modelling ? Assessment of alluvial aquifer abstraction practices ? Future Water Resources development scenario

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Outputs to achieve Outcome 2.1	2.1.1 Joint Basin Survey conducted for key river health indicators 2.1.2 Ecological water requirements (e-flow) established to support the future water resources planning in a sustainable manner 2.1.3 Sedimentation Transport Monitoring and Modelling capacity strengthened 2.1.4 Assessment of ecological impacts of alluvial aquifer abstraction practices 2.1.5 Review of policies, laws / regulations and governance relevant to IWRM within the Limpopo Basin 2.1.6 Future Water Resources development scenario analysis			
Outcome 2.2: Basin-wide information and knowledge management tools used to create user-friendly products linking science to policy for decision makers	Indicator 10: A comprehensive Transboundary Diagnostic Analysis (TDA) to enable LIMCOM and its parties to target investments at root and underlying causes and to form a solid scientific base for the SAP (IWRM plan).	The Limpopo River Basin Monograph Study (2013), which has identified a number of knowledge gaps to be filled, some of which will be addressed by the GEF project	TDA approved and widely disseminated to stakeholders, civil society, governments, other basin wide projects, and the International Cooperating Partners	TDA and critical basin wide information resources (Joint Basin Survey, E-flows data, etc.) inputted into functioning LIMIS
	Indicator 11: Policy briefs that connect science to management and policy discussions	No policy briefs to support science-based management and policy	At least 1 policy brief completed and shared with policy makers and other stakeholders	At least a total of 1 additional policy brief completed and shared with policy makers and other stakeholders by end of project
Outputs to achieve Outcome 2.2	2.2.1 Transboundary Diagnostic Analysis of the Limpopo River Basin completed 2.2.2 LIMCOM Environmental Monitoring Framework strengthened 2.2.3 All new data/knowledge fed into LIMIS 2.2.4 Policy Briefs produced that connect science to management and policy discussions			
Project Component 3	Informed Strategic Planning and Decision Making to implement the basin-wide IWRM (Science-to-Governance)			
Outcome 3.1: Transboundary and national priorities agreed and endorsed as SAP and NAPs to guide future development and investment	Indicator 12: National Action Plans (NAPs) developed congruently in the basin states	0 NAPs exist in the Limpopo River Basin	Baseline information for the development of NAPs collected in all Member States, and harmonised structure of NAP final document developed and agreed upon	4 NAPs completed and approved by appropriate national authorities

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
	Indicator 13: The LIMCOM SAP developed in consultative and cross-sectorial process with effective engagement of basin stakeholders	No SAP exists for the LRB	Baseline information for SAP development collected and collated and structure of SAP document formulated and agreed upon with strong cross-sectorial consultation within each Member States and across LRB Member States	Final SAP document developed through strong cross-sectorial consultation and endorsed at Ministerial level within and across all Member States
Outputs to achieve Outcome 3.1	3.1.1 Long-term Strategic Action Programme (SAP) drafted, and 5-year Integrated Water Resources Management (IWRM) plans drafted and approved by LIMCOM 3.1.2 Four National Action Plans (one for each Member State), accompanying SAP developed 3.1.3 SAP M&E framework developed based on the Theory of Change 3.1.4 SAP Investment Plan developed 3.1.5 SAP for the Limpopo River Basin, together with NAPs, endorsed by at least one Minister from each Member State 3.1.6. A roundtable organized among investors and partners to support SAP implementation			
Project Component 4	The IWRM Plan implementation pilots			
Outcome 4.1: Participatory IWRM practices demonstrated to address sedimentation issues	Indicator 14: Percentage of women participating in sustainable land management activities at the pilot sites	Baseline will be completed during year 1	50% increase in the number of smallholder female agricultural producers involved in SLM activities at pilot sites	100% increase in the number of smallholder female agricultural producers involved in SLM activities at pilot sites
	Indicator 15: Number of farms with improved conditions due to the adoption of sustainable land management practices	0 farms at project pilot sites implementing SLM best practices (baseline information on which farms are either owned or headed by women will be established at project start and tracked throughout the project)	135 farms (average 2 ha each) at project pilot sites implementing SLM best practices	270 farms (average 2 ha each) at project pilot sites implementing SLM best practices

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Outputs to achieve Outcome 4.1	4.1.1 - Community-based Sustainable Land Management demonstrations piloted to reduce sedimentation and to improve land productivity 4.1.2 - Sustainable Land Management demonstration(s) piloted in partnership with private sector to reduce sedimentation and to improve economic productivity			
Project Component 5	Knowledge exchange and information sharing for replication and upscaling			
Outcome 5.1: Replication and upscaling supported through exchange of knowledge, best practices and lessons learned	Indicator 16: Formal exchange visits by LIMCOM representatives to other River Basin Organizations and regional institutions in southern Africa to share knowledge and facilitate replication of project lesson learnt	River Basin Organizations and regional institutions in southern Africa hold a bi-annual RBO workshop and participate in SADC Water Resources Technical Committee (WRTC) meetings and SADC Water Dialogue meetings; some also participate in annual Stockholm World Water Week (SWWW)	? At least 2 official exchange visits with other RBOs and relevant regional institutions undertaken ? Participation by LIMCOM representatives in at least 2 regional and global events (e.g. SWWW; GEF IW Conference)	? At least 4 additional official exchange visits with other RBOs and relevant regional institutions ? Participation by LIMCOM representatives in at least 2 additional regional and global events
	Indicator 17: # of knowledge products disseminated to relevant national, regional and global stakeholders	Brochures dealing with floods in the Limpopo River Basin have been developed and disseminated	At least 5 knowledge products produced and shared	At least 10 additional knowledge products produced and shared
	Indicator 18: Active participation in the GEF IW:LEARN program ? Participation in GEF International Waters Conference (IWC) ? Project information uploaded to LIMCOM website (following IW:LEARN guidance) ? Sharing of GEF IW Experience Notes	? No current participation by LRB stakeholders ? Existing LIMCOM website is not linked to IW:LEARN website ? 0 experience notes produced	? Participation by LIMCOM / project staff in one IWC ? LIMCOM website linked to IW:LEARN website ? 1 experience note produced	? Participation by LIMCOM / project staff in a 2nd IWC ? All relevant project reports / documents uploaded to LIMCOM website ? 1 experience note produced

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Outputs to achieve Outcome 5.1	5.1.1 - Exchanges with other RBOs and relevant regional institutions to support the effective and efficient delivery of Outcomes 1-4 and the source-to-sea approach 5.1.2 - Project results and knowledge products developed and disseminated nationally, regionally and globally 5.1.3 - Active contribution to the learning and knowledge sharing activities and events organized by the GEF IW:LEARN program 5.1.4 - Timely Project M&E to inform adaptive management for successful delivery of project results, capturing best practices and lessons learned, including MTR and TE			

[1] The targets for project pilot site activities (indicators 1, 3, 4, and 15) may need further refinement during the project inception phase due to the limitations on site visits / consultations during the PPG phase because of COVID-19 travel restrictions in the four target countries

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).

GEFSec Review

GEFSec Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
Co-Financing: By ENDORSEMENT, please note: ? Co-finance amounts need to be made transparent and a table explaining how the co-finance is aligned with which project component be provided. ? Letters of co-finance need to all be in English (if originals are not in English, an informal agency provided translation suffices along with the original) ? Letters of co-finance need to spell out what the co-finance is made up off and how it aligns with the project and project PDO	The requested table showing alignment with project components has been provided. All co-financing letters are in English and describe the co-financing commitments and their support for the project.	UNDP Prodoc Section VIII (Financial Planning and Management)

GEFSec Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>Core Indicators</p> <p>? May 2, 2019: While the overall core indicator in table F is correct (one basin/shared water system), sub-indicator "Level of Transboundary Diagnostic Analysis and Strategic Action Program formulation and implementation" is still regarded low and puts LIMCOM at even level with a basin with no prior TDA/SAP type assessments. Please reconsider BY ENDORSEMENT.</p> <p>? Further, at endorsement: please substantiate (and update) the estimate of <i>direct</i> beneficiaries (incl. sex aggregation of indicators) - indicator 11.</p>	<p>All of the scores under Core Indicator 7 are the same at CEO ER as at PIF approval, since by definition no progress could be made on these major outputs during PPG. Based on the wording of the questions, all of the responses must be scored at 1 for this project, except 7.2, which remains a 3 with ambition for a 4 by project end.</p> <p>The estimate of direct beneficiaries has been updated and explained.</p>	<p>UNDP Prodoc Annex 12 (GEF Core Indicators)</p>
<p>Baseline Scenario</p> <p>The baseline on regional level is well articulated and some of the most relevant investments on national level mentioned throughout the project document. During PPG PHASE, please expand on a more detailed analysis of current national level investment (either on-going or about to become active) with the purpose to coordinate and seek synergies with project activities as relevant.</p>	<p>The baseline scenario has been revised and expanded, and an annex has been added with significant details on current national level investments.</p>	<p>UNDP Prodoc (Section IV ? Partnerships; and Annex 16 ? National Baseline Programs)</p>

