DEVELOPMENTAL WATER MANAGEMENT

Municipal water supply and sewage treatment

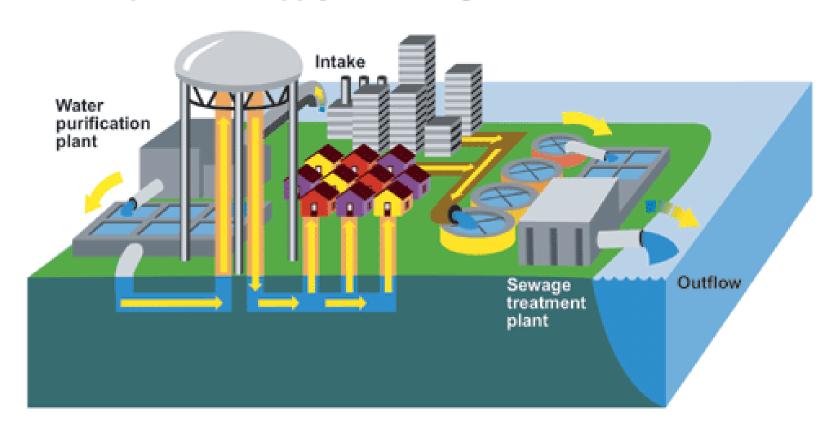


Table of Contents

- Introduction
- Problem Statement
- Policy Contextualisation
- Causal Layered Analysis
- Leadership
- Toolkits
- Process Gap Identification
- Governance and Institutional Arrangements
- Stakeholder Approach Collaboration and Identification
- Solutions
- Strategic Inventions
- Benefits

Developmental Water Management



South Africa is a water scarce country. As cities expand, Urban Water demand increase – the approaches requires long term thinking, new ways of governance and technology

PROBLEM STATEMENT



Inhabitants /communities need to be involved in finding ways to access sustainable, safe, reliable, piped and potable water on site in rural and per-urban communities while considering the systemic, fiscal and constraining environment

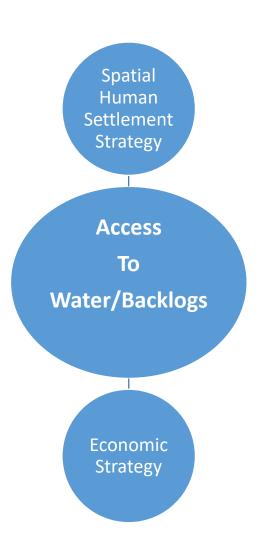
CONTEXTUALISATION

- The approach to water management has to be developmental:
 - There must be an acknowledgement of water scarcity issues both at government level, societal level and individual level. The narrative must change.
 - Acknowledgement that migrating patterns, inadequate or inflexible land use management and spatial planning all affect our approach to the management of water
 - Smart looking at technology to provide safe and clean water fit for human consumption
 - Governance Stronger policies and reforms are needed to avoid inefficient water use.
 - There must be an engaged and active citizen involvement
 - Collaborative stakeholder management commitment
 - Financing arrangements must be in place

CAUSAL LAYERED ANALYSIS

LITANY/ FACTS	 No access to potable piped water No collaboration Land suitable available land Continuing of influx of people
SYSTEMATIC REASONS	 Legacy of apartheid Scarcity of resource Lack of infrastructure Limited budget Policy on human settlement
NARRATIVE	 "Government will provide us with services" "Government's fault"
MYTH	 "hoping government will provide free services" "sense of entitlement with immediate actioneering" "view that informal dwellers don't pay for services"

POLICY CONTEXTUALISATION



BUT

Unlikely to get rid of rural and peri-urban need in the short to medium term.

