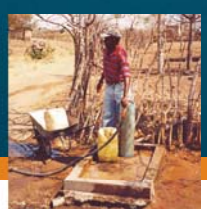
triple-S
WATER SERVICES THAT LAST

LESSONS FOR RURAL WATER SUPPLY

Assessing progress towards sustainable service delivery





South Africa

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This study was conducted as a part of IRC's Triple-S initiative with funding from the Bill & Melinda Gates Foundation. These documents can be downloaded at www.waterservicesthatlast.org.

de la Harpe, J., 2011. *South Africa: Lessons for Rural Water Supply; Assessing progress towards sustainable service delivery*. The Hague: IRC International Water and Sanitation Centre.

/ rural water supply / service delivery / sustainability / functionality / South Africa

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Assessing progress towards sustainable service delivery

South Africa

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The Hague 2011

ACKNOWLEDGEMENTS

The author would like to express gratitude to all those who participated in interviews and group discussions and provided information for this study. In particular special thanks go to Kerry Harris who assisted with the research and edited this report. Thank you also to Jim Gibson and Abri Vermeulen for their generous advice and insights to water services provision institutional arrangements. Thanks are also given to the officials in various South African Government Departments who participated in this study. Thank you also to Stef Smits who provided very valuable comments towards finalising the study.

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1 INTRODUCTION

Over the past two to three decades there has been relative success in providing new rural water infrastructure—building the physical systems—and driving increased coverage levels. Despite this positive trend, there has to a large extent been a failure to find durable solutions to meet the needs of the rural poor for safe, reliable domestic water. Rural people face continuing and unacceptable problems with systems that fail prematurely, leading to wasted resources and false expectations. Although figures vary, studies from different countries indicate that somewhere between 30% and 40% of systems either do not function at all, or operate significantly below design expectations.

Constructing physical systems is an obvious requirement, but it is just one part of a more complex set of actions that are needed to provide truly sustainable services. Increased coverage does not equate to increased access.

A tipping point may now have been reached, however, with national governments and development partners beginning to recognise the scale of the problems associated with poor sustainability and the *real* threat this in turn presents to achieving the WASH Millennium Development Goals. Discourse on sustainability is now shifting from a focus on one or two individual factors, to requirements for addressing the underlying causes in a more holistic, systemic way.

The rural water sector in most countries in the developing world has been undergoing a period of profound change over the last 10 to 15 years, driven by broader processes of decentralisation and of sector reform. In some cases, decentralisation of service provision authority has been relatively well planned and supported, as in South Africa and Uganda for example. In other countries, including Burkina Faso and Mozambique, the decentralisation process has been much more problematic. In almost all cases however, serious challenges remain in terms of lack of capacity and resources at intermediate or decentralised governance levels.

Other significant factors affecting the sector and its actors include the drive for increased harmonisation and 'professionalisation' of community-management approaches—that is, making them more viable, commercially-orientated and more efficient but not necessarily privatised. More importantly, many of these change-drivers—decentralisation in particular—are not unique to the water sector; rather they are part of broader societal changes to which the rural water sector (as other sectors) has to respond.

1.1 THE TRIPLE-S INITIATIVE AND COUNTRY STUDIES

Sustainable Services at Scale (Triple-S) is a six-year learning initiative with the overall goals of improving sustainability of rural water services and bringing about greater harmonisation through increased sector capacity. The initiative is managed by IRC International Water and Sanitation Centre in the Netherlands, and works in partnership with international, national and local partners. Further details can be found at: www.irc.nl/page/45530.

Triple-S aims to act as a catalyst for transforming the current approaches from piecemeal projects that often involve one-off construction of water systems, to indefinitely sustainable rural water services delivered at scale. Working in two initial focus countries—Ghana and Uganda—the initiative will seek to encompass a further two countries over the next two years. As part of the initiative's start-up, a broader research and scoping exercise was conducted in the form of *country studies* which were carried out in a range of countries, alongside a parallel process of documentation and a literature review of experiences in rural service provision.

The main objective of the research study is to contribute to the conceptual and empirical basis of Triple-S by providing an in-depth understanding of rural water service delivery and fostering better understanding of the organisational changes, incentives and barriers within the sector. More specifi-

cally, the study seeks to identify those factors and principles that appear to contribute to or constrain the delivery of sustainable rural water services at scale in different country contexts.

The composite country studies took place in 13 countries: Ghana, Uganda, Honduras, Colombia, India (three states), Thailand, Sri Lanka, Burkina Faso, Benin, South Africa, Mozambique, Ethiopia, and the USA. Three broad groupings can be identified from this selection: a set of *least developed countries*—Ethiopia, Mozambique, Burkina Faso and Benin—with highly aid-dependent WASH sectors (more than 50%); a *middle group* of countries—Honduras, Uganda, Ghana—with mixed aid dependency and income levels; and finally, a group of *middle-to-higher-income,* non-aid dependent water sectors that include the USA, Colombia, South Africa, Thailand, Sri Lanka and India.

The selection of a broad range of countries was intentional, firstly because it was known that individual cases included interesting examples of elements of rural water service delivery; and secondly because these cases represent a continuum of sector maturity across differing coverage levels and decentralisation experiences, where lessons could be shared. This document presents the findings of the country study for South Africa.

Understanding the causes of poor sustainability can also be related to the *political economy* of the country in question. This refers to the broader socio-economic, governance and political dynamics of the country within which the water sector is developing. It also encompasses an understanding of how groups with common economic or political interests influence the development of the sector—for example, the promotion of or resistance to privatisation of service delivery, maintenance or government monopolies.

These country studies look beyond a description of the rural water sector and towards broader processes of decentralisation and political leadership in an attempt to unpack what has gone right or, as in many cases, what has gone wrong, within the rural water sub-sector.

1.2 KEY CONCEPTS

The country studies are based on a number of concepts developed by Triple-S concerning rural water service delivery, which are outlined below.

The starting point for sustainable services at scale is the realisation that there is a need to move towards a **service delivery approach (SDA)**. The SDA is a conceptual ideal of how water services should be provided. It is rooted in the shift in focus from the means of service delivery (the water supply systems or infrastructure) towards the actual service accessed by users, where access to a water service is described in terms of a user's ability to *reliably and affordably* access a given *quantity* of water, of an acceptable *quality,* at a given *distance* from her or his home. A water service consists therefore of the *hard and soft* systems required to make this access possible.

A key assumption of the approach is that, in a given context, the principles behind the SDA should be applied through one or more agreed **service delivery models (SDMs).** SDMs provide agreed frameworks for delivering service. It is guided by a country's existing policy and legal frameworks which define: norms and standards for rural water supply; roles, rights and responsibilities; and financing mechanisms. At intermediate level, an SDM can articulate the provision of the service to an entire population in a given area usually served by a variety of systems. In a country, or even within a single decentralised or intermediate level administrative unit, there may be several SDMs, often related to the management models recognised in the policy framework. It is realised that this term may not be used in the same way in all countries. The way the thinking behind this is understood in South Africa is discussed in Chapter 5.

Decentralisation is a core theme in many of the country studies and is often a process that takes many

BOX 1: WHAT IS THE DISTINCTION BETWEEN THE SERVICE DELIVERY *APPROACH* AND A SERVICE DELIVERY *MODEL?*

We define the underlying concept of the water delivery approach as sustainable water services, delivered in a coordinated and cost-effective way, at scale within a district. We see this as a universal approach, or paradigm, with common principles and benefits that can help unblock the problems of the past. However, when applied in practical terms in any given context, we argue that a model has to be researched and developed, to reflect the realities of that country and the service area, including the type of rural population, levels of social and economic development and relative strength of the public and private sectors. In simple terms, the water service delivery approach is the concept while the water service delivery model is the application.

TABLE 1: DIMENSIONS AND MODES OF DECENTRALISATION

Dimensions of decentralisation	Modes of decentralisation
Administrative decentralisation—how responsibilities and authorities for policies and decisions are shared between levels of government and how these are turned into allocative outcomes	**Deconcentration**—the shallowest form of decentralisation, in which responsibilities are transferred to an administrative unit of the central government, usually a field, regional, or municipal office
Fiscal decentralisation—the assignment of expenditures, revenues (transfers and/or revenue-raising authority), and borrowing among different levels of governments	**Delegation**—in which some authority and responsibilities are transferred, but with a principal-agent relationship between the central and lower levels of government, with the agent remaining accountable to the principal
Political decentralisation—how the voice of citizens is integrated into policy decisions and how civil society can hold authorities and officials accountable at different levels of government	**Devolution**—the deepest form of decentralisation, in which a government devolves responsibility, authority, and accountability to lower levels with some degree of political autonomy

Source: World Bank, 2008

years or even decades to reach a level of maturity in which lower tiers of government are not only given a mandate to deliver services, but are provided with adequate resources, capacities and indeed decision-making power.

As the various studies show, there can be a number of approaches that lead to decentralisation. These range from well planned and resourced processes that take place over many years, with progress indicators, to the so called "big bang" decentralisation wherein the central level of government announces decentralisation, swiftly passes laws and transfers responsibilities, authority, and/or staff to sub-national or local governments in rapid succession without adequate time to embed real capacity.

For the purposes of the country studies, the definitions of decentralisation are based on the World Bank's Independent Evaluation Group definitions.

In the study, reference is also made to a number of different levels or functions within the SDA conceptual framework for rural water service delivery. These levels are closely linked to decentralisation, but vary from country to country in terms of the exact formulation used, particularly in larger federal states such as India or the USA where they may have intermediate levels (i.e. states, regions or provinces which often house deconcentrated representation of central ministries). Broadly speaking four distinct groups of functions can be identified at specific levels:

1. **Policy and normative functions—national level.** This is where sector policy, norms and regulatory frameworks are set, service levels defined and macro-level financial planning and development partner coordination take place. It can also be the level at which learning, piloting and innovation can be promoted. Overall sector guidance and capacity building is set by this level of authority.

2. **Service authority functions—intermediate level[1] (district, commune or municipality).** Under decentralisation, this is most commonly the local governance level where planning, coordination and decision-making are carried out and where regulation and oversight functions are applied. This level is also closer to day-to-day monitoring and technical back-stopping tasks (for service providers and operators). Depending on national and by-laws, this level may include asset ownership.

3. **Service provider functions—local level (a community or grouping of communities).** This is the level at which services are provided to consumers and may be delivered by a community, groupings of communities or other appropriate service providers, depending on the size, scale and technology of the water supply systems in question. It is the level at which day-to-day management of the system takes place for maintenance and operation and in the rural context is often taken on by a voluntary water committee. The actual service provision may be contracted to a private company, individual operator or a joint management arrangement, which may be defined in the form of a service

[1] The term intermediate level is used here to refer to the institutional level(s) in between the national and community level. This is the level where typically authority functions lie. The administrative name of this level may differ from country to country, but typically is called district, municipality, commune or governorate. In many cases, authority functions may even be split over various levels, e.g. between a province and a district.

delivery agreement, a contract or otherwise. The service delivery contract also involves different arrangements which impact on asset ownership, investment in the system, and the responsibilities and obligations of the service provider in providing the service, from a simple service contract (for operations and minor repairs), to a management contract (that also includes managing the system and major maintenance) to a lease and even a full concession (although concessions are not common for rural areas).

4. **Operator functions—community committee level or outsourced to company or individual.** This is the level at which day-to-day operation of the physical system takes place, and includes preventative and corrective maintenance, bookkeeping, tariff collection, etc. This may be done directly by a committee acting on behalf of the community. In cases where there is professionalisation of community management, these tasks are increasingly delegated or sub-contracted to an individual (plumber or technician) or to a local company acting under a contract. In many cases, the difference between this and the previous level are minimal and this can be seen as a sub-level of the previous, i.e. when the service provider also does the operation itself. In other cases, the differentiation is clearer, for example when a water committee contracts a private plumber or technician.

2 METHODOLOGIES AND ANALYTICAL FRAMEWORK

The methodologies for data collection followed a similar format in all study countries, employing a combination of secondary data collection, such as document and literature reviews, with primary data collection gathered through interviews. The report was written with substantial input from interviews and questionnaires from key sector players, including government officials, national and intermediate-level organisations, donors and NGOs operating in the water sector.

Because the picture 'on paper' can differ wildly from the reality of the rural water sector, the studies focused primarily on *theory versus practice* to highlight the gaps between 'how it should be' and 'how it actually is'. Each study was coordinated by an IRC staff member, conducted by a national expert, or team of experts, and involved a range of sector stakeholders, from national government ministries or agencies, to UN organisations, NGOs and civil society groups in most of the country study processes.

In order to validate the studies and gain sector buy-in, the majority of studies incorporated a *check-in* process in which preliminary findings were shared and discussed with a group of sector experts at validation workshops during the course of the study. This often involved a two-step process with those key issues identified at national level meetings being put to a group of experts and practitioners from district and regional levels who participated in similar workshops.

This type of validation exercise served to enrich the conclusions in the studies as well as jump-start a process of dissemination and dialogue around the key issues facing sustainability in the country in question.

2.1 COMMON ANALYTICAL FRAMEWORK

In order to provide a common point of reference for the various countries involved in this study, an analytical framework was developed for the individual country teams. This framework includes a range of elements or principles at three different levels of intervention designed to provide prompting questions or descriptions of issues known to be important to understanding sustainable service delivery. In total there are 18 elements, each with a short description, that address issues such as: sector decentralisation and reform; institutional roles and responsibilities; financing, service delivery models; learning and coordination; and monitoring and regulation.

The three main levels of analysis in the framework correspond to levels 1 to 3 in Section 1.2 and include an assessment of the national level enabling environment, the intermediate level (most commonly corresponding to the local or district government level or commune or municipality, depending on country context) and the service provision level with functions typically delegated to the water committee or operator. An example of the analytical framework used by the country study teams is given in Annex A.

The application of this common analytical framework has allowed Triple-S to compare key issues and elements across the full range of countries, thereby identifying common trends or factors which seem to be important either as positive drivers of improved sustainability or constraints to service delivery approaches.

2.2 STUDY OUTPUTS

For each country involved in the Triple-S study process, a stand-alone document, or **country working paper,** has been produced and circulated to interested stakeholders at national or regional level. Additionally, shorter **country summary case studies** of four to six pages—that are more accessible to policy makers, suitable for international dissemination and intended to catalyse debate—have been produced.

Finally, a **synthesis document**—the main output from the 13 country study analyses comparing key factors and principles across these different experiences—will be produced. This document captures trends and emerging lessons around decentralisation and sector

reform processes as well as the development of the community-based management approach that have evolved over time. The synthesis document will also help to inform the ongoing Triple-S action research process both at country level (in Ghana and Uganda) and internationally.

3 INTRODUCTION TO SOUTH AFRICA AND THIS STUDY

South African policy, legislation, strategies, institutional roles and responsibilities and financial systems for the water services sector are all designed to provide an overall framework for scaling up and providing sustainable water services. This framework decentralises the water services function to local government and has also evolved over time to provide an enabling environment for the implementation of the sector wide approach in the water sector.

Despite this framework and South Africa's good progress in addressing the Millennium Development Goal (MDG) targets for water and sanitation (where the country has exceeded the water target and is on target for sanitation[2]), there are serious concerns about the performance of many municipalities in addressing their infrastructure backlogs and providing sustainable water and sanitation services. The Department of Water Affairs (DWA) and the water sector as a whole have recognised the need to revisit the functionality of some municipalities, which have shown little or no improvement in terms of performing their core services delivery mandate despite access to extensive support programs. As the Department of Water Affairs states: "If the country is to meet the national water and sanitation services targets, the capacity of local government will have to be considered … and this debate cannot be held in isolation of the revision of powers and functions of local government" (DWA, 2010). A revision of powers and functions implies that some municipalities may lose their executive authority for certain municipal services, including water and sanitation services. Given the enabling framework for sustainable water and sanitation services and the successful sector wide approach that has been implemented in the sector, what are the challenges municipalities are facing whereby they may lose their authority for the water and sanitation powers and functions? This is one of the issues this study aims to address.

Key features of the institutional framework that influence the way water services are planned, designed, implemented and provided are the separation of the regulatory and governance functions at the local level and the wide range of institutional options for water services provision. Does the separation of governance and provision functions constitute 'a model' that can be replicated in other countries? Is this separation working in practice and how does it contribute to improved services provision?

An extensive range of institutional options for water services provision has developed over time in response to different challenges and conditions within different municipal areas. The key issue facing water services authorities is how to determine the most appropriate water services provider (WSP) option/s for their area of jurisdiction. The process to make this decision is set out in local government legislation, and municipalities also have access to technical support when undertaking the process. Are there defined WSP 'models' for water services provision? Are some models more successful than others in providing sustainable services? To what extent are WSP institutional arrangements context specific?

These are some of the challenges this study aims to address towards contributing to the body of research under the auspices of the IRC International Water and Sanitation Centre's Sustainable Services at Scale (Triple-S) project.

3.1 RESEARCH OBJECTIVE

The primary objective of this research is to determine the service delivery approach for water services in South Africa and the extent to which this approach enables or hampers (i) the scaling up of water services; and (ii) the sustainability of services.

Water services in the South African context refers to "Water supply services and/or sanitation services, or

[2] Written communication from Director of Planning, Department of Water Affairs, Fred Van Zyl

any part thereof" and includes both urban and rural areas. However, for the purposes of this study the focus has been on rural water supply within the context of the broader water services framework. South Africa's Strategic Framework for Water Services (SFWS) lays the foundation for understanding the overall service delivery paradigm in South Africa and how this paradigm impacts upon scaling up and sustainability. Thus the research uses the SFWS and a range of water services provider institutional options, as implemented in various case studies, to identify and analyse water services success factors and challenges.

3.2 RESEARCH QUESTIONS

Service delivery approach

This research aims to assess the influence of the South African service delivery framework (policy, legislation, fiscal arrangements, planning, infrastructure programmes, water services provision institutional arrangements and regulation) on the scaling up and sustainability of water services. Towards analysing the performance of the service delivery approach of the South African water services sector, the following questions will be addressed:

1. What is the existing service delivery framework[3] for water services?
2. What are the underlying principles of the strategic framework?
3. To what extent does the water services framework enable and facilitate scaling up of sustainable water services?

   This question will address the following:

   - What are the institutional arrangements to scale up services provision and how effective are these?
   - What are the institutional options for the provision of water services?
   - What are the success factors for sustainable water services?
4. What were the drivers for the strategic framework?
5. What are the success factors and challenges in implementing the framework?

Ownership, harmonisation and alignment

6. To what extent has the water services sector achieved sector ownership, harmonisation and alignment?
7. What were the triggers, drivers and incentives for adopting the sector wide approach (SWAp)
8. To what extent has the SWAp contributed to sustainability?

3.3 LITERATURE REVIEW

In terms of the literature review method of research, this study makes use of primary and secondary data analysis. Illustrative data, including case accounts, historical material, government reports, policy, legislation, programme documentation, and evaluation reports were used to conduct the literature review.

The Triple-S analytical framework was used as a guide to structuring and analysing the service delivery approach from a range of perspectives and in terms of the different spheres of government.

A preliminary analysis of the main theoretical elements relevant to the study was conducted in order to develop a conceptual framework for analysing the service delivery approach and the performance of the approach in scaling up and achieving sustainable services. This preliminary analysis was divided into two parts. The first part addresses the policy, legislative, fiscal and institutional context to determine the overall environment within which water services are scaled up and provided, including obstacles and constraints towards achieving sustainability. This study is based on public policy, government documents, sector reports and research reports.

The second part addresses water services sustainability challenges arising from the actual implementation of the overall service delivery framework. It draws on case studies to assess different water services provider institutional options ranging from small community-based options to management contracts with public utilities and the private sector. Since the focus of the research is on rural areas, small towns or (peri-)urban settlements, it does not include the more complex arrangements such as concessions.

The literature review draws on existing research and case studies on water services institutional arrangements, in particular recent research undertaken by Water Dialogues—South Africa (2009) and the Water Research Commission (forthcoming). Where appropriate this report draws on the case studies and findings of the Water Dialogues and WRC research.

3.4 INTERVIEWS AND WORKSHOPS

Interviews and discussions were held with some key members (see Annex B) of the water services sector

[3] Following consultation with key stakeholders in the South Africa water sector, the term 'framework' is utilised instead of model, in line with the Strategic Framework for Water Services which sets out the sector goals and targets, and the institutional, planning, financial, regulatory, monitoring and support frameworks for water services.

concerning the overall status of scaling up and water services provision in South Africa, and strategies to improve the sustainability of services. Key insights were gained from the following conferences and workshops: Water Dialogues Conference held in Bonn (December 2009), the Mvula Trust Community Based Management Workshop in East London (October 2009), the Water Sector Leadership Group Workshop in Johannesburg which focused on the Turnaround Strategy for Local Government (November 2009) and the WRC Reference Group Meeting on Water Services Provision (February 2009).

The information collected was interpreted in order to address the research questions and to draw some conclusions about the overall service delivery approach, institutional arrangements for water services provision and the implementation of the sector wide approach.

4 POLITICAL ECONOMY OF THE WATER SECTOR

4.1 SOUTH AFRICAN ECONOMY

South Africa is a middle-income, developing country with an abundant supply of resources, well-developed financial, legal, communications, energy, and transport sectors, a stock exchange that ranks among the 10 largest in the world, and a modern infrastructure supporting an efficient distribution of goods to major urban centres throughout the region. South Africa accounts for almost 45% of the Gross Domestic Product (GDP) of the entire African continent.

Over the past 10 years the South African economy averaged a growth rate of just under 3% per annum. However, in the past few years this has grown to almost 5% a year. Following the global economic recession, this figure was expected to drop in 2008/09, but will accelerate moderately in 2010 and beyond.[4]

South Africa's economy is inextricably connected to the southern African region, and the region's economic prospects are linked to the economic recovery of the continent. The New Partnership for Africa's Development (NEPAD) is the internationally agreed framework for the socio-economic development of the continent. At a continental level, South African investment and trade with African countries has increased dramatically since 1994. Africa is now South Africa's fourth-largest export destination. South African investments in southern Africa alone totalled approximately Euro 1.4 billion in 2001. Trade with the rest of Africa totalled about Euro 5 billion in 2001 and increased to Euro 10.8 billion in 2007 with exports amounting to Euro 6.8 billion and imports to about Euro 4.0 billion. In the same year, South Africa's trade in the SADC (Southern African Development Community) region totaled some Euro 6.8 billion with exports reaching Euro 4.4 billion and imports Euro 2.4 billion.

Despite these positive economic development indicators, growth rate is still not sufficient to overcome significant social and development problems such as the dual nature of the South African economy. A large portion of South Africa's population is marginalised. The government is attempting to address this and other related needs in the economy through a more expansionary fiscal policy, focusing on increasing the level of social services and welfare. Both monetary and fiscal policies are seen to be sound, and generally prudent.

Underlying the success of the fiscal policy has been the ability to continue to expand the tax basis, allowing total public spending to increase at a real growth rate of nearly 5%. The direct benefits have been an increase in the allocations to key departments for social deliveries. Overseas Development Assistance amounts to significantly less than 1% of the total expenditure, therefore external funding does not affect the fundamentals of the economy nor have a significant effect on the macro-economic policies implemented by the Government.

Government's fiscal policy seeks to support structural reforms of the South African economy consistent with long-run growth, employment creation and an equitable distribution of income. It aims to promote investment and export expansion while enabling government to finance public services, redistribution and development in an affordable and sustainable budget framework.

4.2 POPULATION AND GROWTH

The National Information System (NIS) of the Department of Water Affairs (DWA) estimates a population of 49.7 million people with the following breakdown of population and demographics:

- The population is split into more than 26,000 settlements.

[4] http://www.info.gov.za/aboutsa/economy.htm#intro.

TABLE 2: CURRENT ANNUAL POPULATION GROWTH AND COMMUNITIES

Province	Oct 2001 Population (Stats SA)	April 2009 Population (based on Census and Stats SA data)	Current Annual Pop Growth %	Communities (DWA)
Eastern Cape	6,278,620	6,508,211	0.56	7,761
Free State	2,706,759	2,816,104	0.60	277
Gauteng	9,206,929	10,883,261	0.60	430
KwaZulu-Natal	9,584,311	10,646,955	0.38	11,942
Limpopo	4,994,505	5,395,267	0.58	2,315
Mpumalanga	3,351,740	3,709,701	0.58	552
North West	3,173,307	3,465,633	0.52	1,005
Northern Cape	999,370	1,029,969	0.57	605
Western Cape	4,524,325	5,288,568	0.50	865
National Total	44,819,866	49,743,669	0.48	25,752

Source: DWA NIS, 2010

- Approximately 16 million (i.e. approximately 33% of the population) live in six large metropolitan areas.
- Approximately 8 million (i.e. approximately 17% of the population) live in medium-sized cities and towns.
- Approximately 5 million (i.e. approximately 10% of the population) live in small towns in rural areas.
- Approximately 19.5 million (i.e. approximately 40% of the population) live in small rural villages and scattered settlements.
- The nine largest cities represent 37% of the population; 50% of the workforce; 41% of the households; and they occupy 2% of the land area.

Table 2 below, from the DWA NIS, presents the information on current annual population growth and communities.

4.3 THE STATE OF WATER SERVICES DELIVERY

Household water backlogs

The democratically elected government of South Africa of 1994 inherited enormous infrastructure backlogs in water and sanitation with an estimated 15.2 million people without access to adequate water supplies and an estimated 20.5 million people without adequate sanitation facilities.

Of the 15.2 million people (40% of the population) without access to basic water supply, 70% lived in rural areas.

Of the current population of 49.7 million people (based on the updated Census as of the end of 2008), 3.3 million people are currently without access to a basic level of water supply and a further 4.9 million people have a water supply that does not meet basic service levels. There are currently 15.3 million people without access to basic sanitation facilities (DWAF, 2010).

These figures show the significant progress in eradicating basic water and sanitation services backlogs. In terms of basic water supply, South Africa achieved the Millennium Development Goal (MDG) target in 2005, 10 years ahead of the 2015 target date, and to date has achieved a 66% improvement.

Given the levels of funding and rates of services delivery, the complete elimination of the water backlog by 2008 did not happen. 45% of the water services authorities (WSAs) surveyed in the Masibambane Summative Evaluation (August 2007) estimated that it would take them more than five years to eliminate their water backlogs, and 14% estimated that they would need more than10 years.

Key challenges to accelerating services delivery is population growth and population migration (both into South Africa, and within South Africa). To date the South African population has grown by 12 million since 1994, and more and more people moving to the rapidly growing cities. Many of these economic

TABLE 3: HOUSEHOLD WATER BACKLOGS

Province	Census 2001	Statistics South Africa						DWEA 2008			Municipal source 2008		
		General household survey 2007			Community survey 2007								
	Total no. of Households	Total no. of households	No. of households receiving below basic level of service	Households below a basic level of service, as a percentage	Total no. of households	No. of households receiving below basic level of service	Households below basic level of service, as a percentage	Total no. of households	No. of households receiving below basic level of service	Households below a basic level of service, as a percentage	Total no. of households	No. of households receiving below basic level of service	Households below a basic level of service, as a percentage
Eastern Cape	1,506,540	1,795,872	490,872	27.3%	1,584,787	462,478	29.2%	1,598,994	254,634	15.9%	1,634,642	513,088	31.4%
Free State	758,112	873,415	28,415	3.3%	802,859	21,787	2.7%	795,862	11,338	1.4%	770,062	211,109	27.4%
Gauteng	2,889,676	3,243,966	80,966	2.5%	3,174,157	65,997	2.1%	3,381,995	109,801	3.2%	3,174,143	55,304	1.7%
KwaZulu-Natal	2,233,498	2,537,156	421,156	16.6%	2,231,975	461,222	20.7%	2,451,294	448,904	18.3%	2,317,293	651,610	28.1%
Limpopo	1,194,036	1,317,459	222,459	16.9%	1,215,935	198,930	16.4	1,259,743	251,806	20.0%	1,319,755	276,090	20.9%
Mpumalanga	830,987	888,406	101,406	11.4%	940,314	84,051	8.9%	902,515	109,011	12.1%	1,024,416	194,451	19.0%
North West	898,740	943,782	100,782	10.7%	911,121	91,678	10.1%	925,893	98,208	10.6%	924,430	210,623	22.8%
Northern Cape	259,633	293,701	15,701	5.3%	257,130	13,773	5.4%	257,279	19,407	7.5%	273,887	17,545	6.4%
Western Cape	1,211,414	1,367,171	38,171	2.8%	1,359,874	14,866	1.1%	1,422,725	33,784	2.4%	1,371,217	347,686	25.4%
Grand Total	11,782,636	13,260,928	1,499,928	11.3%	12,478,152	1,414,782	11.3%	12,996,300	1,336,893	10.3%	12,809,845	2,477,506	19.3%

Data source: Stats SA, Census 2001.
Stats SA, GHS – July 2007 survey based on households.
Stats SA, Community Survey February 2007 based on households.
DWA ,2008, data based on updated census 2001 (households).
Municipal Source, 2009, data gathered via comprehensive infrastructure planning in April 2009.

Source: DPLG Basic Services, 2008

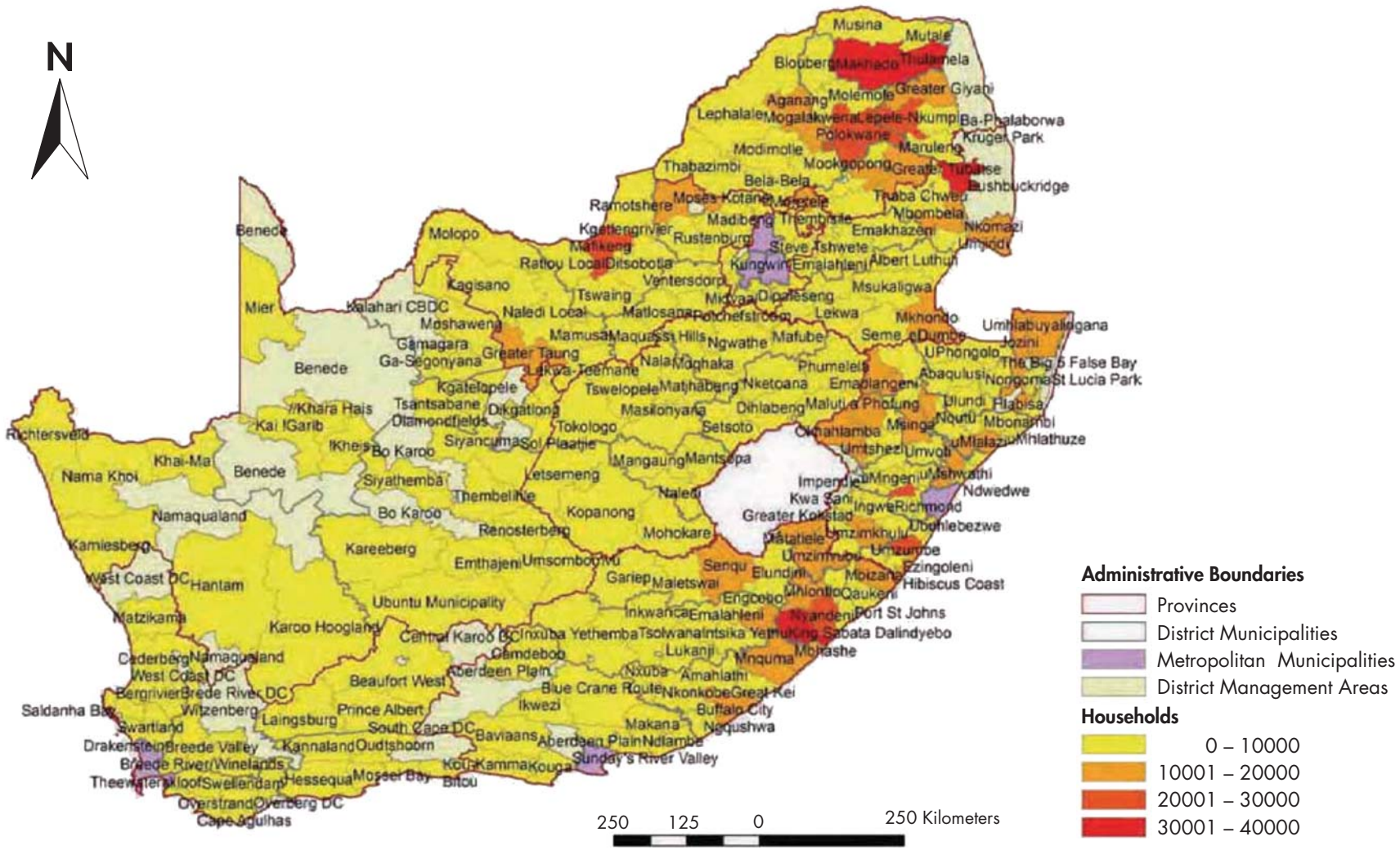
Definition: Higher level of service includes piped water inside dwelling. Basic level of service includes 25 litres of potable water per person per day supplied within 200 metres of a household.