GEFSec Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>Alternative Scenario ? Specific Comments By Endorsement:</p> <p>2. Please consider to not create a proliferation of plans and using GEF terminology necessarily unless requested by the countries. SAPs should be implementation oriented and in that are usually not so different from the current IWRM which does prioritize actions. The current draft is missing though targets for some of the measures e.g. those in terms of stress reduction (where applicable) and as described in the agency response could therefore be enhanced. Please during project design/ppg phase consider if the long-term strategic plan and next 5 year IWRM plan (up to 2028/29) can be merged.</p> <p>6. Stakeholder engagement plan and linked communications plan: Please clarify further by ENDORSEMENT how these plans support project activities.</p>	<p>As detailed in Output 3.1.1, the Strategic Action Programme (SAP) drafted for the Limpopo River Basin (LRB) will provide the overall strategy and priority setting for management of the LRB over a 20-25 year timeframe. The SAP will build on important previous processes, including the LIMCOM IWRM Plans and the LRB visioning exercise finalized in 2019. In addition, LIMSEC with guidance from the Member States will draft the next Integrated Water Resources Management Plan (2023-2027) for the LRB. LIMCOM's IWRM Plans are operational documents with a short-term (5-year) timeframe. The LIMCOM Member States wish to continue to develop and use the IWRM Plans to guide shorter-term priority setting, planning and management oversight within the context of the overall SAP.</p> <p>Additional explanations of the links between the stakeholder engagement plan and the LIMCOM Communications Plan / Strategy with other project activities have been described under Output 1.1.4 and in the Stakeholder Engagement Plan Annex.</p>	<p>UNDP Prodoc (Section IV - Alternative Scenario)</p> <p>UNDP Prodoc (Annex 8 ? Stakeholder Engagement Plan)</p>
<p>Alternative Scenario ? General Comments By Endorsement:</p> <p>? Please simplify the formulation of the project development objective (PDO). The essence of it is valid, but the wording should be tightened to express the objective of what the project aims to achieve and revised, more concise wording on 'how to get there'</p>	<p>Based on stakeholder consultations during the PPG phase, the project objective has been revised and simplified; it now states 'to achieve integrated, cross-sectoral, ecosystem-based management of the Limpopo River to uplift the living standards of the basin's population and conserve the basin's resources and ecosystem services'</p>	<p>UNDP Prodoc (Section IV - Alternative Scenario)</p>

GEFSec Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>? Please strengthen the formulation/wording of the project outcomes 2 and 3 in line with the project's theory of change. In these cases the project outputs and activities are quite tangible and the outcomes to be achieved with these could be worded much more clearly and strongly. By endorsement this needs revision and the results framework provide transparent and quantifiable indicators for these outcomes (e.g. "Outcome 2: Priority knowledge gaps filled to update the monograph" is a weak wording to capture the component outcomes: a Joint Basin Survey; Establishment of e-flows; Sediment Transport modeling; Assessment of ecological impact of small scale groundwater withdrawals (in select areas); a Governance review; and Future Development Scenario analysis).</p>	<p>Project Outcomes 2 and 3 have been revised and are aligned with the project's theory of change. In addition, indicators have been developed for all project outcomes in the Results Framework.</p>	<p>UNDP Prodoc (Section IV - Alternative Scenario; and Section V ? Project Results Framework)</p>
<p>? Please add in the project document that the SAP/IWRM plan needs to be signed by at least one minister from each country.</p>	<p>The following text has been added under Output 3.1.5: ?The project will ensure that the SAP and associated NAPs are formally endorsed by at least one Minister from each Member State.?</p>	<p>UNDP Prodoc (Section IV - Alternative Scenario)</p>
<p>? Please provide sufficient detail of the project management costs, incl. such as e.g. GWP execution costs, staff costs (partial staff equivalent and/or fulltime) involved in project management, and office/PMU running costs.</p>	<p>Project management costs have been detailed in the project budget</p>	<p>UNDP Prodoc (Section IX ? Total Budget and Workplan)</p>
<p>? JBS indicators - please consider to be informed by other on-going efforts in the choice of indicators to make this effort most useful on national and regional level, by e.g. striving to align indicators with national requirements, with SADC-wide reporting and assessment needs, and synergies with e.g. SDG and other MEA reporting efforts.</p>	<p>The following text has been added under Output 2.1.1: ?The river health indicators will be aligned with national requirements, with SADC-wide reporting and assessment procedures, and with the UN SDGs and other Multilateral Environmental Agreement reporting efforts. The indicators will be similar in scope to those utilized in the ORASECOM JBS programme?.</p>	<p>UNDP Prodoc (Section IV - Alternative Scenario)</p>
<p>? Update the Theory of Change to provide formulations of outcomes in the TOC to align with quantifiable indicators in the project results framework in the prodoc/endorsement request</p>	<p>The Theory of Change has been updated and is aligned with the indicators in the project results framework</p>	<p>UNDP Prodoc (Section III ? Strategy)</p>

GEFSec Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>? Design into SLM pilots sufficient efforts for quantification in order to support e.g. assessment of costs and benefits, form a base for cost-effective up scaling, and to inform the design and stakeholder engagement in possible PES schemes.</p>	<p>Text under Output 4.1.1 describing the SLM pilots states that they are partially intended to investigate the viability of establishing of Payment for Ecosystem Services (PES) schemes, and that the project will quantify and elaborate on the extent to which reduced sediment flows might generate benefits in terms of improved ecosystem services; build a business case justifying cost-effectiveness to motivate upscaling & broader replication across the entire river basin; and inform the design of activities and stakeholder engagement processes for possible PES schemes?</p>	<p>UNDP Prodoc (Section IV - Alternative Scenario)</p>
<p>? Seek not only exchanges with GEF/UNDP implemented transboundary river basin activities and RBOs but also others, such as the Pungwe, Save, Busi basins and involving some of the same national agencies and stakeholders. The PuBuSa GEF project will be endorsed shortly.</p>	<p>Text under Output 5.1.1 explains that</p> <p>The project will seek exchanges with other RBOs in the region, including OKACOM and ORASECOM, including seeking to learn from the experience of ORASECOM in working with the Benguela Current Commission (BCC) in developing a ?source-to-sea? approach for river basin management, and that is also will seek to promote knowledge sharing and collaborative actions between LIMCOM and the Nairobi Convention for the Western Indian Ocean for the transitional waters of the Limpopo River Basin, and to collaborate with the IUCN-GEF project</p> <p>?Management of competing water uses and associated ecosystems in Pungwe, Busi and Save Basins?, whose objective is to strengthen transboundary cooperation and management of water resources and associated ecosystems for improved water security, climate change resilience and sustainable livelihoods in the shared Pungwe-Busi-Save basins (Zimbabwe and Mozambique). The PuBuSa project involves many of the same national agencies and stakeholders in Zimbabwe and Mozambique as the proposed project for the Limpopo River Basin, and mechanisms for sharing of information, strategies and best practices between the two projects will be pursued at project inception.</p>	<p>UNDP Prodoc (Section IV - Alternative Scenario)</p>

GEFSec Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>Coordination</p> <p>As mentioned earlier, during PPG further potential synergies with GEF and non-GEF supported TA and investments on national and sub-national should be explored (e.g. when designing the pilot interventions).</p>	<p>As noted above, the baseline scenario has been revised and expanded, and an annex has been added with significant details on current national level investments.</p>	<p>UNDP Prodoc (Section IV ? Partnerships; and Annex 16 ? National Baseline Programs)</p>

