

# SADC SECRETARIAT

#### REQUEST FOR EXPRESSION OF INTEREST (CONSULTANT QUALIFICATIONS-BASED SELECTION)

COUNTRY:	BOTSWANA
NAME OF PROJECT:	SADC REGIONAL CLIMATE RESILIENCE PROJECT (RCRP)
PROJECT ID:	P180171
ASSIGNMENT TITLE:	CONSULTANCY TO DEVELOP STRATEGIES FOR CLIMATE RESILIENCE IN SELECTED BASINS AND CARRY OUT DAM SYNCHRONISATION STUDIES
REFERENCE NUMBER:	SADC/3/5/2/384
DATE OF ISSUE:	20 <sup>th</sup> March 2025

#### Background

The SADC Secretariat through the SADC Regional Climate Resilience Project (RCRP) has received a grant. The Project is the first in a Series of Projects (SOP), and involves Madagascar, Mozambique, South Sudan, Comoros, and two regional organizations: SADC, and the Eastern Nile Technical Regional Office (ENTRO). The overarching development objective of the SOP is to strengthen the resilience to water-related climate impacts in Eastern and Southern African countries.

The project serves as a first step towards a regional platform to tackle climate adaptation through a common and coordinated approach, including on fund raising and



consolidating multilateral and bilateral support - which is critical to ensure alignment, development, and scaled-up financing of critical adaptive interventions.

It will contribute to improved disaster risk management in support of regional resilience and the strengthening of climate change, adaptation and mitigation, under the crosscutting issues of the SADC Vision 2050, as well as contribute towards the achievement of the aspirations of SADC as spelt out in the Regional Indicative Strategic Development Plan 2020-2030

The SADC Secretariat intends to apply part of the proceeds of this financing to eligible payments under the contract for hiring a firm to undertake a CONSULTANCY TO DEVELOP STRATEGIES FOR CLIMATE RESILIENCE IN SELECTED BASINS AND CARRY OUT DAM SYNCHRONISATION STUDIES

The SADC Secretariat invites submissions from suitably qualified and interested firms to undertake this consultancy, recruited using Consultants Qualifications-based Selection. following World Bank Procurement Regulations dated September 2023.

Title : CONSULTANCY TO DEVELOP STRATEGIES FOR CLIMATE RESILIENCE IN SELECTED BASINS AND CARRY OUT DAM SYNCHRONISATION STUDIES (A Firm)

Time Commitment : 100%

Accountable : Acting Head, Disaster Risk Reduction Unit

Duration of Assignment: 18 months

- 1. The Objectives of the Assignment; To identify options for improving infrastructure assets operations to increase the resilience of selected SADC river basins. The detailed scope of work can be obtained from the terms of reference below.
- 2. The SADC Secretariat now invites eligible consulting firms to indicate their interest in providing these services. Interested consulting firms must provide information indicating that they are qualified to perform the services (i.e., Company profile detailing alignment to the assignment, description of similar assignments undertaken, experience in similar conditions and availability of appropriate skills among staff).
- 3. The consulting firm should have significant in-depth expertise and knowledge in activities such as stakeholder engagement, training and capacity building conducted under this assignment must align with the World Bank's Environmental and Social Framework (ESF) and its applicable Environmental and Social Standards

(ESSs), ensuring that recommendations consider potential environmental and social risks and align with best practices in transboundary water resource management. Work under this consultancy is also expected to incorporate gender-sensitive approaches in all project activities and conduct a GBV/SEA/SH risk assessment. All technical assistance and recommendations must align with World Bank Dam Safety requirements (ESS4 - NAS4).

4. Establishment of the short-list and the selection procedure shall be in accordance with the attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" dated September 2023 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest which is available on the Bank's website at <u>https://thedocs.worldbank.org/en/doc/Procurement-Regulations-September-2023.pdf</u>. The Consultant will be selected under the Consultants Qualifications-based Selection.