Interpretation: In terms of the percentage of households with water backlogs, the data sets for GHS (2007), CS (2007), DWEA (2008) and Municipal Source (2009) are variable, yet comparable in terms of the trends exhibited. The percentage variation may be due to:

- Date stamp of the data;
- Methodology by which the data were gathered;
- Total number of households varying per data set; and
- Interpretation of what constitutes a backlog and the application thereof.

Figures for household access to water are determined by adding households receiving piped water inside dwelling, piped water inside yard and piped water within 200m.

FIGURE 1: SPATIAL DISTRIBUTION OF HOUSEHOLD WATER BACKLOGS



Source: DWA, 2008

TABLE 4: WATER: ACCESS TO BASIC AND HIGHER LEVELS OF SERVICE

Province	Census 2001	Statistics South Africa						DWEA 2008			Municipal source 2008		
		General household survey 2007			Community survey 2007								
	Total no. of Households	Total no. of households	No. of households receiving basic and higher levels of service	Household access to water, as a percentage	Total no. of households	No. of households receiving basic and higher levels of service	Household access to water, as a percentage	Total no. of households	No. of households receiving basic and higher levels of service	Household access to water, as a percentage	Total no. of households	No. of households receiving basic and higher levels of service	Households access to water, as a percentage
Eastern Cape	1,506,540	1,795,872	1,305,000	72.7%	1,584,787	1,122,309	70.8%	1,598,994	1,344,360	84.1%	1,634,642	1,121,554	68.6%
Free State	758,112	873,415	845,000	96.7%	802,859	781,072	97.3%	795,862	784,524	98.6%	770,062	558,953	72.6%
Gauteng	2,889,676	3,243,966	3,163,000	97.5%	3,174,157	3,108,160	97.9%	3,381,995	3,272,194	96.8%	3,174,143	3,118,839	98.3%
KwaZulu-Natal	2,233,498	2,537,156	2,116,000	83.4%	2,231,975	1,770,753	79.3%	2,451,294	2,002,390	81.7%	2,317,293	1,665,683	71.9%
Limpopo	1,194,036	1,317,459	1,095,000	83.1%	1,215,935	1,017,005	83.6%	1,259,743	1,007,937	80.0%	1,319,755	1,043,665	79.1%
Mpumalanga	830,987	888,406	787,000	88.6%	940,314	856,263	91.1%	902,515	793,504	87.9%	1,024,416	829,965	81.0%
North West	898,740	943,782	843,000	89.3%	911,121	819,443	89.9%	925,893	827,685	89.4%	924,430	713,807	77.2%
Northern Cape	259,633	293,701	278,000	94.6%	257,130	243,357	94.6%	257,279	237,872	92.5%	273,887	256,342	93.6%
Western Cape	1,211,414	1,367,171	1,329,000	97.2%	1,359,874	1,345,008	98.9%	1,422,725	1,388,941	97.6%	1,371,217	1,023,531	74.6%
Grand Total	11,782,636	13,260,928	11,761,000	88.7%	12,478,152	11,063,370	88.7%	12,996,300	11,659,407	89.7%	12,809,845	10,332,339	80.7%

Data source: Stats SA, Census 2001.
Stats SA, GHS – July 2007 survey based on households.
Stats SA, Community Survey February 2007 based on households.
DWA, 2008, data based on updated census 2001 (households).
Municipal Source, 2009, data gathered via comprehensive infrastructure planning in April 2009.

Source: DPLG Basic Services booklet, 2008

Definition: Higher level of service includes piped water inside dwelling. Basic level of service includes 25 litres of potable water per person per day supplied within 200 metres of a household.

Interpretation: In terms of the percentage of households with water backlogs, the data sets for GHS (2007), CS (2007), DWEA (2008) and Municipal Source (2009) are variable, yet comparable in terms of the trends exhibited. The percentage variation may be due to:

- Date stamp of the data;
- Methodology by which the data were gathered;
- Total number of households varying per data set; and
- Interpretation of what constitutes a backlog and the application thereof.

Figures for household access to water are determined by adding, households receiving piped water inside dwelling, piped water inside yard and piped water within 200m.

migrants retain a homestead in their ancestral base, thus accounting for the ever growing demand on services delivery.

Table 3 illustrates household backlogs.

Table 4 provides 2008 figures on access to basic and higher levels of service.

The free basic water policy of the government envisages that every poor household should receive 6 kl of water per month free of charge. National Treasury assists municipalities to implement this by making available the Equitable Share—a grant from the national fiscus to support implementation of free basic services (including water and sanitation). Table 8 provides an up-to-date overview of implementation of the free basic water policy.

4.4 WATER RESOURCES[5]

South Africa 's water resources comprise 77% surface water, 9% groundwater and 14% re-use of return flows. Four international shared rivers drain about 60% of the surface area representing 44% of the national surface water runoff.

Most of the surface water is generated by short rivers along the east coast with limited development and management opportunity. In the interior, seasonal rivers generate 27% of the runoff from 54% of the surface area, while in the west 24% of the surface area is drained by episodic rivers without any significant contribution to the runoff. The natural mean annual runoff is about 49,999 million m^3/a, of which only about 27% is currently available as reliable yield.

TABLE 5: SERVICE LEVEL VIEW: TOTAL POPULATION SERVED

Service Level	Above basic	At basic	Below basic	No Infrastructure	Total
Total	35,115,024	9,934,865	2,579,900	2,113,880	49,743,669
Served	30,927,756	9,073,452	2,374,863	121,888	42,497,958
%	88.08%	91.33%	92.05%	5.77%	85.43%

Source: DWA, 2010

TABLE 6: SERVICE LEVEL VIEW: TOTAL *POOR* POPULATION SERVED

Service Level	Above basic	At basic	Below basic	No Infrastructure	Total
Total	14,324,508	5,847,422	1,539,773	1,432,237	23,143,940
Served	13,096,671	5,207,098	1,430,646	56,077	19,790,492
%	91.43%	89.05%	92.91%	3.92%	85.51%

Source: DWA, 2010

TABLE 7: WATER SERVICES AUTHORITIES

	Water Services Authorities		
Total	**Providing to all**	**Providing to some**	**Not Providing**
169	29	136	4

Source: DWA, 2010

[5] DWAF Water Services presentation to National Water Summit, 4-5 May 2006 entitled "A National Perspective: Making it happen", page 11.

Owing to the high temporal and spatial variation in rainfall, high evaporation and the location of water users, the remaining economic development potential is only 5,400 million m^3/a per year (i.e. 11% of the mean annual runoff).

To manage the variability of surface water runoff and to supply the water to locations of economic activity, South Africa has had to build comprehensive infrastructure, including 3,854 major dams and 13 inter-basin transfer schemes with a total transfer capacity exceeding 6,000 million m^3 per year.

Challenges include the *development* of additional water resources to meet the growing demand, effective water sharing, management of floods and droughts, active implementation of demand and conservation management and water resource protection, which includes pollution control.

Progress includes the reservation of basic water for ecological needs and for basic domestic water use (the social reserve), systems to enable compulsory licensing for all water use, improved monitoring and planning, progressive establishment of integrated catchment management, roll-out of demand and conservation management, establishment of a dedicated Disaster Management Unit (floods and droughts) and construction of some key water resources infrastructure.

TABLE 8: NATIONAL: SUMMARY VIEW

Population	Total	Poor
Total	49,743,669	23,143,940
Served	42,497,958	19,790,492
%	85.43%	85.51%

Source: DWA, 2010

5 FINDINGS ON SERVICE DELIVERY MODEL(S), ACCORDING TO THE ANALYTICAL FRAMEWORK

5.1 WHAT IS THE SERVICE DELIVERY MODEL IN THE SOUTH AFRICAN CONTEXT?

For the purposes of this paper, the service delivery model is understood to mean the policy, legislative, planning, financial, institutional, regulatory and support frameworks for water services provision, where the primary focus is on rural water supply.

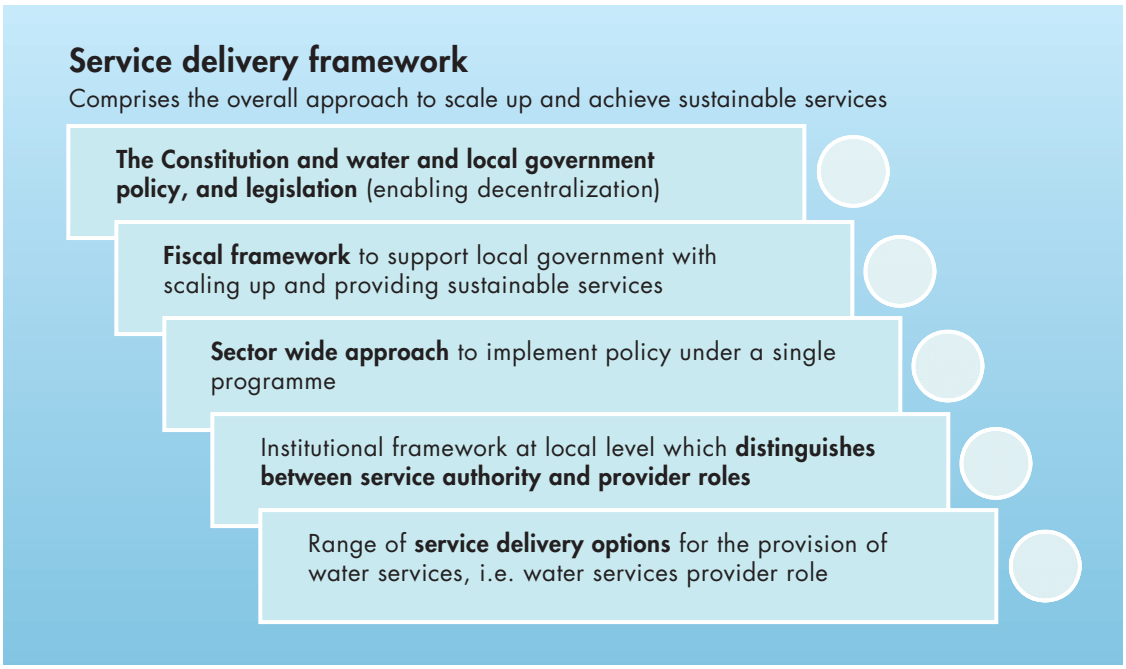
In 2003, South Africa adopted a Strategic Framework for Water Services (SFWS). This Framework sets out the vision, goals, targets, principles and approach to the provision of water services in South Africa, ranging from small community water supply and sanitation schemes in remote rural areas to large regional schemes supplying water and wastewater services to people and industries in the largest urban areas.

Essentially the Strategic Framework for Water Services (SFWS) captures the 'service delivery model' for South Africa against which to assess South Africa's overall performance in the delivery of water services.

It provides a set of *policy frameworks* for the implementation of sustainable water services for a 10-year period, which address water services planning, institutional arrangements, national norms and standards, financial issues, regulation, support and monitoring.

In the South African context a 'service delivery model' is understood as an institutional arrangement for the provision of water services at the local level which is typically called the water services provider. In some cases the term has also been used to refer to delivery mechanisms for the design and implementation of new

FIGURE 2: THE SERVICE DELIVERY FRAMEWORK FOR SOUTH AFRICAN WATER SERVICES



Source: constructed by author

infrastructure. Thus it is more appropriate to refer to a service delivery framework or approach when addressing the overall policy, legislative, planning, financial and institutional environment for water services.

Figure 2 captures the service delivery framework for South African water services.

5.1.1 Implementation of the service delivery framework

The various policies, legislation, planning and fiscal frameworks, institutional arrangements and the overall programme for water services provide the mechanisms for both scaling up and ensuring the provision of sustainable services. Fundamental to the framework are roles and responsibilities of different institutions within the sector and how decentralised services provision is planned, implemented, financed and supported.

In terms of water services the two main spheres of government are national government and local government, where both spheres also have to engage in governance issues involving all relevant stakeholders. Both these spheres have responsibilities in terms of policy development, planning, finances, infrastructure, water services institutional arrangements, advocacy and communication, monitoring and regulating. National government also has a major support role and national leadership role to ensure a strong and collaborative sector. Local government is responsible for ensuring the actual provision of services and universal access to services. Figure 3 illustrates at a very high level the phases of what has become known as the 'services delivery life cycle' and the different levels of government within each sphere for which roles and responsibilities for municipal infrastructure and services are allocated. This figure is only a slice of the total picture as it does not capture water resources, finances, sector collaboration, and a range of other components that form part of the overall water services framework.

The implementation phase culminates in commissioning which is the end of municipal infrastructure delivery. The service provision phase is where operation and maintenance takes place, which is the actual provision of services.

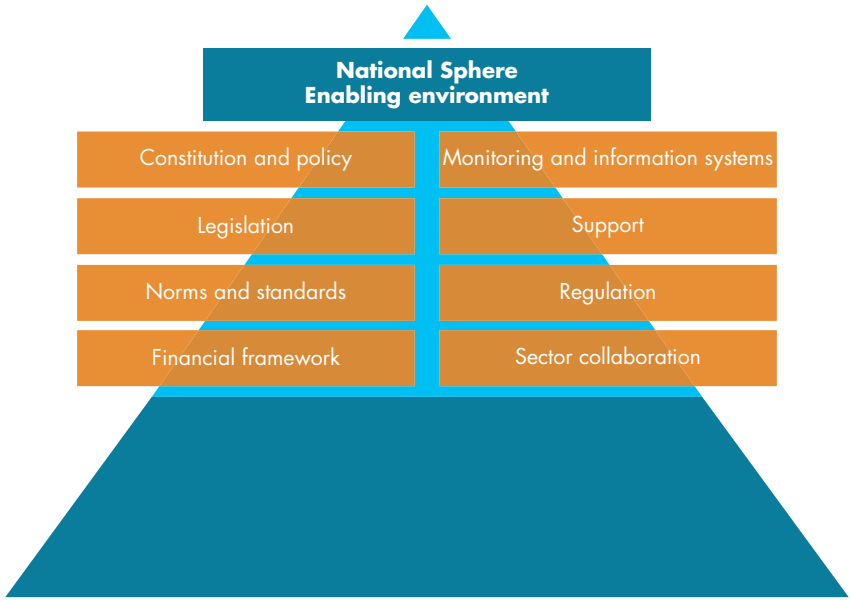
The **Service Delivery Life Cycle** should not be confused with the Project Life Cycle. The Service Delivery Life Cycle is all the phases and processes from policy through to service provision. It applies to all spheres of government and is an interactive process where policy is improved over time as lessons are learnt through the cycle and fed back into the policy-making process.

FIGURE 3: SERVICE DELIVERY LIFE CYCLE

	PHASE 1 Policy	PHASE 2 Planning	PHASE 3 Implementation	PHASE 4 Service Provision
National sphere	Develop municipal infrastructure policy and set standards for delivery systems	Develop framework for National Spatial Development Perspective (NSDP)	Municipal infrastructure programme management, collaboration, mobilise support and monitoring	Regulatory oversight of systems, procedures
National Water Sector Sphere (DWA)	Develop water sector policies, norms and standards	Macro water sector planning (part of SWAp)	Monitor implementation of norms and standards and collaboration around support	Regulatory oversight of water services norms and standards and support
Provincial Sphere (DWA Regional offices)		Provincial Water Services Plan (links to SWAp)	Monitor the implementation of sector policy, norms and standards and provide sector support	Service provision support
Municipal level	Service provision policies and by-laws	Integrated Development Plan (IDP)	Infrastructure delivery systems put in place and project management	Municipal regulation over service provision
Municipal water sector Level (WSA)	Water policies for free basic services	District / local water services development plan	Technical department (e.g. water, roads, etc. oversight of project implementation) or infrastructure unit	Water Service provider agreements / contracts
Water Services Provider	N/A Not responsible for service provision policy	WSP Business Plan (Plan for services in service delivery area)	May be contracted by WSA to implement capital projects	Operations, maintenance, customer care, revenue collection, etc. as per service provider agreement / contract
Project level		Project Pre-Feasibility and Feasibility Studies and Business plans	Project cycle—implement technical norms and standards Design / Tender / Construction / Commission	Incorporated into existing service provision arrangement, or new WSP established as part of project cycle

Source: de la Harpe, 2006

FIGURE 4: ENABLING ENVIRONMENT FOR WATER SERVICES FROM A NATIONAL PERSPECTIVE



Source: constructed by author

The **Project Life Cycle** is the different phases that a project goes through and forms part of the service delivery life cycle. A project has a beginning and an end and is time bound. The project life cycle happens at the local level, but it is supported by other spheres of government where required.

5.2 ENABLING ENVIRONMENT FOR THE SERVICE DELIVERY APPROACH AT NATIONAL LEVEL

South Africa has established a comprehensive framework for the provision of water services which is articulated in the Constitution, water services policy and legislation, and local government policy and legislation. In addition, the policy objectives for water services are supported from the national level through various mechanisms such as national norms and standards, a financial framework, monitoring and information systems, a sector support strategy, regulation and sector collaboration which takes place in the context of the sector wide approach (SWAp). Figure 4 captures this enabling environment for water services from a national perspective.

5.2.1 Constitution

In 1996, the new Constitution[6] was finalised, which defines three interdependent spheres of government (national, provincial and local) and assigns powers and functions between these spheres. The Constitution provides the basis for decentralisation of basic services, contrary to the former government system, which was centralised. Between 1998 and 2000, legislation guiding the future system of local government was finalised after which the new municipal boundaries were demarcated. Following the second democratic local government elections in 2000, the new system of local government was implemented. These local government structures faced many challenges, including the establishment of completely new municipalities, restructuring and amalgamation of old administrations, implementing the division of powers and functions, establishing new systems and procedures in line with new legislative requirements, addressing service delivery backlogs, taking transfer of water services infrastructure and staff, and taking on additional responsibilities such as local economic development and housing delivery. Municipalities essentially had to transform to become 'developmental local government'.

The Constitution outlines a vision for developmental local government, where one of the objects of local government is to "ensure the provision of services to communities in a sustainable manner". Local government has the mandate to deliver services for all, where "provision of household infrastructure and services"[7] is one of the developmental outcomes of local government.

[6] Constitution of the Republic of South Africa (Act No. 108 of 1996).

[7] White Paper on Local Government (1998).

The Constitution is important in terms of water services as it addresses both the rights of individuals to access basic water and it sets out the institutional framework for services provision. The Bill of Rights, which is part of the Constitution, guarantees the right of everyone to sufficient food and water and to an environment that is not harmful to their health or well-being.

In terms of the Constitution and in terms of local government legislation[8] municipalities have the executive authority and right to administer the provision of water services within their areas of jurisdiction. This means that the local government sphere is responsible for water services. National government is responsible for establishing norms and standards for service provision. National and provincial government have the obligation to support and strengthen the capacity of local government to manage their own affairs and to exercise their powers and functions, such as water services. National and provincial governments also have the authority to regulate the effective performance of local government in terms of the services.

5.2.2 Water services policies

The previous government relied on the former 'homeland governments' to provide services in the homeland areas which were predominantly rural. Although significant resources were allocated for services provision, the homeland governments failed to achieve sustainable services. This was primarily due to poor institutional arrangements, top-down approaches, insufficient attention to financial sustainability, and a complete failure to involve communities in decision making, local level management and the ongoing operation and maintenance of the projects.

Given the failures of the previous government, it was evident that new approaches were required to provide sustainable services and to dramatically increase service provision coverage. The new approach was outlined in the Department of Water Affairs and Forestry 1994 **White Paper on water supply and sanitation.**

The basic policy principles outlined in the White Paper were as follows:

- Development should be demand driven and community based.
- Basic services are a human right.
- "Some for All" rather than "All for Some".
- Equitable regional allocation of development resources.
- Water has economic value.
- The user pays.
- Integrated development.
- Environmental integrity.

In terms of finance and tariff policy, services should be self-financing at a local and regional level, with the exception of *basic services* to poor communities. The policy thus recognised the need for grant finance to subsidise the cost of construction of basic minimum services, but not the operating, maintenance and replacement costs.

The **Free Basic Water Services Policy** was introduced in 2001 based on a political decision to provide poor households with a basic supply of water free of charge, being 6,000 litres of safe water per household per month. The primary purpose of the policy is to ensure that no one is denied access to a water supply system simply because they are unable to pay for the service. The policy is also part of South Africa's overall poverty alleviation strategy and based on the recognition that water related health problems severely affect the poor, and the reduction of health threats is fundamental to sustainable livelihoods.

The **Strategic Framework for Water Services** (2003) was developed to address policy shifts required following the local government transformation process of 2000, and in line with changes required in the role of the Department of Water Affairs. At the time of the 1994 Water Supply and Sanitation White Paper the Department of Water Affairs and Forestry was playing a direct role in providing basic water and sanitation services to those without services, particularly in rural areas. Following the local government transformation process, local government was required to assume full operational responsibility for water and sanitation services as provided for in the 1996 Constitution. The Department could therefore start phasing out its operational role and focus on becoming sector leader, supporter and regulator. The timetable for phasing out the Department's operational role was set out in the Division of Revenue Act (2002) which provided to the necessary fiscal transfers, and in the Joint Transfer Policy for water services (2003).

A fundamental policy shift between the 1994 Water Supply and Sanitation White Paper and the 2003 Strategic Framework was the establishment of an overall enabling environment for local government as the sphere of government responsible for water and sanitation services.

[8] Municipal Structures Act (Act No. 117 of 1998).

5.2.3 Water in local government legislation

The National Water Act (Act No. 36 of 1998) and the Water Services Act (Act No. 108 of 1997) provide the overall legislative framework for water resource management and water supply and sanitation services. The National Water Act legislates the way that the water resource (surface and groundwater) is protected, used, developed, conserved, managed and controlled. The Water Services Act legislates the municipal function of providing water supply and sanitation services.

Water Services Act (Act No. 108 of 1997)

The Water Services Act is a flexible, developmental legislative framework for the provision of water services, where water services include water supply and sanitation, even where the sanitation facilities are dry on-site toilets.

One of the most important elements of the Water Services Act is that it distinguishes between the **water services authority** and the **water services provider.** A water services authority is any municipality with executive responsibility for water services.

The Act provides that every water services authority (WSA) must: **ensure access** to efficient, affordable, economical and sustainable water services for all consumers; make **by-laws;** prepare a **water services development plan** (WSDP); and either perform the function of **water services provider (WSP)** itself or contract a water services provider. These legislative functions can be divided into two key areas: the governance function and the provision function.

The governance functions are essentially the executive functions of the municipality that it cannot delegate to any other legal entity, but it can contract in support to *assist* with various governance functions. The governance function is to ensure an enabling environment for water services within the local government sphere. These functions set the rules of the game, (by-laws and free basic service policies relevant to the local context), plan for water services across the entire district, ensure that the most appropriate water services provision institutional arrangements are established, and monitor and regulate the provision of water services. Where a water services authority also performs the water services provider functions, the Water Services Act specifies that the governance functions must be managed and accounted separately from the provision functions.

The **provision function** is the actual provision of the water supply and sanitation services to consumers, for example operating and maintaining the water services infrastructure, customer relations, revenue collection, administrative and financial management. A water services authority has a choice. It may carry out the functions of a water services provider itself or it may enter into a contract or form a joint venture with another water services provider or providers.

The water services provider function can be performed by any legal entity: a municipality, a municipal entity, a water board, a non-governmental organisation (NGO), a community-based organisation (CBO), a private sector company, or any other public or private body capable of providing the necessary services. No person or institution may operate as a water services provider without being contracted by the water services authority.

FIGURE 5: WATER SERVICES AUTHORITY AND THE PROVISION FUNCTION (IN-HOUSE AND CONTRACTED OUT)

Source : de la Harpe, 2006

Municipal Structures Act (Act No. 117 of 1998)

The Municipal Structures Act provides for the structures for local government and the allocation of functions between different types of municipalities. It distinguishes between metropolitan municipalities, district municipalities and local municipalities. The six Metropolitan municipalities (also called category 'A' municipalities) are cities with a large urban core and extended rural periphery and tend to have significant capacity to provide all municipal functions. The rest of the country is divided into 47 district municipalities (called category 'C' municipalities) and 231 local municipalities (called category 'B' municipalities). The local municipalities fall within the district areas. In terms of amendments made to the Municipal Structures Act in 2002, the responsibility for the provision of water and sanitation services lies with metropolitan and district municipalities. However, a number of local municipalities were authorised by the national Minister for Provincial and Local Government for the water and sanitation powers and functions.

Municipal Systems Act (Act No. 32 of 2000)

The Municipal Systems Act focuses on the internal systems and administration of a municipality, including: public accountability and involvement in policy making; guidelines for making by-laws; integrated development planning; performance management and monitoring; and municipal services including tariff policies and mechanisms for provision of services. The process to select service providers is outlined in some detail in section 78 of this Act, including the range of service delivery mechanisms through which a municipality may provide municipal serves. Most water services authorities have conducted what has become known as the section-78 process to determine the most appropriate water services provision institutional arrangements for their municipal areas.

Municipal Finance Management Act (No. 56 of 2003)

The Municipal Finance Management Act applies to all municipalities and municipal entities, and to national and provincial organs of state, to the extent of their financial dealings with municipalities. The objective of the Act is to secure sound and sustainable management of the fiscal and financial affairs of municipalities and municipal entities by establishing norms, standards and other requirements for: ensuring transparency, accountability and appropriate lines of responsibility in their fiscal and financial affairs; managing their revenues, expenditures, assets and liabilities, and financial dealings; budgetary and financial-planning processes and coordinating processes of organs of state; borrowing, and handling financial problems and other financial matters.

5.2.4 Sector vision, goals and targets

The water services sector vision, goals and targets are outlined in the Strategic Framework for Water Services.

The purpose of the sector goals is to ensure both scaling up of services as well as the provision of sustainable services. They address access to water services, health and hygiene practices, sustainability issues, governance issues, and service provision issues, finances and regulation.

1. All people living in South Africa have access to an appropriate, acceptable, safe and affordable basic water supply and sanitation service.

2. All people living in South Africa are educated in healthy living practices (specifically with respect to the use of water and sanitation services) and the wise use of water.

3. Water and sanitation services are provided:
   - equitably (adequate services are provided fairly to all people);
   - affordably (no one is excluded from access to basic services because of their cost);
   - effectively (the job is done well);
   - efficiently (resources are not wasted);
   - sustainably (services are financially, environmentally, institutionally and socially sustainable); and
   - gender sensitively (taking into account the different needs and responsibilities of women and men with regard to water services and sanitation).

4. All water services authorities are accountable to their citizens, have adequate capacity to make wise choices (related to water services providers) and are able to regulate water services provision effectively.

5. All water services providers are accountable, cost-effective, efficient, and viable, and implement appropriate employment and gender equity policies.

6. The prices of water and sanitation services reflect the fact that they are both social and economic goods (that is, pricing promotes access to a basic safe service, encourages the wise and sustainable use of resources and ensures financial sustainability).

7. Water and sanitation services are effectively regulated with a view to ensuring the ongoing achievement of these goals.

The sector targets include targets for the entire sector and address the following: access to services; education and health, free basic services; and institutional development and performance. Targets are stated within given timeframes, with means of verification and the responsible institution/s. For example, the first target under access to services is "All people in South Africa have access to a functioning basic water supply facility by 2008" which can be verified through the Census, and sample surveys. Water services authorities supported by the Department of Water Affairs are responsible for this target. (See Annex C for the full list of targets.) The access targets set out in the Strategic Framework exceed those set out in the Millennium Development Goals for water and sanitation, but these targets have not yet been achieved. New target dates have therefore been set so that municipalities remain under pressure to accelerate their scaling up programmes.

5.2.5 Service levels—water ladder

The Strategic Framework for Water Services (SFWS) introduces the water ladder as a concept towards progressively improving levels of service over time and in line with the aims of the Reconstruction and Development Programme of 1994. The water ladder is described as follows:

The first step up the water ladder is the provision of at least a basic water and sanitation service to all people living in South Africa. This is the most important policy priority and government will commit adequate funds to make this possible within the next few years. The next step is an intermediate level of service such as a tap in the yard. Water services authorities are expected to assist communities to achieve intermediate and higher levels of service wherever practical, affordable and sustainable without compromising the national policy priority of universal access to at least a basic level of service. National government will increase its commitment of grant funds over time to support households to step up the services ladder. Basic levels of service will also be reviewed in future to consider increasing the basic level from 25 to 50 litres per person (DWAF, 2003).

The targets of the Strategic Framework for Water Services are precisely to address access by the poor to adequate, affordable and sustainable levels of defined basic water supply and sanitation services. The definitions for basic water and sanitation supply services were revised in the Strategic Framework for Water Services (Figure 6) as follows:

Unrestricted water connections have to be metered or controlled to a basic level and where pre-payment meters are installed, these need to allow access to a basic amount of water at a zero tariff. The SFWS makes provision for definitions to be revised as progress is made in addressing services provision backlogs and if affordability increases as a result of economic growth.

The policy specifies that every water services authority has a duty to ensure that at least a *basic water supply and sanitation service* is provided to every household within its area of jurisdiction. Whilst national targets are set for this universal service obligation, it is subject to the availability of resources and to the "progressive

FIGURE 6: REVISION OF THE DEFINITIONS FOR BASIC WATER AND SANITATION SUPPLY SERVICES IN THE STRATEGIC FRAMEWORK FOR WATER SERVICES

Basic water supply facility: The infrastructure necessary to supply 25 litres of potable water per person per day supplied within 200 metres of a household and with a minimum flow of 10 litres per minute (in the case of communal water points) or 6,000 litres of potable water supplied per formal connection per month (in the case of yard or house connections).

Basic water supply service: The provision of a basic water supply facility, the sustainable operation of the facility (available for at least 350 days per year and not interrupted for more than 48 consecutive hours per incident) and the communication of good water-use, hygiene and related practices.

These definitions distinguish between the *facility* (the infrastructure), and the *sustainable operation* of the facility. So that responsibilities can be identified and progress measured. This separation is also necessary in terms of defining free basic services.

The policy also specifies that potable water must be of a quality consistent with the National Specifications for Drinking Water.

Source: DWA, 2003

realisation" of rights as outlined in the Constitution. Water services authorities are responsible for ensuring that *all people* in their area of jurisdiction are progressively provided with basic services, including people living on private land. Towards ensuring universal provision of at least a **basic water supply facility,** national government provides grants to water services authorities from the municipal infrastructure grant (MIG). Where a water services authority (WSA) fails to plan and implement strategies to provide universal basic services and where they fail to provide efficient, effective and sustainable services, national government has the right to intervene.

Whilst the policy defines basic levels of service, it does not define other levels of service, apart from referring to levels of service that are higher than the basic level, for example a yard tap providing more than 50 litres per person per day. WSAs are responsible for determining levels of service in their area of jurisdiction where the service is required to comply with national norms and standards.

5.2.6 Institutional framework from a national perspective

The institutional framework for the water sector and specifically the water services sector is guided by a number of principles in the Strategic Framework for Water Services:

1. **Clear definition of roles and responsibilities.** The respective roles and responsibilities of the different independent spheres of government and other water services institutions are clearly defined. The imperative of cooperative government is nonetheless recognised. Overlapping mandates are minimised.

2. **Separation of regulatory and operational responsibilities.** There is a clear separation of the activities of regulation and operation. This reduces the potential for conflicts of interest inherent in self-regulation and will help to improve the clarity of objectives and responsibilities. Regulation will seek to protect the interests of consumers and balance these with the need for sustainable institutions.

3. **Local government is responsible for ensuring water services provision.** Provision of water services is the constitutional responsibility of local government. Developmental and democratic local government is in the best position to make accountable decisions related to how services should be provided, taking into account the social and environmental aspects of water services.