GEF Council Review

GEF Council Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
Comments from the United Kingdom		
<p>It is really important to stress that implementation needs to be done in partnership with other donors ? as both UK and USAID active in the basin. This is particularly important when working with LIMCOM that doesn't have a lot of capacity</p>	<p>During project development, extensive consultations were carried out with USAID and UK-CRIDE, and detailed plans for collaboration with those programs have been developed (see Partnerships and Alternative Scenario sections in the Prodoc for details). In addition, the proposed project will strengthen LIMCOM's capacity through activities under Component 1 so that all future initiatives will be coordinated with on-going initiatives effectively for the maximum synergies and to avoid duplication. LIMCOM is also in the process of establishing an International Cooperating Partners (ICP) Forum to facilitate strategic cooperation with international development partners active within the LRB. Finally, under Output 1.1.3, the project will support the development and implementation of a LIMSEC Financial Sustainability Plan, which will outline the LIMSEC's financial resource needs and propose long-term financing strategies to sustain LIMSEC's expanded systems and staff. The plan will seek to utilize lessons learnt from other similar efforts in the region, including the establishment of the Cubango-Okavango Fund under OKACOM and the Buzi, Pungwe and Save financial sustainability plan. The process of developing the Financial Sustainability Plan will include an on-going dialogue with member countries regarding their contributions to LIMCOM to support its core costs over the long-term. In addition, the project will work with IW:LEARN to establish linkages with more 'mature' GEF financed and in some cases GEF established RBOs to learn from and apply their experiences in establishing sustainable financing schemes for their Commissions and Secretariats.</p>	<p>UNDP Prodoc (Section IV ? Alternative Scenario and Partnerships)</p>

GEF Council Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>On the point around staff positions and the problems that project-funded staff can have in an organisation like LIMCOM. - What happens when they leave? Consider sustainability of these positions. Who will fund these positions in the long-term?</p>	<p>At present, the LIMCOM Secretariat has only one permanent staff member (the Executive Secretary), funded by the LIMCOM Member States. Through the proposed project, three additional permanent staff positions will be established: an Environment and Water Resources Management Specialist, a Communications & Knowledge Management Officer, and an Administrative & Financial Assistant. The project proposes to fund these three positions (at pay levels appropriate for a non-governmental organization in the sub-region) for the first 3.5 years of the project; during the final year of the project, the LIMCOM Member States are expected to take over the funding of these positions going forward.</p>	<p>UNDP Prodoc (Section IV ? Total Workplan and Budget)</p>
Comments from Germany		
<p>Germany requests to review the list of indicative sources of co-financing, as it both includes a large number of co-financiers (all riparian countries) and comprises a substantial amount of the overall project costs. The PIF names GIZ as a co-financier in its list of indicative sources of co-financing and states GIZ support for the LIMCOM secretariat ? neither of which is presently the case. GIZ, together with DFID, decided to suspend support for the LIMCOM secretariat in 2015, partly due to its unclear legal status.</p>	<p>Regarding support from GIZ, the project has received a letter of co-financing support from GIZ, consisting of funds from GIZ's phase 5 program of support for SADC from 2020 ? 2023 to strengthen the management of shared watercourses, will support the implementation of the SLM pilots under Component 4 of the project.</p> <p>Regarding support from DFID, in fact DFID has decided to extend the CRIDF (Climate Resilience Infrastructure Development Facility) for 3 years with additional funding, and the CRIDF program has provide a letter of co-financing commitment to the project.</p>	<p>GEF CEO ER (Part I, Table C)</p>
<p>Additionally, Germany requests review of the risk section of the document to respond further to the missing national support for LIMCOM in the past. From past experiences, South Africa has formally supported the LIMCOM, but has often refused to cooperate with the secretariat on substantial issues, whereas Zimbabwe's support has been impaired due to political and economic reasons. The proposal identifies the issue in its risk assessment as low risk; Germany would suggest that the prospective risk mitigation through cooperation of the basin states according to the SADC revised shared watercourse protocol is revised and evaluated appropriately.</p>	<p>The risk section has been reviewed and an additional risk (# 2) and risk mitigation strategy have been added to address this comment.</p>	<p>UNDP Prodoc (Section IV ? Results and Partnerships)</p>
Comments from Canada		

GEF Council Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>We would be interested to know how the funding will be distributed, and how the different countries will contribute individually to the project. It is not too clear on what the difference is between the Transboundary Diagnostic and the freshwater health survey</p>	<p>Funding allocations from the project to specific countries have not been designated during the project design process. Co-financing from the countries is detailed in the co-financing tables in the UNDP Prodoc. Regarding the freshwater health survey, this is no longer included in the project activities. However, we can take this opportunity to clarify the difference between a Joint Basin Survey (JBS) and the Transboundary Diagnostic Analysis (TDA) process. The JBS constitutes the ground work mechanism for generation of robust data and information (biophysical and socio-economic ? current focus is on biophysical) on the status of basin ecosystems, which feeds into the comprehensive TDA, a process that is inherently analytical in nature. The JBS is a process of gathering vital data on carefully selected biophysical ecosystems parameters/indicators across the entire spectrum of a given river basin system, to ascertain the health / status of the various land and waterscapes, encompassing the transboundary river basin being surveyed. The JBS should be designed to focus on assessing only biophysical parameters or indicators that are critically relevant for ecosystem functioning status of various land and waterscapes, gauged against internationally established standards (e.g. WHO water quality standards; Ecosystems Integrity Status; IUCN Habit Fragmentation, etc.). Biophysical surveys require undertaking physical and biological measurements of changes taking place over time, related to specific indicators, and using internationally established measurements and analytical procedures, normally framed in the form of monitoring practices. In this regard, an initial JBS is normally used to establish a baseline to comprehensively monitor changes over time. The JBS also facilitates harmonization of monitoring practices across riparian states. On the other hand, the TDA will make use of the information gathered through the JBS to scientifically and technically assess emerging water related environmental issues and challenges, using a causal chain analytical framework. The causal chain analytical framework is much broader in scope, as it considers basinwide, national, regional and global scales, and includes socio-economic, political, policies and institutional contextual settings. The purpose of conducting the TDA, therefore, is to scale-up the relative importance of both immediate and root sources and causes of transboundary water problems, and to identify potential prophylactic and remedial actions. Further, the TDA will also assess the</p>	<p>UNDP Prodoc Section VIII (Financial Planning and Management)</p>

GEF Council Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>We are also wondering how an equitable access to the river for all will be achieved if the projects is partly financed through private interests</p>	<p>Because this is a GEF IW ?foundational? project to carry out a TDA and establish a SAP, the project activities will largely be driven by technical and policy experts from the countries, LIMCOM and GWP SA. The primary role for the private sector during the project will be to engage in the TDA (provision of data, models, studies, experts, etc.) and SAP (involvement in identifying relevant policy solutions that incentivize private sector roles and responsibilities), as well as a role in partnering to implement sustainable land management activities at one of the pilot sites under Component 4.</p>	<p>UNDP Prodoc (Alternative Scenario)</p>
Comments from United States		
<p>We are very supportive of this project, and particularly welcome the institutional capacity strengthening activities. We would like the three following ideas to be reflected in the future development of this project. First, the proposed project should coordinate with the two USAID projects in the Limpopo River basin, with which it has significant geographic and thematic overlap. These include the ?Conjunctive Water management across borders in the SADC region? and ?Resilient waters? projects.</p>	<p>Cooperation with USAID-supported projects in the region was explored during the project development phase, and strategies for collaboration and information sharing were identified with three relevant projects, including: 1) the Resilient Waters programme (based on extensive consultations with the RW programme team); 2) the project ?Conjunctive Water management across borders in the SADC region?, from which the proposed project will use information, data and lessons learnt to support the TDA and SAP processes for the Limpopo River Basin as well as other project activities to fill critical data and information gaps in order to enable science-based planning, development and management for the Limpopo River Basin; and 3) the project ?E-Flows for the Limpopo ? building more resilient communities and ecosystems through improved transboundary natural resources management? from which the proposed project will seek data and lessons learnt. Information on collaboration between these USAID projects and this proposed project is integrated throughout the description of the project outputs (in the Alternative Scenario). Such information is also summarized in the Partnerships ? Baseline Initiative section of the UNDP Prodoc; while Annex 18 of the UNDP Prodoc summarizes the coordination between USAID and GEF/UNDP finance in supporting LIMCOM?s IWRM Plan 2018-2022.</p>	<p>UNDP Prodoc (Alternative Scenario; Partnerships ? Baseline Initiative; Annex 18)</p>