The firms will be selected using the following criteria:

Evaluation Criteria	
	Points
Firm specific experience related to the assignment	40
Availability of Qualified and Experienced Experts	60
Total	100

- 5. Interested consultants may obtain further information and detailed terms of reference at the address below during office hours 08h00hours to 16h30hours Botswana time.
- 6. Expressions of interest must be submitted electronically in PDF format and dully signed via this LINK: https://collab.sadc.int/s/p2Hmn7Qkzt3CW8T by midnight Botswana time on 3 April 2025 and should mention the name of the consultancy assignment. CONSULTANCY TO DEVELOP STRATEGIES FOR CLIMATE RESILIENCE IN SELECTED BASINS AND CARRY OUT DAM SYNCHRONISATION STUDIES (A Firm)

Firms are advised to submit their proposals during working hours for support in case of any technical problems. Expressions of Interest must be submitted as one PDF file or zipped folder bearing the name of the applicant.



7. Below is the address for obtaining further information:

The Procuring entity: SADC Secretariat Head of Procurement Unit Contact person: Ms. Mercy Mikuwa Telephone: +267 364 1989 / 3951863 Fax: 3972848 E-mail: mmikuwa@sadc.int Copy to: dmndzebele@sadc.int; tchabwera@sadc.int ANNEX 1

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# TERMS OF REFERENCE



### TERMS OF REFERENCE

For

CONSULTANCY TO DEVELOP STRATEGIES FOR CLIMATE RESILIENCE IN SELECTED BASINS AND CARRY OUT DAM SYNCHRONISATION STUDIES



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#### 1. BACKGROUND INFORMATION

#### **1.1. Partner country and procuring entity**

Southern African Development Community (SADC)

#### **1.2. Contracting authority**

Southern African Development Community Secretariat (SADC Secretariat)

#### 1.3. Background and rationale

#### 1.3.1. Background

The SADC Region is vulnerable to a wide range of water-related disaster hazards. In relation to water security threats, these include both flood and drought related disasters, often induced by the ever-increasing frequency and impact of La Nina and El Nino conditions respectively, which are arguably also associated with climate change. Considering that nine out of ten global natural disasters are water-related (World Bank, 2023), which is also an observed tendency in SADC with respect to regional disasters, the need for deepened understanding of the climate-water risks, up-to-date dam analytics and responsive dam operations is therefore compelling.

Many of the region's dams are built for primarily one type of water use, being hydropower (e.g., major dams in the Zambezi River Basin) or irrigation (e.g., in the Incomati, Maputo, Limpopo, and lower Orange-Senqu River Basins) or domestic and industrial water transfers (e.g., upper Orange-Senqu in Lesotho). To a limited scale some dams have integrated or retrofitted hydropower as secondary user (e.g., Maguga Dam in the Incomati system). Dam operation tends to sometimes conflict therefore with the objective of utilization of the region's dam systems to mitigate flooding during La Nina situations—dam operators for irrigation-biased dams would like to keep storage at the maximum even at the beginning of a rainy period of a predicted La Nina season. Even in El Nino conditions, the need for dam operation synchronization is very important (e.g. for upstream-downstream notification on reduced or timed flow releases or system rationing measures). Reviewed and synchronized dam operation rules, especially for transboundary watercourse systems, are a requirement therefore to increase the resilience of the region's Member States to climate change-induced pressures.

In 2011 a dam synchronization study was undertaken by SADC for the Zambezi River Basin. Results of the study were adopted by the dam operators in the Zambezi, especially for the large dams operated by the Zambezi River Authority (for dam systems joint operations between Zambia and Zimbabwe) and Cahora Bassa operators in Mozambique. A joint task force was established that ensures annual reviews of system performance and to inform operational response plans for predicted water levels situation, and the ease of information exchange. Lessons from the Zambezi would help with setting up transboundary dam operations for other regional systems such as Buzi, Pungwe and Save (BUPUSA) Tri-basin, and Incomati River Basin. These are seen as some potential *hot spot* basins, considering the response function of these systems to several cyclones in the recent 5-10 years, and La Nina and El Nino Conditions.