4. **Flexibility.** A key characteristic of the institutional vision is that *the precise institutional form of water services provision is not specified but rather is flexible with respect to both the scale of provision and the type of service provider.* With respect to the scale of the provision of services, a water services provider could serve one small rural community, one or more towns, a large metropolitan area or a whole region. There is also flexibility with regards to the *type* of water services provider. *This flexibility recognises the diverse realities of the water services sector in South Africa* which includes large metropolitan areas, major and minor towns scattered across South Africa, dense and sparsely populated rural settlements, small distributed systems of supply using springs and boreholes serving a few people, surface water systems supplying a few towns, and large regional schemes serving many towns and cities.

5. **The private sector has a role to play** in assisting local government and other water services institutions in the water services sector.

6. **Management at the appropriate level.** The institutional vision provides for management, decision making and control of water services projects to be devolved to the lowest appropriate level whilst taking into account efficiency benefits related to economies of scale.

7. **Building on existing capacity.** The skills and resources within established and capable water services institutions will be protected and enhanced, recognising the potential impact of HIV/Aids on human resources.

8. **Transformation.** Through the institutional reform process, assisted by the support framework, water services institutions will be transformed in order to ensure effective, efficient and sustainable services provision, and taking cognisance of the need to reflect the cultural, gender and racial diversity in South Africa.

9. **Gender mainstreaming.** Women often bear the brunt of absent or poor water services and hence are key stakeholders in the sector. The needs and responsibilities of women and men in relation to water services and sanitation are often different. There will be a targeted effort to enable women to play a meaningful role at all levels in consultations, planning, decision making and in the operation and management of water services.

10. **Civil society** has an important role to play in, amongst others, planning, monitoring and advocacy.

The **Department of Water Affairs** is the custodian of the water resource and overall leader of the water

sector. Whilst it is not involved in developing or operating any water services infrastructure, it oversees the activities of water services authorities and water service providers and regulates both water resources and water services. The Department is also responsible for water resource planning at both the national and international levels and for decisions related to inter-catchment transfers and international allocations. The Department is currently investigating the efficacy of an independent water services regulator.

Catchment management agencies (CMAs) are responsible for water resource planning at the catchment level and most water resources management activities in these areas, such as the licensing of water use and discharges, monitoring abstractions and discharges, collecting abstraction and discharge fees, monitoring water quality, and overseeing land-use activities as this affects water management. Where CMAs are not yet established, the Department of Water Affairs (DWA) is responsible for the role of the CMA (through its regional offices based in the nine provinces).

Water services are decentralised to water services authorities. See Section 5.5 on the service delivery framework at local level.

5.2.7 Support from national government to the water services sector

The purpose of support is to: ensure the establishment and functioning of capable, effective and efficient water services institutions; ensure the development of adequate skills and competencies required in the water services sector; and to enable all sector role-players and partners to fulfil their roles effectively. The Strategic Framework identifies various mechanisms of support including: direct support for the establishment, coordination and sustainability of local government, of which water services is a key component; peer-to-peer knowledge-sharing networks; access to advisory services; guidelines and tools; direct technical assistance; skills development; and access to research.

The following principles inform the vision and support framework.

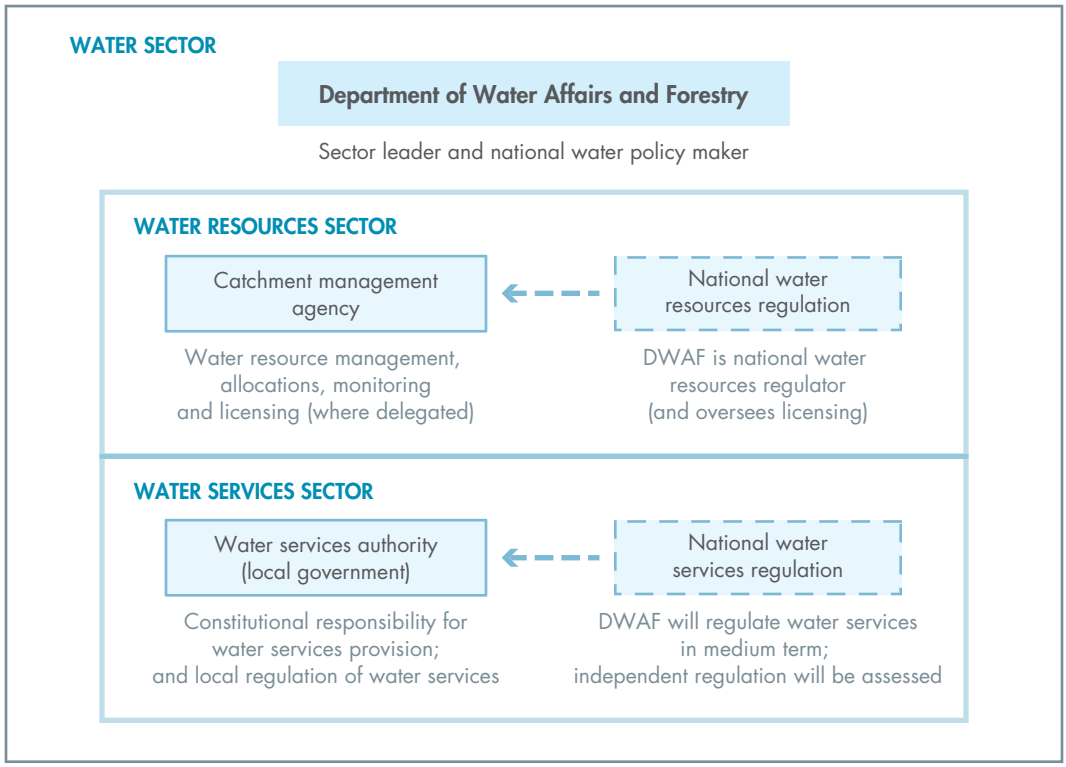
- **Outcomes-based support.** Support initiatives and activities will primarily focus on outcomes and not on inputs.
- **Institutionalisation of capacity.** Support initiatives will seek to develop capacity within the institutions that require it, so that reliance on external support is reduced over time.
- **Demand-driven.** Wherever practical, support should be responsive to needs and demands.
- **Alignment with Department of Cooperative Governance and Traditional Affairs ([COGTA] ex-DPLG) capacity building strategy.** The support strategy for water services will be aligned with and contribute to the COGTA capacity building strategy for local government.
- **Strategic.** National support should be strategic to meet sector priorities and seek to maximise the outcomes for a given set of limited resources.
- **Holistic.** Support for the water services function should be addressed as part of *overall* municipal services support—as all underpin the viability of local government.
- **Transformation.** Through the institutional reform process, assisted by the support framework, water services institutions will be transformed in order to ensure effective, efficient and sustainable services provision, and taking cognisance of the need to reflect the cultural, gender and racial diversity in South Africa.

A comprehensive Sector Support Strategy was developed in 2007 to translate the support framework into action. The overall purpose of the Support Strategy was to achieve the water services sector vision, sector goals and sector targets as outlined in the SFWS. The Strategy sets out the support that will be provided to ensure that these goals and targets are achieved. The Strategy resulted from a series of joint workshops comprising representatives of the sector, as well as regional and national consultative workshops. Whilst the objective of the Strategy was to strengthen the water sector as a whole, the main focus of the Strategy is on local government in terms of both its authority function and water and sanitation services provision function.

The Strategy recognises the need to not only support local government but also to support those institutions that are supporting local government. The Strategy builds on tried and tested practices, and introduces a number of initiatives intended to respond directly to local government support needs. The Strategy identifies 10 focus areas where each focus area is designed to strengthen water sector support provided to local government (Figure 8, p. 27).

The multi-dimensional support approach includes hands-on operational support, the development of water services leadership and management capacity, a multi-annual programme of councillor development, the appointment of national and regional support managers, skills development, the creation of national and regional resource pools (access to specialist expertise), sector wide planning, structures and

FIGURE 7: INSTITUTIONAL FRAMEWORK



Source: DWA, 2003

planning mechanisms for coordination, and improved knowledge and peer networks. Critical to the successful implementation of the strategy is the sector wide approach and the role of DWA regional offices in coordinating support and ensuring access to support resources. The sector wide approach requires all stakeholders to plan and budget to achieve a *common set of objectives and targets*. These objectives and targets are outlined in the SFWS. When implementing the sector wide approach, the allocation of resources, expertise and support will be geared to these common objectives and targets within the local, provincial and national spheres.

A major focus of the support strategy is on water services providers (WSPs). The support strategy recognises that building effective operational and management capacity in WSPs means: understanding the environment in which they operate; spending time with the managers, encouraging and mentoring them; developing their leadership skills; facilitating peer networks so that they can learn from each other, and ensuring access to specialist expertise. WSP support therefore comprises a range of support interventions.

Those WSPs that are hardly functioning at all (high risk) are the main target of support and will be able to access direct operational support. This initiative involves a diagnosis of the problems, the development of a WSP Action Plan and intensive hands-on support. A national resource pool of highly experienced water services managers who can make a good diagnosis to turn around a failing water services business, support this initiative. Whilst the support focuses on the provision function (well-functioning services is the outcome) it will also address authority functions to the extent that these impact on service provision, and thus link to the support provided to water services authorities (WSAs).

The significance of this initiative is that it acknowledges that there is no "one size fits all". Since every municipality is different with different support needs, operational support to WSPs is context specific, and seeks to address real and known constraints. The Strategy has provided strategic direction in terms of how the water services sector, and in particular local government water services institutions, should be supported.

National government departments, research institutions, municipalities, WSAs, WSPs and various other organisations within the water services sector have developed a range of tools to support WSAs and

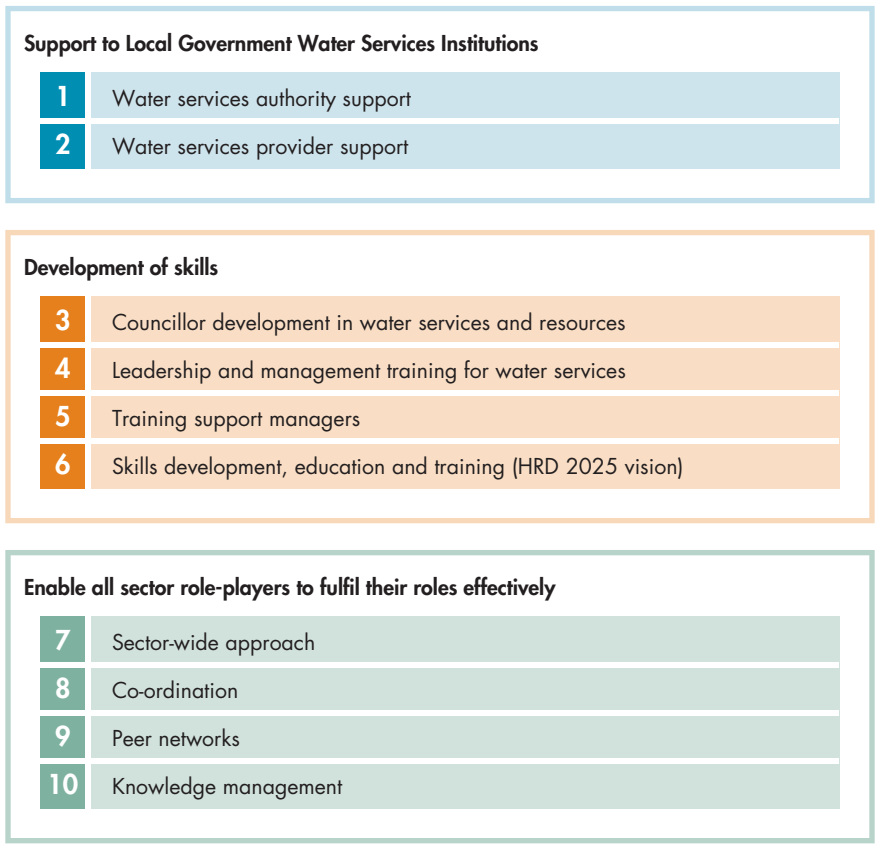
WSPs to fulfill their functions. These tools need to be made more accessible and in some cases the usability of tools needs to be addressed. Peer sharing of tools developed by municipalities is a key component of support. This can only work effectively if resources and expertise are made available to ensure that this sharing takes place.

Recommendations for improving support through guidelines and tools to WSAs and WSPs include:

- The establishment of web-based WSA and WSP "official" toolboxes as part of DWA's website to ensure that all official existing tools are accessible.
- A systematic process of accessing WSP systems, tools, procedures, job descriptions, policies and other supporting mechanisms from municipal WSPs, as well as other WSPs such as water boards, and establishing a mechanism (peer networks) to inform municipal WSPs of what tools are available.
- Development of an ongoing repository of WSA and WSP tools which is maintained and kept up to date (preferably with links to the developers of tools so that they can post updated versions of their tools).
- Identification of individuals who can provide support in utilising particular tools (for example, a tool related to treatment works will require someone with practical experience with treatment works) and who are cross-referenced in the inventories and electronic toolboxes.
- DWA as sector leader takes responsibility for the development and management of the official WSA and WSP electronic toolboxes and for allocating the resources to maintain the toolboxes on an ongoing basis.
- Additional WSA and WSP tools are developed and maintained by the WSPs themselves. The peer networks are used for the dissemination of these tools.

Research is a further important area of support, particularly in terms of rural water services provision and the use of community management. The Water Research Commission (WRC) expanded its mandate in the last few years to include a focus on community-based development and action research. It is further researching water services provision institutional arrangements.

FIGURE 8: SUPPORT TO LOCAL GOVERNMENT WATER SERVICES INSTITUTIONS



Source: Adapted from DWA, 2007b

BOX 2: WATER INFORMATION NETWORK—SOUTH AFRICA (WIN-SA)

The *Water Information Network—South Africa (WIN-SA)* is a knowledge management initiative designed to serve the water sector, with the aim of ensuring that the body of knowledge in the sector is well managed, readily accessible and appropriately applied, leading to improved decision-making and performance, especially of local government. WIN have, *inter alia*, commissioned and published a series of papers on best practices. For further detail, see www.win-sa.org.za.

e-WISA

e-WISA is an electronic information initiative undertaken by WISA in partnership with others. e-WISA was launched in May 2006.

Source: DWA, 2007b

In terms of knowledge management, the Water Information Network - South Africa (WIN-SA, Box 2) was set up initially as a Masibambane knowledge management initiative, but it is now institutionalised in the WRC. The Masibambane 2 Evaluation found that WIN-SA has enormous value in providing continuously updated information on the state of the sector in terms of targets and lessons learnt. It probably provides the most informative picture of any sector across South Africa. This is a result of the sector wide approach where all stakeholders supported and bought into the establishment of a knowledge management resource.

Other knowledge networks also exist for local government more generally. These include the SA Cities Network and the Local Government Knowledge Sharing Programme (see www.dplg.gov.za).

5.3 NATIONAL NORMS AND STANDARDS AND THE REGULATORY FRAMEWORK

The Minister prescribes compulsory national standards relating to:

- the provision of water services;
- the quality of water taken from or discharged into any water services or water resource system;
- the effective and sustainable use of water resources for water services;
- the nature, operation, sustainability, operational efficiency and economic viability of water services;
- requirements for persons who install and operate water services works; and
- the construction and functioning of water services works and consumer installations.

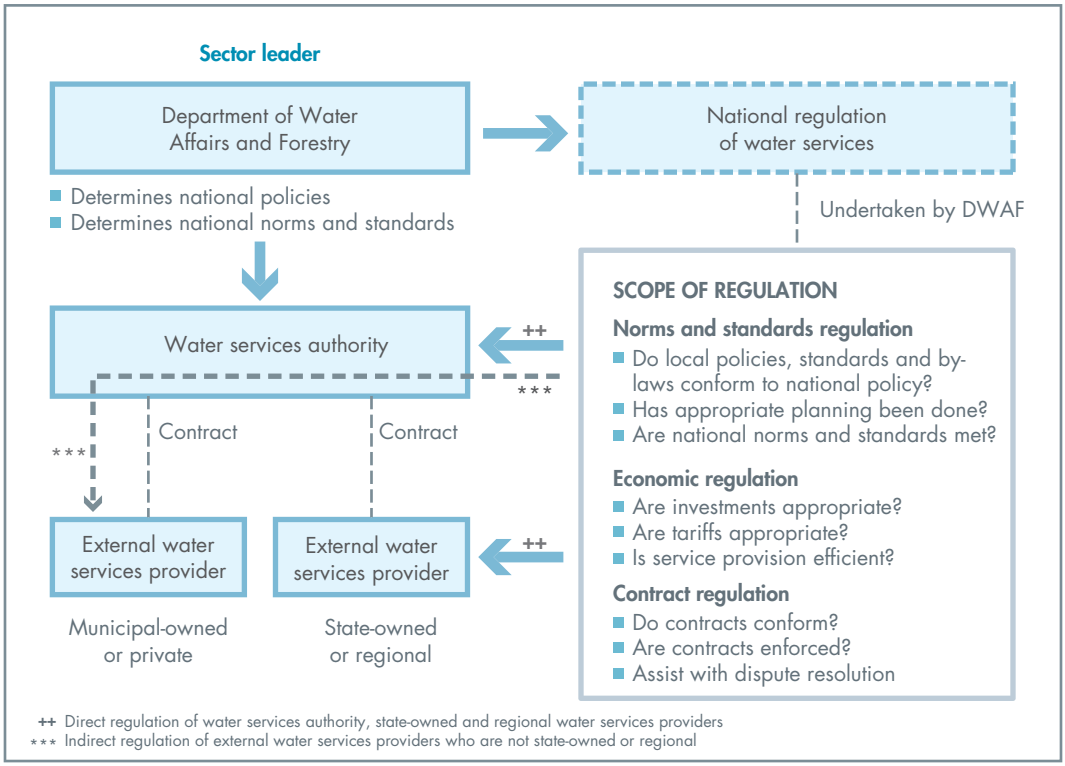
Every water services institution must comply with these standards prescribed by the Minister towards ensuring sustainability, equity, effectiveness and efficiency.

The overall purpose of the regulatory framework for water services is to protect consumer and public interests by: ensuring compliance with minimum national norms and standards; ensuring good performance and the efficient use of resources; and ensuring good contracting practice.

The regulatory framework is informed by a set of principles outlined in the Strategic Framework for Water Services (SFWS) as follows:

- **Separation of regulatory and operational responsibilities.** Wherever possible and practical, the roles of regulation and operation should be clearly separated and preferably fulfilled by separate institutions.
- **Integration with local government regulatory framework.** The regulation of water services and the general regulatory framework for local government will be aligned.
- **Incremental regulation.** The regulatory framework will be matched to the capabilities of water services authorities and water services providers. A "one size fits all" regulatory approach is not appropriate in the South African context. The regulation of a large metropolitan water services provider poses an entirely different set of challenges compared to the regulation of a community-based water services provider managing local water and sanitation services in a small rural community.
- **Strategic regulation.** The implementation of regulation will be strategic, focusing initially on priority areas where most gains can be achieved in the context of limited capacity and resources.

FIGURE 9: REGULATORY FRAMEWORK FROM A NATIONAL PERSPECTIVE



Source: DWA, 2003

- **Implementation or regulatory impact assessments.** An appropriate balance needs to be struck between desirable standards and the full economic costs associated with meeting these standards. The costs and benefits of new policy objectives and regulatory initiatives will be assessed prior to adoption and implementation.
- **Regulation of outcomes.** Wherever practical and appropriate, emphasis will be placed on regulating outcomes rather than absolute compliance with stated regulations. This is a more flexible model and is more appropriate to the South African context.
- **Dispute resolution.** The primary mechanism for the regulation of external water services providers is by contract. Wherever practical, contractual disputes should be resolved through existing arbitration mechanisms rather than relying on the costly and lengthy process of litigation.

Figure 9 outlines the regulatory framework from a national perspective.

Regulatory framework at national level

DWA as the sector leader is responsible for setting national norms and minimum standards for the provision of water services. **National regulation of water services includes** the following:

- Monitoring compliance with (and relative performance with respect to) national policies and national minimum norms and standards;
- Reviewing investment decisions of water services providers and tariffs set by water services authorities;
- Ensuring that all contracts between water services authorities and water services providers conform to national regulations. This includes oversight of the management and enforcement of contracts, including support where required, for example dispute resolution and interventions in terms of the contract;
- Assessing the progress of water services authorities in taking reasonable steps to realise the right of everyone to have a basic water supply and sanitation service, taking into account the constraints facing water services authorities;
- Protecting consumer rights in terms of access to services by ensuring that credit control procedures are consistent with the credit control policies.

TABLE 9: ROLES AND RESPONSIBILITIES FOR REGULATING WATER SERVICES

Role	Institution/s	Responsibilities
Constitution of South Africa	Ministers of Water Affairs and Minister of Cooperative Governance and Traditional Affairs (ex dplg)	To set national norms and standards To fill the role of water services authority if service at local level fails To provide support to local government in relation to water services To legislate with regard to municipal functions (including minimum procurement rules) To monitor performance
	Municipal government (local sphere)	To be responsible for the provision of a basic level of service to all South Africans
Regulator	Minister of Water Affairs	To set minimum levels of service To set minimum reporting requirements To set tariff policy To monitor performance To encourage regionalization to achieve economies of scale
Water services authority (WSA)	Municipal government	To achieve requirements set by regulators To balance the needs of stakeholders To enter into contracts with WSP(s) best able to achieve these requirements To monitor performance of the WSP in terms of the contract with the WSA To report to regulators
Water Services Provider (WSP)	Public, private or mixed entities, or municipal government itself	To provide the services and perform the duties as required in the contract, the WSA and the Constitution

Source: Adapted from DWA, 2003

The Department remains the national regulator until an independent regulatory function is created. Table 9 sets out roles and responsibilities for regulating water services.

In addition to the above responsibilities, national departments, in particular DWA, Cooperative Governance and Traditional Affairs, and Finance provide support to municipalities in the form of capacity building, financial assistance and operational support. Other departments such as Environment, Health, and Labour also regulate elements of this sector.

The National Water Services Regulation Strategy (April 2008) provides a framework for regulating water services institutions in South Africa. It outlines key areas to be regulated and the approach to be used by DWA in regulating water services institutions. It highlights three priority programmes to: mitigate key risks; build the foundations for effective regulation; and to move to the full scope of water services regulation. The National Drinking Water Quality Initiative (which is one of the three priority programmes) is a certification programme which awards WSAs with Blue and/or Green Drop status when they comply with drinking water and wastewater legislative and other best practice requirements.

The Department launched the Blue Drop Certification Programme in September 2008 as an incentive-based regulation approach for **drinking water quality** management. The initial assessment round (November 2008 to January 2009) of the Blue Drop Certification Programme assessed more than 70% of water services institutions against stringent criteria for effective drinking water quality management. This process aims to ensure the sustainable improvement of skills, data credibility, monitoring programmes, quality compliance, incident response protocol and asset management within the drinking water quality domain of all relevant water services institutions. An electronic water quality management system (eWQMS) has been established to ensure efficient monitoring of drinking water quality and to provide DWA with regular information necessary for effective DWQ regulation. More than 90% of WSAs are loading data

onto this system from more than 3,200 sampling points. On average, approximately 94% of the sample points complied with the health aspects of the national standard known as SANS 241. A key factor in making this initiative so successful has been the intense awareness programmes and support from sector partners such as the Institute for Municipal Engineers of South Africa (IMESA) and the South African Local Government Association (SALGA).

The Green Drop Certification Programme was initiated as a twin project to the Blue Drop Certification Programme, focusing on wastewater services management. The Blue Drop-Green Drop Certification process includes clarification of the criteria against which compliance to drinking and wastewater legislation, as well as other best practice requirements, will be assessed in future. Receipt of a Blue or Green Drop is accepted to represent excellence in managing drinking water quality, or wastewater services by a town within a water services authority. These Certification Programmes have shown success in improving drinking water and service quality with 52% of WSAs having achieved acceptable service quality. Service Quality indicators include "the existence of a customer service system; appropriate levels of staffing, equipment, resources, funding and, most importantly, the ability to respond to customer call-outs within 24 hours".

Blue and Green Drop status also provides citizens with credible information on drinking water and wastewater management within the various WSAs.

The Minister is responsible for ensuring that there is a national information system on water services. One of the purposes of this system is to provide information to water services institutions, consumers and the public to enable them to monitor the performance of water services institutions. A national water information system has been established by DWA which is used extensively by municipalities and to report to parliament and other key stakeholder forums. The system monitors performance against the water and sanitation MDG targets and against service provision indicators (drinking water quality and quantity, interruptions, water safety plan, drinking water quality sample analysis, management of failures, and asset management issues) from the municipal sphere to the national sphere so that the Department can identify those areas where there is good progress and those areas where progress is lagging behind.

5.4 SECTOR FINANCING

The sector is financed through various financial mechanisms, including grants, operating subsidies, funds, taxes, transfers, and tariffs. The municipal infrastructure investment framework outlines financing for the provision of water and sanitation services for both urban and rural areas.

5.4.1 Municipal infrastructure investment framework

The South African Government has committed itself to removing the backlogs with respect to the provision of infrastructure to all in South Africa by the year 2013 (taken to be the municipal financial year 2013/14 in this report). Since municipalities are at the forefront of providing infrastructure, they need to have the capacity to operate and maintain the infrastructure while remaining financially viable. The Municipal Infrastructure Investment Framework (MIIF) is intended to describe the manner in which these objectives can be met, encompassing:

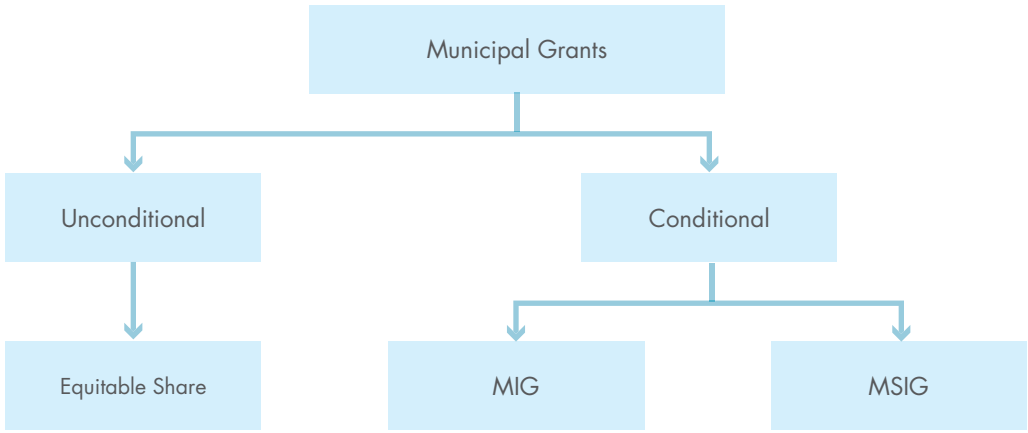
- The extent of infrastructure to be provided.
- The capital expenditure required to provide this infrastructure.
- The methods of financing this capital expenditure, including capital grants and the MIG in particular.
- The operating expenditure required to ensure that the infrastructure provided is properly operated and maintained.
- The methods of raising revenue to cover this operating expenditure, drawing in the provisions of the Municipal Fiscal Framework.
- The monitoring system required to assess progress with respect to infrastructure delivery.
- Ensuring that systems and management capacity are in place in municipalities to manage the infrastructure, with the emphasis on a municipal infrastructure asset management strategy.

The MIIF has evolved over time, to accommodate the rapidly changing municipal environment, availability of improved information and new objectives of government. It is recognised that this evolution will continue and the MIIF will be updated in the future, on an annual basis if necessary.

5.4.2 Municipal grants

The Constitution established local government as a sphere of government with responsibility for services provision to communities, including water and sanitation services. In support of the decentralisation process, there have been corresponding reforms to the systems of inter-governmental fiscal relations and municipal finances. Whereas large grants were previously made to sector departments, such as the Department of Water Affairs and Forestry for the delivery of water services infrastructure, as well as for subsidising operational costs, these grants are now being allocated to local government.

FIGURE 10: MUNICIPAL GRANTS



Source: de la Harpe, 2006b

Municipalities receive two types of grants. The first grant is the **Equitable Share Grant (ES)** and is an unconditional, equitable share of national revenue, allocated to a particular municipality based on a formula. Equitable Share is a grant from the national fiscus to support the provision (operation and maintenance costs) of free basic services (including water and sanitation).

The second type of grant to the local sphere is a conditional grant which, as the name implies, may not be used for any purpose, but only for the purpose to which it is intended.

There are two types of conditional grants. The first is a capital grant called the **Municipal Infrastructure Grant (MIG)** which supports the provision of at least a basic level of service by the year 2013 for all South Africans, through grant finance to cover the capital cost of basic infrastructure for the poor.

The second conditional grant is the **Municipal System Improvement Grant (MSIG)** which provides grant funding for capacity building of local government institutions, for example the water services authority and water services providers (where the provider is the municipality). These grants are illustrated in Figure 10.

The relationship between the equitable share and conditional grants, particularly the MIG, is important since there have been criticisms raised against the equitable share grant in that it is not linked to the MIG. This means that the amount of equitable share a municipality receives is not linked to the amount of capital funding a municipality receives to expand infrastructure to poor households.

5.4.3 Capital investments

The majority of water services capital expenditure takes place at the WSA level.

Table 10 is an estimate of the total capital expenditure in the water services sector for the year 2005/06.

Actual capital expenditure on water infrastructure separate from sanitation infrastructure in urban and rural areas cannot be reported on, as the MIG reporting system does not ring-fence water from sanitation.

5.4.4 Operating expenditure

Since municipalities have not been required to account for water and sanitation services separately, the Department has not been able to report accurately on water sector operating expenditure on water services. It is also not possible to provide an assessment of actual expenditure of equitable share funds in the water sector, as municipalities do not have to account for expenditure of an unconditional grant. However, the DWA Strategic Assessment Report has used modeling to estimate the total cost of providing water services in South Africa at R17.3 billion in 2004/05. Metropolitan municipalities accounted for approximately half of this expenditure, and local and district WSAs 24% and 27% respectively.

5.4.5 Sources of revenue

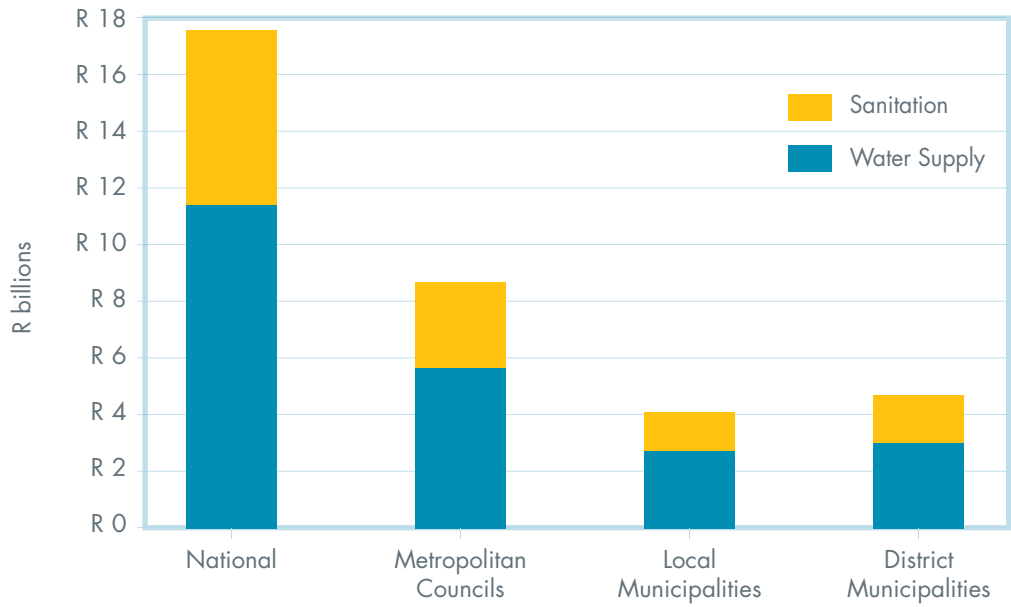
In terms of operating revenue, the equitable share is estimated to cover approximately 16% of the total, with the majority of costs recovered through user tariffs (Figure 12).