GEF Council Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>Second, in Section C. on page 12, the USAID Resilient Waters project is listed as providing a Grant to the value of \$8 million. While the subsequent narrative is an accurate reflection of the USAID support to the activities via technical assistance, the reflection of these funds as a "grant" is not. Please correct this in subsequent versions of the proposal.</p>	<p>USAID Resilient Waters co-financing has been recategorized as "in-kind" co-financing</p>	<p>UNDP Prodoc Section VIII (Financial Planning and Management)</p>

GEF Council Comments	UNDP Responses at time of CEO Endorsement	Changes in Documents
<p>Third, greater clarity on project partners and their engagement would be beneficial. For example, the project would benefit from early and consistent engagement with CSOs, agricultural ministry officials, and those ministries that manage large water infrastructure. In addition, the project draft says the private sector will be involved in a PPP, but what types of business are intended for involvement (e.g. eco-tourism partners, hydropower entities, agri-industrial partnership)? Recognizing the importance of a country-driven choice, it would be good to understand the full landscape of implications for sustainability early in the process.</p>	<p>Details on the project's strategy for engaging with the private sector, including the types of business that would be involved, has been added to the project documents</p> <p>Also, the following organizations were consulted during project preparation:</p> <p><u>Agriculture</u></p> <ul style="list-style-type: none"> ? Mozambique: Ministry of Agriculture of Mozambique/ National Irrigation Institute and the Mozambique Agrarian investigation Institute ? Zimbabwe: Ministry of Lands, Agriculture, Water and Rural Resettlement ? Botswana: Botswana University of Agriculture and Natural Resources; Ministry of Agriculture, Development and Food Security ? South Africa: Department of Agriculture and Rural Development <p><u>Water Ministries / Authorities</u></p> <ul style="list-style-type: none"> ? Botswana: Department of Water Affairs and Water Utilities Corporation ? Mozambique: The National Directorate of Water Resources Management, the National Directorate of Water Supply and Sanitation, and the Regional Water Authorities (<i>Administração Regional de Águas</i>) ? South Africa: The Department of Water and Sanitation, as well as Water User Associations and Catchment Management Agencies ? Zimbabwe: Department of Water within the Ministry of Lands, Agriculture, Water and Rural Resettlement, as well as the Zimbabwe National Water Authority and Sub-Catchment Councils <p><u>CSOs</u></p> <ul style="list-style-type: none"> ? Botswana: Kalahari Conservation Society, Botswana Country Water Partnership, community farmer associations ? Mozambique: A4Labs (Arid African Alluvial Aquifers), community fishing associations and farmer associations ? South Africa: Association for Water and Rural Development (AWARD), Mvula Trust, Environmental Monitoring Group, WaterAid, International Water Management Institute (IWMI), community fishing associations and farmer associations ? Zimbabwe: Dabane Trust, and Zimbabwe Country Water Partnership, community fishing associations and farmer associations 	<p>CEO ER Section Part II, Section 4</p> <p>UNDP Prodoc Section IV (Private Sector Engagement)</p>

STAP Review

STAP Review Comments	Response to STAP Review	Changes in Documents
<p>Overall Assessment: Minor issues to be considered during project design:</p> <p>STAP welcomes the project entitled "Integrated Transboundary River Basin Management for the Sustainable Development of the Limpopo River Basin" from UNDP. This is a fairly standard IW project design for TDA and SAP. STAP finds it very helpful to see a Theory of Change diagram included, with links between barriers and actions noted, and assumptions briefly indicated. Development pressures and livelihood / human security implications of current development trends are severe, meaning that there is an urgency to move from analysis and planning to sustained action. Stakeholder analysis is inadequate regarding civil society and private sector roles. Gender analysis is planned but the current document fails to identify key risks and opportunities. Knowledge management is emphasized but the approach not adequately specified.</p>	<p>Substantial new details, based on consultations and research carried out during the project preparation phase, have been included in the project documents, including:</p> <ul style="list-style-type: none"> ? Stakeholder analysis with details on the roles of civil society and the private sector ? Gender risks and opportunities ? Knowledge management approach 	<p>UNDP Prodoc (Annex 8)</p> <p>UNDP Prodoc (Annex 10)</p> <p>UNDP Prodoc (Alternative Scenario, Outputs 5.1.1 ? 5.1.3) and GEF CEO ER (Knowledge Management, Part II, Section 8)</p>
<p>Do the planned outcomes encompass important global environmental benefits / adaptation benefits?</p> <p>? STAP Comment: The outcomes are heavily focused on analysis and planning; they need to lead subsequently to sustained, effective management actions</p>	<p>The proposed project is a ?foundational? IW project that is intended to carry out the analysis and undertake the planning that will allow for and guide effective management actions in the Limpopo River Basin going forward (possibly including in a follow-on GEF project for SAP implementation). Having said that, Component 1 of the project is primarily focused on capacity building at the basinwide and national levels to enable effective IWRM activities, and Component 4 is focused on implementing effective management to support IWRM objectives at the site level.</p>	<p>UNDP Prodoc (Alternative Scenario, Components 1 and 4)</p>
<p>Are the benefits truly global environmental benefits, and are they measurable?</p> <p>? STAP Comment: Yes, but targets for improvement resulting from IWRM have not yet been identified.</p>	<p>Targets for improvements in global environmental benefits resulting from the project include an increased number of hectares of land restored and an increased number of hectares of land under improved practices</p>	<p>UNDP Prodoc (Section V ? Project Results Framework)</p>

Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers? ? STAP Comment: Inadequate detail re plans for civil society and private sector engagement	Details on the project strategy for private sector and community engagement have been added	UNDP Prodoc (Section IV - Private Sector Engagement; and Annex 8)
What are the stakeholders' roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge? ? STAP Comment: Not clearly addressed, particularly with regards to efforts that move beyond government-led planning	Details on stakeholder roles in the project's implementation, including stakeholders beyond national government institutions, are provided in the stakeholder analysis and stakeholder engagement plan	UNDP Prodoc (Annex 8)
Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences? ? STAP Comment: Very preliminary; indicates Gender Analysis and Action Plan anticipated but does not identify key issues	A Gender Equity and Social Inclusion Report and Gender Action Plan have been developed with details on risks, opportunities and response measures	UNDP Prodoc (Annex 10)
Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed? ? STAP Comment: Not yet specified	Obstacles to the full participation of women in water resources planning, decision-making and management are described in the Gender Equity and Social Inclusion Report, and strategies for addressing such obstacles are included in the Gender Action Plan	UNDP Prodoc (Annex 10)
Are there social and environmental risks which could affect the project? ? STAP Comment: Yes, requires more attention to private sector roles and livelihood stress	Social and environmental risks, and the project's proposed risk mitigation measures, have been detailed in the Social and Environmental Screening Procedure document. This analysis includes the risk that ?in the absence of mitigation measures, stakeholders whose livelihoods rely on direct use of the water basin may be negatively affected (economic displacement e.g., loss of assets or access to resources due to access restrictions) due to pilot project activities?	UNDP Prodoc (Annex 5)
Have specific lessons learned from previous projects been cited? ? STAP Comment: Requires further development prior to CEO endorsement, especially regarding lessons from other IWRM efforts in the subregion	Additional details on lessons learnt from other IWRM efforts in the sub-region (including OKACOM, ORASECOM, and the SAPPHIRE and WIOSAP projects) have been added in the project Alternative Scenario and in the section detailing coordination with other GEF projects	UNDP Prodoc (Section IV - Alternative Scenario and Partnerships)