In view of the above, the Southern African Development Community Secretariat is undertaking a number of interventions to increase the resilience of the SADC economies. One such initiative is the Regional Climate Resilience Program (RCRP), which is a programmatic framework (structured as a series of projects or SOPs), funded by the World Bank, with the objective of strengthening the resilience to waterrelated climate hazards and their impacts in Eastern and Southern African countries. The first project within this program, RCRP-1 supports Madagascar, Mozambique, South Sudan, Comoros, and two regional organizations: SADC, and the Eastern Nile Technical Regional Office (ENTRO) while the second project (RCRP-2) supports Malawi and the African Union. The SOP allows for scalability (countries can join at different times) and economies of scale. It supports catalytic medium- to large-scale investments to reduce people's exposure to climate shocks, with a focus on protective, multi-benefit infrastructure; risk adaptation and mitigation via improved early warning systems and planning; and scaling up adaptive safety nets and decentralized resilience building activities.

The Project Development Objective (PDO) of the RCRP-1 project is to improve the management of water-related climate hazard impacts in Eastern and Southern Africa, and, in case of an Eligible Crisis or Emergency, for early response. The PDO addresses the need for improved management of water-related climate impacts in the participating countries, in particular management of hazard from increased rainfall variability and extremes, droughts, floods, and cyclones affecting the regions. Component 2 of the project focuses on Infrastructure Investments and Sustainable Asset Management for Climate Resilience. Through the project, the SADC Secretariat intends to solicit the services of a Service Provider (consultant) to undertake some activities under Component 2.

#### **1.3.2.** Current status in the sector and rationale

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This activity seeks to diagnose climate risks to selected river basins, viewed as potential hotspots. Two groups of river basins have been identified, namely Incomati, and the tri-basin group including Buzi, Pungwe and Save (BUPUSA). These basins have been historically seen to be responsive to major cyclones that have hit the region in certain La Nina years since the experience of Cyclone Idai in 2020 that ravaged Zimbabwe and Mozambique in the BUPUSA River Basins.

Identified basins need to be evaluated in terms of risks of past and projected hydroclimatic variability, droughts, and floods. The assessment of hydroclimatic variability includes the evaluation of the influence of large-scale patterns such as ENSO, seasonal changes, changes in the onset of the rainy season, and others as agreed with the client. The assessment of floods and droughts will include the evaluation of their physical characteristics as well as assessment of observed impacts. The assessment will look also at the transboundary characteristics of mentioned risks.

The evaluation of hydroclimatic projections must follow a bottom-up-based approach which permits a deep exploration of the uncertainty in climate projections dictating the identified basins. So, this activity is expected to generate a mapping exercise that describes the hydroclimatic risks of the basins. As such, this activity will include the development of hydrological and water systems models along with the application of other relevant tools to examine and account for uncertainty in hydroclimatic relationships in the basins. The consultants should first explore what models exist, if any.

Furthermore, the activity aims to make recommendations to improve the resilience of the identified basins, with a particular focus on how to improve or optimise dam operations. At the same time, this activity seeks to undertake a dam synchronisation study for selected river basins viewed as potential '*hot spot*' basins in relation to upstream-downstream dam operation impact. This will be applied for the two groups of river basins identified for the study, namely Incomati River Basin and the BUPUSA tri-basin group. The task will also include the review of dam operation rules (of major dams) and make recommendations on their improvement, while also making recommendations on synchronisation procedures for dam releases. This is aligned with the SADC Protocol on Shared watercourses that advocates for joint effort to mitigate against causing significant harm to one another among riparian states, and the exchange of information.

In addition, in the selected basins, additional options will be explored to increase their resilience in connection to better manage water extremes and variability. These include identification of upstream infrastructure (grey or green) interventions, intervene in land cover-use, soft measures, and others which would adapt the basins to changing climate risks. The approach should follow an evaluation of the performance of such interventions against multiple scenarios describing climate risk, accounting for uncertainties in projections, and other metrics which would describe success or failure of interventions. As such, the activity will involve strong coordination with local stakeholders to develop narratives to describe climate risk and other relevant metrics.

