

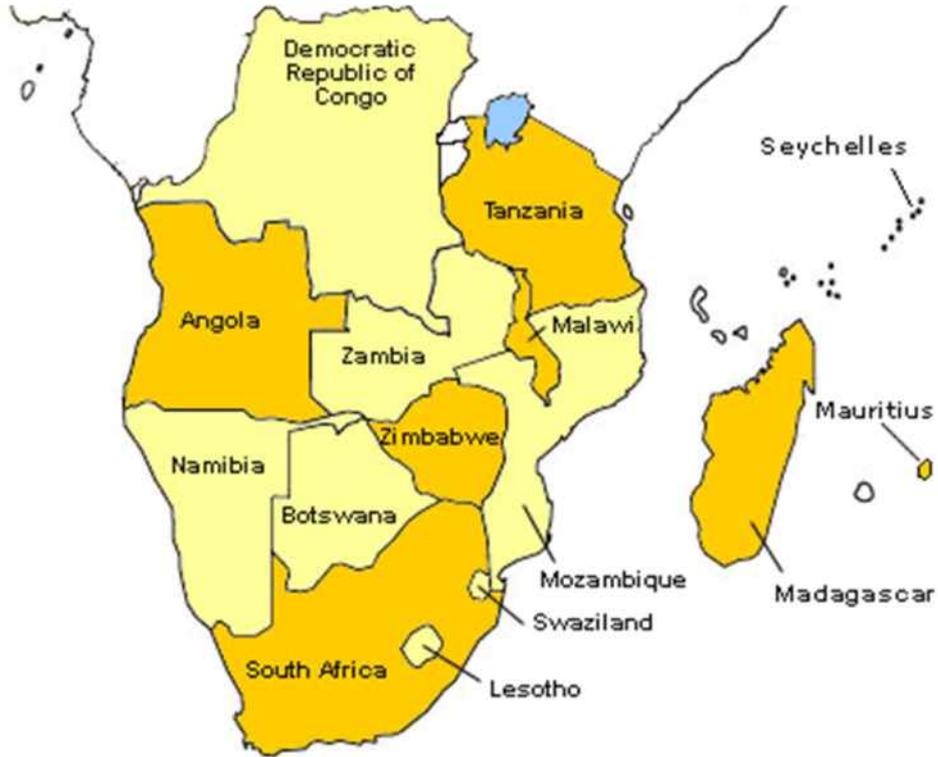


Regional Water Infrastructure Programme

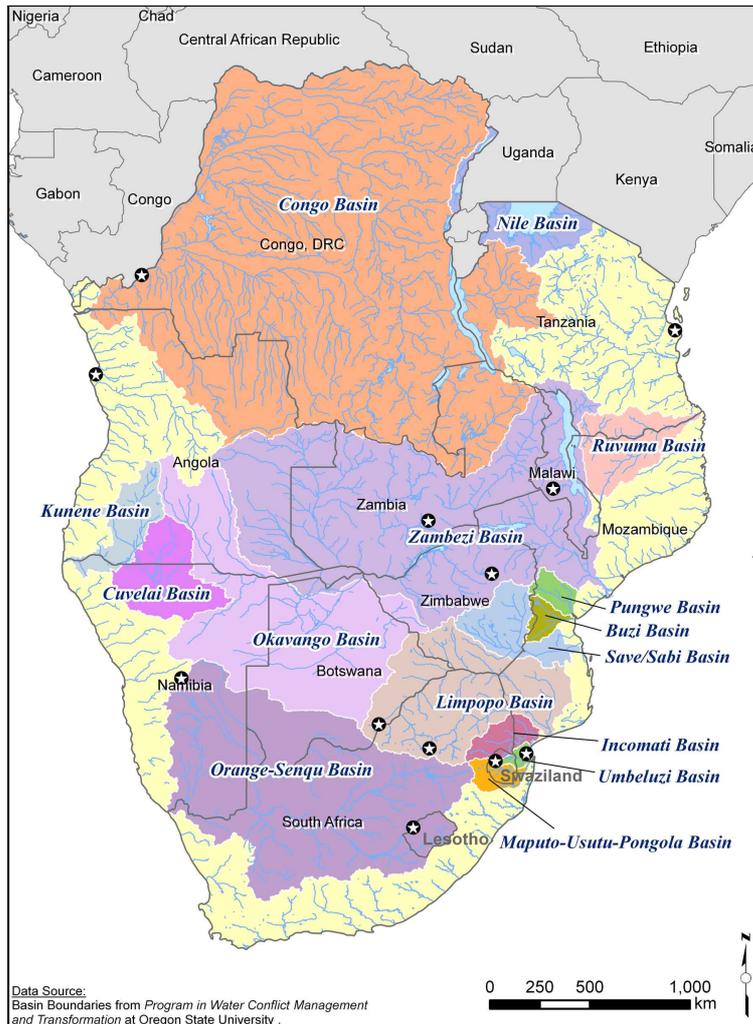
“Watering life together, forever”