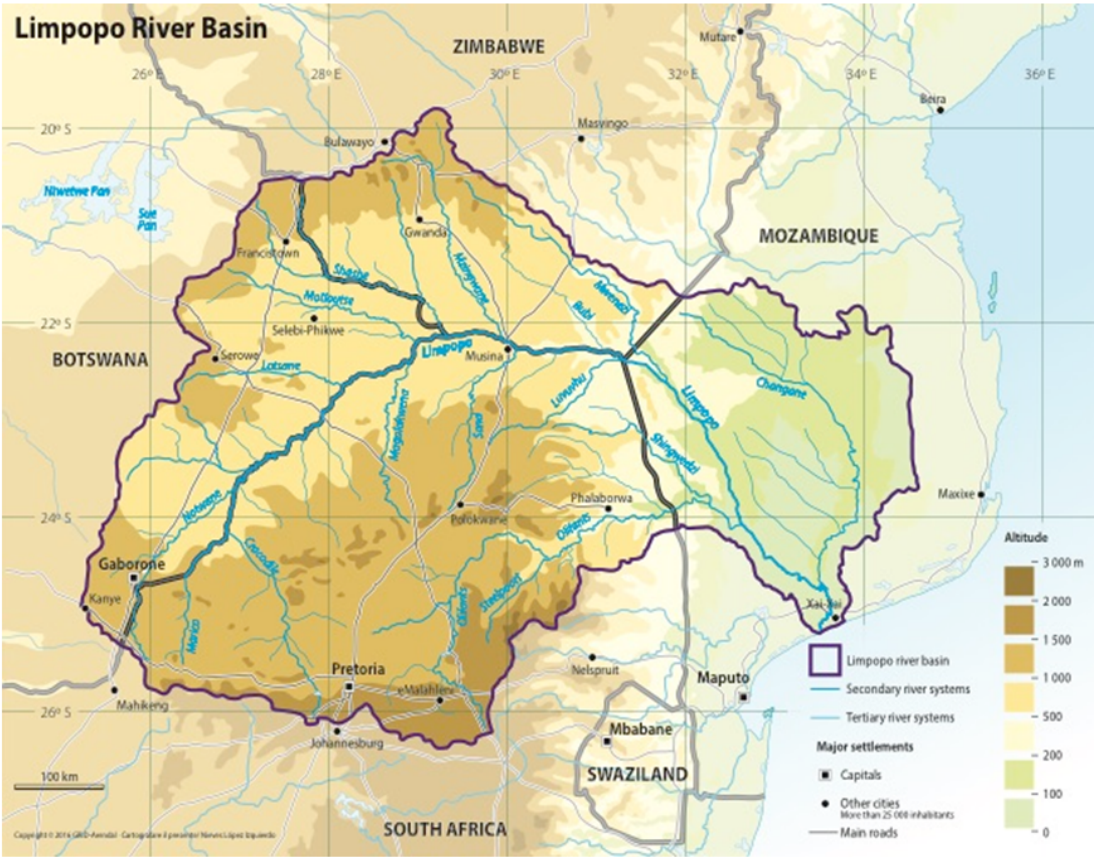
ANNEX C: Status of Utilization of Project Preparation Grant (PPG).
(Provide detailed funding amount of the PPG activities financing status
in the table below:

PPG Grant Approved at PIF: 200,000			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent to Date</i>	<i>Amount Committed</i>
Project preparation grant to finalize the UNDP-GEF project document for the project ?Integrated Transboundary River Basin Management for the sustainable development of the Limpopo River Basin?	200,000	133,415	66,585
Total	200,000	133,415	66,585

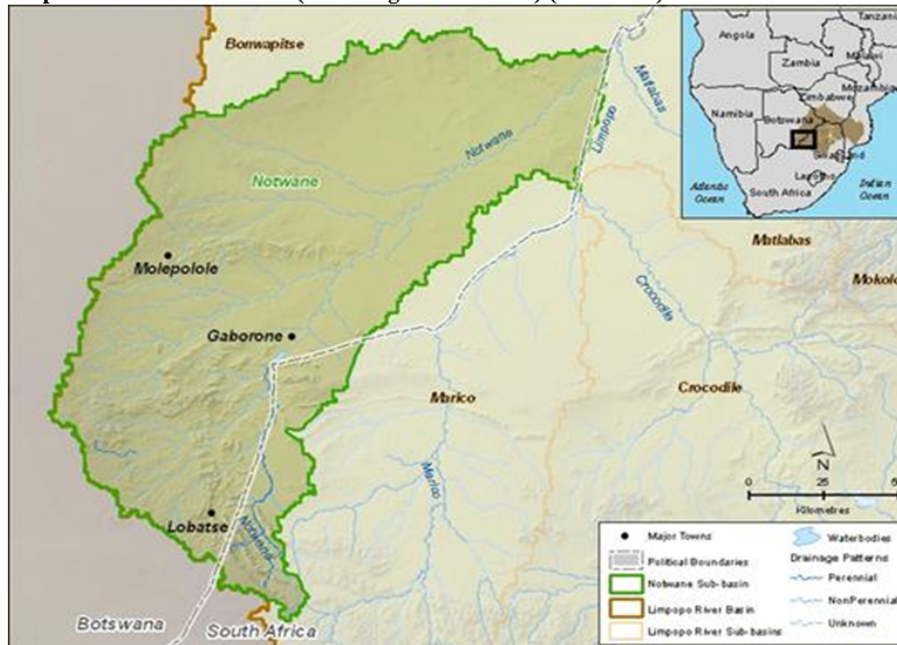
ANNEX D: Project Map(s) and Coordinates

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

Map 1: Limpopo River Basin

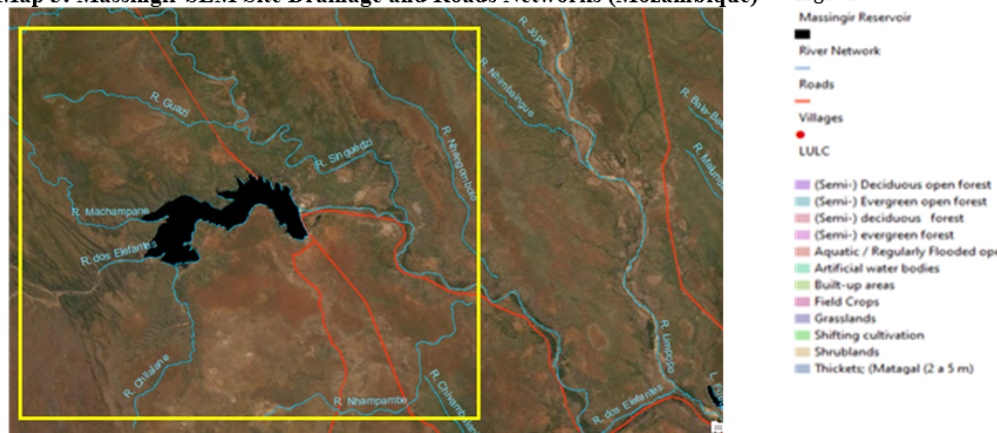


Map 2: Notwane Sub-Basin (incl. Mogone Pilot Site) (Botswana)



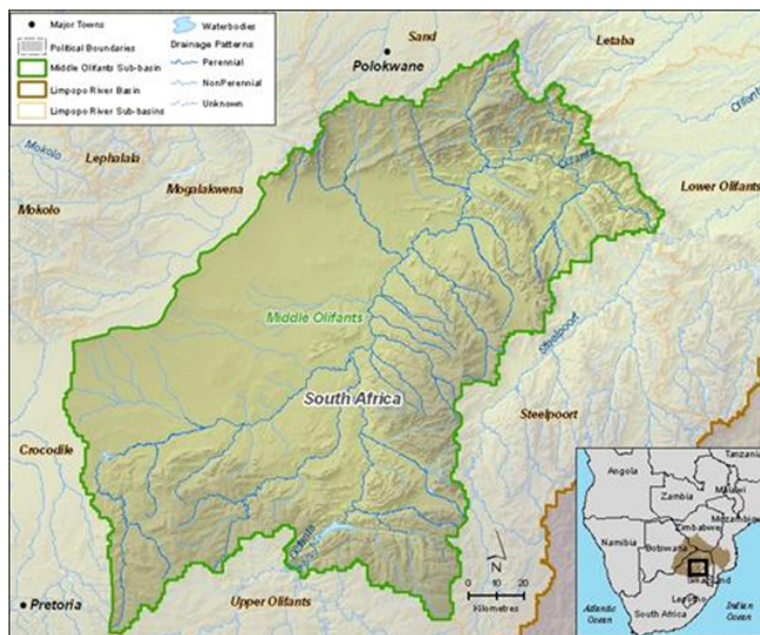
The Mogobane area is located at latitude 24°59'28.4" South and longitude 25°42'16.9" East and latitude 24°59'27.5" South and Longitude 25°43'11.8" East. The Shashe site is located are at latitude 24°57'15.8" South and Longitude 25°43'15.5" East, latitude 21°09'20.8" South and Longitude 27°15'41.3" East, latitude 21°09'03.8" South and Longitude 27°16'14.8" East, latitude 21°10'23.6" South and Longitude 27°16'41.4" East, latitude 21°11'07.0" South and Longitude 27°22'13.3" East, and lastly latitude 21°11'20.7" South and Longitude 27°23'09.0" East

Map 3: Massingir SLM Site Drainage and Roads Networks (Mozambique)