These materials (developed methodologies and tools) will be also used in capacitating SADC National Hydrological Services (NHSs) and RBOs in reservoir system management and collaboration in transboundary watercourses.

#### 2. OBJECTIVE, PURPOSE, AND EXPECTED RESULTS

#### 2.1. Overall objective

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To identify options for improving infrastructure assets operations to increase the resilience of selected SADC river basins.

#### 2.2. Purpose (Specific Objective)

The specific objectives of the assignment are to:

- estimate the current and projected climate risks to the selected river basins viewed as hydroclimatic variability, and characteristics of droughts and floods. The identification shall follow a risk-based approach to account for the uncertainty in climate projections and characterisations of the selected basins;
- (ii) refine adaptation strategies to account of dam interventions such as synchronisation and optimisation of operations under identified conditions of change;
- (iii) Identify additional interventions that would complement existing storage and their operation, to help increase the overall resilience of selected basins. These strategies are expected to consider but will also go beyond the modification of operational rules of dams and look at wider catchment and water strategies; and
- (iv) Provide training for Member States (through a regional training workshop) on the methodologies utilised in the study.

All activities, including studies, stakeholder engagement, training and capacity building conducted under this assignment must align with the World Bank's Environmental and Social Framework (ESF) and its applicable Environmental and Social Standards (ESSs), ensuring that recommendations consider potential environmental and social risks and align with best practices in transboundary water resource management.<sup>1</sup> Work under this consultancy is also expected to incorporate gender-sensitive approaches in all project activities and conduct a GBV/SEA/SH risk assessment. All technical assistance and recommendations must align with World Bank Dam Safety requirements (ESS4 - NAS4).

#### 2.3. Results by contractor

For each Part, the Consultant shall prepare the following set of reports described in the section about deliverables:

a) Inception Report

b) Interim PowerPoints (for discussion) showing progresses, advances, and barriers

- c) Draft final report;
- d) Final report;

<sup>&</sup>lt;sup>1</sup> Please see here for World Bank Group ESS: <u>https://projects.worldbank.org/en/projects-operations/environmental-and-social-framework/brief/environmental-and-social-standards</u> and here for World Bank Group ESF: https://www.worldbank.org/en/projects-operations/environmental-and-social-framework



e) access and transfer (if needed) of any developed interactive visualisation tools/portals

f) Other PowerPoint presentations, as directed;

g) Other documents as requested and agreed with the Project Team and the Counterpart; and

h) Training material development and training delivery to water agencies in SADC Member States and RBOs.

Timelines for the deliverables will be proposed and agreed during project inception phase.

# 3. ASSUMPTIONS AND RISKS

# 3.1. Assumptions and Risks underlying the project

#	Risks	Risk level. (H/M/L)	Mitigating measures	Assumptions
1.	Low participation of Member States' NHSs and RBOs in training programmes	Μ	Early invitation and promotion through the SADC Water Resources Technical Committee, and ensuring that trainees are involved in operation.	Member States NHSs and RBOs are fully engaged in the training and NHSs will continue to supply them with resources post-project SADC needs to coordinate with WB and improve the dialogue.
2.	Trained experts leaving the organisation for greener pastures	Μ	Provide for training of two practitioners per country, a substantive and an alternate	Nominees will come from relevant sectors, and SADC will work with the governments to identify acceptable candidates well in advance of the training.
3	Poor cooperation and sharing of information on hydrological condition and river basins	Μ	Formal introduction of project will made to RBOs and beneficiary states, so that Member States and RBOs can all effectively support project implementation	Project adds value to basin strategies and national priorities, and so Member States and RBOs can

		effectively	contribute
		information	l.

#### 4. SCOPE OF THE WORK

#### 4.1. General project description

This assignment is expected to follow a participatory-planning approach. The consultancy will estimate current and projected climate risks to the region's selected river basins. It will then design adaptation strategies that also include dam synchronisation solutions and improved operations for conditions of change. It will further develop knowledge products, also involving engagement of and dissemination through regional multi-stakeholder forums.