SADC Member States



River Basins in the SADC Region





Foreword from the Director of Infrastructure and Services

During the Summit of the Southern African Development Community (SADC)'s in 2009 the Heads of State and Government launched "SADC 2010", an Investment Promotion Programme aimed at promoting sustainable investment into the SADC Region against the backdrop of the CAF Africa Cup of Nations in Angola and the FIFA World Cup in South Africa.

Under the theme "1 Team, 15 Nations for Sustainable Investment", it was agreed to raise the visibility of SADC, both regionally and internationally and attract measurable sustainable investment into the Region to contribute to the economic well-being of its peoples. The SADC Region presents vast investment opportunities in the key sectors of Infrastructure and Services, Tourism, Trade and Industry. The natural endowments in minerals, oil, abundant raw materials for manufacturing and value addition, coupled with a combined population of about 257 Million inhabitants with an estimated GDP of US\$471 billion, makes the Region an invaluable investment partner.

As the Southern Africa region is largely a water deficit region the majority of its people lack access to basic safe water and appropriate sanitation. SADC Member States have acknowledged the importance of water in regional integration with the *Protocol on Shared Watercourses*. Following this commitment a sound legal framework

consisting of *SADC Regional Water Policy* and *SADC Regional Water Strategy* was established and is implemented through the first, second and upcoming third *Regional Strategic Action Plan on Integrated Water Resources Development and Management*.

During these implementation efforts Member States identified diverse small, medium and macro Strategic Water Infrastructure Projects, altogether worth US\$6.5 Billion. These projects were supported with advice and feasibility studies through the *Regional Strategic Infrastructure Development Support Programme* within our secretariat. As the Water Sector is one of the five key-sectors of the "SADC 2010" campaign we are aiming now on sustainable investment via Public Private Partnership in these projects and are currently implementing first pilot projects. An example is the Kunene Transboundary Water Supply Project between Angola and Namibia.

A handwritten signature in black ink, appearing to read 'Remigious Makumbe'.

Remigious Makumbe, Director
Directorate of Infrastructure and Services



Regional Water Infrastructure Programme

Introduction

The water sector plays an important role in the realisation of the SADC goal of Regional economic integration aimed at poverty reduction. Integrated Water Resources Management (IWRM) and related infrastructure development is one of the priority intervention areas under the *Regional Indicative Strategic Development Plan* (RISDP) aimed at contributing to the SADC goal. IWRM is a holistic approach of developing and managing water through an all inclusive participatory approach across sectors and stakeholders at all levels. The requirement for regional water infrastructure development was reaffirmed in RISDP in 2003 through its two main specific targets:

- (a) Develop by 2015 water infrastructure needed to double land under irrigation, and
- (b) Halve the proportion of people without access to drinking water and proper sanitation.

SADC Member States felt that the development of physical water infrastructure makes a difference to people's lives.

Enabling Environment

The enabling environment for the SADC Water Infrastructure Programme was established through the *Regional Strategic Action Plan on Integrated Water Resources Management* (RSAP-1) as early as 1998. One of the main products of RSAP-1 was the development of the *SADC Protocol on Shared Watercourses*. Subsequently the *SADC Water Policy and Strategy* were developed to provide policy direction to the development of the water sector. The second phase of the plan (RSAP-2) was launched in 2005 and aims to provide leadership and coordination of water resources development and management including infrastructure

development at both Member State and regional level within a sustainable environment. RSAP-2 consolidated all the SADC Water Programmes into four clusters of which the Infrastructure Support Cluster is a core programme.