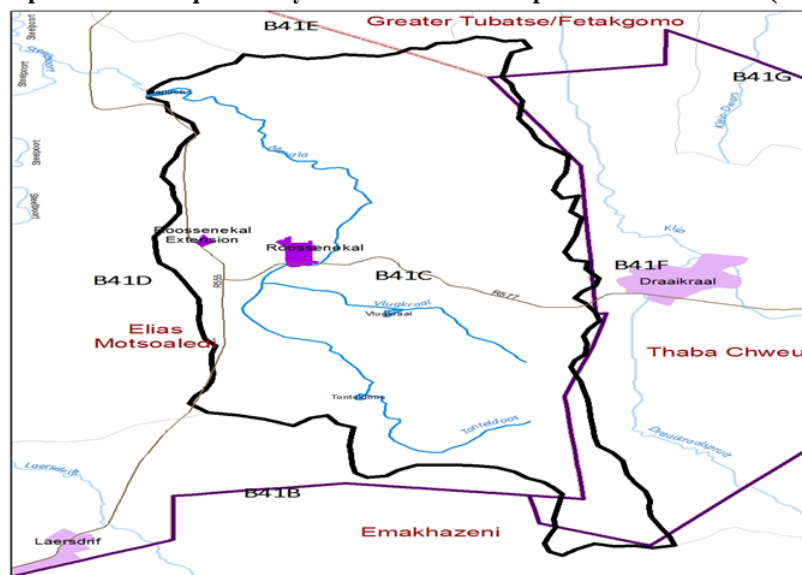


The Massingir dam within the selected SLM pilot site is located at coordinates 23°52'45"S and 32°08'40"E

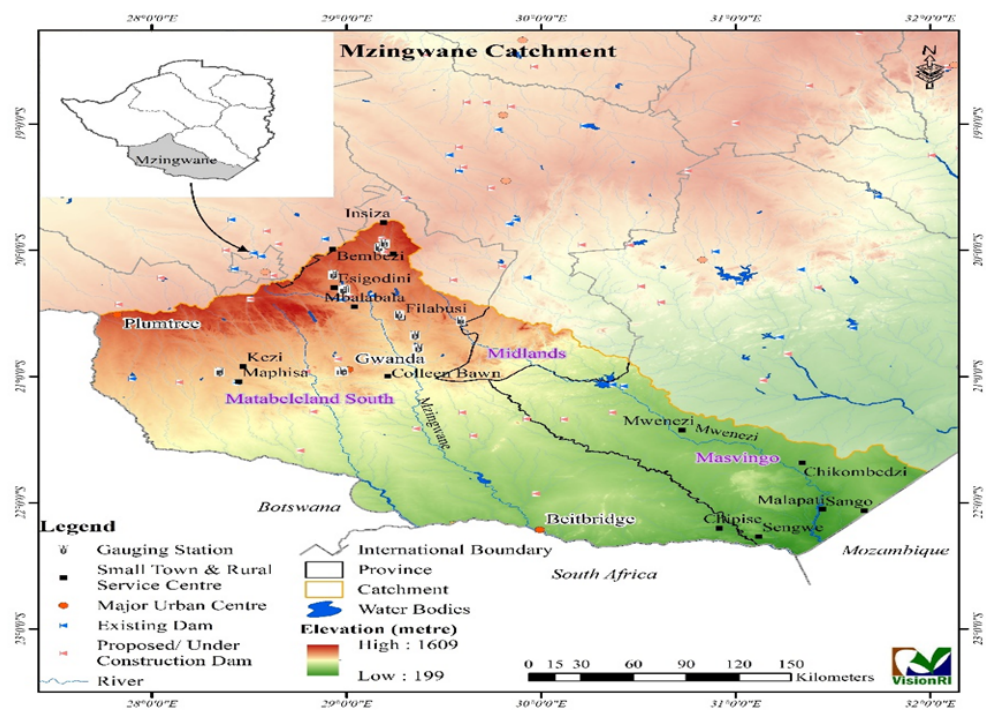
Map 6: Middle Olifants sub-basin (South Africa)



Map 7: The B41C quaternary catchment where Mapochs' mine is located (South Africa)



Map 8: Mzingwane Catchment (Zimbabwe)



ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (US\$eq.)								Total (US\$eq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency/II)
		Component 1	Component 2	Component 3	Component 4	Component 5	Sub-Total	M&E	PMC		
Equipment	Equipment and materials (incl. software packages) for National Water Departments to carry out ecological water requirement surveys (30,000)Equipment and materials (incl. software packages) for LIMCOM's Flood Forecasting Task Team (10,000)Equipment and materials for 8 stations for the Limpopo Transboundary Flood Forecasting & Early Warning System (FFEWS) (48,900)Equipment and materials (incl. software packages) for Sediment Transport Monitoring (30,000)Equipment and materials (incl. software packages) for the Limpopo Groundwater Committee (10,000)Equipment and materials (incl. software packages) for the new LIMCOM Water Resources Task Team (10,000)Equipment and materials, including accounting software, servers, website hosting costs, etc. to strengthen LIMSEC's operational capacities (40,000)Equipment and materials (incl. software packages) to strengthen catchment management structures in Member States (530,000)Equipment and materials to support implementation of the LIMCOM Communications Plan (20,000)	228,900					228,900			228,900	Global Water Partnership Southern Africa (GWP-SA)
Equipment	Equipment and materials to carry out joint Basin Survey (80,000)Equipment and materials to conduct e-flow assessments (60,000)Equipment and materials to carry out sediment monitoring (80,000)Equipment and materials to carry out alluvial aquifer assessments (40,000)Equipment and materials to carry out joint monitoring under LIMCOM Environmental Monitoring Framework (80,000)Equipment and materials for remote monitoring stations (35,000)Equipment and materials (including hardware and software packages) for operation of LIMIS (50,000)		425,000				425,000			425,000	Global Water Partnership Southern Africa (GWP-SA)
Equipment	Equipment and materials to support SLM activities in partnership with private sector (private sector partners are expected to provide significant material support for this output) (20,000)				20,000		20,000			20,000	Global Water Partnership Southern Africa (GWP-SA)
Equipment	Office furniture (2,000)						-		2,000	2,000	Global Water Partnership Southern Africa (GWP-SA)
Equipment	2 computers (2,800); software (400); 2 printers (1,000); hard drives (345); power stabilizers (469); total = 5,014						-		5,014	5,014	Global Water Partnership Southern Africa (GWP-SA)
Contractual services	Project Coordinator: 1 consultant for 54 months (10% time) at USD 7,000/month = 37,800Communications & Knowledge Management Officer to lead all activities under Outputs 5.1.1 - 5.1.3. 1 consultant for 42 months (40% time) at USD 4,000/month = 67,200WRM Specialist to support Output 5.1.4. 1 consultant for 42 months (10% time) at USD 5,000/month = 21,000WRM Specialist (GWPSA) to support Outputs 5.1.1 - 5.1.4. 1 consultant for 22 days at USD 750/day = 16,500Transboundary Water & Env. Specialist (GWPSA) to support Outputs 5.1.1 - 5.1.4. 1 consultant for 68 days at USD 600/day = 40,800Project Technical Officer (GWPSA) to support Outputs 5.1.1 - 5.1.4. 1 consultant for 68 days at USD 300/day = 20,400					203,700	203,700			203,700	Global Water Partnership Southern Africa (GWP-SA)
Contractual services	Project Coordinator: 1 consultant for 54 months (10% time) at USD 7,000/month = 37,800WRM Specialist to support Outputs 4.1.1 and 4.1.2. 1 consultant for 42 months (25% time) at USD 5,000/month = 52,500				90,300		90,300			90,300	Global Water Partnership Southern Africa (GWP-SA)
Contractual services	Project Coordinator: 1 consultant for 54 months (15% time) at USD 7,000/month = 56,700WRM Specialist to support Outputs 1.1.1 and 1.1.2. 1 consultant for 42 months (15% time) at USD 5,000/month = 31,500Senior Technical Advisor to support Outputs 1.1.2 and 1.1.3. 1 consultant for 54 months (20% time) at USD 6,000/month = 64,800Communications & Knowledge Management Officer to develop/implement LIMCOM Communications Plan under Output 1.1.4. 1 consultant for 42 months (50% time) at USD 4,000/month = 84,000Finance / Administration / Procurement (FAP) Officer (GWP SA) to support strengthening of LIMSEC's financial and administration systems. 1 consultant for 54 months (12.5% time) at USD 4,000/month = 27,000Admin/Fin. Assistant to support strengthening of LIMSEC's financial and administration systems. 1 consultant for 42 months (80% time) at USD 2,500/month = 84,000Senior Climate Specialist (GWPSA) to support Outputs 1.1.3 and 1.1.4. 1 consultant for 42 days at USD 900/day = 37,800WRM Specialist (GWPSA) to support Outputs 1.1.1 - 1.1.4. 1 consultant for 22 days at USD 750/day = 16,500Transboundary Water & Env. Specialist (GWPSA) to support Outputs 1.1.1 - 1.1.4. 1 consultant for 68 days at USD 600/day = 40,800Project Technical Officer (GWPSA) to support Outputs 1.1.1 - 1.1.4. 1 consultant for 68 days at USD 300/day = 20,400Transboundary Env. & Ecosystems Expert (GWPSA) to support Output 1.1.1. 1 consultant for 30 days at USD 600/day = 18,000Transboundary Water Management Expert (GWPSA) to support Output 1.1.1. 1 consultant for 12 days at USD 600/day = 7,200	488,700					488,700			488,700	Global Water Partnership Southern Africa (GWP-SA)
Contractual services	Project Coordinator: 1 consultant for 54 months (20% time) at USD 7,000/month = 75,600WRM Specialist to support Outputs 2.1.2, 2.1.6 and 2.2.2. 1 consultant for 42 months (50% time) at USD 5,000/month = 105,000Senior Technical Advisor to support Outputs 2.1.1 and 2.1.3. 1 consultant for 54 months (50% time) at USD 6,000/month = 162,000WRM Specialist (GWPSA) to support Outputs 2.1.6. 1 consultant for 22 days at USD 750/day = 16,500Transboundary Water & Env. Specialist (GWPSA) to support Outputs 2.1.1 - 2.1.6. 1 consultant for 68 days at USD 600/day = 40,800Project Technical Officer (GWPSA) to support Outputs 2.1.1 - 2.1.6. 1 consultant for 68 days at USD 300/day = 20,400Transboundary Env. & Ecosystems Expert (GWPSA) to support Output 2.1.2. 1 consultant for 55 days at USD 600/day = 33,000Communications & Knowledge Management Officer (PMU) to develop policy briefs. 1 consultant for 42 months (10% time) at USD 4,000/month = 16,800		470,100				470,100			470,100	Global Water Partnership Southern Africa (GWP-SA)
Contractual services	Project Coordinator: 1 consultant for 54 months (20% time) at USD 7,000/month = 75,600Senior Technical Advisor to oversee Outputs 3.1.1 - 3.1.6. 1 consultant for 54 months (30% time) at USD 6,000/month = 97,200WRM Specialist (GWPSA) to support Outputs 3.1.1 - 3.1.6. 1 consultant for 44 days at USD 750/day = 33,000Transboundary Water & Env. Specialist (GWPSA) to support Outputs 3.1.1 - 3.1.6. 1 consultant for 136 days at USD 600/day = 81,600Project Technical Officer (GWPSA) to support Outputs 3.1.1 - 3.1.6. 1 consultant for 136 days at USD 300/day = 40,800Transboundary Env. & Ecosystems Expert (GWPSA) to support Outputs 3.1.4 and 3.1.6. 1 consultant for 12 days at USD 600/day = 7,200Transboundary Water Management Expert (GWPSA) to support Outputs 3.1.1 - 3.1.2. 1 consultant for 21 days at USD 600/day = 12,600			348,000			348,000			348,000	Global Water Partnership Southern Africa (GWP-SA)
Contractual services	Project Coordinator: 1 consultant for 54 months (25% time) at USD 7,000/month = 94,500Finance / Administration / Procurement Officer (GWP SA) to manage project budgets, hiring, procurement, etc. 1 consultant for 54 months (37.5% time) at USD 4,000/month = 81,000Admin/Fin. Assistant to support management of project budgets, hiring, procurement, etc. 1 consultant for 42 months (20% time) at USD 2,500/month = 21,000						-		196,500	196,500	Global Water Partnership Southern Africa (GWP-SA)