The consultant shall consider potential downstream environmental and social risks in all technical assistance outputs, including: (i) Impacts of water allocation strategies on livelihoods and ecosystems; (ii) Cumulative and transboundary impacts across affected riparian states (South Africa, Mozambique, Zimbabwe, Eswatini); (iii) Climate resilience measures to prevent negative socio-economic effects on local communities.

#### 4.2. Geographical area to be covered

The assignment will cover primarily two RBOs, and Basin States of river basins including the Incomati, and BUPUSA. For the rest of SADC Region, all 16 SADC Member States and RBOs will participate in regional training.

#### 4.3. Target groups

The action is targeting SADC Member States riparian to the Incomati and BUPUSA River Basins, namely South Africa, Eswatini, Mozambique and Zimbabwe. Included also are RBOs of the river basins including, INMACOM, and BUPUSA Watercourse Commission, as well as the Komati Basin Water Authority (KOBWA). SADC 16 Member States NHSs and all other RBOs will also benefit through training on developed tools, early warning systems and flood forecasting using the Southern African Regional Climate Outlook Forum (SARCOF) information. SADC will facilitate the liaison between the consultants and the relevant stakeholders, including data sharing.

#### 4.4. Specific work

The inputs and feedback of stakeholders are expected to be constant, even if not explicitly mentioned in the steps below:

- (i) Review existing literature, models, and other tools to develop the assigned tasks
- (ii) Identify the systemic characteristics of the basins selected. This may include the development of schemes, maps, or system-based representations of the basins to describe the key elements and interconnections that describe water security and resilience in the basins.

- (iii) Climate stress testing and identification of solutions in selected basins
  - Identify the key relevant metrics that may describe resilience, robustness, failure/success of policies, and others to manage climate-water risks in the identified basins. The metrics should account for physical-hydrological impacts as well as others related to cooperation across basins, type of impacts, and others.
  - Identify the main drivers of climate risk to the developed metrics in the selected basins. The main drivers must be related to hydroclimatic variability (seasonal, inter-annual, decadal), occurrence, frequency and duration of extremes (floods, and droughts), and others considered relevant for the assignment.
  - Identify the context of climate-water risk. Identify past events of hydroclimatic risks which have resulted in climate-water risks. Also, identify the general characteristics of future events as suggested by GCMs, RCMs or other available climate projections.
  - Following stakeholder consultations, identify interventions appropriate to address climate-water risks in the basins.
  - Develop scenarios that describe hydroclimatic risks. Using a weather generator along with a suitable hydrological model, this step would generate sufficient number of hydroclimatic scenarios which account for the uncertainty in future climate risks while also being able to translate these scenarios into meaningful surface hydrological variables (river flow, floods, and other as agreed with the team).
  - Identify a simple hydrological and water systems model that can be used or adapted for SADC that sufficiently describes the characteristics of the basins (as mapped in previous steps) while having sufficient capabilities to be modified following both the suggested interventions and conditions of climate risk as developed previously.
  - Using the identified model, stress test the performance of the developed metrics against the scenarios generated previously using the Incomati River Basin as a case study.
  - Identify the main drivers of climate risks, and the hotspot areas (possibly through use of satellite imageries and validation with existing data), and others that describe the vulnerability of the basins.
  - Develop a dam synchronisation procedure to be recommended for operations under conditions of change.
  - $\circ\,$  Identify the trade-offs across interventions and the potential portfolios which might group them.
  - Develop a roadmap of decisions which identify the steps to be taken at different points in time or thresholds of climate, while accounting for the

uncertainty in long-term projections and the need for adaptive interventions.

- (iv) Training:
  - Develop training material on the developed tools and the use of seasonal meteorological forecasts to generate hydrological outlooks.
  - Deliver required training to SADC Member States hydrologists and SADC RBOs through regional training workshop(s)
- (v) Dissemination:
  - Prepare and deliver presentation to regional multi-stakeholder dialogue forums as knowledge exchange
- (vi) Prepare project reports on the above tasks

### 4.5. Project management

The assignment shall be coordinated by the Senior Programme Officer of the SADC Water Division with the advisory support of the DRR Unit and the RCRP Project Coordinator. Outputs referred to above shall be submitted to the Deputy Executive Secretary responsible for Regional Integration (DES-RI) through the DRR Unit for final approval.

