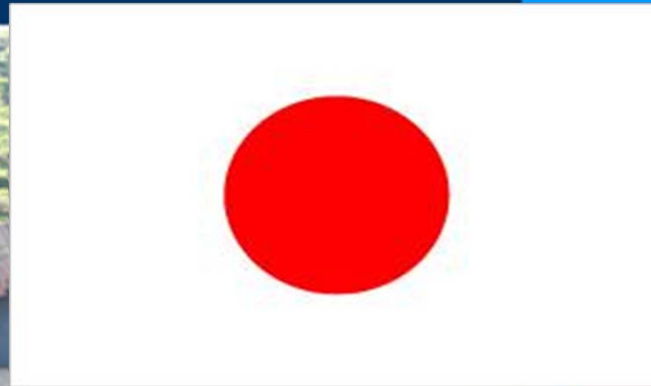




**SADC – JAPAN INFRASTRUCTURE
INVESTMENT CONFERENCE**

14 - 15 MARCH, 2012



INVESTMENT OPPORTUNITIES IN THE SADC WATER SECTOR

By

R Makumbe, Director, Infrastructure and Services

OBJECTIVES OF THE SADC WATER INFRASTRUCTURE PROGRAM

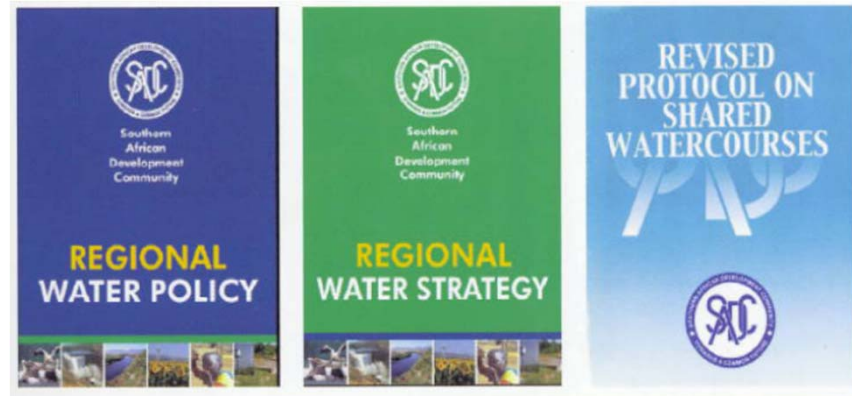
- ❑ The objective of the SADC Water Infrastructure Development Program is to facilitate the construction, operation and maintenance of water infrastructure to meet the requirements for:-
 - Irrigation
 - Water supply and sanitation
 - Hydropower generation; and
 - Flood management



SECTOR POLICIES AND PLANS

The SADC Water Infrastructure Development Program is governed by 4 regional instruments

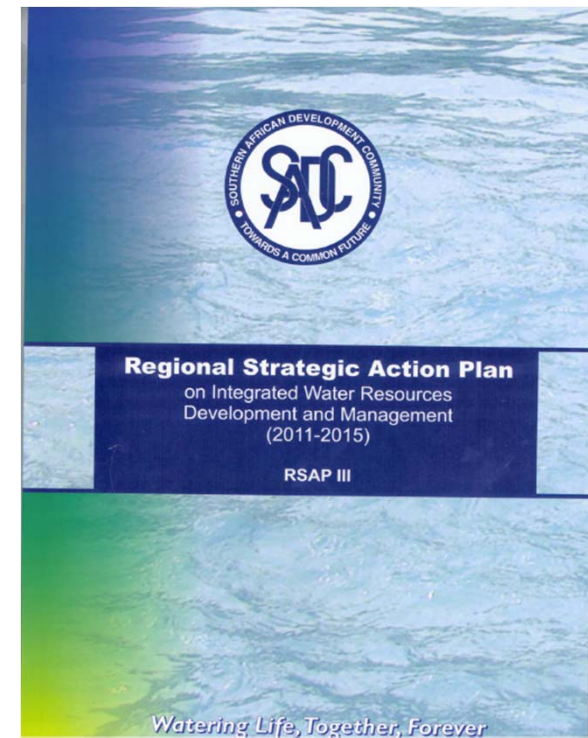
1. The Regional Water Policy (2005)
 - ❖ Is a framework for the development & management of water resources in SADC
2. The Regional Water Strategy (2006)
 - ❖ Is an instrument to operationalize The Regional Water Policy
3. The Revised Protocol on Shared Watercourses
 - ❖ The Protocol calls for the establishment of shared watercourse agreements and shared watercourse institutions to facilitate coordination and joint management of shared water courses