Contractual services	Contracted Company (non-governmental organization) will lead all project activities under Output 4.1.1, including technical oversight and planning, procurement of equipment and materials, training of local stakeholders, etc. (509,700)				509,700		509,700		509,700	Global Water Partnership Southern Africa (GWP-SA)
Contractual services	Contracted Company to provide institutional capacity assessment and undertake capacity building on e-flow monitoring (70,000)Contracted Company to harmonize e-flow frameworks, data and assessments across the LRB (50,000)Contracted Company to carry out integrated flow assessments (60,000)Contracted Company to train national stakeholders on sediment modelling and monitoring (50,000)Contracted Company to develop sediment transport models (60,000)Contracted Company to carry out field work for assessments and mapping of aquifers, abstraction practices, groundwater yields, etc. and propose options for conjunctive use of surface and groundwater resources (120,000)Contracted Company to develop future water resources scenarios and associated economic, financial and investment analyses (120,000)Contracted Company to develop / strengthen LIMIS and develop a resourcing plan (90,000)			620,000			620,000		620,000	Global Water Partnership Southern Africa (GWP-SA)
Contractual services	Contracted Company to provide technical support for using LIMCOM website to manage and disseminate project reports and other outputs (20,000)					20,000	20,000		20,000	Global Water Partnership Southern Africa (GWP-SA)
Contractual services	Training for National Water Departments in carrying out ecological water requirement surveys (35,000)Strengthen LIMCOM's Legal Task Team (20,000)Strengthen LIMCOM's Flood Forecasting Task Team (20,000)Strengthen the Limpopo Transboundary Flood Forecasting & Early Warning System (FFEWs) (20,000)Strengthen LIMCOM's technical capacity for Sediment Transport Monitoring (20,000)Strengthen the Limpopo Groundwater Committee (20,000)Strengthen and capacitate new LIMCOM Water Resources Task Team (25,000)Carry out assessment, develop strategy and facilitate the work of LIMCOM and national institutions in SAP/IWRM implementation (60,000)Provide training in administration, operations, finance, etc. for LIMSEC staff (40,000)Provide training to strengthen catchment management structures (24,000)		284,000				284,000		284,000	Global Water Partnership Southern Africa (GWP-SA)
International Consult	Develop and implement a LIMSEC Financial Sustainability Plan. 1 consultant for 50 days at USD 600/day = 30,000		30,000				30,000		30,000	Global Water Partnership Southern Africa (GWP-SA)
International Consult	International Consultant (i.e. TDA Expert) to gather, analyze and consolidate information and writing of TDA, facilitate meetings to validate accuracy of information in TDA, and develop materials to summarize TDA for various stakeholders. 1 consultant for 77 days at USD 650/day = 50,050			50,050			50,050		50,050	Global Water Partnership Southern Africa (GWP-SA)
International Consult	International Consultant to lead Mid Term Review process (30,000)International Consultant to lead Terminal Evaluation process (35,000)						-	65,000	65,000	Global Water Partnership Southern Africa (GWP-SA)
International Consult	International Consultant with lead responsibility for development of IWRM plan and SAP, as well as support to national IWRM Experts for development of NAPs; and development of SAP M&E framework. 1 consultant for 80 days at USD 650/day = 52,000			52,000			52,000		52,000	Global Water Partnership Southern Africa (GWP-SA)
Local Consultants	Develop, agree and establish key river health indicators, river health survey practices, and classification methodologies for Joint Basin Survey. 1 consultant for 100 days at USD 500/day = 50,000Local Consultant to develop strategy for institutionalization of Joint Basin Survey. 1 consultant for 40 days at USD 500/day = 20,000Local Consultant to develop strategy for ongoing monitoring of the LIMCOM Environmental Monitoring Framework by Member State Institutions. 1 consultant for 50 days at USD 500/day = 25,000Local Consultant to facilitate workshops etc. to disseminate results of Policy Briefs developed by the LIMCOM Secretariat. 1 consultant for 30 days at USD 500/day = 15,000			110,000			110,000		110,000	Global Water Partnership Southern Africa (GWP-SA)
Local Consultants	Local consultant (SLM expert) to provide technical oversight and planning for activities under Output 4.1.2. 1 consultant for 100 days at USD 500/day = 50,000				50,000		50,000		50,000	Global Water Partnership Southern Africa (GWP-SA)
Local Consultants	Local Consultant to lead project activities on gender mainstreaming. 1 consultant for 60 days at USD 500/day = 30,000Local Consultants (National IWRM Experts) to lead development of National Action Plans. 4 consultants for 50 days each at USD 500/day = 100,000Local Consultant (Public Finance Expert) to lead the development of the SAP Investment Plan. 1 consultant for 40 days at USD 650/day = 26,000			156,000			156,000		156,000	Global Water Partnership Southern Africa (GWP-SA)
Local Consultants	Regional Consultant to support Mid Term Review process (20,000)Regional Consultant to support Terminal Evaluation process (20,000)						-	40,000	40,000	Global Water Partnership Southern Africa (GWP-SA)
Local Consultants	Train extension services in collaborating with women and youth groups. 1 consultant for 50 days at USD 400/day = 20,000Lead the creation of a LIMCOM data and information sharing protocol. 1 consultant for 30 days at USD 500/day = 15,000		35,000				35,000		35,000	Global Water Partnership Southern Africa (GWP-SA)
Training, Workshops	Inception workshop costs (2,000)						-	2,000	2,000	Global Water Partnership Southern Africa (GWP-SA)
Training, Workshops	Meeting costs to support participatory SLM work with private sector partners (10,000)				10,000		10,000		10,000	Global Water Partnership Southern Africa (GWP-SA)
Training, Workshops	Project Steering Committee meetings (24,100)						-	24,100	24,100	Global Water Partnership Southern Africa (GWP-SA)
Training, Workshops	Workshops and other meetings of SAP and NAP working groups (15,000)Workshops / meetings with key national development sectors to support formulation of SAP and LIMCOM IWRN Plan (25,000)Participatory workshops to review / validate IWRM plan and SAP (30,000)Workshops / meetings with key national development sectors to support formulation of NAPs (20,000)Participatory workshops and forums to review / validate NAPs and NAP financing strategies (22,600)Meeting costs for national processes and regional consultations to gain Ministerial endorsement of SAP and NAPs (30,000)Meeting costs for investor roundtable to support SAP implementation (10,000)			152,600			152,600		152,600	Global Water Partnership Southern Africa (GWP-SA)
Training, Workshops	Workshops to present / validate consultant's work on river health indicators, practices and methodologies (20,000)Workshops to present / validate information developed on e-flow monitoring (45,000)Workshops to present / validate sediment transport models (20,000)Workshops to present / validate assessments and proposed options for monitoring of alluvial aquifer abstraction (20,000)Workshops to present / validate future water resources development scenarios and associated analyses (50,000)Participatory workshops to develop and validate TDA (50,000)Four national events to present TDA (30,000)Training workshops for national institutions on joint monitoring frameworks / approaches (50,000)Workshops to demonstrate the use and operation of LIMIS to Member State institutions (28,479)Workshops, roundtables and other meetings to present policy briefs (30,000)			343,479			343,479		343,479	Global Water Partnership Southern Africa (GWP-SA)
Training, Workshops	Workshops to present and validate capacity development strategy for LIMCOM and Member States (10,000)Meetings with the LIMCOM Member States to discuss / design the LIMSEC Financial Sustainability Plan (6,000)Workshops to present / validate the LIMCOM data sharing protocol (10,000)Meeting costs for semi-annual NASC meetings in each Member State (8 meetings at 2,000 each = 16,000); three BASC meetings (3 meetings at 5,000 each = 15,000)Country-level inception meetings in each Member State (4 meetings at 2,000 each = 8,000)		65,000				65,000		65,000	Global Water Partnership Southern Africa (GWP-SA)