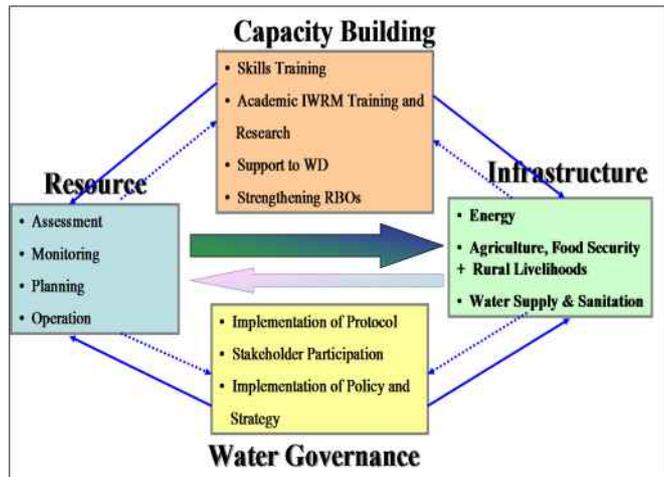


Figure 1: RSAP-2 Programme Clusters

Part of the enabling environment entailed the establishment of a Policy and Regulatory Environment upon which infrastructure development could be sustained. Figure 2 shows the overall instruments that guide water resources development in the SADC region.

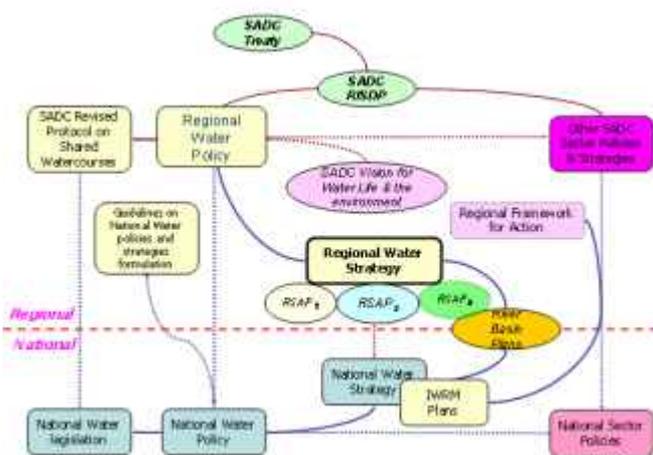


Figure 2: Policy and Regulatory Framework

Institutional Framework

Institutional Development and Strengthening is a major component of the enabling environment as it is necessary for the management of the infrastructure development

programme. Figure 3 shows the institutions involved in the SADC water sector.

The institutional framework brings together Member States and International Cooperating Partners (ICPs) under the coordination of the SADC Secretariat. The ICPs coordinate their input to the water programme through the Water Strategy Reference Group (WSRG).

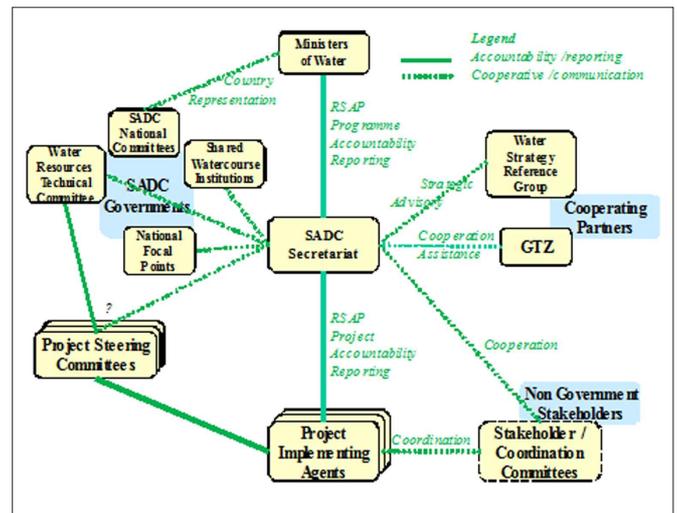


Figure 3 Institutional Framework

Shared Watercourse Institutions (River Basin Organisations - RBOs)

The majority of SADC watercourses are shared by two or more countries. As such it became necessary to develop institutions for the management of transboundary watercourses. Shared watercourse institutions are the main vehicle for the implementation of the SADC water programme at river basin level.

They are provided for by the SADC Protocol on Shared Watercourses under article 2(a), Article 5, 1(b) and 3. They can be established as commissions, water authorities, or boards as may be determined by the respective parties.

Their main role is to:

- Facilitate coordinated, judicious, and sustainable utilisation of shared watercourses;
- Act as advisory bodies and joint programme implementation agencies on behalf of Member States;
- Develop joint Strategic Action Plans / Programmes and projects for implementation along shared watercourses; and
- Offer a platform for discussions, information sharing and conflict prevention at river basin level.