TABLE 10: CAPITAL EXPENDITURE IN THE WATER SERVICES SECTOR, 2005/06 (R MILLIONS)

R' millions	2005/6 Budget	2005/6 Expenditure	% Expenditure
DWAF			
Indirect grant to capital projects	138.7	247.2	118%
Management support overheads	70.8		
Donor funding	291.3[9]	164.6	57%
LOCAL GOVERNMENT	6,110		
of which:			
MIG & Bucket eradication (1)	3,284	2,389	73%
Own funding (2)	2,826		
OTHER AGENCIES			
Housing – WS component	(3) 920.2		
Health – clinic W&S			
Education – school W&S			
Water boards (4)	*653		
TOTAL WS Capital	7,531		

Source: DWA, 2010

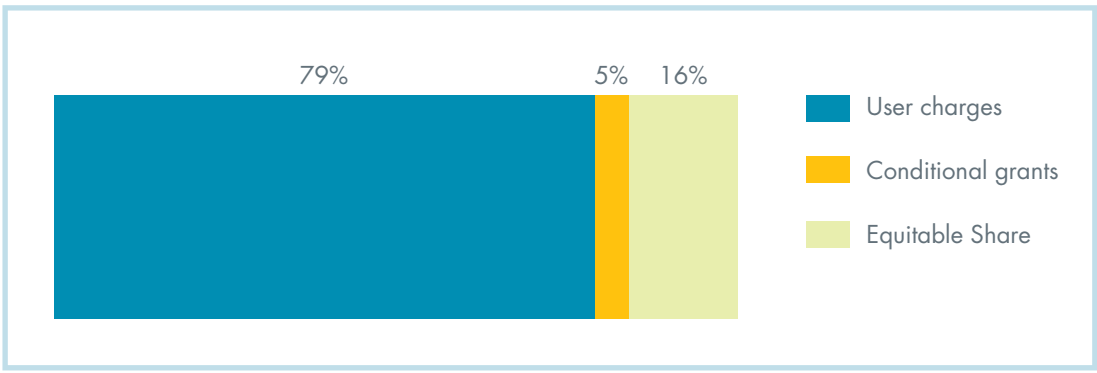
FIGURE 11: ESTIMATED TOTAL RECURRENT COST OF WATER SERVICES PROVISION, NATIONAL AND BY MUNICIPAL CATEGORY



Source: DWAF NIS, 2004, based on MSFM modeling

[9] The MIG became effective in 2005. Prior to this period DWAF was implementing water capital projects in rural areas and also made water sector funding available to local government for capital projects and capacity support. Donor funds for water capital projects was therefore channeled through DWAF.

FIGURE 12: ESTIMATES BY SOURCES OF WATER SERVICES OPERATING REVENUE— NATIONAL PROFILE



Source: DWAF NIS, 2004, based on MSFM modeling

5.5 DESCRIPTION OF THE SDM(s) AT INTERMEDIATE LEVEL/LOCAL SPHERE

The key components of the service delivery approach that impact on how water services are scaled up and provided are the following:

a) That the water services function has been decentralised to local government, namely the water services authority (WSA);

b) That the fiscal framework supports the decentralisation of services to local government through a system of grants and subsidies;

c) That a distinction is made between the WSA and the water services provider (WSP);

d) That service delivery at the local level is part of a national sector wide approach (SWAp);

e) That WSAs are required to go through a legislated process to determine the most appropriate WSP arrangements.

The local sphere is the municipal level where the WSA is either a district or a local municipality. In terms of the Municipal Structures Act all district municipalities are the WSA, meaning that they have executive authority for the water and sanitation functions. However, the Minister of Provincial and Local Government (now Cooperative Governance and Traditional Affairs) has the power to 'authorise' a local municipality for the water and sanitation functions. Where the local municipalities have been authorised, they become the WSA instead of the district municipality. In most cases local municipalities are authorised when they have greater capacity than the district municipality to perform the WSA functions.

The key functions of the WSA (being the service delivery approach at the local government level) are captured in Figure 13.

This section briefly outlines key components of the approach at the local government level in line with the Triple-S Analytical Framework.

5.5.1 Institutional arrangements

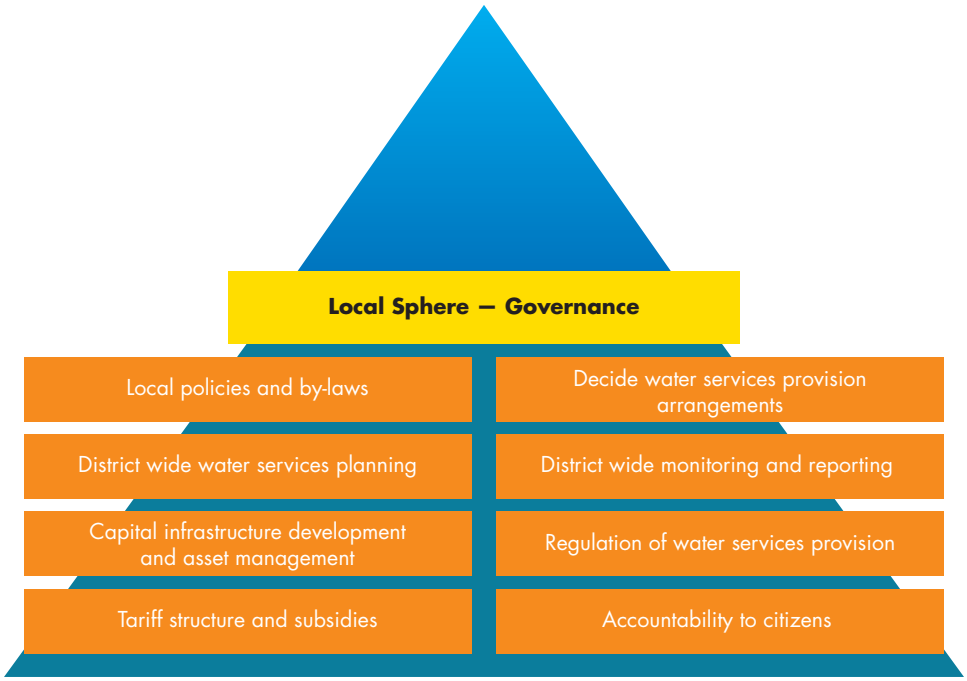
Figure 14 captures the water services sector at the local sphere where the key water services institutions are water services authorities and water services providers.

Water services authorities

Water services authorities have the constitutional responsibility for ensuring access, planning and regulating provision of water services within their area of jurisdiction. This means that they are responsible for: planning the services across their entire municipal area, ensuring sufficient finances for the services, providing the necessary water services infrastructure, and regulating the provision of services. WSAs may either provide water services themselves and/or they may contract external water services providers to undertake the provision function on their behalf. However, given the separation between the authority and the provider roles, the WSA must ensure that the WSA and WSP functions are separated if the municipality undertakes the WSP role itself.

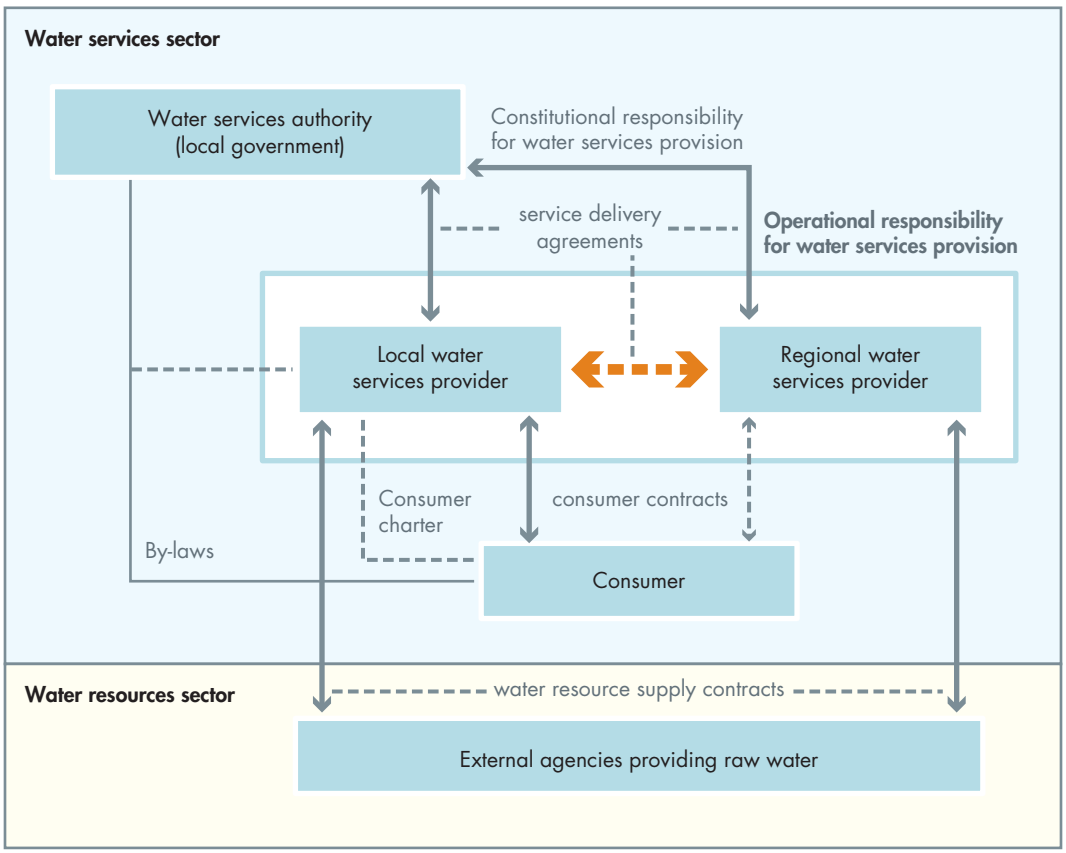
Water services authorities are responsible for securing from DWA (or Catchment Management Agencies [CMAs] where established and where this function is delegated) licenses to abstract water from, and to

FIGURE 13: KEY FUNCTIONS OF THE WATER SERVICES AUTHORITY



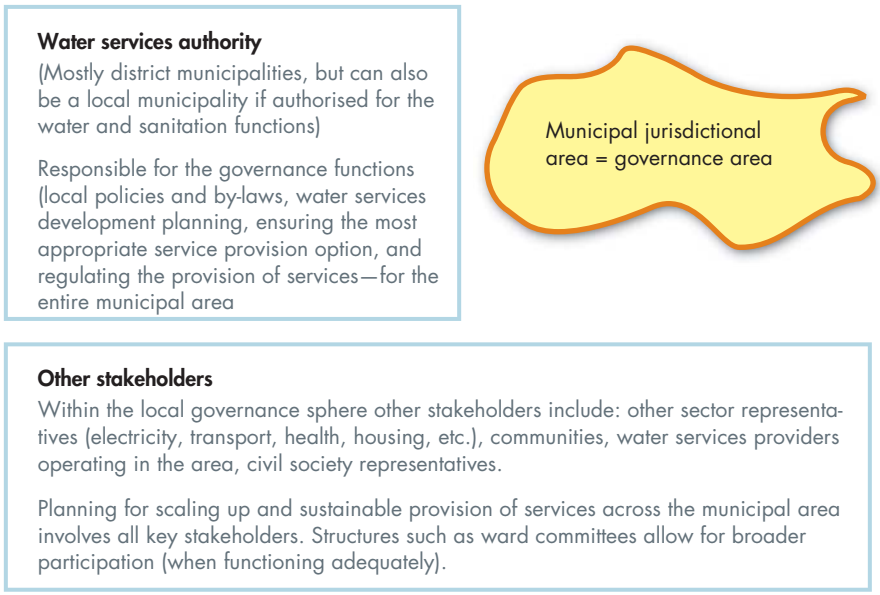
Source: constructed by author

FIGURE 14: THE WATER SERVICES SECTOR AT THE LOCAL SPHERE



Source: DWA, 2003

FIGURE 15: LOCAL GOVERNANCE SPHERE



Source: constructed by author

discharge wastewater to, the water resource. Water services authorities are responsible for regulating the provision of water services within their area of jurisdiction through by-laws and contracts.

Water services providers

Water services providers (WSPs) assume *operational* responsibility for providing water services. A water services provider may be an internal mechanism where the water services authority (WSA) undertakes the service itself, or it may be an external mechanism where the WSA contracts another entity as the water services provider. The WSA and the WSP enter into a contract or service delivery agreement. In the case of the municipality performing the function itself, a performance agreement is signed between the WSA and the department or unit within the municipality responsible for the actual provision of services.

WSP's must enter into a contract when they purchase water from, sell water to, or accept wastewater from, another institution, which is typically a bulk water services provider (such as a water board). In addition they must also enter into a contract with the consumers to whom they provide retail services. This contract may either be through a consumer charter or individual consumer contracts.

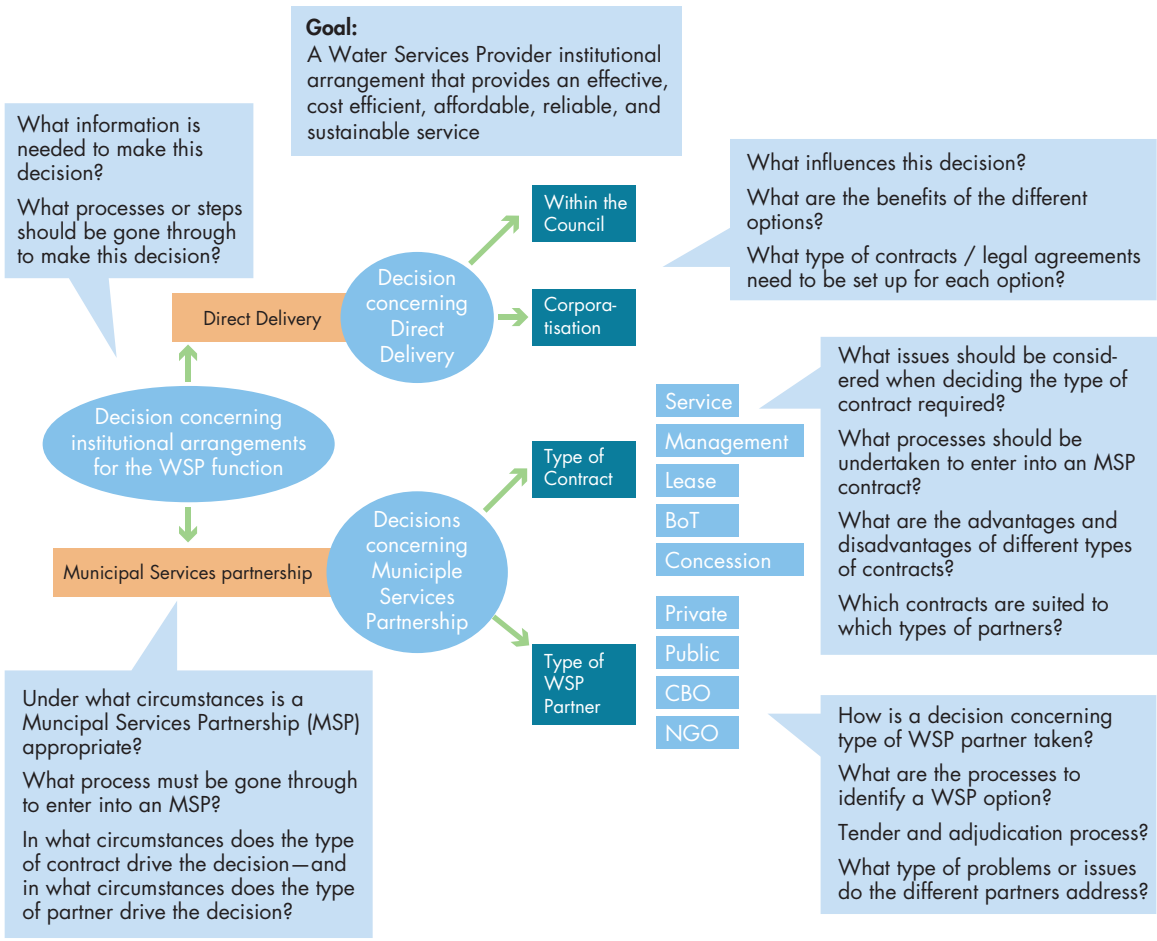
A key challenge facing local government is how to operationalise the institutional framework as set out in the Water Services Act within its jurisdictional area. This requires *informed decision making* concerning water services provider arrangements.

In many cases rural local government does not have the capacity to fulfil the functions of a WSP. Consequently they are required to investigate options where they enter into municipal service partnerships (MSP) with service providers. The Water Services Provider Decision Tree (Figure 16) summarises some of the issues that local government needs to address when making decisions concerning WSP institutional arrangements. These issues are often complex and require thorough and careful processes to ensure that the most appropriate Water Services Provider institutional arrangements are developed and established for sustainable water services.

5.5.2 Community-based organisations and water services provision

In the late 1990s a great deal of work was undertaken to promote community-based organisations (CBOs) as the most appropriate WSP option for rural water supply. The CBO model was strongly promoted by the Department of Water Affairs and Forestry as part of the drive to scale up water supply in rural areas, particularly in the Eastern Cape, Limpopo and Kwa Zulu Natal Provinces. Guidelines were produced defining a CBO, and the role of CBOs as water services providers. Figure 17 illustrates the simple

FIGURE 16: WATER SERVICES PROVIDER DECISION TREE



Source: de la Harpe, 2002

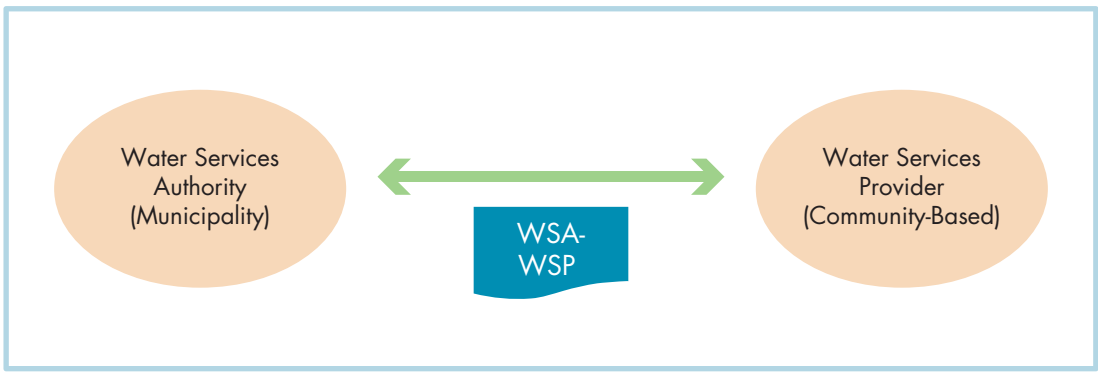
model that was promoted in the late 1990s and early 2000s.

"A community-based water services provider is: a community-based organisation that is providing water services to a defined community with the mandate of the community and with the agreement of the water services authority within whose area of jurisdiction the community-based organisation is operating. No organisation or legal entity may act as a WSP without the approval of the WSA. A community-based organisation can be defined as a WSP only if it has been contracted by the WSA to fulfil WSP functions." (DWAF, 2001)

District municipalities such as Ugu, Alfred Nzo, Chris Hani, Oliver Tambo and others therefore pursued the CBO option in the early 2000s. In Alfred Nzo, for example, the institutional arrangement for the entire rural population was CBOs supported by different SSAs.

Whilst local government policy (Municipal Service Partnership Policy, 1999) recognised the key role of CBOs as water services providers (particularly in terms of rural areas) and recommends that strategies be developed to increase the involvement of CBOs in municipal service delivery, local government legislation does not create an enabling environment to achieve this policy objective. In terms of the Municipal Systems Act of 2000, any institution that is not a municipality, municipal entity, water board, or a national or provincial organ of state, is required to enter into a competitive bidding process in order to be considered as a water services provider. Clearly, competitive bidding is inappropriate for CBOs and community management models since they have neither the resources nor the expertise to tender and often CBOs only become properly established once they have been identified for WSP functions and once they have been trained. They certainly are not in a position to 'compete' with established service providers. In an attempt to ensure more enabling legislation for the procurement of CBOs as WSPs, the

FIGURE 17: WATER SERVICES AUTHORITY AND WATER SERVICES PROVIDER



Source: constructed by author

Department of Water Affairs and Forestry proposed that the legislation be amended so that CBOs are treated in the same way as 'public entities' who are exempt from the competitive bidding requirement. This proposal was rejected on the basis that there was no clear definition within South African policy or legislation of what a CBO is. It was argued that exemption of CBOs from competitive procurement could result in a loophole in the legislation, for example private bodies could define or call themselves CBOs to avoid competitive tendering. Unfortunately, these legislative constraints as well as other labour legislation requirements have made the contracting of CBOs as WSPs a very complex process. Consequently, municipalities looked at other options for service provision in rural areas. In some cases the CBOs have become sub-contracted by SSAs where the SSA is contracted as the WSP (an interim arrangement in Alfred Nzo), and in other cases the municipality has taken over the services provision function itself, and appointed some of the CBO staff as municipal employees (Ugu). Today the Chris Hani District Municipality is the only WSA that continues to use the community management model for rural water services.

A further factor in the decline of the CBO model was that it did not receive political support from local councilors. In a workshop on the CBO model hosted by Mvula Trust (2009), it was reported that councilors interviewed from a number of WSAs had indicated that their preferred WSP arrangement was the municipality itself. They did not trust CBOs as they believed that CBOs would have too much autonomy from the municipality and would use the platform of service delivery to win political support. They also accused CBOs of being corrupt and nepotistic but no evidence of this view was made available. One councilor from Kwa Zulu Natal was reported as saying, "these CBOS, who's idea is this? This is not a South African idea, where does it come from? We are the elected councilors, there's no place here for CBOs."[10]

5.5.3 Cooperative governance and coordination platforms

The framework for the roles and responsibilities of national sector departments, their provincial counterparts, and municipalities in terms of the delivery of municipal infrastructure are based on Chapter 3 of the Constitution of South Africa (1996) on cooperative governance. The Constitution states that the three spheres of government are distinctive, interdependent and interrelated.

Thus the principles that underlie the relations between the spheres are that of cooperative government and intergovernmental relations. In terms of the Intergovernmental Relations Framework Act (Act No. 13 of 2005), each sphere must, amongst other things:

- Respect the constitutional status, institutions and powers and functions of government in the other spheres;
- Exercise their powers and perform their functions in a manner that does not encroach on the geographical, functional or institutional integrity of government in another sphere;

[10] Report from interviews to Mvula Trust Workshop (2009)

- Cooperate with one another in mutual trust and good faith by:
  - assisting and supporting one another;
  - consulting one another on matters of common interest;
  - coordinating their actions and legislation with one another;
  - adhering to agreed procedures.

This means that all national departments and their provincial counterparts retain their policy-making and regulatory functions, which cover the full range of municipal activities, including: governance, administration, planning, projects and operations.

However, the importance of coordinating such activities, with the objective of creating a common approach to local government, is recognised. Towards achieving this objective, coordinating structures such as the Technical Inter-ministerial Committee (IMC) have been established and assigned coordinating functions.

In addition, sector departments and provinces retain their constitutional rights to intervene directly in the affairs of municipalities where necessary.

The central points of contact between supporting partners in the water services sector and local government are the DWA Regional Offices. The responsibility of the DWA Regional Offices is to support implementation at local government level. This coordinated approach must also be seen in the context of the sector wide approach which involves all sector partners through the Provincial Sector Forums.

DWA support managers fulfil the role of both 'director of support' and relationship manager. They are responsible for identifying and arranging appropriate support for WSAs and WSPs, as well as monitoring the impact of support initiatives. They also play a critical interface role between sector stakeholders locally, provincially and nationally, as well as between other support initiatives.

The key principle is that each WSA or WSP manager must have a single point of contact with the DWA Regional Office for all support requirements.

The DWA regional support manager optimises the use of support resources through:

- Lesson learning;
- Having a thorough understanding of the status quo of water services institutions within the province and their support needs;
- Identifying and realising support synergies; and
- Anticipating support resource needs.

At the regional level, Provincial Sector Forums, and their technical committees, have been the focus for practical problem solving. Early in the collaboration, provincial structures had to sort out their own implementation problems, but as the linkages between provincial and national structures improved, so did the responsiveness of the national DWA to providing appropriate policies and guidance to solve local issues. Various support processes were rolled out to the provinces (such as decision making concerning water services provider options), with regional task teams established, replicating their national counterparts. These regional task teams have become part of the collaborative structures. Provincial stakeholders in the Eastern Cape for example, reported that the SWAp ensured the national DWA became more in touch with local issues, and that communication improved. The relationship between the province and the national office developed into a more constructive collaborative approach.

Provincial Sector Support Implementation Plans (PSSIPs) were also developed to capture and summarise water services authority and provider support requirements (based on expressed support needs by water services authorities and water services providers). These plans were used by support managers to estimate the nature and extent of support requirements, which were then passed on to DWA Head Office for planning purposes. The purpose of these plans was to assist in determining the *nature and extent* of support required.

The integrated development plan (IDP) and the water services development plan (WSDP) remain the key tools for municipal development and sector collaboration and for setting the water and sanitation targets as well as resources to support ongoing services provision. The IDP is a five-year single, inclusive and strategic plan for the development of a municipality which links, integrates and coordinates sector plans. It is thus inter-sectoral and guides and informs all planning, budgeting, management and decision making within a municipality. The WSDP (which is addressed in more detail later in this document) is a sector plan setting out the way in which the WSA plans and delivers water services in its area of jurisdiction. The WSDP is a segment or chapter of the municipal IDP.

Central benefits of collaboration have been lesson learning, bringing peers from different local governments together to discuss issues, and ensuring linkages between different sectors. Sector collaboration has also brought the provincial Departments for Housing and Local Government into a more active role in water services. Examples of peer networks for rural water services are in Box 3 and Box 4.

BOX 3: DISTRICT WATER SERVICES MANAGERS' FORUM

The District Water Services Managers' Forum (DWSMF) is an information sharing, learning and action research network of water services managers of district municipalities that are WSAs. It facilitates debate on key topical issues facing the water sector in these municipalities; provides a mechanism for communication and keeping up to date with sector developments; and promotes best practice management of water in the (predominantly) rural areas of South Africa.

Attendance of this forum has been good indicating demand for this type of lesson sharing amongst peers. The forum is funded by the WRC where positive feedback has been received by water services managers.

BOX 4: WATER SERVICES PROVIDER NETWORK

The Water Services Provider Network (WSPN) was launched by SALGA in March 2006 with the aim of empowering water services providers to address the many challenges they face by harnessing the expertise and knowledge of established WSPs to build the capacity of newly appointed providers. A pilot stage focussed on eight municipalities was implemented. WSPs attended the initial workshops and the initiative continues with funding from SALGA and voluntary time from the established WSPs. The cost of running this network is not known.

The value of the above mentioned networks has been recognised in the sector, particularly in terms of addressing practical challenges and problems. Through the SWAp these networks have been sustained in terms of technical and financial support. Without this support it is unlikely that these networks would have become properly established or achieved their lesson sharing objectives. However, it is recognised in the sector that these networks will not become sustainable if they do not become self-funded and continue to grown organically. The key issue is where to draw the line between a supply-driven and demand-driven approach. The networks would not exist without the supply-driven approach to benchmarking and lesson sharing. The success of the networks depends on an ongoing demand for this type of peer interaction and the benefits of sharing experiences, lessons and best practices.

5.5.4 Strategic planning for full life cycle for service delivery

A critical part of the developmental role of local government is planning and ensuring the provision of basic water and sanitation services, improved service delivery and higher levels of service, as well as implementing Free Basic Water policies. Water services development planning facilitates planning for socio-economic development as well as planning towards achieving the water and sanitation MDG targets and to address water services provision sustainability issues.

BOX 5: WHAT IS A WSDP?

A water services development plan (WSDP) is a plan to progressively ensure efficient, affordable, economical and sustainable access to water services. It is the **product** of the water services development planning process. It is a **sectoral plan,** which deals with socio-economic, technical, financial, institutional and environmental issues as they pertain to water services. It also functions as a management tool in ensuring the provision of total, effective and sustainable water services.

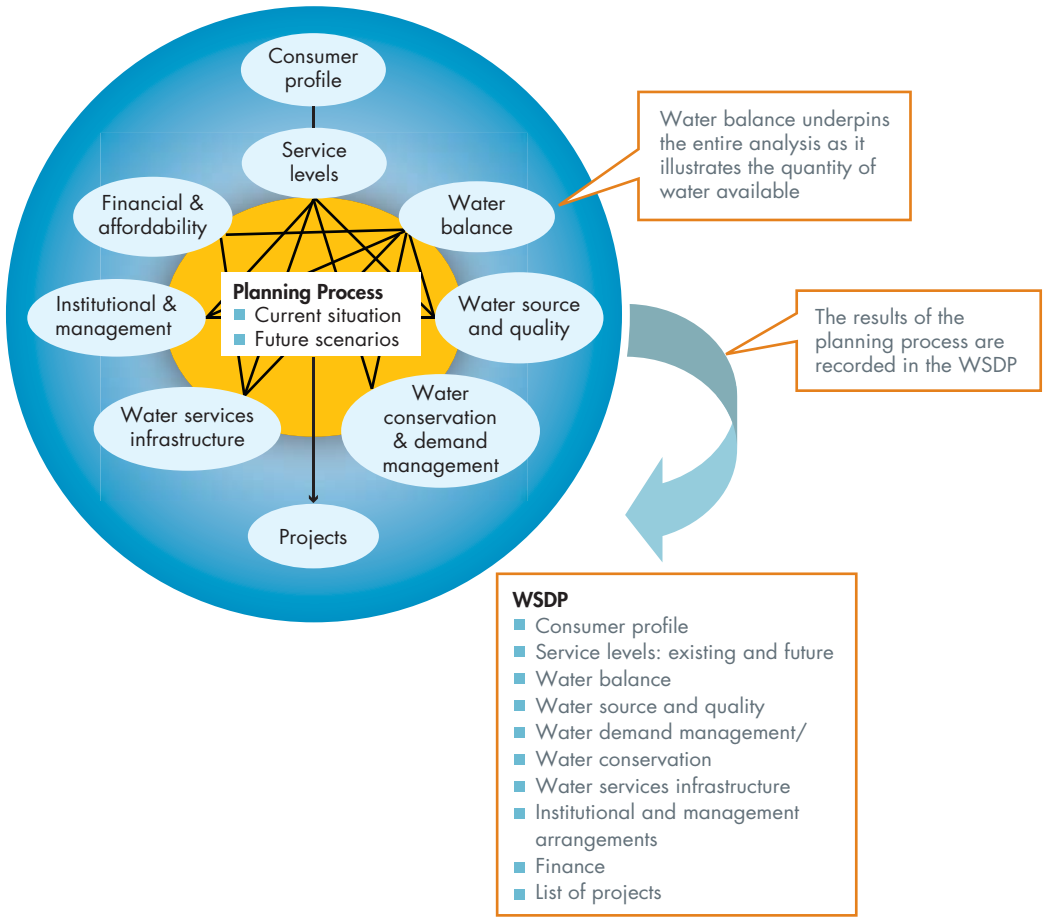
The water services development plan (WSDP) serves as the mechanism for strategic planning at the WSA level for the entire municipal area.

According to the Water Services Act, every WSA is required to develop a WSDP which addresses the following:

- the physical attributes of the area to which it applies;
- the population within that area;
- a time frame for the plan, including the implementation programme for the following five years;

- the existing water services infrastructure;
- existing industrial water use and industrial effluent;
- the number and location of people who are not being provided with a basic water supply and basic sanitation;
- all the issues regarding future water services provision (capital projects) to ensure that the services are sustainable, including:
  - the water services providers which will provide the water services;
  - the contracts and proposed contracts with those water services providers;
  - the proposed necessary infrastructure;
  - the water sources to be used and the quantity of water to be obtained from and discharged into each source;
  - the estimated capital and operating costs of those water services and the financial arrangements for funding those water services, including the tariff structures;
  - any water services institution that will assist the water services authority;
  - the operation, maintenance, repair and replacement of existing and future infrastructure;
- the number and location of people who cannot be provided with water services within the next five years with an explanation as to why this cannot be done and a time frame within which it can reasonably be expected that a basic water supply and basic sanitation will be provided to those persons;
- existing and proposed water conservation, recycling and environmental protection measures.

FIGURE 18: WATER SERVICES DEVELOPMENT PLANNING PROCESS



Source: constructed by author

Water services development planning process and links to the WSDP

The WSDP process (Figure 18) is a strategic process since it addresses the gap between existing services provision and a future scenario where there is constant improvement in terms of numbers served, levels of service, and quality of the services provided. The WSDP is a tool to assist water services authorities to make informed decisions about water and sanitation services, and to plan for those communities that do not have access to basic services. The planning process involves:

- data collection and analysis;
- stakeholder participation;
- strategic decision making;
- project identification and prioritisation; and
- commitments in terms of actions and resources required to implement the WSDP.