SECTOR POLICIES AND PLANS

4. The Regional Strategic Action Plan III (2011-2015)

- ❖ The RSAP III serves as a workplan to guide the development and implementation of activities in the water sector in SADC for the five-year period (2011-2015)
- ❖ It focuses on 3 areas:-
 - i. Water Governance
 - ii. Infrastructure Development
 - iii. Water Management

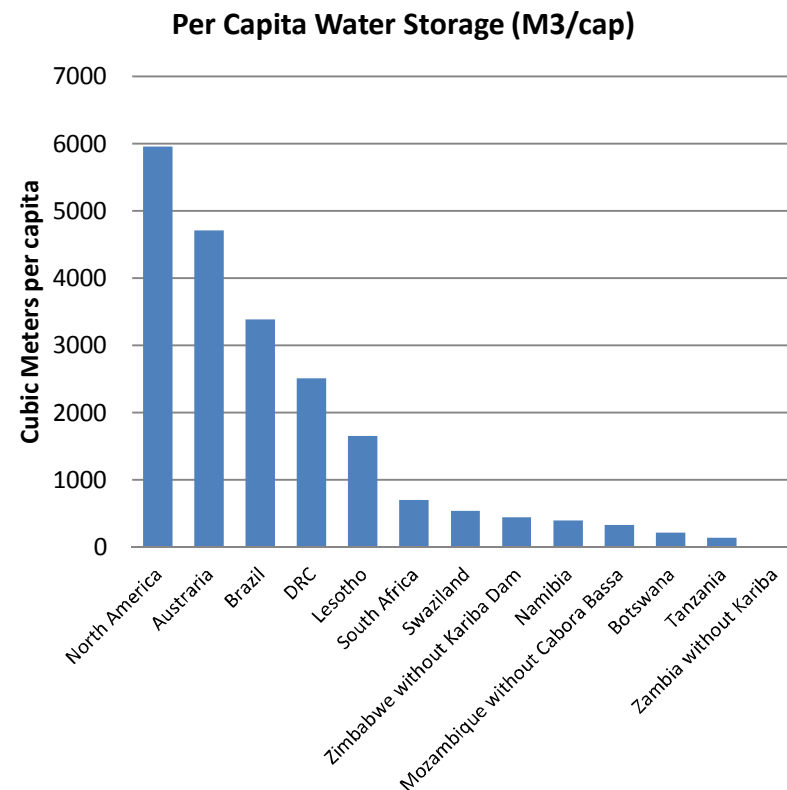


OPPORTUNITIES IN THE WATER SECTOR

□ The water sector in SADC offers investment opportunities in infrastructure development for:-

- Irrigation
- Hydropower generation
- Water supply and sanitation
- Water use efficiency (e.g. metering, leak detection and reducing unaccounted for water)

Water storage capacity in SADC is still very low compared to other regions as shown in this graph



PRESENTATION OF PROJECTS

- ❑ In 2011, the SADC Water Division assisted each Member State to identify one priority water infrastructure development project
- ❑ 10 of these projects are presented in the report prepared by SADC for this conference and distributed to you.
- ❑ These projects can be categorised into three groups:-
 - i. Water Supply and Sanitation Projects
 - ii. Multi-purpose Dam Construction projects; and
 - iii. Irrigation projects