SADC Water Infrastructure Programme

The SADC Water Infrastructure Programme is comprised of three main programmes:

- Regional Water Supply and Sanitation Programme (RWSSP)
- Community Livelihood and IWRM Demonstration Programme, and
- Regional Strategic Water Infrastructure Development Programme (RSWIDP)

The Regional Water Supply and Sanitation Programme (RWSSP)

This programme entails the development of a regional framework for water supply and sanitation, planning and management to facilitate the attainment of the Millennium Development Goals (MDGs). It involves institutional strengthening, rationalization, knowledge management, and monitoring and evaluation systems.

Community Livelihoods and IWRM Demonstration Projects

This programme is comprised of projects that are necessarily to demonstrate and promote the benefits of IWRM at community level, which is crucial for the implementation of physical water infrastructure projects. They include small projects such as the establishment and rehabilitation of small irrigation, water supply and sanitation schemes as well as catchments management projects. They are targeted at poor communities in rural areas and help alleviate poverty.

Regional Strategic Water Infrastructure Development Programme (RSWIDP)

The RSWIDP aims to promote the development of strategic water infrastructure including rehabilitation and expansion of existing facilities, creation of new facilities, regional programme for water supply and sanitation. RSWIDP is founded on the principle of Integrated Water Resources Management, taking into account the impacts of Climate Change with a view to improve resilience. It has three support pillars of Water Supply and Sanitation, Food Security and Energy Security.

RSWIDP has four sub-programmes:

- Project Preparation and Packaging,
- Resources Mobilisation,
- Capacity Building, and
- Pilot Projects

Project Preparation and Packaging entails the preparation of projects into bankable projects. Water infrastructure projects are categorized into three main categories, namely:

- Small and Medium Priority Projects,
- Macro-Priority Projects, and
- IWRM Demonstration Projects.

Small and Medium Priority Projects are those projects which can be implemented in a relatively short space of time (three - five years) and within a relatively small budget (less than 10 million Euros), see Table 1 in the annex. Macro-Priority Projects are large and complex projects such as dams for hydropower and irrigation. These projects require extensive preparation over many years and often involve more than one country in preparation, see Table 2 in the annex. More information about IWRM demonstration projects is provided in Table 3 of the annex.

Resource Mobilisation involves the mobilisation of resources for project preparation, packaging and implementation. These are in the form of Project Preparation Facilities such as the SADC Infrastructure Project Preparation Facility (IPPDF) hosted by the Development Bank of Southern Africa (DBSA) and the SADC Water Infrastructure Project Fund also hosted by DBSA. Other initiatives involve investment promotion activities such as “SADC 2010” that was launched as part of the CAF Africa Cup of Nations in Angola and the FIFA World Cup in South Africa. The organisation of Regional Water Infrastructure Donor Conferences is another form of resource mobilisation.

The **Capacity Building** component deals with the development of capacity building programmes and tools to enhance the capacity of Member States to develop and implement water infrastructure programmes. These include the development of guidelines on water infrastructure financing and implementation of transboundary water infrastructure projects. Training manuals on key topics taken from the UNEP Dams and

Development Compendium of Relevant Practices have also been developed. These include training manuals on Environmental Management Plans, Comprehensive Options Assessment and Selected Economic and Social Aspects and Benefit Sharing. The training manuals are rolled out to various key stakeholders such as Policy Makers, Practitioners and Civil Society.

The selection and implementation of **Pilot Projects** is a major component of RSWIDP. Pilot projects are implemented in order to demonstrate key aspects of water infrastructure development and to share such lessons learned with all SADC Member States. The Kunene Transboundary Water Supply Project between Namibia and Angola is the first Pilot project under RSWIDP. The project is implemented by the Task Force Calueque, a subcommittee of the Permanent Joint Technical Commission (PJTC) on the Kunene River Basin between Angola and Namibia. The project is carried out with the financial and technical support of the German Government (through the German Technical Cooperation, GTZ and German Development Bank, KfW) with contributions from the Angolan and Namibian Governments.

[For further information on potential investment opportunities please contact:](#)

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SADC Water Partner Organisations

African Ministers' Council on Water (AMCOW),
www.amcow.net

Global Water Partnership - Southern Africa,
www.gwpsa.org

SADC Groundwater and Drought Management Project,
www.sadc-groundwater.com

SADC HYCOS,
<http://sadchycos.dwaf.gov.za/>

SADC Hydrogeological Map and Atlas,
www.sadc-hgm.com

SADC Water Sector ICP Collaboration Portal,
www.icp-confluence-sadc.org

Southern Africa Water Wire,
www.africawaterwire.org

SADC River Basin Organisations

International Commission for the Congo-Oubangui-Sangha
Basin (CICOS),
www.cicos.info