It is also a comprehensive and iterative planning process which addresses all the key components of water services provision including the customer profile, service levels, water balance, water source and quality, demand management and conservation, existing infrastructure, institutional arrangements (particularly WSP arrangements) and financial issues. The plan is for a five-year period where projects are identified to address the backlogs as well as institutional and capacity issues. Once a project is approved as part of the project list in the WSDP, a feasibility study can be conducted for that project. No capital projects can commence without having been identified and approved in the WSDP. Ultimately only those projects which are found to be feasible proceed to the project business planning stage and to implementation. Progress against the WSDP is reported on an annual basis.

One of the main aims of a WSDP is to ensure that the requirements of consumers are addressed and that consumers understand what they can expect from their WSA in terms of water services. The plan functions as a contract between the WSA and the public. By having such a plan, the public can call the WSA to account for their actions against the "promises" made in the plan. In other words the WSDP functions as a performance contract between the WSA and the public.

The challenge to WSAs is to ensure that the WSDP becomes an effective planning and management tool towards addressing water-related development objectives and priorities and towards enhancing progress in poverty elimination. According to the Department, every WSA has prepared a WSDP which identifies future targets and against which they report.

However, when the WSDP process commenced, many WSAs, particularly those serving large rural areas, complained that the WSDP planning process was too time consuming, complex and not providing the type of information the municipality required. The early WSDPs were prepared by consultants appointed by DWAF, where there was low stakeholder participation with municipalities not having sufficient ownership of the plans.

In many cases the WSDPs produced by those WSAs mainly based in the more rural areas were not sufficiently practical and therefore did not enable municipalities to execute capital projects at the rate required to meet the access targets. For example, essential baseline information was not available (such as basic asset registers) and targets set were often unrealistic or are not matched to the available resources. Consequently, planning did not translate into infrastructure delivery programmes that could meet the targets in a sustainable way. The WSDPs also did not address the necessary capacity to deliver and operate the infrastructure. The financial planning component has tended to be poor with the result that the WSDP becomes a capital projects wish list rather than a realistic and financially sustainable plan. Planning for the sustainable provision of free basic water and sanitation services has also, in many cases been poor.

5.5.5 Monitoring and information for full service delivery

The responsibility for monitoring municipal infrastructure delivery and specifically the conditions related to the Municipal Infrastructure Grant, are allocated between the national departments as follows:

- COGTA is responsible for monitoring the cross-cutting conditions and overall progress with programme implementation.
- DWA is responsible for monitoring performance of municipalities with regard to water services criteria and the overall sustainability of water services infrastructure.
- The Department of Public Works is responsible for monitoring poverty alleviation criteria.
- National Treasury is responsible for monitoring financial reporting and revenue related criteria.

The National Municipal Infrastructure Unit based in COGTA is responsible for the overall monitoring of the infrastructure development programme activities in municipalities. The tool utilised by the National Municipal Infrastructure Unit for monitoring the delivery of infrastructure through the Monitoring and Information (MI) Programme is the Key Performance Indicator (KPI) Report which is compiled quarterly.

The KPI Report provides information on the key achievements of the programme in the delivery of infrastructure to the poor.

The National MI Unit has developed a KPI reporting template which is completed by municipalities and then verified by DWA. DWA has a role in ensuring that municipal infrastructure projects result in the delivery of sustainable services. In this regard DWA fulfills an oversight and monitoring role and, where necessary, intervenes where projects are not being implemented according to business plans or DWA norms and standards.

Municipalities are responsible for the following monitoring activities which are also monitored by DWA:

- Compile service delivery KPIs in terms of the WSDP;
- Identify and plan for projects to be implemented over the Medium Term Expenditure Framework (MTEF);
- Adhere to and monitor labour intensive construction methods in terms of the Expanded Public Works Programme (EPWP) guidelines where appropriate;
- Constantly monitor progress on the implementation of projects;
- Prepare and submit a Division of Revenue Report every month to indicate expenditure and progress on MIG projects;
- Monitor KPIs contained in the Project Registration Form;
- Submit quarterly performance reports to COGTA within 30 days after the end of each quarter;
- Submit the Annual Performance Assessment as requested in the Division of Revenue Act (DoRA);
- Ensure that projects comply with all conditions contained in the DoRA framework.

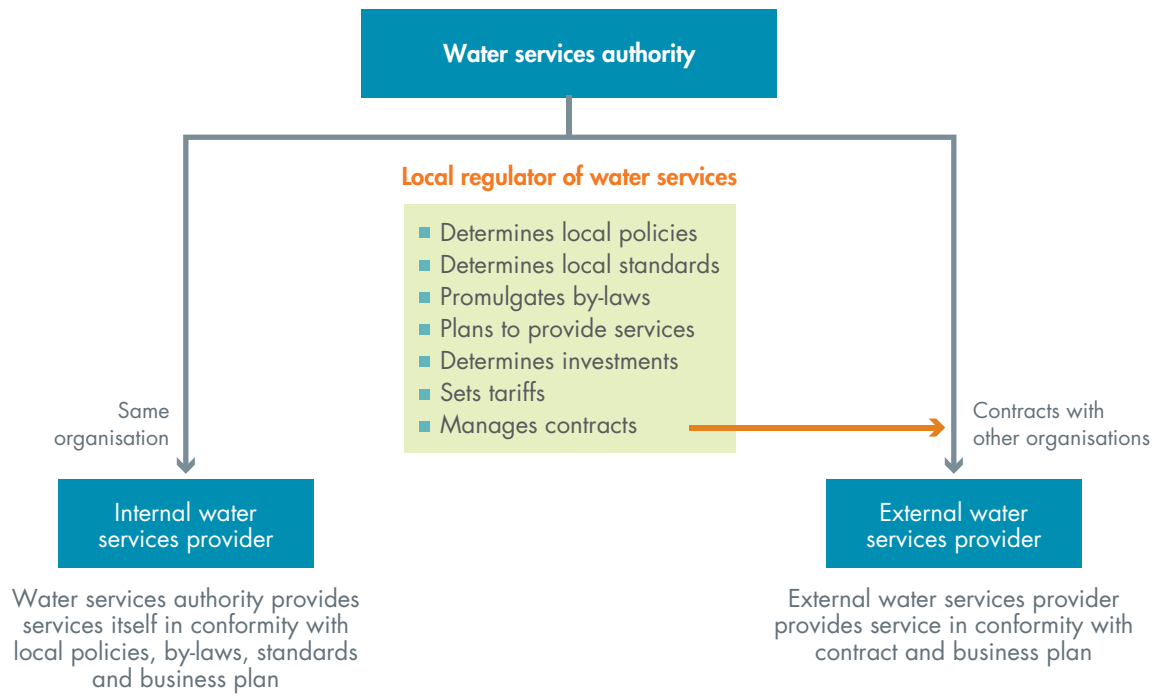
Upon commissioning, the WSA is responsible for monitoring the provision of services provided by the relevant WSP. This monitoring is in accordance with KPIs outlined in the WSP Business Plan as well as obligations specified in the WSP contract or service delivery agreement. Results from the monitoring are reported in the WSDP.

5.5.6 Regulatory framework at the local level

The regulatory framework at the local level is captured in Figure 19.

The water services authority (municipality) is the local regulator of water services. It determines local policies and standards (which must conform to national

FIGURE 19: THE REGULATORY FRAMEWORK AT THE LOCAL LEVEL



Source: DWA, 2003

minimum norms and standards), promulgates by-laws, plans the provision of water services (WSDP), determines how investments in water services are undertaken and sets tariffs. Where the water services authority is also the water services provider, there is self-regulation. The accountability of the water services authority to the local electorate is an effective regulating mechanism for the provision of water services in this context.

Where water services are provided by an external water services provider, the water services authority regulates the provision of services by means of a contract (service delivery agreement). The WSP also prepares a business plan which illustrates how it proposes to fulfil its water services provision obligations as outlined in the contract. The business plan also includes the performance indicators and plans to ensure improvement of the services.

Water services authorities are ultimately accountable to their citizens for the effective delivery of services to meet their citizens' needs. Nevertheless, a water services authority must also ensure that water services are provided within its area in conformity with national policies, norms and standards. Water services authorities regulate all aspects of water services provision locally. More specifically, the scope of regulation extends to the following:

- The primary mechanism for the local regulation of water services is a set of by-laws that a water services authority must promulgate. These by-laws set out the general rights, duties and responsibilities of water services providers, intermediaries, water services agents and consumers with respect to water services.
- Where a water services authority contracts with an external water services provider, the water services authority regulates the water services provider by contract. Any contract developed must be consistent with national norms and standards. All contracts are subject to national regulatory oversight.
- The water services authority must monitor the performance of all external water services providers within its area of jurisdiction to ensure compliance with national norms and standards and with the contract.
- Water services authorities will regulate (in terms of the contract) the investments, tariffs and operating efficiency of local external water services providers (economic regulation).

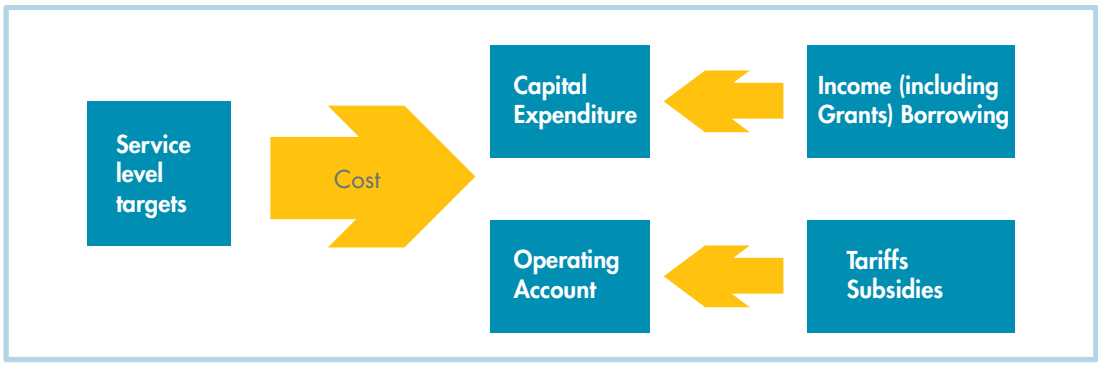
The two key linkages between water *services* regulation and water *resources* regulation are licensing and regulation of water use; and licensing and regulation of waste discharge.

5.5.7 Financial planning for all life-cycle costs

Financial planning for all life-cycle costs is part of the water services development planning process. It is a critical part of the entire planning process where costs associated with service level targets are identified as well as the sources to meet the costs. In this way the WSA can see how financially viable their WSDP is.

Service level targets drive costs, including capital costs (CAPEX) being the cost to install the infrastructure. Once the infrastructure has been built, there are ongoing operating costs (OPEX). This is an area that has often not been given enough attention by WSAs. Where the projected operating costs associated with capital expenditure are not factored in right from the start (i.e. when service levels are being considered), WSAs are not able to afford the running costs of the services.

FIGURE 20: PLANNING FOR LIFE-CYCLE COST



Source: Adapted from DWA, 2007b

TABLE 11: SOURCES OF FINANCE

Category	Type of income
Grant funding from national government	• Municipal Infrastructure Grant (MIG). • Expanded Public Works Programme.
Capital grant funding from other sources	• NGOs. • Donors.
Funding available from local government itself	• District municipality funds (raised through levy income). • Local authority capital development funds (although on a limited scale given the financial position of many local municipalities. It is more relevant to relatively wealthy metropolitan municipalities).
Loan finance	• Loans from private banks and the Development Bank of Southern Africa (DBSA)
Consumer contributions	• This refers to money paid directly by consumers for higher levels of service. Basic services are subsidized by the MIG programme.
Ad hoc private sector sources	• Depending on the particular context, there might be additional sources of finance from the private sector.

Source: Adapted from DWA, 2007b

Income for operating costs comes from user payments (through tariffs) and subsidies (equitable share). This information is also part of the WSDP financial planning including information on current and future tariffs. Future tariffs are important as this gives an indication of what the cost to users will be of continuing to supply the services as set out in the targets. These figures are reported for the entire municipal area, where they are initially calculated for each of the different settlement types and then consolidated.

Certain policies need to be in place before costs can be calculated as they give the parameters for service levels, who qualifies for subsidised or free basic services, and how the equitable share will be used.

Sources of finance for infrastructure is referred to as *capital income*. There are a number of different capital financing options available to municipalities for water services. Most municipalities rely heavily on national subsidies (such as the Municipal Infrastructure Grant) or district municipality funding made available from levy income. (For sources of finance, refer to Table 11.)

Projections of operating costs are also part of the WSDP based on current operating costs and anticipated costs as a result of new infrastructure. The existing operating costs are allocated to consumer units to get a per-consumer-unit operating cost which will vary with the level of service provided. Various methods are used to calculate costs, from very simple to fairly complex approaches. A water supply services model has been developed for municipalities to use which is part of the Water Research Commission guidelines. In terms of future costs per consumer unit for the different types of consumers estimates are made which allow for variances in the efficiency of service provision, and for changes in input costs relative to the general inflation rate and anticipated levels of consumption.

The *total operating costs* are calculated from the estimated unit costs and the projected numbers of consumer units for different categories of users. These costs include purchase of bulk water, production costs of water, operating costs (including overheads, salaries and wages, maintenance and depreciation, and finance charges.

Operating income is based on tariffs charged to consumers of services and on subsidies received. The WSA is required to have an income or tariff policy stating where it will raise recurrent income, how tariffs are to be set for different consumer groups and levels of service, and actual tariff levels. This also includes the WSA's policy to provide free basic water for those who cannot afford a basic level of supply. The WSA also needs to project trends in tariffs as this is the key constraint to be applied to a service provider. Methodologies are also available for undertaking this calculation.

The main subsidy available for funding operating costs is the equitable share. The amount of this unconditional grant from national to local government is based on the levels of poverty within the particular municipal area. The municipality decides how it will

BOX 6: EQUITABLE SHARE AND VERTICAL SPLIT

Equitable share is the sum of unconditional transfers (formula-based and current transfers) that flows from national to local government. The Constitution states that equitable share transfers cannot be conditional. But, in defining the amount of the equitable share, the full picture of transfers to municipalities—conditional and unconditional, and capital and operating—needs to be considered. What counts as local government's equitable share will also depend on what else it receives from the national fiscus for both operating and capital expenditure.

Vertical split: This describes the total allocation of nationally raised revenue between the national, provincial and local spheres of government. The share of national revenue flowing to local government should be understood in the context of the overall fiscal structure of local government in South Africa. What is important here is the fact that local government raises over 90% of its revenue from local sources, such as property taxes and service charges. Total intergovernmental transfers are required to fund less than 10% of the aggregate annual municipal budget.

Source: J de la Harpe, 2004

spend this subsidy and how much of it is to be spent on water. The Department recommends that part of this subsidy is used to cover the running costs of supplying a basic level of supply to poor households based on an indigents' policy.

Apart from subsidies, the main source of income is based on tariffs charged to consumers. These tariffs are mainly collected in the urban areas. However, municipalities do not disaggregate income based on whether an area is urban or rural. Tariffs often comprise both a fixed charge and a variable charge based on consumption. WSAs are required to report the tariffs charged over a five-year period for different levels of service such as communal supply, controlled volume supply and uncontrolled supply.

The first tariff block to residential consumers is set to provide the first six kilolitres for free where the equitable share covers this cost. Higher consumption blocks can then be charged at a rate which is greater than the cost so that a surplus can be generated in order to also cross-subsidise consumers who use up to six kilolitres. The WSA has to describe how it will address this in such a way that sustainable services can be provided. In practice, many WSAs that serve large rural areas are not able to generate sufficient funds for cross-subsidies and therefore argue that the equitable share is insufficient to ensure financial sustainability.

The *total income received from subsidies and tariffs* also needs to be recorded with provision for actual income received (which takes into account non-payment). Expected income and actual income should be equal, and if this is not the case, the WSA is expected to make efforts to improve the payment rate. From this data the WSA can see whether its finances are improving or deteriorating. If they are deteriorating, either the service targets need to be revised to be more affordable (and sustainable) or management activities improved to ensure that proper bills and credit control measures are put in place. In practice, low tariffs and low levels of payment, as well as inadequate allocations of the equitable share within the municipality to water services, all contribute to the inadequacy of financial resources for sustainable operation and maintenance of the water service. This also contributes to inadequate resources for investment in infrastructure (although availability of MIG funds exceeds capacity to spend in many municipalities).

Affordability of the service to consumers is calculated by relating the amount consumers are to be charged for water services in relation to their household incomes. This information is included in the planning of service levels which looks at a typical monthly bill and the average monthly income of those receiving the service.

Planning around *sales arrangements* includes: type of metering to be used (credit or prepaid) for each level of service; type of billing system (separate for water services, combined, creative styles, whether it is computerised or manual); method of sending bills (mail or hand delivery); arrangements for payment collection (offices or door-to-door); and credit control arrangements including a credit control policy which clearly spells out actions that will be taken to collect debts.

5.5.8 Project implementation approaches

The project level includes all activities that directly relate to the planning and implementation of capital projects, from pre-feasibility studies through to

construction, commissioning and ultimately operation and maintenance of the project infrastructure.

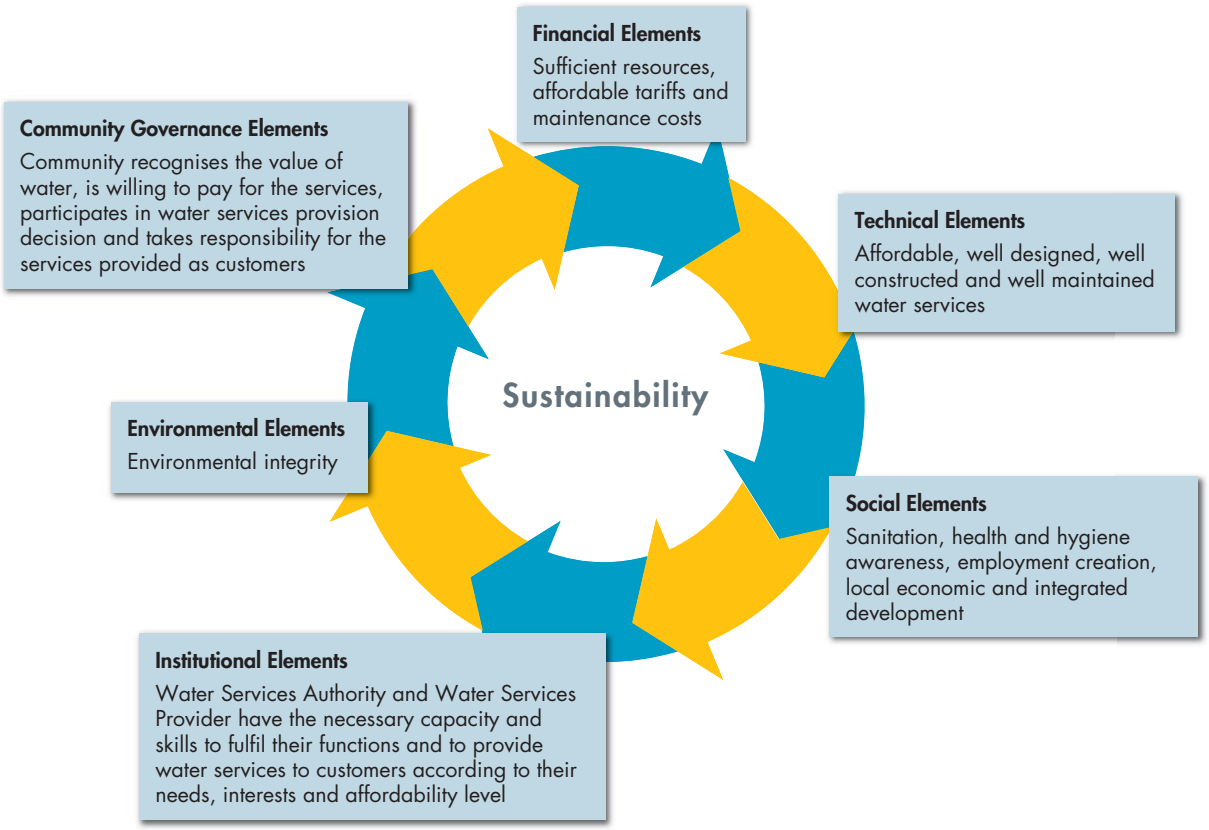
In 1997 the DWAF recognised that technical approaches to water services projects were not resulting in sustainable water services. The concept of institutional and social development (ISD) was introduced towards addressing the sustainability of the services to be provided by the water services infrastructure. The introduction of ISD resulted in a paradigm shift from a project driven approach to a 'sustainable services provision approach'. Many debates were held as to what constituted a sustainable service and how to achieve this. Ultimately a package of documents known as the ISD Package was developed by the Department in consultation with a whole range of water services sector stakeholders and practitioners. Sustainability was accepted as the "vision of a community's future where the vision is community orientated and focused on long-term goals". Within the context of a water supply project the services could be described as sustainable if:

- The benefits of the service continue to be realised over a prolonged period of time.
- The facilities are maintained in a condition which ensures a reliable and adequate water supply.
- The water consumed is not over-exploited but developed in a sustainable way.
- There are no unplanned external interventions.

The ISD package states that services are sustainable if "… from the simplest perspective the water services are ongoing through time where the same quality and quantity of water continues over the years" (DWAF, 1999).

Between 1997 and 2001 a great deal of work was undertaken towards understanding the different components within the project cycle and towards ensuring that every project was supported by proper WSP institutional arrangements. Whereas initially capital projects were treated as purely technical projects, over time it was agreed that 10% of capital project budgets could be utilised to address 'sustainability' factors which were widely referred to as 'ISD'. ISD became so popular that municipalities started employing ISD officials and implementing agents contracted ISD consultants to ensure that the various aspects of the ISD Package were properly addressed.

FIGURE 21: NECESSARY ELEMENTS FOR LONG-TERM SUSTAINABILITY



Source: de la Harpe, 1999

Any person wanting to participate in the ISD aspects of a water services project was required to attend the Department's ISD training as well as have access to the ISD Package. A cadre of ISD practitioners was developed within a couple of years where a project was not complete unless the ISD components had been addressed. Indicators were developed for measuring the outcome of ISD interventions and ultimately ISD resulted in WSP institutional arrangements including performance assessment indicators.

A number of elements were identified as necessary for long-term sustainability which formed the basis for inputs to the project cycle. These elements are illustrated in Figure 21 and were as much as possible addressed as an integrated whole.

The Project Management Cycle is the approach used for managing the various phases of a project. It starts with the pre-feasibility study through to the project evaluation phase and eventually to ongoing services provision. The life of a project extends beyond the project cycle into the ongoing services provision (or continuation) phase.

Capacity building, communication, awareness creation (including sanitation, health and hygiene promotion), monitoring and stakeholder participation are activities that take place throughout the project cycle and into the "ongoing life of the water service".

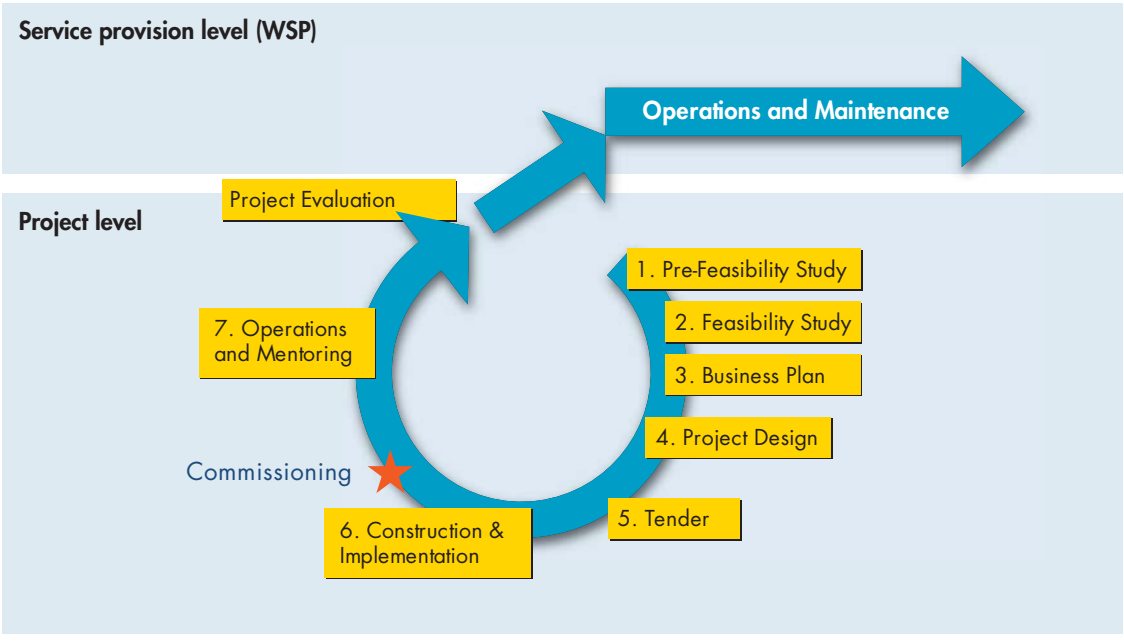
The entire approach is aimed at achieving ongoing sustainable services and thus from the pre-feasibility phase to the operations and mentoring phase, emphasis is placed on *all components* of services provision, including institutional, financial, community awareness and participation, legal, support and technical aspects.

Over time the same project management cycle may be applied to the same project. For example, the WSA may find that the scheme needs to be extended or upgraded. The process of extending or upgrading the scheme will follow the same phases as the initial project.

Within each phase of the project cycle there are a number of steps towards ensuring that the ISD components are properly addressed. These are detailed in the ISD Package.

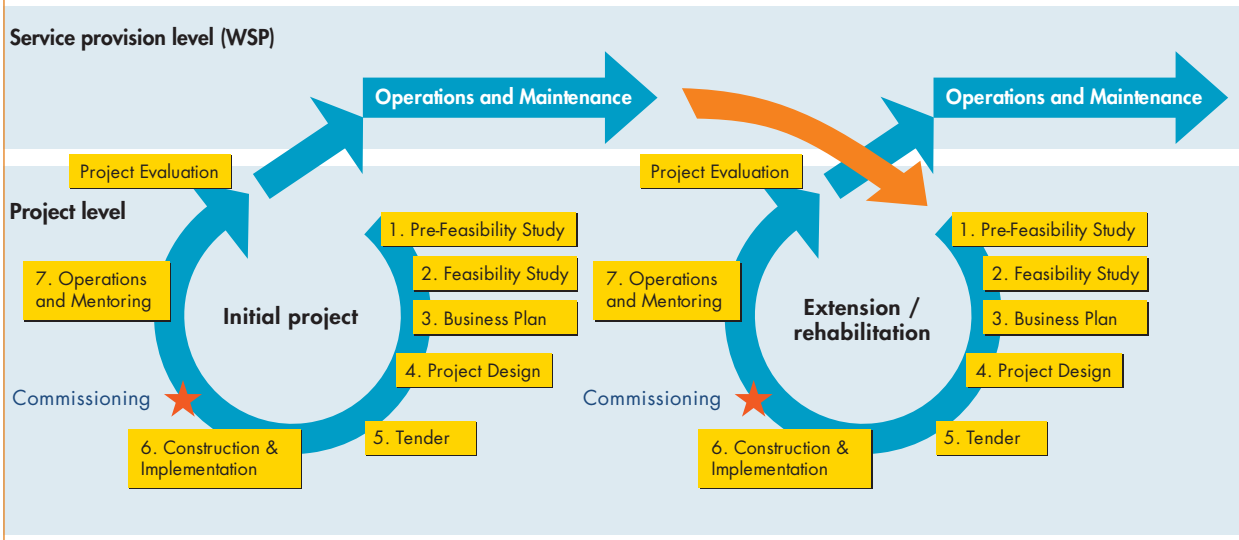
The **Implementation Phase** is where the actual construction of the water supply infrastructure commences. It is also the phase when the **ISD Capacity Building and Training Plans** are implemented. This includes aspects such as ongoing awareness creation, communication, monitoring, facilitation of decision making, stakeholder participation and reporting. Monitoring is particularly important during the Implementation Phase where a **Monitoring Plan** is developed which outlines:

FIGURE 22: PROJECT CYCLE



Source: de la Harpe, 2003

FIGURE 23: INITIAL PROJECT CYCLE THROUGH TO SERVICE PROVISION, THROUGH TO NEXT PROJECT CYCLE



Source: de la Harpe, 2003

- Key performance indicators (KPIs) to be monitored;
- How monitoring will take place;
- Who will fulfil the monitoring function;
- Where and how information will be stored;
- Processes to ensure that information is analysed and acted upon;
- Format of monitoring reports.

Upon commissioning of the water services infrastructure, a project moves into the next phase known as the **Operations and Mentoring Phase.** The major objective to be achieved in this phase is to ensure that the outcomes and sustainability indicators are achieved. This is the phase where operation of the scheme commences and mentoring support is provided to key stakeholders, in particular the WSP.

Mentoring is a key part of this phase as it provides for on-the-job training and support with an ongoing Mentoring Plan. Mentoring support is mostly provided in the case of rural projects where a CBO, water committee or similar community management model is used for operating the services. This support is provided by the implementing agent for some time after the commissioning of the project. The duration and the nature of the ISD mentoring support depends on the capacity and skills of the stakeholders and on how effectively the different ISD components were addressed in previous phases. In terms of DWA guidelines, mentoring should be provided when and where necessary towards ensuring sustainability. The guidelines also state that ISD mentoring should ensure that there is an effective monitoring system in place where all stakeholders participate in the monitoring function.

A Mentoring Plan is developed, which includes the following: communication strategy; community awareness; community responsibilities; water services provider tasks and responsibilities; sanitation, health and hygiene promotion; and entrepreneurial development (as appropriate). The Mentoring Plan also addresses: who will provide the mentoring support; the kind of support to be provided, how often the support will be provided (e.g. once every week in the first few months, and then once a month for set period of time as appropriate); when the support will be provided (so that stakeholders know on what dates visits will be made); and intended outcomes of the mentoring support.

It needs to be noted that social and institutional problems are often the biggest threat to the sustainability of water services. For this reason, adequate provision has to be made for ISD mentoring during the Operations and Mentoring Phase. In the case of a community-based option for the WSP, the ISD mentoring often continues into the **Ongoing Services Provision** (also known as **"Continuation"**) Phase. For example in the case of many rural projects in the Eastern Cape, the implementing agent was contracted to provide mentoring support from one year to the next. Over time it was recognised that most CBOs will

require ongoing support and therefore the concept of the Support Services Agent (SSA) was introduced, where the SSA not only provides mentoring support but also undertakes functions such as major repairs and maintenance. With the introduction of the ISD approach, the project cycle shifted fundamentally from a technical to a much more comprehensive approach, which includes community participation and consultation, community awareness training, establishment of the necessary structures for services provision (as appropriate), operations training, financial systems and training, monitoring, reporting and customer relations training, and the establishment of mechanisms for support and maintenance. The project champion was no longer a technician or engineer but the ISD practitioner who had to look at the bigger picture of which the technical component was only one part.

5.5.9 Capacity to fulfil service provision and governance functions

Despite steady progress in addressing water services authority (governance) functions, most municipalities generally lack the necessary resources, structures, systems and expertise to ensure the provision of sustainable and effective water services. This capacity problem is not only a local government problem, it points to a capacity problem within the broader water services sector. The need for support to local government is evident in the poor performance of municipalities in both the delivery of infrastructure (scaling up) and in the provision of water services (sustainable delivery).

A national benchmarking initiative, plus various surveys and audits of the status of water services infrastructure assets and their operation, have highlighted key areas where capacity support is required.

Capacity problems to be addressed

Whilst services must be provided in a manner that is financially viable and sustainable, poor asset management, insufficient spending on maintenance and a lack of proper accounting for depreciation, for example, have resulted in water and sanitation services that are not sustainable over the long term. There is little evidence that water services in South Africa are customer driven at present and in many cases customer dissatisfaction has resulted in service delivery protests. There are many causes for this poor performance with the primary reason being a lack of sufficient human and financial resources to deliver the necessary infrastructure (capital investments) and to operate and maintain this infrastructure adequately and sustainably.