This Map shows the Locations of the Priority Water Projects



P#	PROJECT TYPE AND NAME	COUNTRIES	KEY SECTOR	STATUS NOW	PROJECT TOTAL [USD M]
RG	REGIONAL PROJECTS				
RG-1	Inga 3 Hydropower	DRC-shared Regional Electricity	HE	Pre-FS done	7 600 to 10 000
RG-2	Lesotho Highlands, Phase 2	Lesotho, South Africa	HE WS	Agreement reached between SOA and LES to commence Phase 2	2,000
RG-3	Batoka Gorge Hydropower	Zambia, Zimbabwe	HE	EIS and FS done	3,500
RG-4	Songwe River Basin Development Programme	Malawi, Tanzania	HE WS AG	FS and DD being done 2013	329
XB	CROSS BORDER PROJECTS				
XB-1	Food Security - Upper Okavango	Angola, Namibia	AGRI	Pre-FS done	66
XB-2	Vaal-Gamagara Water Supply	Botswana, South Africa	WS	Concept Note	Not specified
XB-3	Ressano Garcia Weir - Water Supply	Mozambique, South Africa	WR	Preliminary DD and EIA done	6
XB-4	Lomahasha/Namaacha Water Supply	Swaziland, Mozambique	WS	SWA - Pre-FS done	13 plus cost for MOZ side
XB-5	12 Border Locations - Water Supply & Sanitation	Zambia, Angola, Botswana, DRC, Malawi, Mozambique, Tanzania, Zimbabwe	WSS	Concept supported; some Pre-FS done.	30 plus costs for cross border infrastructure.
P1	MEMBER STATE PRIORITY #1 PROJECTS				
P1-1	Lubango - Phase 2: Water Supply & Sanitation	Angola	WSS	Phase 1 funded and work underway	126
P1-2	Limpopo Basin Joint Water Monitoring	Botswana, Mozambique, South Africa, Zimbabwe	WR	Parties agreed on doing project	0.7
P1-3	Kinshasa - Water Supply & Sanitation	DRC	WSS	Pre-FS partially done	220
P1-4	Lesotho Lowlands Water Supply Scheme Zone 1	Lesotho	WS	Tender to be prepared	78
P1-6	Mombezi Dam - Multipurpose	Malawi	WS AG	FS done; Pre-design underway	209
P1-7	13 Housing Estates - Water Supply	Mauritius	WS	Complete through FS	10
P1-8	Movene Dam - Multipurpose	Mozambique	WS AG	Concept note done	10
P1-9	Windhoek - Managed Aquifer Recharge	Namibia	WS	Artificial Recharge (MAR) infrastructure & most wells – in place	55
P1-10	Non Revenue Water and Use Efficiency	Seychelles	WS	Master Development Plan Done	69
P1-11	Water Demand Management	South Africa	WR	Examples in place. Expansion of scope is needed.	
P1-12	Nondvo Dam - Multipurpose	Swaziland	HE WS	Pre FS done	143
P1-13	Ruhuhu Valley Irrigation	Tanzania	AGRI	Concept Note done	12.3
P1-14	Climate Change Adaptation AER 1	Zambia	AGRI	Project planned	13
P1-15	Bulawayo Water Supply from Zambezi River	Zimbabwe	WS	FS and EIS completed	1,250

Note: ¹ Projects for Madagascar are expected to be added in the future.

A WATER SUPPLY AND SANITATION PROJECTS

- ❑ There are 6 priority water supply and sanitation projects
- ❑ These projects involve
 - Drilling of boreholes
 - Laying water reticulation and sewer pipes
 - Constructing water and sewer treatment plants
 - Rehabilitating water reticulation systems; and
 - Water transfer schemes

	Country	Project Title	Estimated Total Cost (US\$ Million)
1	Angola	Lubango Water supply and Sanitation	126
2	DRC	Kinshasa Water Supply and Sanitation	220
3	Lesotho	Lowlands Water supply and Sanitation	78
4	Mauritius	13 Housing Estates Water Supply	10
5	Seychelles	Rehabilitation of water supply system	69
6	Zimbabwe	Bulawayo water supply from Zambezi	1,250

B CONSTRUCTION OF MULTI-PURPOSE DAMS

- ❑ There are 3 priority multi-purpose dam construction projects
- ❑ These projects involve
 - Construction of dams
 - Laying water reticulation pipes for both domestic and irrigation purposes

