

## WATER SUPPLY

### Towards sustainable water services provision

# A WRC-funded study investigated future strategies for consideration by municipalities to ensure sustainable water services provision.

#### Seeking guidance in addressing issues of sustainable water services provision

South African water services authorities (WSAs), i.e., those municipalities tasked with governance of water and sanitation provision, and water services providers (WSPs), i.e., those organisations or individuals tasked with the actual provision of water and sanitation on behalf of the WSA, face numerous challenges in providing sustainable services. Reasons for this include the enormous services backlogs, scarcity of technical and other skills, an aging and deteriorating infrastructure asset base, non-alignment of political will with technical priorities and an inability to always maximise cost efficiencies through benefits of scale and scope.

This difficult and complex situation is exacerbated by the fact that WSA decisions to set up institutional arrangements are governed by onerous legislation that articulates a decision-making process, but provides little guidance on the content and configuration of institutional arrangements, or a rationale for choosing one arrangement over another. Furthermore, institutional arrangements are commonly viewed as being 'centralised' or 'decentralised'. However, since all water services provision in South Africa takes place within a decentralised governance framework, the application of these terms to institutional arrangements at the WSA and WSP levels could lead to some confusion.

It was therefore deemed necessary to initiate an investigation which would assist WSAs in making well-informed decisions regarding appropriate institutional arrangements for water services provision and also assist national government to better align policy, legislation and implementation guidelines in support of such institutional arrangements.

#### Approach to the investigation

**A literature review** provided some international context to the study and insight into lessons emerging from other countries.

Ten key challenges facing water services provision were identified, namely:

- Human resource scarcity
- Accessing funds and financial viability
- Procurement
- Infrastructure asset management (IAM) and augmentation
- Optimisation of operations
- Water services quality
- Consumer engagement and communication
- Communication within and between the WSA and WSP
- Alignment of planning
- Water resource availability and scarcity.

These key challenges were seen to correspond directly to key water services functional areas at the municipal level. Ideally, institutional arrangements for water services provision need to be such that these key challenges are met and that the needs of the corresponding key functional areas are adequately satisfied.

**Four case studies** focusing on institutional arrangements for the provision of water services were included in the investigation in order to obtain in-depth insights into the range and appropriateness of such arrangements. After careful consideration of a number of options, the case studies, selected on the basis of initial assumptions regarding their institutional arrangements, were as follows:

- The Chris Hani DM was assumed to represent a **'decentralised institutional arrangement'** at the DM WSA level, having a mix of LM WSPs and community-based WSPs, but having retained some significant centralised functions relating to governance and funding.
- The Maluti-a-Phofung LM was assumed to be **changing from a 'decentralised to a centralised' arrangement** at the LM WSA level, in that the WSP functions which had previously been undertaken by two different WSPs (and in two separate geographical areas) were being combined under a single, new municipal utility.
- The Ugu DM was assumed to represent a **'centralised institutional arrangement'** at a DM WSA level, having ceased its earlier use of community-based WSPs, even though some significant decentralised functions (notably certain aspects of its operations) had been retained.
- uThukela Water was assumed to represent a **'centralised (regional) institutional arrangement'** at a level higher than DM WSAs, with three WSAs using one multi-jurisdictional utility as WSP but having a significant proportion of decentralised functions (particularly in terms of governance and certain aspects of its operations).

The four case studies focused on providing:

- A background to each of the corresponding water services provision areas.
- A summary, history and current context of the corresponding institutional arrangement.
- Findings regarding how each particular institutional arrangement was seeking to meet the key water services provision challenges.
- Insight into the ability of each institutional arrangement to meet the needs of its key water services provision functional areas (each functional area being focused on a key challenge) and whether or not these functional areas are consolidated (i.e. "centralised" in terms of operations only) or not.
- An articulation of the ways in which municipal politics enable or constrain the management of water services.

## Insights and recommendations emerging from investigations

### Terminology

The terms 'centralised' and 'decentralised' to describe institutional arrangements for water services provision in South Africa are often used without reference to the particular context, i.e., that of South Africa's decentralised institutional water services framework or that of a specific water services institutional arrangement. To avoid confusion created by non-explicit usage, it would be preferable to describe

particular institutional arrangements for water services provision in respect of WSP functional areas, and to use the terms 'consolidated', 'non-consolidated' or a 'combination' of both, rather than 'centralised' or 'decentralised' which, in this context, should be reserved for operations only.

### Implications of the SA decentralised governance framework for water services

The South African decentralised governance institutional framework (which has necessarily retained national functions such policy development, enabling-environment creation, regulation, oversight and support as centralised functions) has, to some extent caused problems such as:

- Loss of potential for economies of scale
- Reduced potential for cross subsidies
- Lack of incentive to protect catchments and control water pollution.