In most municipalities water services managers are not expected to exhibit the leadership and strategic management skills necessary to create the right incentives and to utilise resources strategically so that their water service operations perform optimally. Water service provision tends to be viewed by many municipalities as a set of functions rather than as a business operating along sound business and management principles. In other words, water services is treated as a technical function rather than as an integrated business.

Many municipalities struggle to attract and retain the necessary skills at all levels—leadership and managerial skills, technical skills (engineers, technicians and artisans) and operational skills (trained operators). This arises partly from the lack of financial resources, partly from structural constraints (salary levels within municipalities) and partly from issues related to organisational culture (level of initiative encouraged and recognition for initiative).

There is a tendency to over-regulate public service delivery. The focus on legislative compliance (and the burden of legislative compliance) tends to discourage initiative and overshadow assessments of good performance and outcomes-based assessments.

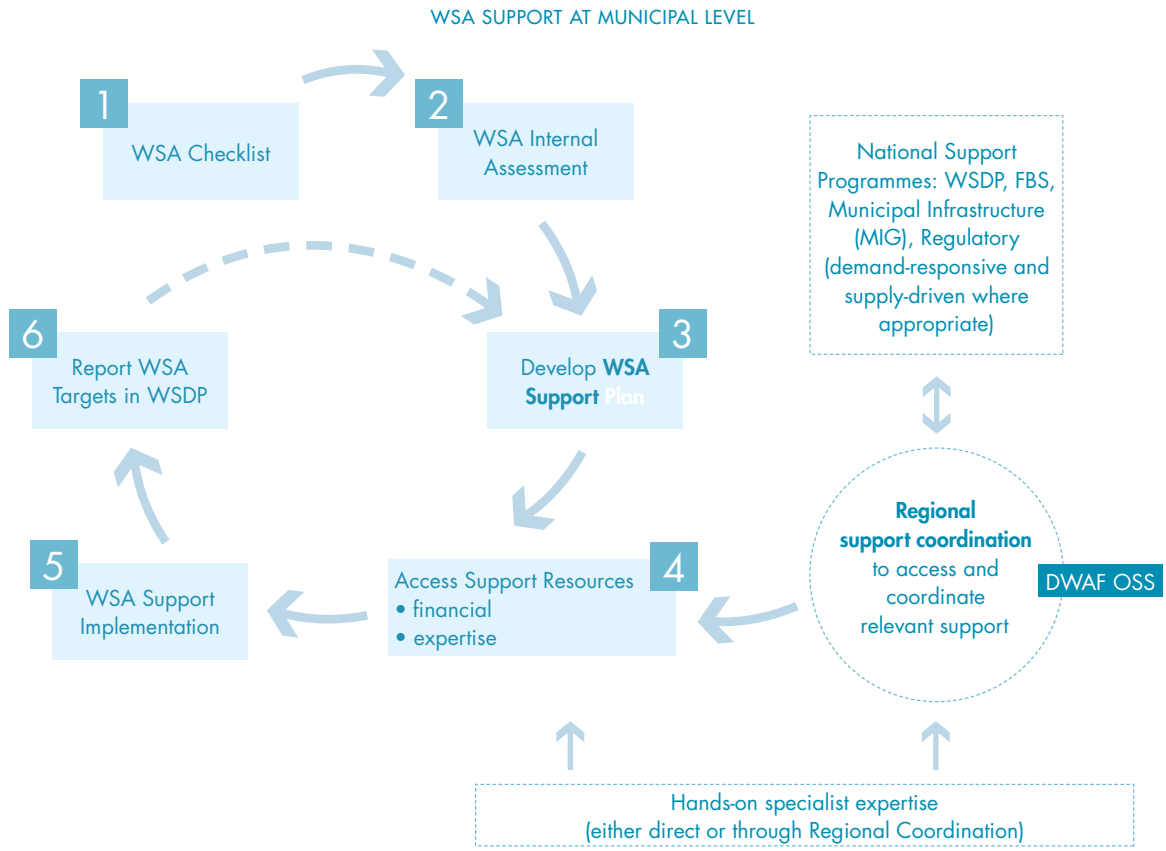
Support strategy

The Sector Support Strategy of 2007 was designed to address capacity problems in the sector as a whole and to build the capacity of water services authorities to *both* fulfil their authority functions *and* to develop strategic leadership at the authority level related to the provision of water services. The ultimate purpose of support to water services authorities is for each authority to achieve the targets outlined in the Strategic Framework and to strengthen the capacity of authorities so that they are able to: (1) effectively plan their water services to ensure access to all; (2) effectively develop infrastructure to meet their targets; (3) ensure the financial sustainability of the service; (4) make good decisions concerning water services provider arrangements; and (5) effectively regulate water services provision.

Although a lot of effort has gone into support, and there have been some successes, evaluations of sector support (DWAF, 2007)[11] have found that the overall benefits of support do not appear to warrant the current level of activity and expenditure on support. In particular, support has not been provided in terms of a coherent support strategy, the allocation of support resources has not been strategic and much of the support is uncoordinated.

[11] Masibambane evaluation

FIGURE 24: THE SUPPORT PROCESS FOR WSAS AS OUTLINED IN THE SUPPORT STRATEGY



Source: DWA, 2007b

Support also tends to be supply driven in silos, focusing on only one aspect of the water services business, with a lack of understanding of the need to manage water services provision as an integrated whole. The support priorities of municipalities towards improving performance are often quite different from the actual support being provided. This is particularly the case where those offering support lack the necessary skills and experience to offer practical and effective support to municipal staff engaged in the day-to-day activities of providing water services to consumers. There is a critical shortage of high-level strategic skills linked to direct operational management skills and there is also a notable absence of appropriate training and development within the sector.

Programmatic support to WSAs

The support strategy targets both WSA and WSP capacity and support needs. Programmatic support is provided to WSAs in terms of their governance functions where the approach to WSA capacity building draws on the experience and builds on the strengths of the various WSA support programmes (such as WSDP support, capital programme support, etc.) whilst at the same time increasing the demand-responsiveness of the approach.

Figure 24 illustrates the support process for WSAs as outlined in the Support Strategy. An initial checklist of WSA performance against a set of indicators is undertaken to gain a high-level picture of the WSA's capacity. This is followed by a more in-depth internal assessment to identify support needs, which is then used to prepare a WSA support plan.

The support plan addresses the following: the compliance and performance targets the WSA needs to achieve (with respect to their authority function); the type of support required to achieve the targets (for example access to legal expertise, support to establish an information system, financial expertise, support to a decision-making process, etc.); and the time frame for the support, plus the resources and budget required.

WSAs can access support resources through a range of mechanisms, including national support programmes and the DWAF one stop shop (DWAF OSS) which is part of the DWAF regional offices where support is coordinated. A major part of the support is to ensure access to specialist expertise to assist in addressing the WSA key performance targets.

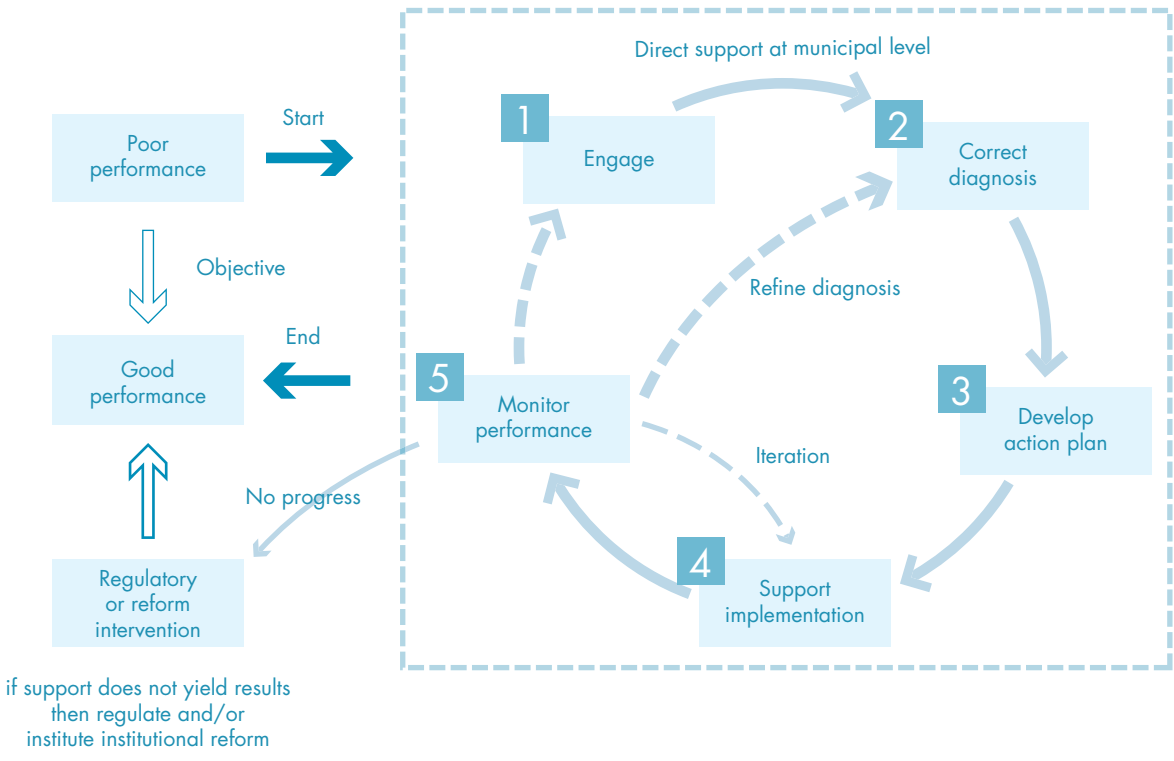
Direct operational support to WSPs

Direct operation support in the form of technical support to WSPs is aimed at making a direct improvement in the performance of municipal water services providers through strategic interventions. This type of support can only be effective if it is context specific and addresses the most important operational constraints in a particular context. The support strategy recognises that effective support must provide *the right solution at the right time*. Thus the approach to this type of support is demand driven, based on requests from municipalities where both the Municipal Manager and the WSA manager provide their endorsement to the support process. Support is customised to each water services provider circumstance with well functioning water services as the intended outcome. The support process is captured in Figure 25 where emphasis is given to finding the underlying causal problems (rather than the symptoms) of poor performance and the framing of practical and realistic solutions. This diagnosis can only be carried out by people with the appropriate skills and experience, notably, demonstrated experience in managing water services operations successfully.

5.5.10 Embedding water services delivery in framework for IWRM

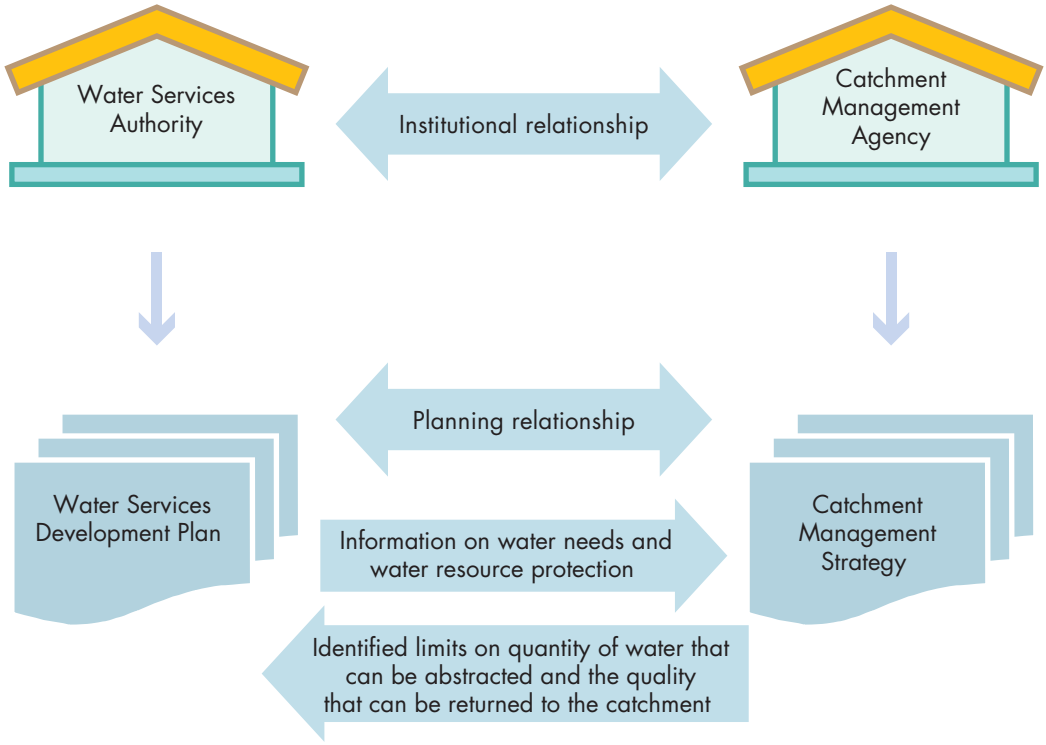
There is both a **planning** and an **institutional** relationship between catchment management agencies (CMAs) and WSAs. The Catchment Management Strategy of a CMA is in terms of the National Water Act required to "take into account relevant national or regional plans prepared in terms of any other law, including any development plan adopted in terms of the Water Services Act." Thus when a CMA prepares its Catchment Management Strategy (which includes an allocation plan for allocating water to existing and prospective users), the CMA needs to take into account the water requirements of WSAs as outlined in their WSDPs. Likewise when preparing the WSDP, the WSA must refer to the Catchment Management Strategy to determine whether there is sufficient water available to support the proposed water services targets.

FIGURE 25: DIRECT OPERATIONAL SUPPORT TO WSPs—THE PROCESS



Source: DWA, 2007c

FIGURE 26: RELATIONSHIP BETWEEN A WSDP AND A CATCHMENT MANAGEMENT STRATEGY



Source: de la Harpe, 1999

The institutional relationship between WSAs and CMAs is provided for in the National Water Act, which indicates that relevant local authorities are to be represented on the governing board of a CMA.

From the point of view of a WSA, the CMA would deal with the limitations on the amount of water which can be abstracted from a resource and how this should be returned—in other words, managing water services from an environmental point of view. The Catchment Management Strategy identifies limits to how much water can be abstracted and the quantity or concentration of particular pollutants, which can be returned to the catchment. These limits are stipulated through licenses. All users of water have to register and obtain licenses, except those that fall under Schedule 1 of the National Water Act. Thus, WSDPs need to be drawn up within the constraints and conditions of the allocations given through the CMA.

Since WSAs facilitate water use (water services) and impact upon water resources (waste management, pollution and disaster management), they are a key role player within water resource management. The WSDP of a WSA must therefore serve as a mechanism to integrate water services planning of the municipality with catchment management and water resources planning of the CMA.

5.5.11 Appropriate technology options

Every water or sanitation scheme has a unique set of characteristics relating to water resources, water demand, location in relation to support services, acceptability to users, affordability and institutional arrangements. Each scheme, therefore, requires a solution appropriate to these characteristics. Remote communities, low-income settlements and water scarce areas of the country present the greatest challenges in finding appropriate solutions—and they are often very different from solutions implemented in high-income urban settlements. Most schemes in rural areas involve piped water supply to communal or household standpipes, which is either gravity fed or pumped.

A number of projects emanating from DWA over the years have attempted to give greater priority to appropriate technologies. For example, the NORAD-funded programme to develop tools for local government in the mid-1990s developed a very useful guide to assist WSAs in making sound technology decisions. It was intended to give users an introduction to the range of appropriate solutions available, and to provide information on where and how different technologies (solutions) would be suited to different situations. Each technology is explored in detail, and information under each technology includes what the

technology is and how it works, requirements, institutional support, capital needs, operation and maintenance, advantages and disadvantages of the technology, and experience as regards practical implementation.

In May 2004 the Council for Scientific and Industrial Research (CSIR) Built Environment Unit prepared the "Appropriate Technologies in the Water Sector in South African Position Paper" for DWA. It is not clear what the uptake of this document has been, but the 2007 Masibambane 2 Evaluation says South Africa could and should be doing much more to insist on appropriate technologies.

5.6 SDM AT SYSTEM LEVEL (WSP)/SERVICES PROVISION LEVEL

Since water services provision has been decentralised to local government, the WSA is responsible for the delivery of infrastructure and for ensuring that the most appropriate institutional arrangements are put in place for ongoing services provision (including maintenance and asset management). However, the WSA may contract other entities to support the implementation of its capital programme and/or to undertake the actual provision role.

5.6.1 What is the life cycle of service provision?

The term 'life cycle' has been used in the water sector to refer to a range of processes and development phases. For example, it has been used to refer to the entire water cycle, from protection, development, management and control of use of raw water (surface and groundwater) through to raw water abstraction, bulk water treatment (purification) and bulk potable water distribution, through to reticulation and ultimately to wastewater and effluent collection and treatment and returning the treated effluent back to the river. It is also used to refer to the entire framework for water services provision from national policies to service delivery planning to financing and infrastructure development and eventually to ongoing water services provision (O&M).

For the purposes of this report, the life cycle of services provision at the local sphere refers to the project cycle through to ongoing services provision.

5.6.2 Functions of a water services provider

The services provision level is the actual provision of water services to communities by a WSP. Over time water services officials, practitioners, and staff from DWA have held a range of workshops and undertaken various studies to determine the functions necessary to provide a water supply service. These functions are illustrated in Figure 27 and are the typical functions of the WSP. The challenge to the WSA is to find the most appropriate institutional arrangement and contracting arrangements to ensure that these functions are effectively fulfilled for a particular services provision area. The institutional arrangement may be a relatively complex arrangement involving more than one legal entity (for example a joint venture or a Support Services Agent supporting many community-based organisations), or it could be a simple arrangement such as the municipality itself or a single entity such as a water board. In addition, the functions of the WSP may vary from WSP to WSP. For example, a capacitated WSP may be responsible for all the WSP functions and may even take on capital projects, whereas a community-based organisation (CBO) may only be responsible for basic operations and customer relations. Where CBOs fulfil only part of the functions, they are sub-contracted by the WSP.

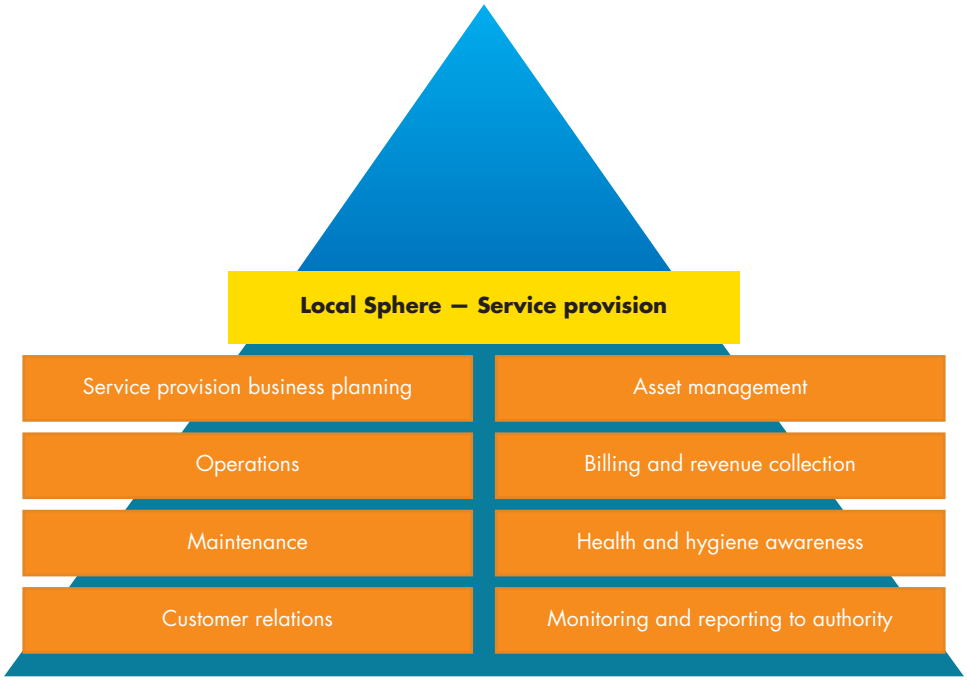
The role and functions of a Support Services Agent (SSA) are important in terms of rural water services provision. The SSA is an entity that provides support services to a CBO or small service provider that is a WSP, or is part of a WSP arrangement. Since most CBOs do not have the capacity to contract support services themselves, the WSA has a role in ensuring that these services are provided. The WSA can be the SSA itself, or it can contract another entity to fulfil this role. 'Support services' refers to a variety of activities required to assist small services providers, particularly CBO WSPs in terms of ensuring sustainable water services. The precise nature of support required will vary from CBO WSP to CBO WSP, but typically it will include the following: major maintenance; operations mentoring; financial management support services; institutional and social development (ISD) mentoring; procurement of goods and services (including bulk purchasing); health and hygiene promotion and pit emptying for VIP latrines.

In South Africa great emphasis has been put on finding the most appropriate arrangement to ensure efficient, effective, affordable and sustainable services. In particular section 78 of the Municipal Systems Act requires that the WSA undertake a thorough process towards selecting the most appropriate mechanism, which may be an internal or an external mechanism. An internal mechanism is a business unit or department within the municipality itself, whilst an external mechanism is another legal entity with which the WSA enters into a municipal services partnership.

5.6.3 Institutional arrangements for service provision

Perhaps the most fundamental aspect of water services provider institutional arrangements in South Africa is that it is recognised that *there is no one-size-fits-all approach*. WSAs are required to examine a range of options through a feasibility study and the section-78

FIGURE 27: LOCAL SPHERE—SERVICE PROVISION



Source: constructed by author

process which legislates the steps a WSA must go through to come to a decision about the most appropriate arrangement.

The entire approach of government towards the management of assets and service delivery is what can best be described as a move from *government* to *governance,* which involves a range of institutional options based upon a set of criteria including, amongst others, service coverage, service quality and effectiveness (such as addressing the needs of the poor) and efficiency.

With respect to municipal services, municipalities responsible for water and sanitation services can make a choice from a range of options for the actual provision of the services, which options are collectively called "Municipal Services Partnerships". Towards supporting municipalities to enter into municipal partnership agreements, the Municipal Infrastructure Investment Unit was created by Cabinet Memorandum in 1997 and established in April of 1998 as a private non-profit company. It was conceived of as a five-year intervention with the objective of representing and assisting local governments to locate and negotiate deals with service partners in the sphere of municipal infrastructure and services. It provided grant funding to local government on a cost sharing basis to hire expertise from the private sector for project preparation assistance (up to the Request for Proposals, evaluation, negotiation, or initial implementation stages). The Unit also provided assistance to local government in the process of hiring private sector consultants and managing contracts with the private sector.

The White Paper on Local Government provides for public-private partnerships where it states that in assessing the appropriateness of different service delivery mechanisms, the choice is not between public and private provision, but in *finding an appropriate combination of options* which most effectively achieves the municipality's policy objective. It thus encourages municipalities to seek an "appropriate mix of service delivery options", where choices about delivery options should be guided by clear criteria such as coverage, cost, quality and the socio-economic objectives of the municipality. The delivery mechanism options identified in the 1998 White Paper include:

- Building on existing capacity,
- Corporatisation,
- Public-public partnerships,
- Partnerships with CBOs and NGOs,
- Contracting out,

- Leases and concessions (public-private partnerships), and
- Transfers of ownership (privatisation).

The Municipal Service Partnership (MSP) Policy aims to provide a clear framework within which to leverage resources of public institutions, CBOs, NGOs, and the private sector towards meeting the country's overall development objectives. According the MSP Policy, government is committed to facilitating the use of MSP arrangements as an option for service delivery, where this option should enjoy equal status among a range of possible service delivery options available to municipal councils. The policy outlines that an MSP may include arrangements between a municipal council and a range of options towards addressing the services delivery challenges. Section 76(b) of the Municipal Systems Act (2000) lists the range of alternative options which are referred to as "external mechanisms". Contracting with any of these entities involves an assessment under section 78(3) of the Systems Act.

The Municipal Systems Act and Municipal Finance Management Act (2003) provide municipalities with an overall framework for implementing municipal services partnerships and for *considering different MSP arrangements/options*. The Municipal Systems Act requires that a municipality undertakes a detailed *section-78 process* to assist them to identify the most appropriate partnership arrangements to address their infrastructure backlogs and provide sustainable services. Section 78 of the Municipal Systems Act relates to the *criteria and process for deciding on mechanisms* to provide municipal services. The Act states that a municipality may provide a service through an internal mechanism (its own administration or a business unit operating under its own administration) or through an external mechanism by entering into a service delivery agreement.

Section 78 of the Municipal Systems Act helps the municipality to decide which would be the most viable option to provide the service. This is an exercise which considers a wide range of relevant considerations—costs and benefits (including impacts on the environment and human health, well-being and safety), capacity in terms of skills and other resources, administration, job creation and employment patterns, the views of organised labour and the local community. In terms of external mechanisms the exercise requires consideration of whether the mechanism will provide value for money, address the needs of the poor, be affordable and transfer appropriate technical, operational and financial risk.

In addition to the considerations required in a section-78 assessment process, the research of Harris and Vermeulen (2010) as part of a Water Research Commission report identifies a number of key water services provision 'challenges' against which they analyse a range of water services provision case studies. These challenges include: human resource scarcity; accessing funds and financial viability; procurement; integrated asset management and augmentation; optimisation of operations; water quality; consumer engagement and communication; communication within and between the WSA and WSP; alignment of planning; and water resource availability and scarcity. The purpose of the research was to "assist WSAs to make well-informed decisions regarding an appropriate institutional arrangement (centralised or decentralised) for its water services provision; and to assist national government to better align policy, legislation and implementation guidelines to support such institutional arrangements".

In terms of water services provision functions, the terms 'centralised' or 'decentralised' are potentially misleading in the South African context since the authority for water services is decentralised in terms of the Constitution. Harris and Vermeulen therefore suggest that when referring to water services provision functions, the terms "consolidated" or "non-consolidated" be used to describe the extent to which a function is performed at a more central or less central level.

What is significant about the findings of their research is that whilst the WSP case studies appear to be very different in terms of the extent to which they are 'more' or 'less' consolidated, they are in fact very similar in terms of how the functions are addressed. For example, a WSP arrangement with a number of community-based organisations fulfilling the operations function is not that different from another WSP arrangement where a single entity is performing all the service provision functions. In the case of the arrangement with the CBOs, it is only the operations function that is 'decentralised' to the community level, whilst the rest of the functions remain either with the municipality or another entity. If the CBOs took responsibility for most of the provision functions then the arrangement could be described as 'less consolidated' since most of the WSP functions would be fulfilled by many CBOs spread across an area at grass roots level. However, in most cases the majority of WSP functions are in fact fulfilled at a more centralised level where they are consolidated into a single institution. Thus whilst institutional arrangements may appear 'decentralised' at first glance, a more detailed examination of functions may illustrate a totally different picture with only a small part of the WSP responsibility being addressed at the community level.

5.6.4 Examples of WSP institutional arrangements

There are a whole range of WSP institutional arrangements operating within South Africa, ranging from options that cover an entire district area (and even multiple municipal areas) to individual CBO options that cover specific communities. The table below describes the various options and the benefits and limitations of the different options. The most common WSP arrangement for rural communities in the South African context have been CBOs, CBOs supported by Support Services Agents (SSAs) and the municipality itself. However, since approximately 2007, the use of CBOs has substantially decreased due to complex legal requirements in contracting CBOs and a general political preference amongst councilors to use municipal options.

TABLE 12: VARIOUS OPTIONS FOR WATER SERVICES PROVIDER INSTITUTIONAL ARRANGEMENTS AND THEIR BENEFITS AND LIMITATIONS

Arrangement	Features/Examples	Benefits/Limitations
Municipality as the water services provider (WSP)	This is an internal mechanism. This entails a services unit or department within a municipality, which is managed as part of the municipal management. The WSP function needs to conform to municipal procurement systems and financial requirements. **Examples** Cape Town and eThekwini Metros, municipalities with large urban cores such as Ugu DM, Buffalo City LM and Mogale City LM, and ones with medium to small urban cores, such as Saldanha Bay LM and Dihlabeng LM.	**Benefits** • Managed by the municipality. • Benefits directly from municipal grants. • Its revenue stream can be easily used to cross-subsidise non-revenue generating services. • Does not require contract management capacity or expertise related to procuring, managing and monitoring external mechanisms. **Limitations** • Often lacks sufficient management and operational capacity. • Limits external investment.
Another municipality as WSP (bulk and/or reticulation)	A contract is put in place between the water services authority (WSA) and the other municipality as WSP which clearly defines the obligations of the two parties. **Examples** Many examples, mainly brought about by the changes to powers and functions implemented in 2003. The most common example is where the DM is the WSA, and it appoints one or more LMs in its area to continue providing reticulation services to mostly urban areas. Examples are Chris Hani DM (in parts of its area of jurisdiction), Mopani DM, Sekhukhune DM and Amathole DM.	**Benefits** • Utilises WSP capacity of another municipality to provide services in the area of the WSA. • Utilises existing public sector staff. • Cost efficiencies for both municipalities can be achieved. **Limitations** • WSA must have capacity to enter into contract and properly procure another municipality to provide the services. • May be difficult to properly monitor and regulate.
Municipal utility as WSP	The WSA retains ownership of the infrastructure and responsibility for capital expenditure, but contracts out the management and control of the water services works to the WSP (utility).	**Benefits** • Reduced cost of water provision. • Risk transfer. • Procurement exemptions related to contracting a public rather than a private entity. • Utility can act as collection agent on behalf of the WSA and may accept collection risk.

(Continues) ►

◀(Continued)

TABLE 12: VARIOUS OPTIONS FOR WATER SERVICES PROVIDER INSTITUTIONAL ARRANGEMENTS AND THEIR BENEFITS AND LIMITATIONS

Arrangement	Features/Examples	Benefits/Limitations
Municipal utility as WSP (Continued)	The contract outlines the rights and obligations of the WSA and WSP in respect of operating conditions (such as water quality, quantity and pressure), modification and rehabilitation of the existing facilities (to be financed by the WSA) and standard provisions in relation to record keeping, handing over of the network, personnel, the transfer and assumption of risk and the provision of insurance in respect thereof. **Examples** Maluti-a-Phofung Water, Johannesburg Water and East Rand Water Care Company ERWAT (although ERWAT was multi-jurisdictional when it was established).	• Brings in operational expertise towards becoming technically and commercially viable. • Sharing of overhead costs should make water services provision cheaper for both the WSA and the utility. **Limitations** • The risk in respect of the assets and the responsibility for maintenance and capital development remain with the WSA. • It is unlikely that employees in the WSA would be transferred to the WSP—particularly if the term of the contract does not justify this. A secondment or a complex relationship in which the WSP manages the employees of the WSA is more likely.
Multi-jurisdictional utility as WSP	An important element of this option is that WSAs are both shareholders and contracting agencies. In the best case scenario, these two roles are mutually reinforcing—particularly if shareholder control is a function of revenue contribution. Three important requirements here are (1) long contract periods; (2) careful negotiation around prices and service levels; and (3) onerous exit conditions for shareholders. At its worst, however, poor contract performance or negotiation of performance can destabilise and undermine the utility. **Example** The only current example is uThukela Water (Pty) Ltd.	**Benefits** • It allows for joint ownership of assets, sharing of risk and potentially enhanced borrowing and planning capability. • Economy of scale. • Brings together WSAs who may otherwise be competing against each other for scarce resources – water, human resources, specialised expertise, government grants, consumers and loans. **Limitations** • Requires capacity to negotiate complex institutional arrangements. • Complex governance arrangements with multiple WSAs.
Water board as WSP	In terms of the Water Services Act (Act 108 of 1997), water boards are primarily accountable to the Minister of Water Affairs and Forestry, but are also accountable to any other institution with which it has a contract, and in terms of such a contract	**Benefits** • Water boards are established by DWA, and are therefore overseen (and sometimes given assistance—financial and otherwise) by DWA. • Water boards are able to access funds on the market for the implementation of infrastructure. • They usually serve more than one WSA, and therefore already have economy of scale benefits. • They also service non-municipal clients (such as mines and industries) directly, which further enhances their financial sustainability. • Due to their location and reputation, they are better able to attract and retain specialist skills than municipalities. • They are usually willing to provide technical assistance and support to municipalities.