	Country	Project Title	Estimated Total Cost (US\$ Million)
1	Malawi	Mombezi Multi-purpose Dam	209
2	Mozambique	Movene Multi-purpose Dam	10
3	Swaziland	Nondvo Multi-purpose Dam	143

C WATER INFRASTRUCTURE FOR IRRIGATION

☐ This projects involve

- Construction of a dam, spillway, bridge and road
- Establishment of irrigation schemes including canals

	Country	Project Title	Estimated Total Cost (US\$ Million)
1	Tanzania	Ruhuhu Valley Irrigation	12

FUNDING REQUIREMENTS

- ❑ The total cost for these 10 Water Sector Projects is **US\$2,115 Million**
- ❑ No funds have been secured yet for these projects therefore , the funding gap is still **US\$2,115 Million**

Type of Project	Total Costs [USD Million]	Funds Secured [USD Million]	Funding gap [USD Million]
Water Supply and Sanitation	1,753		1,753
Multi-purpose Dam	362		362
Irrigation	12		12
TOTAL	2,115		2,115

SUMMARY OF PROJECTS

No.	Project Title	Location	Project Objectives	Technical Summary	Total Cost US\$ Million
WATER SUPPLY AND SANITATION PROJECTS					
1	Lubango Phase 2 Water Supply and Sanitation	Angola	Water supply and Sanitation in Lubango, Huila Province	<ul style="list-style-type: none"> • Rehabilitation of pipes • Drilling Boreholes • Installation of sewer network 	126
2	Kinshasa - Water supply and Sanitation	Democratic Republic of Congo	Water supply and sanitation services for Kinshasa Municipality	<ul style="list-style-type: none"> • Rehabilitation of pipes • Expansion of water supply network • Construction of a storage reservoirs 	220
3	Lesotho lowlands water supply scheme - Zone 1	Lesotho	Water supply services for the Botha-Bothe Town and adjacent villages in the North of Lesotho	<ul style="list-style-type: none"> • Construction of River Intake • Construction of Water treatment plant • Water supply pipeline • Pumping station • Bulky reservoir 	78
4	13 Housing Estates Water Supply	Mauritius	Upgrade/replace existing water infrastructure in 13 Housing Estates affected by hurricanes	<ul style="list-style-type: none"> • Replacement of water supply pipes • Rehabilitation of sewer system 	10
5	Water Demand Management and Water Use Efficiency	Seychelles	Reduce leakages and increase efficiency in distribution and usage	<ul style="list-style-type: none"> • Rehabilitation of water supply system • Installation of new water supply pipes • Installation of meters • Installing flow meter 	69
6	Bulawayo water supply from the Zambezi River	Zimbabwe	Augmentation of water supply to the City of Bulawayo, Zimbabwe by constructing a pipeline from the Zambezi and a dam	<ul style="list-style-type: none"> • Dam construction • Pump stations • Water treatment plant • Reservoirs • Pipeline from Zambezi to Bulawayo 	1,250

No.	Project Title	Location	Project Objectives	Technical Summary	Total Cost US\$ Million
MULTIPURPOSE DAM CONSTRUCTION PROJECTS					
7	Mombezi Multipurpose Dam	Malawi	Construction of Mombezi dam to supply the city of Blantyre and also for irrigation and fisheries	<ul style="list-style-type: none"> • Multipurpose dam construction • Drinking water supply • Irrigation • Fisheries 	209
8	Nondvo Multipurpose Dam	Swaziland	Dam construction for water supply in Mbabane and Manzini	<ul style="list-style-type: none"> • Dam construction • Water supply 	10
9	Movene Multipurpose Dam	Mozambique	Dam construction for water supply, irrigation, and livestock watering	<ul style="list-style-type: none"> • Multipurpose Dam construction • Drinking water supply • Livestock watering • irrigation 	143
IRRIGATION PROJECTS					
10	Ruhuhu Valley Irrigation	Tanzania	Irrigation development to reduce floods and improve food security	<ul style="list-style-type: none"> • Dam construction • Spill way • Roads and bridges • Irrigation schemes 	12



THANK YOU