

Presentation overview

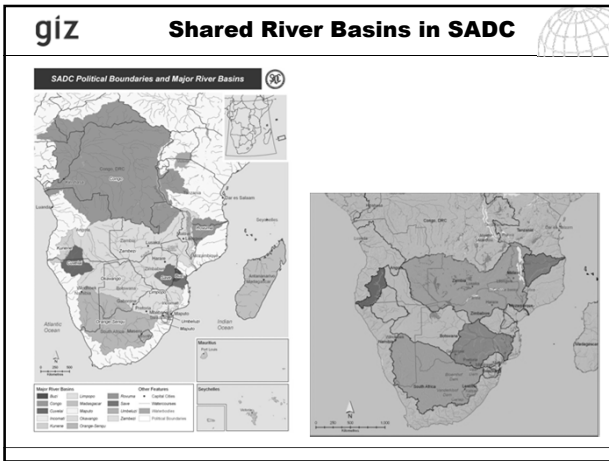
Stakeholders

- SADC
- ORASECOM
- DWA / Vaal River system
- Emfuleni / GIZ / Sasol Partnership

Partnership model

- Structure
- Funding and implementation model

Implementation & Results

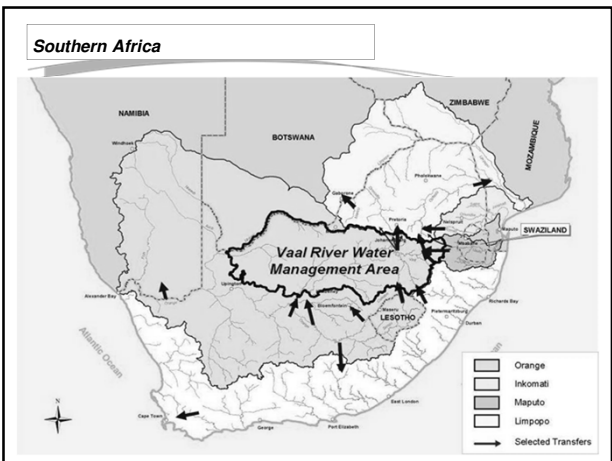


GIZ

- **GIZ Transwater SADC**
 - German Agency for International Cooperation involved in trans-boundary water management projects in SADC region on behalf of BMZ and in delegated cooperation with AusAID and UKaid
 - Supports people & societies worldwide in shaping their own future and improving living conditions in a sustainable way
 - Supports Development Partnership Projects (DPP) that involve private sector partners in supporting interventions to improve water conservation and stewardship

ORASECOM

- **Orange-Senqu River Commission (ORASECOM)**
 - River basin organisation representing interests of Lesotho, RSA, Botswana & Namibia
- **The respective delegations are as follows:**
 - Botswana: Ministry of Minerals, Energy and Water Resources
 - Kingdom of Lesotho: Ministry of Energy, Water & Meteorology
 - Namibia: Ministry of Agriculture, Water and Rural Development
 - South Africa: Ministry of Water and Environmental Affairs



DWA and Vaal River System

- **SA Department of Water Affairs**
 - “Half water losses by 2014” Pres. Jacob Zuma
 - 15% Municipal water conservation targets
- **Vaal River System**
 - Demand exceeding available yield
 - Increasing levels of pollution

Emfuleni

- **Emfuleni Local Municipality**
 - Covers an area of ca. 1000 km²
 - Current population estimate 800 000
 - 160 000 Formal stands
 - 220 000 Households
- **Metsi-a-Lekoa**
 - Water Services Provider unit of Emfuleni
 - 2 849 km of water pipelines
 - Uses 90 million m³ per annum of water from Vaal River
 - Supplied by Rand Water at a cost of R450 million for 2012/3

Emfuleni typical issues

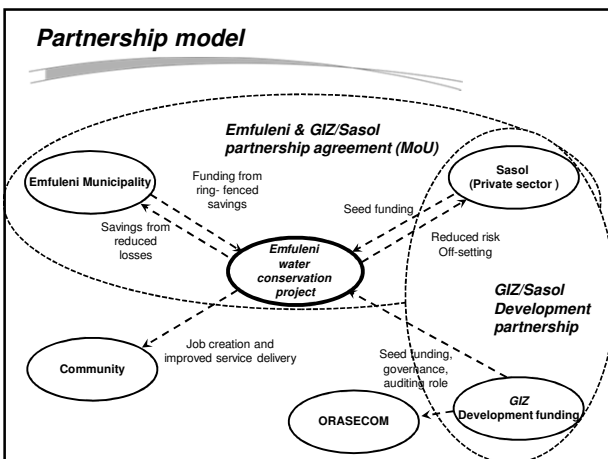
Sasol is dependant on reliable supply from the Vaal River system

Vaal system water demand per sector

Sector	Percentage
Domestic use	25%
Domestic losses	17%
Agriculture	41%
Eskom	13%
Sasol	4%

Source: DWA Vaal System annual operating analyses

- Sasol operations (Secunda and Sasolburg) account for 4% of Vaal River system demand



Funding model

Emfuleni water statistics

- 2012 water demand = 90 mil.m³/a
- Targeting 15% savings = 14 mil.m³/a
- Value = R70 mil./a

Seed Funding

- GIZ on behalf of BMZ, AusAID, Ukaid = R5 million
- Sasol New Energy = R5 million

Challenges

- **Achieving alignment on the primary objective (save water)**
- **Meeting secondary objectives while “keeping your eyes on the ball”**
 - Local content vs. cost efficiency
 - Awareness vs. education
 - Revenue enhancement vs. improved service delivery
 - Realising financial savings vs. re-investment of savings
- **Management of funds**
- **Different procurement systems**
 - appointment of Service Providers/ contractors
- **Different approaches to governance processes**
 - Lead time for decision making
- **Sustainability of results**

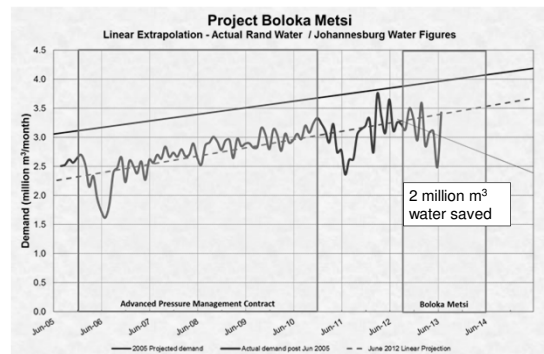
Project Resourcing

- **Trained 40 local people as Water Conservation Warriors and Assistant Plumbers;**
 - Increased awareness in communities of the importance of water conservation;
 - Water Conservation Warriors have spoken to 30,000 households and provided water conservation advice;
- **Plumbing teams (50 plumbers and assistants) have visited app. 60,000 households and made repairs to water supply systems**

“Project Boloka Metsi” typical initiatives



Phase 1 Water Savings in Sebokeng/Evaton



Phase 1 Financial Summary

- **Expenditure R13 million**
 - Seed funding R10 million (depleted)
 - Augmented through ring-fenced savings
- **Financial savings**
 - R10 million (reduced Rand Water bill)
- **Challenges**
 - Monthly demand variability (m3)
 - Slow ramp-up of cumulative savings
 - Cash flows
- **Phase 2 savings projected to exceed expenditure**

Benefits for Emfuleni

- **Contributing to achieving required water savings**
- **Reduces the total annual water bill**
- **Additional savings can be used for the further improvements on the water supply system**
- **Community behaviour change**
- **Prepares the way for improved metering and billing**