If, in addition, the decentralised governance framework for water services provision does not serve South Africa well in conditions of water scarcity, then water management could be re-conceptualised by undertaking both water services provision and integrated water resources on a catchment-based geographical scale. This would require a constitutional amendment, and could include setting up water authorities based on catchment boundaries and also, owing to the prevalence of inter-basin transfers, relationships between catchments.

### Benefits of scale and scope

Whether in terms of spreading scarce skills over a wider geographical area (scale) and range of functions (scope), or enhancing buying power, or synchronising information technology (IT), record-keeping, planning and other systems, institutional arrangements should seek every opportunity to maximise benefits presented by scale and scope. However, it must be borne in mind that with growth in scope and scale, a point may well be reached where enhanced benefits associated with economies of scale are offset by the "costs of complexity", and a balance between these cost and benefits must be found if a successful institutional arrangement is to be put in place.

### Lessons from case studies

An analysis of the outcomes of the institutional arrangements case studies resulted in an emerging picture of which functional areas within an institutional arrangement are more effectively performed at a consolidated level (to realise benefits of scale and scope), which are better performed at

a non-consolidated level, and which require some consolidated and non-consolidated combination or mix.

Functional areas which are **best consolidated** within an institutional arrangement include human resources (in terms of application of scarce skills), accessing funds, procurement, infrastructure asset management (IAM) and augmentation, alignment of planning and water resource management.

Functional areas **best non-consolidated** within an institutional arrangement, but supported by consolidated auxiliary services, include optimising of operations, consumer engagement and communication.

Functional areas served **equally well** either within a consolidated or non-consolidated institutional arrangement include water services quality and communication within and between the WSA and WSP.

In addition, **auxiliary services should always be consolidated** to ensure benefits of scale and scope. These include supply chain management, call centre operations, meter reading, billing and revenue collection operations, laboratories for water quality testing, analysis and monitoring, stores for materials, workshops where components of the supply system can be produced or customised, equipment management and health and safety installations.

The case studies suggested that functional areas for water services provision must be used as a basis for decision making in respect of institutional arrangements, especially in the context of ensuring benefits of scale and scope. In deciding on the precise nature of the proposed institutional arrangement, existing practical realities should also be considered and improvements over time sought through building on successes. Decisions need always to be guided by sound business principles.

## Service delivery components as overriding challenges

Service delivery has three primary components, viz., infrastructure, skills and systems/structures, all of which must be well-understood and well-resourced in order for water services provision to be effective. Examples of good practice should be used to find ways of attracting, building and maintaining skills at a consolidated level within the chosen institutional arrangement. Further research needs to be undertaken into the range of water services provision systems and structures for WSPs: what they are; current problems in inadequate systems; and how improved systems might support sustainable water services provision.

## Municipal politics and managing water services as a business

As important as deciding on the mix of consolidated or non-consolidated functional areas, or resourcing the above-mentioned service delivery components, is that councillors understand and support the water services business, and enable effective operations through sound decision making based on good business principles and the most pressing water services. Often the drawing of WSA boundaries has been political and not catchment-based. This issue will always present a challenge with respect to water services provision, and stand in the way of obvious benefits of economies of scale and scope.

## Implications for policy

- It is important that the South African water services sector explores issues of centralisation and decentralisation in a manner that acknowledges different needs in different contexts within the decentralised institutional framework for water services provision.
- Institutional arrangements for water services provision in South Africa may be described as more consolidated or less consolidated in terms of how functional areas within the institutional arrangement are configured. There will generally be a mix of consolidated and non-consolidated functional areas.
- Most challenges are better met within a more consolidated institutional arrangement, but even where a less consolidated arrangement is best, consolidated support from auxiliary services is required for optimal functioning.
- All institutional arrangements should be viewed as context specific, guided by the needs of the functional areas and key challenges, and by opportunities for realising benefits of scale and scope.
- Politicians have a responsibility to understand the water services business, and to enable sustainable water services provision through whatever institutional arrangement is selected for their WSA.
- The link between integrated catchment management and water services provision needs to be further explored and developed in terms of the institutional realignment and reform process.

### Further reading:

To obtain the report, *Situational Analysis of Water Services Provision in South Africa – Establishing Future Strategies for Consideration by Municipalities* (Report No: 1812/1/10) contact Publications at Tel: (012) 330-0340; Fax: (012) 331-2565; E-mail: [orders@wrc.org.za](mailto:orders@wrc.org.za) or Visit: [www.wrc.org.za](http://www.wrc.org.za)