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TABLE 12: VARIOUS OPTIONS FOR WATER SERVICES PROVIDER INSTITUTIONAL ARRANGEMENTS AND THEIR BENEFITS AND LIMITATIONS

Arrangement	Features/Examples	Benefits/Limitations
Water board as WSP (Continued)	**Examples** There are currently fifteen water boards in the country. They vary greatly in size, scope and resources. All provide bulk water services to other institutions and some also provide reticulation services in terms of specific contracts.	**Limitations** • WSAs often do not have the necessary capacity to effectively engage and negotiate with water boards. • The positioning of water boards often makes them the only viable choice for WSP where WSAs have little negotiating leverage. • May have the monopoly on provision of bulk services.
Community-based organisation as WSP	A CBO WSP is situated within a defined community. The WSA enters into a WSP contract with the CBO to provide services where the specific functions and tasks are outlined in the contract. Often CBOs require support, particularly in terms of maintenance, procurement, access to spare parts and skills training. It is thus common to include a Support Services Agent (SSA) within the WSP arrangement to provide the necessary support and also to assist in monitoring and reporting to the WSA. **Examples** There have been many examples of CBO WSPs but over time many of these arrangements have been replaced with the municipality taking over the WSP role and incorporating the CBO staff into the municipal structures. For example in Ugu the municipality employed the 'staff' of the CBOs to become municipal employees. Chris Hani DM remains the only DM with extensive CBO WSP arrangements. Alfred Nzo DM had developed a range of CBO and Support Services Agent (SSA) arrangements but the WSP role is now with the DM.	**Benefits** • Often the only viable option for remote rural areas. • Cost effective. • Responsive. **Limitations** • Lack of sufficient operations capacity. • Poor revenue collection in some cases. • Inability to carry out maintenance functions. • Difficulties in complying with all the legislative and regulatory requirements within a viable financial framework. • Labour laws pose difficulties in terms of contracting staff on a financially viable basis. • Insufficient access to support. • Services provision is often not properly monitored by WSA.
Private sector as WSP	Different types of contracts can be entered into with the private sector ranging from concessions, to BOTs, to lease and management contracts. The contract must be mutually beneficial to deliver real benefits. Typically a WSA will require contract negotiation and management support to ensure a good contractual arrangement. **Examples** Concession contracts include: Queenstown, the Greater Nelspruit Concession (now within the Mbombela LM WSA) and the Dolphin Coast Concession (now within the iLembe DM WSA). Examples of management support contracts include Uzinzo Services (for Maluti-a-Phofung LM) and Johannesburg Water Management (JOWAM—for the City of Johannesburg). Stutterheim (Amatole DM, Amahlati LM), Fort Beaufort (Amatole DM, Nkonkobe LM) have lease contracts.	**Benefits** • Private sector provides access to increased capacity, skills and innovative systems. • The private sector can access financial resources more easily than the public sector. • More flexible management arrangements to address provision constraints. **Limitations** • Politically is not a popular option in the current environment. • Requires extensive processes to satisfy legislative requirements which are time consuming and costly. • Most WSAs do not have the capacity and skills to manage and monitor private sector contractual arrangements where they act as an equal partner. • Some contracts are more costly to manage.

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TABLE 12: VARIOUS OPTIONS FOR WATER SERVICES PROVIDER INSTITUTIONAL ARRANGEMENTS AND THEIR BENEFITS AND LIMITATIONS

Arrangement	Features/Examples	Benefits/Limitations
Joint municipal / national owned utility	Two arrangements are allowed for by South African legislation of a utility jointly owned by national and local government, with either majority share holding by national or local government. No examples exist.	
Other arrangements	Other arrangements also exist, but their continued functioning in the new legislative framework needs to be reconsidered. One such "other arrangement" is the Midvaal Water Company, a non-profit (Section 21) Company that has been providing bulk potable water to Klerksdorp, Orkney and Stilfontein since 1954, but is not responsible for sanitation services. The Matlosana LM is the WSA, and co-owns Midvaal with the various mines it supplies. Midvaal is governed by a board consisting of the WSA and Mines. Midvaal owns the bulk water supply infrastructure.	

Source: de la Harpe, 2009

The chief indicators of measurement of success for municipal service partnerships are usually measurable indicators such as technical improvements, for example reduced unaccounted-for water (UAW) and improved billing systems. However, many consumers, particularly the poor, do not perceive these benefits. Their concerns centre around the presence or absence of a service, its reliability, quality, the level of service, and importantly, its cost. Thus, when negotiating public-private contracts for municipal services for the poor, special attention needs to be given to indicators that will ensure a positive impact on the poor.

5.6.5 Status of water services provision

The provision of sustainable water services has become a key focus for the sector since 2007. Whilst major attention has been given to developing WSA capacity, WSP capacity has not been adequately addressed. The status of water services provision has become a serious concern as many municipalities are unable to provide sustainable services. The operating indicators below provide some insight into the state of water services infrastructure and quality of services:

- Over 80% of electrically-powered schemes experienced regular power failures;
- The condition of 188 water treatment works was described as poor for 10%, average for 45% and good for 37%. 8% of water treatment works were not functioning at all. Inadequate maintenance was given as the main reason for failure at 17% of works;
- 75% of bulk pipelines have breakages of once per year or less, 17% on a monthly basis, and up to 8% on a weekly basis;
- 55% of community water reticulation systems did not provide water to all households, with 7% of systems providing less than 25% of households, 15% of systems providing 25% to 50% of households, 14% of systems providing 50% to 75% of households and a further 19% of systems providing 75% to 95% of households; and
- The condition of 75 wastewater treatment works was described as poor for 25%, average for 40% and good for 29%. 5% were not functioning at all. Inadequate maintenance was given as the main reason of failure for 20% of the works (DWAF, 2007).

In a nationwide self-assessment survey of local and metropolitan municipalities of 2005, only 37% of municipalities were fully compliant with drinking water quality regulations, but 61% perceived their water quality to be good or ideal. Water quality was also not regularly monitored, with only 58% of municipalities claiming to regularly monitor water quality.

Some municipalities have adequate water services infrastructure and service delivery, but there is an increasing proportion of deteriorating infrastructure with unacceptable quality services. As an ex-official of the DWA stated: "In many of the rural areas the services are not collapsing, they have collapsed. People are going back to the rivers". But there are extremes between WSPs who are maintaining infrastructure and providing sustainable services and WSPs who are not able to manage the assets or provide the necessary services. Thus there is a wide variation between capacitated and weak WSPs. Typically it is the more urban municipalities who are providing acceptable services whilst the rural municipalities are failing to provide water services. Some explanation can be provided in that most rural

municipalities were only established in 2000, without the benefit of prior institutional capacity, including systems, structures and skills necessary for services provision. These municipalities also lacked the necessary contractual and management capacity to enter into service provision partnerships with appropriate WSPs.

Probably the biggest challenge facing municipalities in providing rural water services is the lack of direct revenue from sales of water. This is a result of a number of factors:

- A majority of those in the deeper rural areas are unable to afford the services;
- Those that are in a position to pay basic costs are not billed because of the complexities of reading meters in areas far away from operating bases or even where they are read, unable to deliver bills to fixed addresses as a result of no postal services being available;
- Others that are willing to pay for services may have to spend more in travel costs to a payment point than the value of the bill.

In many cases, municipalities have found it unfeasible to manage and collect revenue and have thus resorted to providing "free" services. This has led to a heavy reliance on equitable share which only caters for indigent families/households and not for the extent of infrastructure which has to be managed. Further pressure is thus put on managing and maintaining infrastructure, which continues to deteriorate.

WSPs in rural areas are also characterised by few technical staff. Despite this, the cost of staff is disproportionately high relative to the extent of services being provided. There is also a lack of continuity in management, as WSA managers are sometimes contracted in or are shared between other functions of the municipality in a bid to spread the overhead over a number of services.

The mindset of providing rural services is certainly different to urban provision. Some of the indicators commonly used for urban provision, e.g. the number of maintenance staff per 1,000 customers, does not apply and there is little evidence to suggest that good rural performance indicators have been developed to adequately measure performance by municipalities in this area.

The Sector Support Strategy of 2007 attempts to address WSP capacity problems, many of which are problems related to the overall management and administrative capacity of municipalities. COGTA is also attempting to address these problems through its Local Government Turn Around Strategy.

5.6.6 Mechanisms and approaches for customer participation

The National Water Services Regulation Strategy (April 2008) states that well-informed, constructive and active consumers will make a significant difference in two ways: (1) a strong consumer voice will encourage better service provision, and (2) active, informed and vocal consumers will assist the national regulator by providing information about the regulatory compliance of providers and the adequacy of their services. Based on the Bill of Rights, consumers have the right to satisfaction of basic needs, safety, and information.

One of the Batho Pele (government's "customer first") principles is that "citizens should be given full, accurate information about the public services they are entitled to". All projects and programmes of the municipality must include a communication component. Therefore, it is understood that consumers have a right to be involved in the development, implementation and review of the municipality's performance management system and, in particular, should participate in the setting of appropriate key performance indicators and performance targets. They also have a right to be consulted on the costs of the service, delivery of services, drinking water quality results and a communication strategy. Municipalities are expected to develop a Consumer Charter for Water Services. Typically it would be discussed with a community, and would contain the following information: purpose, vision, pledge to consumers, consumer responsibilities, and contact details for engagement with the municipality. Many municipalities have either a call centre or local, community-based site offices that double as communication points, or both.

5.6.7 Financial arrangements for water services provision

The financial arrangements for water services provision will vary depending on the contract, service delivery agreement or performance agreement between the WSA and the WSP. For example, in some cases the responsibilities of the WSP will include revenue collection, whilst in other cases the municipality may retain this function. However, what is significant at the services provision level are the tariffs for different levels of service and the allocation of equitable share to subsidise poor households. The WSA is responsible for setting tariffs according to national norms and standards as well as for deciding the amount of equitable share to be allocated to the provision of water services.

6 BEHAVIOURAL CHANGE AND THE SHIFT TO THE SECTOR WIDE APPROACH

The water services sector comprises a whole range of complex institutional arrangements, processes and activities addressing a myriad of functions. While different institutions have their own legal entity they are also closely linked due to the integrated nature of water. Behaviour change needs to be addressed from an organisational perspective rather than a sector or broad institutional perspective, and, due to the complexity of institutions in the water services sector, it is not possible to discuss changes of behaviour within each organisation or institution. Rather, it is more appropriate to discuss policy changes, paradigm shifts and changes in approach in the sector towards achieving its sector vision, goals and targets. In this regard the most significant shift in approach came with the introduction of the sector wide approach (SWAp) in the water services sector in 2001.

This shift in approach impacted on the *way of working* of the various stakeholders and institutions within the sector. Concepts such as sector collaboration, coordination, joint policy making, sector ownership, harmonisation and alignment influenced the way different stakeholders engaged with each other. Over time, the entire sector realigned itself behind a common set of goals and targets within a single common water services programme. The sector started to engage with the principles of the Paris Declaration and later the Accra Agenda and what these meant for taking ownership and working with all stakeholders including donors.

The sector wide approach in the South African water sector focused primarily on building the sector rather than trying to achieve components such as donor coordination, harmonisation and alignment. Over time as the approach matured, these different components also played an important role.

This section focuses on the sector wide approach in the water services sector and how this approach changed the way of working towards scaling up and achieving sustainable services provision.

6.1 HISTORY OF THE DEVELOPMENT OF SWAp IN SOUTH AFRICA

The Constitution and first White Paper on Local Government established the principle of coop*erative governance* and devolution, by giving local government status as one of three equal spheres (alongside national and provincial), rather than a subsidiary tier.

BOX 7: HARMONISATION AND ALIGNMENT

Harmonisation: Donors collectively harmonise there actions so that these are more transparent and effectively coordinated. Harmonisation lays the foundation for the links between donors where information is shared, efforts are made to reduce transaction costs for partner governments, and common arrangements and procedures are simplified.

Alignment: By aligning donor inputs with national processes relationships are built between donors and partner governments. Alignment refers to both 'policy alignment' and 'systems alignment'. Policy alignment reflects and supports partner governments' national and sector policy objectives and development strategies. Systems alignment uses government systems and procedures for channeling aid, such as public financial management systems, monitoring and evaluation frameworks and procurement procedures.

Source: based on ODI, 2008

The principle of cooperative governance played an important role in the shift to a sector wide approach based on increased collaboration. Early donor support for infrastructure and operational expenditure for the delivery of basic water supply and sanitation services was fragmented and split over various government departments and agencies. Grants to NGOs, local communities, and local government were according to donor programmes and priorities, rather than supporting an overall government-driven programme. Over time donor support was primarily channelled through the Department of Water Affairs and Forestry (DWAF) (with only 2% going to NGOs) and was mostly controlled via DWAF national). The vast majority of this support was not for hardware but for software aspects, including institutional and policy aspects and pilot projects. The funding was mostly project based and donor-DWAF relations were mostly bilateral. Although DWAF dispersed these projects regionally, there was limited donor coordination.

In 2000, various donor initiatives started to come together, particularly as the notion of a sector wide approach was gaining ground. Member states of the European Union decided to pool their support to the South African water sector, where all existing programmes became integrated into one macro programme of 'sector support'. Donors and the South African government discussed what a multi-donor support initiative would look like, which resulted in a programme of coordinated 'sector support' known as Masibambane. Masibambane, meaning "let's work together" in Nguni languages became the mechanism through which the sector wide approach was implemented. It is a collaborative effort between the water sector and donors that continues today.

The initial purpose of the programme was to "support and strengthen the water and sanitation services sector in South Africa as a whole and in three targeted provinces in particular, and to support the proper functioning of local government in terms of the current policy and legislative framework" (de la Harpe, 2005). Whilst the programme aimed to support and strengthen the water and sanitation services sector as a whole, it also has a specific focus on supporting the proper functioning of local government (as prime implementer of projects and provider of services) in terms of the current policy and legislative framework. Over time the programme was extended to all the nine provinces and in 2007 it was also expanded to include water resources management.

In adopting a sector wide approach (SWAp) for the water services sector the available funds were consolidated to better implement the new approach. Funds to support capital projects were made available through the budgets of DWAF and the Department of Provincial and Local Government (DPLG), but from 2005 these funds were consolidated into the Municipal Infrastructure Grant (MIG) programme operated by DPLG. In addition, capacity building funds for the development of local government capacity were merged into a single capacity building grant. The broad objectives of *sector budgeting* were to achieve the following:

- Flexibility to meet government's strategic goals,
- Sustainability of the water services sector,
- Maximisation of limited available resources,
- Minimising duplication of effort, and
- Greater coordination within the water services sector.

In order to implement a sector wide approach, the budgeting process and allocation of available funds and resources had to be refined into multi-year budgets and workplans against the strategic objectives of the water services sector as a whole. These multi-year budgeting frameworks and workplans enabled the sector to better utilise scarce resources. Donors were also provided with the budgets and workplans to enable them to respond to, and schedule additional funding for the priorities and needs of the water services sector. All projects identified and funded through the programme were linked to a particular sector objective and target within the SFWS. Another benefit of the sector wide budget was the improvement in reporting and communication of information of the sector to all role players.

6.2 ACCOMPANYING PROCESSES OF CHANGE

The SWAp facilitated donor coordination, brought resources together into a consolidated budget, and allocated financial and other resources to the achievement of sector goals and objectives. Through the sector wide approach Masibambane created a platform for addressing "soft issues" related to the quality and sustainability of delivery, which had tended to receive less priority in the past. In addition to bringing donor funding and donor programmes together, the SWAp also brought together the experience of various programmes in supporting local government.

Masibambane was about changing power relations and building a stronger and more organised sector. It promoted leadership and governance at the appropriate levels, institution building, collaborative planning and informed decision making. By bringing together efforts and funds from various funding streams (national government, local government and

donors) it accomplished coordinated support from the national level to local government.

At the launch of Masibambane in April 2001, a coordinating committee was set up with an operational mandate to support and oversee national coordination, and to report on sector strategies and provincial multi-annual action plans (MAAPs). DWAF fulfilled the role of leader and 'custodian' of the sector, where it was responsible for enabling and supporting local government to fulfil its mandate. DWAF thus lead the sector wide approach with the aim of achieving efficient, effective and sustainable service delivery in the water sector.

Over the past nine years provincial forums were set up and the South African Local Government Association became chair of the national coordination meetings.

Two major evaluations of Masibambane were undertaken in 2005 and 2007 which found Masibambane to be one of the most successful SWAp programmes internationally. The reasons for the success of the programme are as follows:

- It was built on solid foundations such as the Community Water Supply and Sanitation Programme and other donor programmes.
- It put in place new water services policy that was developed by the sector as whole with sector ownership.
- It focused on supporting municipalities in both their governance and service delivery functions.
- It supported the transformation of local government to developmental local government in line with new policy objectives and associated strategies.
- Good relationships and understanding were built between key water services sector role players from the outset where 'honest brokers', perceived to be acting without vested interests, played a vital role in the collaborative process.
- DWAF provided not only good leadership, but also capacity support to the various partner organisations.
- Flexible funding was made available to address tangible outcomes and projects.
- Good structures for collaboration were established and reviewed when needed with different parties showing a willingness to compromise where necessary for the benefit of the sector as a whole.
- All sector players participated in developing key policies and strategies such as the Strategic Framework for Water Services, the Transfer Policy, the Sector Support Strategy and the Regulatory and Institutional Reform Strategies.
- The programme has a major focus on learning and sharing which took the form of workshops, forums, peer group sharing, and a water information network for knowledge sharing.

6.3 UNDERLYING TRIGGERS, INCENTIVES, DRIVERS, AND CHALLENGES

Decentralisation in 2000 was one of the major triggers for adopting the sector wide approach. According to the Masibambane 2 Evaluation, Masibambane as a coordinating mechanism for sector collaboration enabled easier and faster decentralisation, and with greater success, than would otherwise have been achieved. A further trigger for the approach was the initial discussions between DWAF and donors, in particular the European Commission.

The primary incentives for the approach were two-fold: firstly to strengthen collaboration within the sector in line with the principle of cooperative governance; and secondly to ensure more efficient sector funding and budgeting. There were many other incentives such as opportunities for achieving economies of scale and also opportunities for capacity development and sector leaning.

There have been many challenges to the implementation of the sector wide approach. Setting up collaborative structures and ensuring participation of all key stakeholders in the various SWAp initiatives was time consuming where often it took a great deal of time before words turned to action. Although DWAF, SALGA and municipalities participated fully in Masibambane, there was often only token participation by other stakeholders, without consistent representation. Other sector departments at both the national and provincial levels tended not to take sufficient ownership of the programme where they viewed it as DWAF rather than a sector programme. Civil society participation and influence within the programme was also weak. A further challenge was getting all donors to participate in the SWAp. Donors had their established programmes and priorities and therefore were reluctant to pool their funding into a new programme driven by government priorities. Some donors such as DFID for example, remained outside of Masibambane, contradicting commitments to harmonisation and alignment.

Sector collaboration at the local level also took much longer to achieve than at the national level. The rationale, objectives and approach of the Masibambane programme was well understood at national level, but at local level it was not obvious how the entire programme worked or what the benefits of sector collaboration were.

The sector wide approach has also not resulted in improved operations and maintenance, and where O&M has improved it has not been as a result of any of the support programmes of Masibambane. More emphasis was placed on providing support to governance functions rather than building capacity for services provision functions.

A major challenge for the Masibambane programme was the capacity required to plan, implement, monitor and report on the programme. Whilst government systems were used for financial management, monitoring and reporting, the existing systems were not adequate to cater for a programme the size of Masibambane. Improved systems were therefore developed, but these were put in place by consultants who also played a major role in operationalising Masibambane. At one point the programme management was being run almost entirely by a consortium of over 100 consultants at the national level who established offices specifically for this purpose. DWAF capacity was severely stretched in trying to manage the consortium. The dependency on consultants became problematic over time, especially when the management contract was concluded. At the local level consultants were also used to provide support to municipalities. In some cases this support was well received, but in other cases municipalities were undecided as to the value of the support, particularly in cases where they felt that skills transfer had not taken place.

The so-called cross-cutting issues (gender, appropriate technology choice, environmental issues, and civil society participation) tended to be marginalised within the SWAp, despite these being part of the objectives of the programme and having been identified as important to achieve positive impacts.

7 ANALYSIS OF THE SERVICE DELIVERY APPROACH

The legislative and policy framework in South Africa is designed to enable and guide decentralisation and sustainable services provision with a very clear set of principles, goals, targets and roles and responsibilities. For some municipalities the framework is an enabler for the provision of sustainable services, but there are others who continue to fail to provide adequate services. Today, senior staff in the Department of Water Affairs (DWA) are starting to question whether decentralisation was the correct way forward. But is it the service delivery approach or it is other factors that are hindering the provision of sustainable services?

The service delivery approach in South Africa can be described as being *comprehensive* in that it addresses all the components necessary for the decentralisation of water services, including:

- a sound policy and legislative framework;
- a planning framework that addresses needs and priorities from the local sphere to the national sphere;
- a fiscal framework that makes provision for extensive subsidies for both capital investments (Municipal Infrastructure Grant - MIG) and operating costs (equitable share - ES) for the poor;
- a programmatic approach where all spheres of government work to a common set of policy objectives and targets, where a collaborative approach has been taken to build the sector as a whole;
- a support framework where both the necessary structures and resources have been put in place to provide targeted support to municipalities as WSAs and WSPs;
- an approach to water services provision institutional arrangements that recognises that there is no one size that fits all and that allows WSAs to assess and propose the most appropriate service provision institutional options; and
- a regulatory framework which separates governance functions from service provision functions.

Taken as a total picture, it can be argued that South Africa has put in place an extremely enabling environment for both scaling up and providing ongoing sustainable services. As with any country facing transition and decentralisation of services there are many challenges in implementing the overall service delivery approach. Why is this the case?

7.1 IMPACTS OF ADOPTION OF SDM(s) WITH RESPECT TO SUSTAINABILITY OF SERVICE

As a result of the services delivery framework/ approach that has been adopted in South Africa, a range of programmes and strategies have been put in place to support the sustainable provision of water services. These include the Municipal Infrastructure Grant programme, the water services programme (which includes water services targets across the entire country), the transfer programme to support the effective transfer of water services provision from national to local government, the free basic water initiative, the sector support strategy, the process of institutional reform, a regulatory framework, the water services development plan (WSDP) support programme and access to equitable share. The sector wide approach pulls all these initiatives into a coherent programme under the Medium Term Expenditure Framework with clear water services objectives, targets, outputs, outcomes and budgets.

Many assessments have been undertaken to determine performance and to identify problem areas by both DWA and the Department of Cooperative Governance and Traditional Affairs (COGTA). The recent assessment by COGTA found that: "There are serious governance challenges in many municipalities… where the relationship and trust between communities and councilors has broken down"; administrations of many municipalities are not functioning properly; and many municipalities do not have the policies, systems

and procedures to effectively run their administrations. Municipalities also lack the requisite skills and qualifications to manage services provision and are also unable to attract the necessary personnel required. Lack of sufficient coordination, support and cooperation between spheres of government is also cited as a problem in achieving good governance and sustainable services provision. Financial management is a further problem where financial policies and regulatory requirements are not followed or enforced which results in inefficient expenditure, corruption and mal-administration. Some municipalities have been found to be non-viable financially with an insufficient revenue base and lack of financial management skills to address the problem strategically. Increasingly these municipalities are receiving negative audits on municipal financial statements from the Auditor General. With poorer communities not paying for services, the consumer debit is growing exponentially (COGTA, 2009b).

There tends to be a highly uneven response by municipalities to the differing demands of urban and rural communities and a poor understanding of migration and other demographic trends. Larger municipalities are not sufficiently leveraging their own resources to address backlogs and there is a lack of a differentiated rationale for managing infrastructure investment.

Although the necessary planning processes and frameworks are in place, there is a lack of proper capital planning for water service delivery and a lack of expertise to manage infrastructure projects from planning to project preparation, contract management, operations and maintenance. Local communities are also not fulfilling an effective oversight role on the quality of services provided. Capacity to deliver infrastructure at scale and provide ongoing sustainable services is a serious problem for many municipalities who do not have engineers, planning capacity or contract management skills. Human resource capacity continues to plague many municipalities.

These problems have resulted in public perceptions that local government is dysfunctional and failing the poor. Consequently, frustrated citizens are taking to the streets to express their grievances and sense of abandonment, sometimes in violent and destructive ways.

However, these problems cannot be directly linked to any deficiencies within the service delivery framework, rather they are linked to various complexities in the provision of sustainable services that result from the particular circumstances of different municipalities. Institutional reform or policy and legislative changes are not going to solve problems of poor management, lack of human resource capacity, and the ongoing flight of skills. Capacity development is a major challenge facing local government in both its authority and provider roles. However, the most critical areas requiring intensive capacity support are all those functions related to the actual provision of services, including planning, financial management, operations, asset management, maintenance, and customer relations. As one DWA official stated: "The shift is now to WSP support to ensure that services are provided and that they are provided sustainably. This is not an easy challenge as not many people have the skills to run a water services business or to diagnose the problems when services are failing. The capacity-building challenge is all encompassing because it is *all aspects* of service provision that we have to tackle, from the most simple operational tasks to business and strategic planning to improve the services."

Following the section-78 process (to select the most appropriate WSP) many WSAs have made changes to their WSP arrangements that have not necessarily resulted in improved services. WSP institutional changes are time consuming, costly and often disrupt services provision. The focus on finding the most appropriate WSP institutional arrangement has tended to shift the emphasis away from strengthening existing WSPs.

Evaluations of support provided to WSAs and of the governance performance of WSAs against the Strategic Framework for Water Services (SFWS) targets illustrates that water sector support programmes have tended to be successful with WSAs having made substantial progress on the targets and a number of compliance issues. In particular transfer of services from national to local government has been successfully completed in 82% of municipalities (DWA, 2009a). The WSA National Checklist indicates that almost all municipalities are complying in the mid 80's percentage in all WSA functional areas, except with respect to performance management and regulating water services provision which is just below 70%. The overall findings of the Checklist are that the state of municipal WSA compliance is on track. Table 13 (p. 68) illustrates the results of 147 WSAs in terms of performance against the institutional targets in the SFWS as of March 2009. With exception of weak annual reporting against the WSDP, the results of the assessment process indicate 69% and higher compliance with the targets. This is a considerable achievement given that WSA support programmes only commenced in 2002.

Masibambane (sector wide approach) evaluations have also indicated positive results in terms of the water services governance functions with many WSAs reporting that the water sector has provided the most useful support programmes for municipal governance

TABLE 13: WSA COMPLIANCE AGAINST INSTITUTIONAL TARGETS IN THE SFWS (2009)

Water services targets (WfWS)	Related checklist question	Question no.	Compliance	Non-compliance	Not applicable	Sum	%-age compliance
9	Free basic water policy	1.6	132	15	2	149	90%
10	Free basic sanitation policy	1.7	102	45	2	149	69%
13	DWAF asset transfer agreement signed	3.6	56	7	86	149	89%
14	Water services by-laws	1.1	102	45	2	149	69%
14	Tariff by-laws	1.3	107	41	1	149	72%
14	Credit control and debt collection by-laws	1.5	114	34	1	149	77%
15	Annual report on progress against WSDP	4.1	68	76	5	149	47%
16	Contracts for bulk water signed	7.2	72	20	57	149	78%
16	WSP contracts	7.4	54	12	83	149	82%
16	If WSA=WSP: Performance management contract	7.3	93	37	19	149	72%

Source: DWA, 2009

(DWA, 2007a). However, the same evaluations have reported weaknesses in terms of water services provision, and where operations and maintenance is successful, this is not a direct result of sector collaboration and the sector having taken on the sector wide approach.

In the drive to meet the political priorities of delivering water and sanitation services to all, operations and maintenance of existing infrastructure has been neglected. Figures on basic services reflect "access to infrastructure" and not "total sustainable service delivery" (DWAF, 2007).

7.1.1 Shift from delivery to sustainable services

With the sector shifting away from delivery to ensuring that services are sustainable, the importance of infrastructure asset management (IAM) has emerged as a key issue in the sector. Recent water quality studies have shown that poor water quality is a symptom of a wider problem with regards to asset management, and that water quality issues cannot be addressed without also addressing the broader context.

In terms of the SFWS, WSAs are required to put in place a system to manage assets in terms of a maintenance and rehabilitation plan. The plan must be based on the principle of preventative maintenance where assets should be rehabilitated and/or replaced before the end of their economic life, and the necessary capital funds must be allocated for this purpose. However, this is not happening. In addition, the rapid expansion of infrastructure has not been accompanied by the necessary increase in operating and management capacity. In many cases, WSAs and WSPs have less technical expertise now than they had in 1994, despite the huge increase in responsibility for water services infrastructure. Financing for infrastructure management and capacity to manage infrastructure is with few exceptions way below what is required. Water services infrastructure management is dependent upon the competence and sustainability of the municipality itself. Insufficient management and

service provision capacity is often at the heart of the problem of poor services provision.

It is generally accepted that municipalities have paid insufficient attention over the past decade to maintaining their growing infrastructure base and as a result, there is a "backlog of need in respect of maintenance and also refurbishment, renewal and replacement (CSIR, 2008)". The competing demands made on limited operational budgets, staff and other resources, severely constrain the proper management of infrastructure by WSAs. Although a comprehensive overview of the condition and functionality of water services infrastructure does not currently exist, functional assessments of schemes that were operated by DWA found that more than 61% of bulk infrastructure components required substantial refurbishment to reinstate them to their original design functionality. The reasons for the poor status of infrastructure were normal ageing, lack of maintenance, and vandalism and abuse (DWAF, 2006). An evaluation of the sector undertaken in 2007 (DWAF, 2007) found that only half of the beneficiaries surveyed reported that repairs were done within a week of reporting them, with 20% reporting that they wait between one and three months and 29% reporting that repairs were never done. Given the lack of WSP accountability and poor O&M these figures are better than expected.

Municipalities need substantial support both in terms of accessing skills and financial resources to ensure that service delivery does not end with the commissioning of infrastructure. In addition, municipal budgets need to reflect the real costs to properly operate, manage and maintain the infrastructure. Many municipalities have argued that the equitable share is insufficient to subsidise free basic services. This is particularly the case in rural areas where affordability and cost recovery are low. Addressing the skills and human resource capacity problem is also a major challenge. Although DWA together with the Development Bank of Southern Africa have embarked upon an ambitious programme to place engineers in municipalities, this programme has experienced many problems such as non-acceptance by municipalities of the selected engineering support and unclear lines of accountability for the support provided.

The overall service delivery approach lacks sufficient incentives for municipalities to properly operate and maintain their infrastructure. Whilst policy, legislation and regulatory requirements promote the provision of sustainable services, these requirements are often not adequately implemented or enforced.

7.2 POTENTIAL FOR SCALING UP OF SDA(s)

The provision of water services infrastructure needs to be scaled up to address the water MDG targets and to ensure universal coverage. In addition, there is a need to scale up capacity to provide sustainable services. The overall service delivery framework is designed to support the scaling up of services delivery but in practice this is not always happening. Municipalities are not able to address both their infrastructure challenges and the challenges of sustainable services with their current human and financial resources. Even where additional financial resources have been made available, only those metros and municipalities with well-established water services capacity have been able to scale up their operations.

Perhaps the question should be not so much about 'scaling up' but rather about addressing capacity problems in terms of ensuring that existing infrastructure is providing sustainable services. The MDG targets place enormous political pressure on municipalities to deliver new infrastructure, but the maintenance backlog is in many cases outgrowing the infrastructure backlogs. It is highly unlikely with the political pressure to scale up that municipalities will shift their limited human resource capacity from capital programmes to operations and maintenance. However, the increasing protests and dissatisfaction amongst communities is a real pressure that councilors have to address.

7.3 COSTS AND BENEFITS OF SDM(s)

Whilst the policy states that the system of grants from national government to water services authorities "will be adequate to ensure universal provision of at least a *basic water supply facility* …within a reasonable period of time", many municipalities argue that the Municipal Infrastructure Grant (MIG) they receive is inadequate to meet the water and sanitation MDG targets.