Training, Workshops	Workshops to review / validate approaches on groundwater (12,000)					12,000	12,000			12,000	Global Water Partnership Southern Africa (GWP-SA)
Travel	Travel costs associated with project management, including for Mid Term Review and Terminal Evaluation (10,000)						-		10,000	10,000	Global Water Partnership Southern Africa (GWP-SA)
Travel	Travel costs associated with project staff conducting site visits to track GEF Core Indicators at mid-term and end of project (10,000)Travel costs associated with project staff conducting site visits for M&E of project results framework (34,500)Travel costs associated with project staff conducting site visits for monitoring of social and environmental safeguards (7,500)Travel for key participants to project Inception Workshop (8,000)						-	60,000		60,000	Global Water Partnership Southern Africa (GWP-SA)
Travel	Travel costs for basin wide working group on formulation of SAP and national groups for formulation of NAPS (10,000)Travel costs for IWRM / SAP formulation Lead Expert (15,000)Travel costs for National IWRM Experts (20,000)Travel costs for national and basin-wide SAP endorsement events (20,000)			85,000			85,000			85,000	Global Water Partnership Southern Africa (GWP-SA)
Travel	Travel costs for SLM expert (20,000)				20,000		20,000			20,000	Global Water Partnership Southern Africa (GWP-SA)
Travel	Travel to participate in exchanges with ORASECOM and possibly others to learn about their Joint Basin Survey practices (30,000)Travel to carry out Joint Basin Survey (80,000)Travel to conduct e-flow assessments (45,000)Travel to participate in information / learning exchanges with other RBOs to learn about their sediment transport monitoring practices (30,000)Travel to carry out sediment monitoring at selected sites (36,000)Travel costs for various consultants (TDA expert; experts on water resources, socioeconomic conditions, etc.) to gather baseline data and carry out consultations and meetings for preparation of TDA (60,000)Travel for joint monitoring of LIMCOM Environmental Monitoring Framework (40,000)Travel to workshops for presentations of Policy Briefs (10,000)			331,000			331,000			331,000	Global Water Partnership Southern Africa (GWP-SA)
Travel	Travel to participate in regional SADC meetings / dialogues (15,000)Travel to participate in regional RBO meetings (organized by SADC Water Division) (15,000)Travel to visit other RBOs for technical information sharing (10,000)Travel to bi-annual GEF International Waters Conferences (20,000)					60,000	60,000			60,000	Global Water Partnership Southern Africa (GWP-SA)
Travel	Travel to semi-annual NASC meetings in each Member State (travel costs to 8 meetings at 5,000 each = 40,000) and three regional BASC meetings (travel costs to 3 meetings at 20,000 each = 60,000)Travel to support dialogue with the LIMCOM Member States on the LIMSEC Financial Sustainability Plan (10,000)Travel to country-level inception meetings in each Member State (travel costs to 4 meetings at 7,000 each = 28,000)Travel to support information dissemination under the project Communications Plan (travel costs within each Member State at 5,000 each * 4 = 20,000)			158,000			158,000			158,000	Global Water Partnership Southern Africa (GWP-SA)
Office Supplies	Supplies for PMU Staff (2,000)						-		2,000	2,000	Global Water Partnership Southern Africa (GWP-SA)
Other Operating Cos	Utilities (150 mo. X 54 months = 8,100); and insurance (300 mo. X 54 months = 16,200); costs for newspaper adverts for recruitment in all 4 countries (1,800); total = 26,100						-		26,100	26,100	Global Water Partnership Southern Africa (GWP-SA)
Other Operating Cos	Professional audit services (4,000/year X 5 years = 20,000)						-		20,000	20,000	Global Water Partnership Southern Africa (GWP-SA)
Other Operating Cos	Professional Services to carry out translation of MTR and TE into Portuguese (7,757)						-	7,757		7,757	Global Water Partnership Southern Africa (GWP-SA)
Other Operating Cos	Audiovisual and print production costs for project knowledge products (18,000)					18,000	18,000			18,000	Global Water Partnership Southern Africa (GWP-SA)
Other Operating Cos	Printing of LIMCOM IWRM plan and SAP (10,000)Printing of NAPS (8,000)Printing and other materials costs for SAP and NAR Ministerial endorsement events (5,000)			23,000			23,000			23,000	Global Water Partnership Southern Africa (GWP-SA)
Other Operating Cos	Production of audio-visual and printed materials as part of the LIMCOM Communications Plan (10,000/year X 4 years = 40,000)	40,000					40,000			40,000	Global Water Partnership Southern Africa (GWP-SA)
Other Operating Cos	Publication of Transboundary Diagnostic Analysis (20,000)Printing and distribution of Policy Briefs (10,000)			30,000			30,000			30,000	Global Water Partnership Southern Africa (GWP-SA)
	Total	1,329,600	2,379,629	816,600	700,000	313,700	5,539,529	174,757	285,714	6,000,000	

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).