Periodic progress meetings will also be held, at which the consultant will make presentations on progress. From time to time, representatives of participating Member States, RBOs and other important stakeholders will also be invited to participate in the project steering meetings. Outcomes and guidance from the meetings will be used to inform the quality of outputs highlighted above.

# 4.6. Facilities to be provided by the contracting authority and/or other parties

The SADC Secretariat, as the Contracting Authority will provide the following.

- Letters of introduction of the Consultant to stakeholders, Member States and RBOs to facilitate access to information;
- Available reports;
- Costs of participation of trainees for regional training workshops to be arranged (travel, accommodation and meals); and
- Venue for training.

# 5. LOGISTICS AND TIMING

#### 5.1. Location

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The services shall be home-based. The Team of Consultants/Consulting firm will be required to facilitate the consultancy consultations and workshops either face-to-face or virtually.

# 5.2. Start date and period of implementation

The assignment shall commence on the date of signature of the contract by both parties, and the period of implementation of the contract will be eighteen (18) months from date of signature of the contract.

### 6. **REQUIREMENTS**

### 6.1. Service Providers

The assignment is expected to be undertaken by a Consultancy Firm with the necessary expertise to include at least the experts listed below. The desired firm should be of good business standing, with legal business registration and compliant with relevant regulations, financially stable, with demonstrated project experience (capacity and good track record to undertake projects), and with insurance to protect clients from potential liabilities. It should also have a well-established quality control system in its operations (quality control procedures and methodologies), and commitment to ethical practices and professional standard.

The firm is allowed to propose additional expertise if deemed relevant for the assignment. The principal personnel of the Firm assigned to the study shall have a strong background in Hydrology, Climate Change, Flood modelling, Water Resources as well as Hydroinformatics, other relevant fields. Experience about methods on stress testing, risk-based decision making, bottom-up risk assessment, uncertainty, and resilience, is a must.

The successful Service Provider must demonstrate: (a) Experience in environmental and social risk assessments; (b) Expertise in stakeholder engagement methodologies, including gender and social inclusion strategies; (c) Proven track record in dam safety assessments, emergency preparedness, and sustainable infrastructure planning.

The following are the minimum qualifications and time input for the Consultant's key personnel required to carry out the services:

# 6.1.1. Team Leader & Water Resource Management Expert

# (a) Qualifications and skills

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The Team Leader should hold a Masters or PhD in Hydrology, Hydrogeology, Water Resources Management/Engineering, Environmental Engineering or related discipline, with strong transboundary water resources planning skills.

# (b) Specific professional experience

- At least 10 years' experience in water resources management work, including experience in water system modeling
- At least 6 Years' experience in the transboundary water management;
- At least 5 years' experience in multi-disciplinary project team leadership

- At least 5 years general experience in emergency preparedness plan development or use
- Deep appreciation of the SADC Protocol on shared watercourses
- Appreciation of at least one transboundary water cooperation agreement of a SADC RBO
- Familiarity with resilient investments at the transboundary community and country level
- Knowledge of drought preparedness plans and their use
- General ability for climate information interpretation and understanding of flood forecasting and early warning information
- Water-related disaster risk management experience
- Demonstrated experience in working with governments, diverse communities and partners

# (c) General professional experience

- At least 5 years general experience in consultant team leadership
- Must have experience in decision making under uncertainty and development of scenarios
- Must be result-oriented, a team player, exhibiting high levels of enthusiasm, tact, diplomacy, and integrity
- Demonstrate excellent leadership, interpersonal and professional skills.
- interacting with government and development partners
- Excellent report writing capabilities
- Fluent in spoken and written English
- Good presentation and facilitation skills
- Working knowledge of French and/or Portuguese will an added advantage
- Computer literate with good working knowledge of the standard Microsoft Office suite of programmes
- Good project management skills

# 6.1.2. Water System Modeler

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# (a) Qualifications and skills

Masters or PhD in Hydrology, Hydrogeology, Water Resources Engineering or related discipline, with strong transboundary water resources planning skills.