We therefore need to find solutions that involve the end-users and that are effective, efficient, relevant and cost effective

COMPLEX

Probe, sense, respond

COMPLICATED

Sense, analyse, respond

EMERGENT

GOOD PRACTICE

LEADERSHIP

CHAOTIC

Act, Sense, respond

SIMPLE

Sense, categorise, respond

NOVEL

BEST PRACTICE

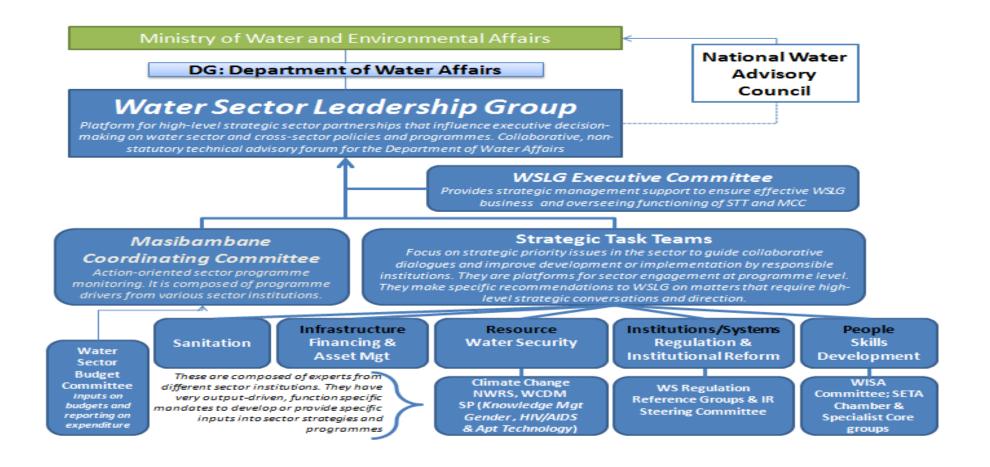
Toolkits

- CSP
- CLA
- CIDMS including RIPOA
- Community Scorecard Tool
- InTAcT
- Informal settlement Upgrading Tool
- Long Term Financing Strategy
- BEPP

PROCESS GAP IDENTIFICATION MODEL

Monitoring & Manage & **TECHNICAL** R&D **Implement** Design **Procure ALTERNATIVE Evaluation** Operate **SOLUTIONS GOVERNANCE** (How Might We?) **Involvement of** People/Bottom Up Institutional/Administrati ve Arrangements Policy **Partnerships** Social **Economic Political**

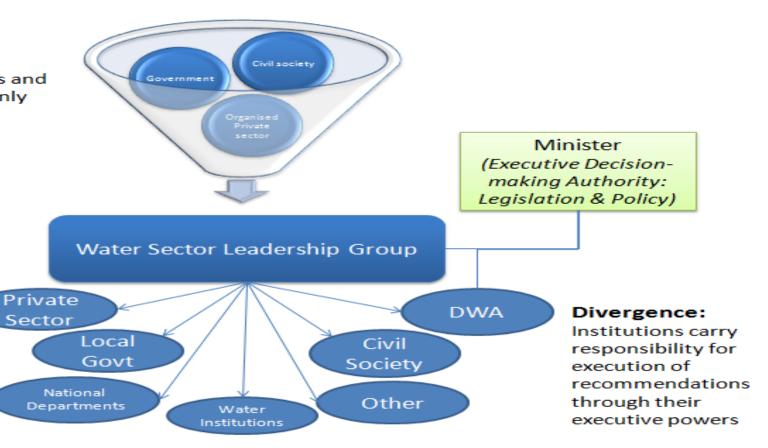
Governance – Institutional Arrangements



STAKEHOLDERS – STRATEGIC COLLABORATIONS

Convergence:

Various stakeholders converge their concerns and ideas based on commonly shared water issues



SOLUTIONS

- Form Community Based Water Committees
- Research and replicate
- Clarify and improve existing governance procedures from case to case and location to location
- Address operational capacity and constraints engaging people with expertise.

STRATEGIC INTERVENTIONS

- Create solutions for waste water reuse
- Establish rain water harvesting projects
- Manage and protect surface and ground water sources
- Removal of alien vegetation programmes
- Promote the reduction of water resource pollution
- Promote retrofit projects
- Capacity buildings and institutional reforms

BENEFITS

- Improved water access
- Responsible water usage
- Environmental sustainability
- Fiscal sustainability
- Stakeholder collaboration and buy-in
- Strengthen accountability
- Job creation and skills transfer
- Increased economic growth