Lake Tanganyika Authority (LTA),
<http://lta.iwlearn.org/>

Nile Basin Initiative (NBI),
www.nilebasin.org

Orange-Senqu River Commission (ORASECOM),
www.orasecom.org

Orange-Senqu River Awareness Kit,
www.orangesenqurak.org

Pangani Basin Water Board (PBWB),
www.panganibasin.com

Permanent Okavango River Basin Commission
(OKACOM),
www.okacom.org

Annex

Table 1: Top 10 Priority Strategic Water Infrastructure Projects
Top Ranked Projects

Project No. Status	Country	Description	Estimated Cost (US\$) 2005 (million)	Funding Gap (US\$) million	Project Implementation
INF1:1.0	Angola/Namibia	Kunene Transboundary Water Supply and Sanitation Project	27	5	Detailed Design Stage. Procurement and Construction to follow.
INF1:1.1	Namibia	Rehabilitation of the Nordoewer Irrigation Scheme – Orange River; a joint project of Namibia and South Africa	2	1.8	Some rehabilitation done. A feasibility study to assess the remaining rehabilitation and cost is needed.
INF1:1.2 done.	Mozambique	Construction of Movene Dam	10	10	Feasibility Study carried
INF1:1.3	Zambia	Construction of 29 medium/small earth dams	8	8	Dam assessment studies done. Feasibility studies yet to be carried out.
INF1:1.4	Mozambique	Construction of three small dams in Sofala Province	1.8	1.8	Feasibility studies carried out. Need for detailed design and tender documentation.
INF1:1.5	Botswana	Construction of Manyana Dam on the Kolobeng River at Manyana	5	5	Detailed design and tender documentation done.
INF1:1.6	Mozambique	Rehabilitation/Expansion of Water Supply System in Manica Town	2.8	2.8	Detailed design carried out but needs review before tender documentation.
INF1:1.7	DRCongo	Rehabilitation of irrigation infrastructure - Kinshasa, Bas Congo, Katanga, Equateur province	1.3	1.3	Detailed feasibility studies done. Need for detailed design and Tender documentation.
INF1:1.8	Angola	Lubango Water Supply Phases 1 & 2	12.5	12.5	Conceptual Stage.
INF1:1.9	Angola	Water Supply and Sanitation Namibe Phases 1 & 2	6.6	6.6	Conceptual Stage.
INF1:1.10	Zambia	Lake Tanganyika Management Planning Project	2.5	2.5	Feasibility studies done.
Total			79.5	57.3	

Table 2: Top 10 Macro Strategic Water Infrastructure Projects
Top Ranked Projects

Project No. Status	Country	Description	Estimated Cost (US\$) 2005 (million)	Funding Gap (US\$) million	Project Implementation
INF1:2.1	Zambia	Kafue Gorge Dam Lower Project	1,800	1,800	Detailed feasibility studies done. Need for project appraisal.
INF1:2.2	Mozambique	Construction of Moamba-Major dam	500	500	Feasibility studies carried out. Need to detail the Environmental Assessment Studies.
INF1:2.3	Malawi	National Water Infrastructure Project development	5 *	5 *	Feasibility studies done. Awaiting National Water Master Plan Studies.
INF1:2.4	Zimbabwe	Batoka Gorge Hydroelectric Scheme	2,500	2,500	Detailed feasibility studies done. Need for project appraisal.
INF1:2.5	Lesotho	Metolong Dam Detailed Design and Construction	285	240	Detailed design carried out. Investor's conference held. Part funding received.
INF1:2.6	Lesotho	Lowlands Water Supply Scheme	430	430	Detailed design done. Part funding received.
INF1:2.7	Zimbabwe	Gwayi-Shangani Dam	40	28	Implementation ongoing
INF1:2.8	Mozambique	Construction of the Large Bue Maria Dam	400	400	Detailed design done. Need project appraisal and funding.
INF1:2.9	Tanzania	Ruhudi Hydropower Project	408	408	Detailed feasibility studies done. Need for detailed design.
Total			6,368	6,311	

*Feasibility Studies only

Table 3: Small IWRM Demonstration Projects

Project No.	Country	Project	Estimated Cost (1000 x US\$)	Funding Gap (1000 x US\$)	Project Status
INF3:1.1	SADC	Small Strategic Water Infrastructure Projects for Livelihoods and IWRM Demonstration	10,000	10,000	Phase 1 completed in selected SADC Countries. There is a need to upscale and cover all SADC Countries.
Total			10,000	10,000	



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