# (b) Specific professional experience

- At least 15 years' experience in water resources management or planning
- At least 10 Years' experience in water system modelling work
- At least 5 years' transboundary water planning or modelling
- At least 5 years general experience in emergency preparedness plan development or use
- Experience in the use of GIS and flood risk mapping

- Adequate experience in the development or review of dam operation rules
- Adequate appreciation of the SADC Protocol on shared watercourses
- Appreciation of at least one transboundary water cooperation agreement of a SADC RBO
- Demonstrated experience in working with governments, diverse communities and partners
- Appreciation of the SARCOF or related products and their use in hydrological products preparation

# (c) General professional experience

- At least 5 years general experience in related consultancy work
- Must be result-oriented, a team player, exhibiting high levels of enthusiasm, tact and integrity
- Ability to impart technical knowledge to others through training
- Excellent analytical skills
- Excellent report writing capabilities
- Fluent in spoken and written English
- Good presentation and facilitation skills
- Working knowledge of French and/or Portuguese is an added advantage
- Computer literate with good working knowledge of the standard
- Microsoft Office suite of programmes

# 6.1.3. Climate Expert

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# (a) Qualifications and skills

Masters or PhD in Hydrology or Climate Science or related discipline, with experience in water related climate scenario modelling.

# (b) Specific professional experience

- At least 10 in the production of regional climate products
- At least 10 Years' experience in hydrological modelling work
- At least 5 years' experience in uncertainty-based approaches
- At least 5 years' preparing or using SARCOF products for early warning systems and advisory to users include the Water Sector at country or regional levels.
- General appreciation of tailor-making weather and climate products for use by clients such as water and DRR
- General appreciation of climate information interpretation and its use in flood forecasting and early warning information generation

# (c) General professional experience

- At least 5 years general experience in related consultancy work
- Must be result-oriented, a team player, exhibiting high levels of enthusiasm, tact and integrity.



- Ability to impart technical knowledge to others through training
- Excellent analytical skills
- Excellent report writing capabilities.
- Fluent in spoken and written English.
- Good presentation and facilitation skills
- Working knowledge of French and/or Portuguese is an added advantage.
- Computer literate with good working knowledge of the standard
- Experience in interactive modeling platform

### 6.1.4. Selection Criteria for RFP Stage after Shortlisting

Table 2 provides the selection criteria for the service provider.

No.	Criteria Category	Total Points for Consultancy team
		(%)
1.	Qualifications (education and professional	35
	skills of the team of experts)	
2.	Specific Professional Experience (training	40
	and skills development and programming)	
3.	General Professional Experience	15
	Experience in environmental and social risk	10
	assessments aligned with World Bank	
	ESF/ESS requirements or similar.	

Table 2: Selection Criteria for Team Leader/Drafter

#### 6.2. Incidental expenditure

It is expected that this consultancy will be conducted in hybrid virtual and face to face modes. Any incidental expenses will be part of the global price.

#### 6.3. Expenditure verification

There will be no expenditure verification for this project.

# 7. REPORTS

#### 7.1. Reporting requirements

The Consultant will report to the Deputy Executive Secretary-Regional Integration through the Acting Head of DRR Unit, with the day-to-day support supervision from the SADC Water Division of the Infrastructure Directorate and RCRP Project Coordinator.

#### 7.2. Duration of the assignment

The proposed deliverables will be expected to be finalized within 18 months.

# 7.3. Payment Schedule

The payment schedule is related to reports and their approvals, as follows:



- 20% upon submission and approval of the Inception report;
- 25% upon submission of the draft report for stress testing and solutions for dam synchronization
- ✤ 35% upon submission and approval of the final reports
- ✤ 20% upon completion of the training

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