A report of DWA (2009) states that the real costs of sustainable water provision are not reflected in the current pricing system, across the entire value chain from source to tap and back. DWA has not developed a coherent pricing strategy for the water sector as a whole so each water board and municipality has adopted their own approaches. DWA's pricing strategy focuses on raw water only. Thus there are a wide range of pricing approaches and tariff levels, where, as a whole, the sector is not recovering the real costs of water service provision. This is cause for concern given that there is a growing demand for water in the context of increasing water scarcity.

Since most municipalities have not ring-fenced their income and expenditure for water services, they do not know the costs for water services. According to DWA, tariffs are frequently set at levels far below the real costs, and budgets are balanced by neglecting essential maintenance and forward investment. The

accounting approach to tariff setting is based on balancing annual budgets, rather than taking into account the real costs of sustainable provision such as maintenance, asset management, rehabilitation and upgrading infrastructure. Given that water services are not ring-fenced it is not possible to determine the extent to which the equitable share is being utilised for water services and for the benefit of the poorest communities. The unconditional nature of the subsidy seems to undermine the purpose of the subsidy where there are few incentives for municipalities to utilise the subsidy to achieve sustainable services provision.

Although the grants and subsidies from the national fiscus are essential towards achieving scaled-up services for the poor, there is an increasing dependence on these grants where municipalities are not taking sufficient action to address cost recovery. The incentives to run water services as a sustainable and viable service are lacking, resulting in poor services without sufficient funds for proper operations and maintenance or for functions such as business planning, monitoring, reporting and good customer care. Mismanagement and corruption are other factors which influence budget spending where large amounts are spent on local and overseas travel, workshops and conferences, communication, and entertainment.

From a support perspective the sector has benefited enormously from the funds and programmes of the sector wide approach. The additional funds allowed the sector to invest in a number of institutional support programmes as opposed to simply focusing on infrastructure delivery. The Masibambane evaluations find that municipalities have benefited significantly from these programmes in terms of their governance responsibilities but insufficient emphasis was given to services provision. This is the major challenge now facing the sector, both in terms of support and in terms of ensuring the necessary financial and other resources to strengthen existing service provision institutions and mechanisms.

7.4 IDENTIFICATION OF UNDERLYING SUCCESS FACTORS AND CHALLENGES

Where municipalities have the right skills, planning capacity, strong leadership, good financial management systems, structures for consultation and coordination and are accountable and transparent, they are able to provide sustainable water services. Those without these capacities are failing to provide the necessary services.

The sector wide approach has been successful in building a strong water services sector where all key stakeholders have participated in the development of policies and strategies and take ownership for the objectives and targets to be achieved. The commitment to cooperation and collaboration and to working towards a common set of goals and outcomes has shifted stakeholders away from what were often positions of conflict to working together in a partnership. For example, at the beginning of the transfer process municipalities and DWA could not reach agreement on the transfer of assets, staff and budgets from national to local government. In some cases municipalities simply stated that they would not take transfer. However, through a process of joint problem solving and the development of a Joint Transfer Policy, there are now transfer agreements with 89% of all municipalities taking transfer.

Support programmes have played an important role in addressing water services capacity, particularly in terms of governance capacity. Most municipalities (approximately 70%) have addressed key governance targets such as water services development planning, contracts between the WSA and WSP and putting the necessary water services policies and by-laws in place, including those for credit control, free basic water services, and tariff setting. The results of the National Water Services Authority (WSA) Checklist Report illustrate increasing regulatory compliance by WSAs.

Critical to the success of water services provision is the approach that recognises that one size does not fit all and that the right water services provider (WSP) institutional arrangement comes from a careful and comprehensive assessment of the local context, challenges and services to be delivered. Consequently there is a whole range of WSP options with varying institutional arrangements designed to respond to local circumstances. For example, within a single district municipality there may be a single WSP for urban areas and community-based organisations (CBOs) for rural areas. Even with the CBO arrangements, there may be different configurations with some supported by the municipality and others supported by another entity. These differentiated approaches recognise the varied conditions and challenges of the different service provision areas. In each case the assessment considers the community to be served, the technology and infrastructure, the geographical location, the availability of water resources, affordability and financial arrangements, factors influencing operations and maintenance, the tasks to be undertaken and the skills required.

Whilst a great deal of resources have been invested in section-78 processes to determine the most appropriate WSP institutional arrangements, these have not always been successful. Some WSAs lack the necessary capacity to give leadership to the process and to take the right decisions. Consequently, the assessment process is undertaken by consultants

without the ownership of the municipality, and when decisions need to be taken the key decision makers lack a full understanding of the rationale behind different WSP options. In some cases, the final decision is based on political preferences rather than the option that best responds to the service provision needs.

South Africa has gone through major processes of institutional reform in the water sector since 1994. Whilst these reforms were necessary to respond to the new constitutional, policy and legislative framework, the sector continues to restructure its institutions. Local government has also been through a process of transformation involving new boundaries, new administrations and structures, a whole new system of local government, and new responsibilities. Institutional reform takes time, and is often complex, expensive and disruptive to services provision. The ongoing process of institutional reform prevents municipalities from consolidating their existing capacity and skills to address their service delivery challenges. Capacity development and technical support are a high priority for those municipalities that are not able to provide ongoing services provision.

Recent research (Water Dialogues—South Africa, 2009) has found that the distinction between the WSA (governance) and WSP (service provision) roles has not been made in most municipalities. The actual separation of the authority and provision functions as required by the Water Services Act and the Regulation Strategy for Water Services, has only taken place in a few municipalities. The question to be addressed here is what impact this has for the effective regulation of water services. Is good regulation possible without a formal separation of the WSA and WSP functions?

According to DWA, the Blue Drop and Green Drop certification has been successful as a regulatory process where municipalities are striving to improve their performance. This approach has been more successful in achieving results than the formal separation of the WSA and WSP functions. Instead of focusing on the separation between governance and provision, it is more important to focus on the performance and targets achieved, and the skills, systems, structures, management and procedures necessary to achieve the targets.

The main focus for water services over the past 10 years has been on infrastructure delivery, driven by the political imperative to provide access to services to poor and marginalised communities and by the MDGs. In line with this imperative, South Africa has made huge investments in water supply infrastructure and yet this has not always resulted in the provision of a water service for the intended communities. Infrastructure is not being properly managed or maintained, which renders the infrastructure dysfunctional before the end of its normal life span. The national information system of DWA gives many examples where communities are not being provided with water services in areas that have already been covered by the water services capital programme.

Despite the enormous grants and subsidies for water services infrastructure and provision, the system is not addressing key priorities such as rehabilitation of infrastructure and operations and maintenance. Firstly, the Municipal Infrastructure Grant (MIG) programme is designed for new infrastructure and does not allow expenditure on rehabilitation, and secondly, the equitable share is unconditional where it is used for "everything else" but not for maintenance.[12] The maintenance backlog is becoming larger than the infrastructure backlog. As one specialist commented, "people think there is more than enough money but the money is being allocated to infrastructure and not to maintenance, so we are building a backlog of maintenance. We can get away with it for five years but eventually it will all break down and that will be a catastrophic failure. If nothing is done in the next seven years we will have to replace the infrastructure and we don't have the money for that!"

In addition, the operational costs of water services in many areas exceed the revenue from water. Even with the equitable share contribution, these services are not financially viable in the longer term, particularly in the poorer areas and where there is poor financial management. This is a further fact contributing to poor operations and maintenance.

[12] Interview with DWA official

8 CONCLUSIONS

8.1 ABOUT THE SERVICE DELIVERY APPROACH

What is the service delivery approach in South Africa and how does this approach influence scaling up and sustainability of water services? South Africa has exceeded the water MDG target and continues to make good progress in addressing backlogs. Yet more and more communities are taking to the streets to protest poor water services delivery and many communities remain unserved. What can we learn from the approach taken in South Africa?

There is no clear service delivery model for South Africa. Rather, there is an approach that has established a range of frameworks to enable water services provision at the local level. These frameworks address water services objectives and targets to be achieved and financial, planning, regulatory, institutional, monitoring, reporting and support issues. The institutional framework for water services also recognises that there is no single model or institutional arrangement that can address the different realities at the local level. Therefore, legislation requires a vigorous assessment process to find the most appropriate service provision arrangements.

Institutional models are not the panacea for sustainability problems. What is more important is the capacity to scale up and provide sustainable services. The approach to addressing institutional capacity at the local level has not resulted in the necessary skills, management systems and operational capacity to address service provision challenges. Despite major capacity support programmes of both the Department of Water Affairs (DWA) and the Department of Cooperative Governance and Traditional Affairs (COGTA), many municipalities still lack the necessary capacity to plan and implement capital programmes and to operate and maintain existing infrastructure. The challenge is how to develop water services and improved management capacity. Municipalities have requested direct operational support with a practical 'hands-on' approach to assist them to put the necessary systems, procedures, and operational structures in place. If systemic management and capacity problems are to be properly addressed, resources have to be put into a proper diagnosis of what is required, ongoing mentoring support and monitoring of progress until the municipality is able to fulfil its key functions sustainably. Where necessary, skills and expertise need to be consolidated into a single entity rather than being dispersed across different departments or decentralised units within the municipality.

Those municipalities who have developed governance capacity are better able to provide direction to water services provider (WSP) institutions. With strong water services development planning, viable tariff structures and cost recovery strategies, good WSP decision making, sound contract management, and proper monitoring and regulation of services, municipalities have proven that sustainable services can be achieved. On the other hand, where municipalities have not addressed their governance functions, they have also failed to hold their WSPs accountable and failed to secure improved services. Part of the governance function is setting targets and performance indicators for services across the entire municipal area and putting in place continuous performance management to ensure that these are achieved. Although many municipalities may not have achieved a separation between the governance and provision functions, what appears to be more important is to ensure that the governance functions are happening in practice.

The legislated process for deciding the most appropriate service provision arrangements is too prescriptive, time consuming and burdensome. Although policies promote the use of partnerships for services provision, the section-78 process places rigorous requirements on water services authorities (WSAs) who may be considering external services provision mechanisms for the provision of water services. These processes are often a deterrent to municipalities who may be looking for more effective service provision options. Legislating a process does

not necessarily improve decision making, and in the case of the section-78 process it can be disempowering where municipalities lack the capacity to undertake the process properly. The assessment processes have also not always resulted in the most appropriate services provision arrangements. In some cases the existing arrangements delivered better services than the new arrangements, with no improvements made as a result of the new WSP (de la Harpe, 2006c). Successful service delivery is also not only about the WSP institutional arrangement but also about the obligations of the WSP outlined in the contract or services delivery agreement, as well as the service outcomes to be achieved. The ideal institutional arrangement may not be in place, but if the WSP is able to perform against the contract and achieve the key performance indicators identified with the WSA, then this is more important than finding the perfect institutional arrangement. New institutional arrangements also do not necessarily perform better than existing arrangements and the process of establishing new arrangements is highly disruptive to services.

There is no doubt that both the governance and provision functions are necessary for sustainability. However, in practice the distinction between these functions is often blurred, especially within rural areas. Often there are not sufficient staff or capacity to make the separation in practice and local regulation generally remains non-existent or weak. How important is it to separate these functions? Where the WSA is also the WSP and where national regulation is weak, the WSA is essentially regulating itself when it comes to services provision. How should this be addressed? Weak regulation is an area that DWA is addressing through the Regulatory Strategy and through the blue and green drop certification process. Reporting on performance and against quantity and quality indictors appears to have been a more effective strategy than local level regulation, but it is still too early to come to any clear conclusions as to what might be the most effective approach.

The water MDG targets have put enormous pressure on municipalities to deliver infrastructure, often to the detriment of ongoing services provision. It is questionable whether local government is able to develop the capacity necessary to roll out a major infrastructure programme and to address services provision. In all the assessments and evaluations of the water services sector, operations and maintenance has come out as one of the most critical weaknesses within the sector. Perhaps the time has come to raise the difficult questions about what can feasibly be achieved, not only in terms of water services but also in terms of other basic services. The type of capacity required to implement major capital projects cannot be replicated in each and every WSA and thus it may be necessary to consider a different approach to infrastructure development which maximises the available skills and where economies of scale can be achieved.

Good frameworks do not necessarily mean good practice, but this also does not mean that the frameworks are flawed. South Africa has developed enabling frameworks but the challenge is implementation and ensuring an approach where decisions concerning services provision are based on the realities and challenges on the ground rather than on conceptual models that might work in other localities.

8.2 ABOUT BEHAVIOURAL CHANGE—SWAp

The sector wide approach (SWAp) fundamentally changed the way the water services sector operated. It changed the relationships between the different stakeholders and role players in the sector and it also changed the way of operating towards scaling up and achieving sustainable water services. Whereas prior to the SWAp the primary approach was project driven with different institutions working to achieve their own institutional mandates and obligations, the SWAp brought about a programmatic approach with a common vision, common objectives, and common targets for the sector as a whole. Stakeholders became committed to building the sector, to working collaboratively and to taking joint responsibility for sector performance. Although municipalities are responsible for their water and sanitation targets at the municipal level, the Minister of Water Affairs is responsible for the overall achievement of these targets at the national level. So if municipalities fail—the Ministry and Department of Water Affairs is also failing. Collaboration was described as being extremely successful and as being the hallmark of the Masibambane programme. This shift in how the sector worked as a whole is perhaps the most significant 'behaviour change' for the sector and for donors supporting the sector.

The SWAp also put in place structures and processes to ensure that support to municipalities was based on real needs rather than on supply-driven programmes identified at the national level. Every WSA was required to prepare a water services support plan outlining problems to be addressed and support required, so that a shared understanding of priorities in the sector could be developed. Resources for these plans, both financial and technical, were provided through the Masibambane programme.

How successful has the approach been in scaling up and ensuring sustainability in practice?

The evaluations of the Masibambane programme (DWAF, 2005a; DWAF, 2007) found that overall the programme has been extremely successful in embedding sector wide thinking and effective support to

water services institutions at the different levels. It was also successful in putting in place the necessary policies, strategies and an overall sector wide programme. A key success of the sector wide approach was that it supported the water sector to decentralise at a much quicker pace than what other sectors have managed to achieve. It greatly supported WSAs to take transfer of water services assets, staff and the operational responsibilities from national government where WSAs felt empowered through the process.

The institutional and capacity building components were also identified as the most successful components of the programme. The approach was also successful in pooling resources within a single government-led programme with strong collaboration, joint strategizing and planning, and improved performance monitoring.

The programme was further described as being an entirely appropriate intervention that was well developed with a robust targeting strategy that reaches the poorest of the poor. Despite these successes, the results in terms of scaling up services and achieving sustainability are less promising. Many infrastructure projects were not completed or the infrastructure became quickly dysfunctional. Municipalities in rural areas generally lacked capacity to ensure quality infrastructure from contractors, with the result that the water services infrastructure was of an inferior quality. In some cases municipalities described the new infrastructure as 'unacceptable'. In terms of providing sustainable services, the results are alarming. Not only do municipalities fail to plan for operations and maintenance, but they also don't budget for it. Equitable share is clearly not being allocated sufficiently to water services where new infrastructure is quickly becoming part of the backlog. Since the primary target audience was the poor, the financial sustainability of water services remains a risk with increasing arrears for water payments. Perhaps the biggest challenge to municipalities is planning, financing and ensuring the necessary skills and capacity for operation and maintenance (O&M).

Although the scaling-up and sustainability challenges are fundamental to the success of the sector wide approach, they do not mean that the approach is flawed. Rather, they are a result of the many challenges that municipalities are faced with on the ground in providing sustainable services. Masibambane is attempting to address these challenges, particularly in terms of providing support to local government. In this area Masibambane has been successful. The Department of Water Affairs and Forestry (DWAF) on behalf of Masibambane received the *VUNA* award for the National Sector Department Providing Exemplary Support to Local Government in December 2006. The award recognised the work of the Masibambane programme in supporting municipalities in their constitutionally mandated responsibility to deliver water and sanitation services. The same year DWAF was also awarded the *Public Sector Innovation Award* for the Masibambane Sector Support Programme, by the Centre of Public Service Innovation (CPSI).

The sector remains committed to addressing its challenges, and it also remains committed to the sector wide approach.

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ANNEX A: ANALYTICAL FRAMEWORK OF ELEMENTS FOR SUSTAINABLE SERVICES AT SCALE

Principle	Explanation	Description of the sector for each principle. This would include the current status and trends therein, as well as the historical background. This column to be "filled out" for each country	Benchmark (to be developed at a later stage)
Enabling environment at national level:			
1. Definition of service delivery models and modalities in policy and laws	This element refers to the way in which water service delivery is formally defined in the national policy and legal framework, and the extent to which different sector stakeholders align to that. This includes, for example, a vision of the sector (targets and goals) and its broader position in development policy (Poverty Reduction Strategy Papers - PRSP). A second aspect is the definition of the various levels of service (in terms of quantity, quality, distance, multiple-use (water) systems (MUS), rural, small-town, urban, definitions of functionality, etc). Finally, this element refers to both the main paradigm(s) that exist on service delivery and the modalities through which these can be provided, i.e. the definition of institutional frameworks for service delivery. Asset ownership is an important part of that; if there are doubts about where ownership lies, leveraging the financing for maintenance and asset replacement may be problematic.	For example, in Colombia, the law identifies four service delivery modalities (community-based management (CBM), private, utility, municipal). In South Africa, the main paradigm to water supply is one of municipal service delivery, in which there is a separation between authority functions at municipal level, and provider functions, which can be carried out through different modalities. Honduras and Nicaragua have four categories of degrees of sustainability of services. In Costa Rica, ultimate ownership for the rural water systems is with the state, and community or private operators are only given licence to administer systems in law.	

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Principle	Explanation	Description of the sector for each principle. This would include the current status and trends therein, as well as the historical background. This column to be "filled out" for each country	Benchmark (to be developed at a later stage)
2. Decentralisation policy for water sector	This element refers to the extent and way in which decentralised service delivery is carried out, in terms of the roles and responsibilities and resources, as well as the programmatic structures for that. For example, there may be one national water supply programme, guided from national level but carried out at decentralised level. Or, each local government may have its own programme. It also refers to the extent to which development partners contribute or not to this policy and programme. For countries where decentralisation is in process, it also refers to the way that process is structured and how decision making, assets and staff are owned and/or transferred to the decentralised level. Four facets of decentralisation are commonly seen: financial, political, functional and administrative.	In Uganda, the sector moved from area-based programmes, to full decentralisation, in which every district has the responsibility to provide services. Since the establishment of a SWAp there, most bilateral development partners contribute to this overall programme, and don't have parallel project structures. However, a significant number of INGOs continue to work outside this framework at intermediate level. South Africa developed a policy for the transfer of staff and physical assets from DWAF to municipalities and in the LAC region there has been the trend to re-centralise some technical functions of support for service delivery.	
3. Oversight (regulation) and accountability	With decentralisation of responsibility for service delivery to intermediate levels, national government plays an increasingly important role in oversight, regulation and enforcement, so as to ensure accountability from service providers to users and to national governments, including elected branch of government. This is an element that looks at the frameworks, tools and mechanisms that have been put in place for this. This could include, for example, sector monitoring and reporting at an aggregate level. It may also include more innovative approaches to service provider accountability to national government, as well as the mutual accountability between governments and development partners.	In Uganda, districts provide annual reports against 10 golden indicators, which are compiled into a sector performance report. In Colombia, community-based service providers need to provide similar management information to the national regulator as utilities. This places too heavy a burden on rural operators, and is not of relevance to their operations. This has given rise to efforts to develop monitoring and regulation tools, specifically geared towards rural CBO operators. In Ghana the WaterAid community scorecard approach is used.	
4. Mechanisms for coordination, learning, support and technical assistance to intermediate level (sector learning)	In many countries, decentralisation is not only about the formal policies and frameworks that guide it. Many local authorities need and will continue to need support, in many forms, ranging from access to information, capacity to learn and reflect, technical assistance, etc. This element refers to the mechanisms that exist at sector level for such learning and support, both at national level, and then downwards to the intermediate level. It would include elements such as presence and use of sector information systems, resource centres, inclusion of water in university curricula, etc.	In Ghana, regional technical teams assist district authorities in a range of aspects of water service delivery. In many countries in Latin America there is a trend towards re-centralisation of technical assistance functions to the provincial level where there is an economy of scale in supporting municipalities. In Uganda, once a year a joint performance assessment is made for the water sector and then discussed between government, development partners and NGOs. Based on that assessment, priorities for further emphasis for the next year are defined.	

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Principle	Explanation	Description of the sector for each principle. This would include the current status and trends therein, as well as the historical background. This column to be "filled out" for each country	Benchmark (to be developed at a later stage)
5. Sector financing	This element refers to four aspects: 1) the sources of financing (taxes, transfers, tariffs, donors funds, community contribution, private sector), 2) the way in which financial flows in the sector are earmarked, for example the percentage of grants to be dedicated to CapEx, OpEx, CapManEx, direct support costs, etc, but also what would be needed at sector level for indirect support costs, 3) the ways in which these financial flows are coordinated and managed at national level (SWAps, five-year expenditure frameworks, off-budget, project-based), but also downwards to the intermediate level (annual disbursements cycles, conditional grants, unconditional grants, project-based), and 4) an indication of the relative size of financial flows and routing, if available, would be important.	In Honduras, there is no overall overview of the total amounts flowing into the sector. At most, some government and donor funds are known. No central database on financial flows exists. Ethiopia distinguishes 4 flows of funds. In Uganda, the main flow of funding is the conditional grant to districts. Most bilateral development partners contribute their funding to this common fund, established under the SWAp. Percentages are given on how these funds are to be used by districts for capital costs, software, hygiene promotion, operational costs, etc); but in addition, about one third of total sector investment is through off-budget mechanisms (largely through INGOs).	
6. Organisational culture and behaviour with respect to harmonisation and coordination	This element refers to cultural and individual attitudes, experiences, beliefs and values of an organisation at international, national and intermediate levels. The particular set of values and/or norms that are found within groups and people in an organisation and that direct the way in which they interact with each other and with stakeholders outside the organisation. Why are agendas set as they are? Why are decisions made to fund in a certain way? What are the attitudes of donors to more aligned funding? Why do governments have certain attitudes to donors/NGOs, etc? Why do NGOs want to work alone? Why don't people pay their water bills?	In many countries certain bi-lateral donors (USAID, JICA, etc.) often do not engage with sector alignment processes or in SWAp mechanisms – their motivation for this is often driven by implementation policies set at headquarter level. In a number of countries there is a fair degree of animosity between government and non-government organisations (e.g. Mozambique or Bangladesh). These views are often driven by political differences, control over resources and other agendas.	
Governance over services delivery at intermediate level:			
7. Institutional responsibilities for the different stages of the life cycle of service provision	This element refers to the definition of roles and responsibilities for different functions (planning, construction, post-construction support, operations and maintenance, monitoring, training, etc.) which functions are supposed to be filled by whom, and whether all different functions that are necessary are covered by these agencies.	The South African framework defines different options for service provision and post-construction support, and separates authority and provision functions.	

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Principle	Explanation	Description of the sector for each principle. This would include the current status and trends therein, as well as the historical background. This column to be "filled out" for each country	Benchmark (to be developed at a later stage)
8. Coordination mechanisms and platforms at intermediate level	Apart from a definition of the roles of each stakeholder in services provision, there is a need for coordination mechanisms between them. Under this element, the mechanisms (platforms, bodies, etc.) for such coordination are described and analysed in terms of their effectiveness. Coordination would refer to all stages in the life cycle, from coordination of efforts to address capital investment needs, to the identification of needs to provide post-construction support. Typical issues would include coordination between NGOs active in the district, but also mechanisms for coordination between those having governance functions and those having service provision roles. Coordination between different government bodies may also be an issue, particularly where some functions are decentralised and others are deconcentrated.	In Zimbabwe, officially, both districts and government agencies form part of the District Water and Sanitation Sub-Committee (DWSSC) as coordination body. In practice, many NGOs by-pass this body, particularly since the on-set of the political and economic crisis, through which local authorities lost both legitimacy and financial clout. A compounding complexity is the tension between Rural District Councils as decentralised branches of government and the Ministry of Health which is a deconcentrated body.	
9. Monitoring and information systems for full service delivery	This element refers to mechanisms and systems in place for collecting all kinds of information on water systems (schemes) in the districts, and access to these for use by different stakeholders in planning process. It is also closely related to issues of access to information and accountability, both upwards and downwards to communities.	Honduras has a rural water supply and information system (SIAR), which contains information for all water supply systems in an area, including their performance indicators. However, it is not easily accessible at municipal level, but is used mainly by provincial-based technicians. The SIAR is limited to water supply aspects, but there is interest to expand this to include sanitation information as well.	
10. Strategic planning for full life cycle for service delivery (capital projects, operations and post-construction support) at intermediate level	Under this element, the focus is on medium-term strategic planning approaches and mechanisms for the full life cycle of delivery of services, according to the defined norms and standards, so entailing both capital investments, ongoing provision and post-construction support for the entire area of jurisdiction at intermediate level. This also refers to how priority setting and targeting of investments is done to different groups within the area of jurisdiction. For example, are specific measures in place to target the most vulnerable and poorest groups: are there pro-poor policies or criteria? Are investments biased to certain areas?	South Africa uses the water services development plan for district planning of water services, which aims to identify both new investment needs and needs related to the support of existing services.	

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Principle	Explanation	Description of the sector for each principle. This would include the current status and trends therein, as well as the historical background. This column to be "filled out" for each country	Benchmark (to be developed at a later stage)
11. Financial planning for all life-cycle costs	This element refers to the financial component of strategic planning (see previous element). Such planning should consider all costs: CapEx, OpEx, CapManEx and direct support costs. It includes all income, and sources of income including tariffs, transfers (from national government), taxes, donor grants, and both public and private investments. It also refers to the consistency between planning and availability of sources of funding (grants, direct investments, customer tariffs and contributions) to cover these costs, including both public and private financing mechanisms. Of particular importance is the clarity and consistency in terms of expected contributions of different customer groups, and inversely the targeting of subsidies, if any. Although this element is part of the previous one, it is so crucial, yet often not done properly, that it is a different element here.	Uganda's conditional grant specifies the percentages of this grant to be used for CapEx, CapManEx and support costs (though not using those terms). However, districts plan more in an ad hoc way. In Ghana, district development funds aim to add performance benchmarks, linked to financial disbursements and future earmarking.	
12. Project implementation approaches	This refers to the approaches followed by actors at intermediate level, both in capital projects and ongoing support. Of particular importance is the standardization of aspects such as creation of demand for improved services, health and hygiene promotion, but also the use of supporting tools, such as manuals and guidelines. Another aspect is how these approaches are articulated in short-term (annual) planning cycles, as well as in project cycles.	In Uganda, government manuals and guidelines exist for the implementation of capital projects. Everyone is supposed to follow these. UWASNET, as umbrella body for NGOs, promotes that these are also used by NGOs, but in practice there is patchy take-up by some NGOs. Even though these manuals emphasise the need for demand creation and participatory planning approaches, in reality, little attention is given to these software issues in project implementation.	
13. Capacity (resources, supply chain, structures, systems and procedures, etc.) to fulfil functions during the entire life cycle of service provision and to carry out governance functions	Apart from clear responsibilities, there must be capacity at the intermediate level for both service provision and governance functions. Capacity refers to human resources (management, technical assistants, private operators, hardware shops, etc.) within the area, as well as material (computers, vehicles, etc.). The type of capacity required differs along the stages of the life cycle and types of system. In the post-construction support phase, spare part supply chains are relevant for example, while during capital investment projects, hardware and machines are needed, alongside expertise in software.	In many countries, there may be lack of access to skills and services to maintain water systems. But, could equally apply to legal advice.	

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Principle	Explanation	Description of the sector for each principle. This would include the current status and trends therein, as well as the historical background. This column to be "filled out" for each country	Benchmark (to be developed at a later stage)
14. Embedding water services delivery in framework for integrated water resources management (IWRM)	Sustainability of rural water supply services is affected more and more by increased competition over water resources. Rural water supply services therefore need to take into account water resources issues, and in that being based on the principles of IWRM (Dublin principles). This implies that at levels above the community (sub-catchment, district, etc.) an assessment is made of available resources and how these affect service delivery. Both strategic planning at intermediate level and planning of capital works needs to be done within such a framework for IWRM. In addition, efforts need to go into promotion of representation of the rural water supply sector in platforms for water resources management. Under this element, an analysis should be made of how this is taken into account in services delivery. In many countries, this implies looking at the interface between local government and water resources institutions.	In South Africa, planning and allocation of water resources defines a Basic Human Needs Reserve for rural water supply, which needs to be taken into account during catchment allocation. Lack of appropriate water resources management institutions and regulations have led to many water supply systems affected by groundwater level decrease in different States in India.	
15. Appropriate technology options	Technology options must be appropriate for the physical and socio-economic environment. Under this element, the focus is on the range of options available to communities to support full coverage, sustainability and the ability to respond to changing demand for higher levels of service. A key issue is finding a balance between the development and use of innovative technologies and standardization to allow economies of scale, in for example the supply chain.	Zimbabwe has standardized rural water supply technologies, particularly the so-called bush pump. This has helped in setting up supply chains and improved spare part availability. However, it has also stifled technological innovation. The rope pump has become a sector standard in Nicaragua and has also helped to improve sustainability.	
Service provision level:			
16. Institutional arrangement for service provision	At community level, effective service providers need to be in place to manage the service. This can either be community-based organisations (CBOs), under the community-management approach, or other service provision management models (private operators, etc.). This element focuses on the type of providers that exist legally, as well as the type of contractual arrangements and regulations in place (service agreement, lease contract, etc.). Much of this should reflect national policy, but there is frequently local innovation and variation.	In Colombia, the law identifies four service delivery modalities (CBM, private, utility, municipal). In some countries there is the presumption that community water committees are formal entities, but in quite a number of cases they may have no legal standing, which can be problematic in a number of aspects.	

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Principle	Explanation	Description of the sector for each principle. This would include the current status and trends therein, as well as the historical background. This column to be "filled out" for each country	Benchmark (to be developed at a later stage)
17. Mechanisms and approaches for customer participation in the full life cycle of the service	The basis for sustainability is laid during capital works projects. During such works, demand is created for services, and capacity is developed at community level to operate and manage the services, in the form of CBOs or other local operators. Ample evidence shows the importance of participatory planning tools and approaches in this. The same applies to other phases in the life cycle. During the operation and maintenance this can come in the form of mechanisms for customer relations and feedback to service providers. Under this element, the focus is on the mechanisms and approaches for customer participation, and the quality of this, during the full life cycle.	Again, the community scorecard developed by WaterAid is one example of this type of accountability mechanism.	
18. Financial arrangements for water services provision	This element looks at the financial arrangements for water services provision. It clarifies expected customer contributions in different stages of the life cycle, including initial contributions to capital works, or other upfront investment arrangements. It includes the arrangements for sound financial management, such as the possibility for CBOs to open bank accounts, have access to commercial loans, billing software or audits by independent auditors.	Legally established CBOs in Colombia have to open a bank account, once they are established with the chamber of commerce. In Honduras, municipalities are supposed to ensure auditing of the accounts of CBOs.	

ANNEX B: LIST OF INTERVIEWEES AND WORKSHOP PARTICIPANTS ENGAGED WITH

- Bhagwan, J. (Water Research Commission)
- Van de Merwe Botha, M. (private consultant working to address problems related to treatment plants and municipal water services provision)
- Colvin, L. (independent consultant and key informant on Masibambane)
- Duma, N. (DWA)
- Evans, J. (DWA)
- Galvin, M. (Umphilo waManzi, & The Water Dialogues International Working Group South Africa)
- Gibson, J. (Maluti GSM, South Africa)
- Harris, K. (independent consultant and key informant on institutional and social development)
- Macleod, N. (eThekwini Municipality Authority, & The Water Dialogues South Africa National Working Group)
- Makhanya, P. (DWA)
- Martin, K. (The Water Dialogues International Secretariat)
- Mas, J.P. (Suez Environment, & The Water Dialogues International Working Group)
- Mettler, J. (South African Local Government Association, SALGA)
- Moraka, W. (South African Local Government Association, SALGA)
- Muller, H. (DWA)
- Munnik, V. (Mvula Trust)
- Nyamugasira, W. (African Monitor, & The Water Dialogues International Working Group)
- Pretorius, B. (United Cities and Local Governments of Africa)
- Reeve C. (independent consultant)
- Rudin, J. (SAMWU, & The Water Dialogues South Africa National Working Group)
- Smith, L. (Mvula Trust)
- Vermeulen, A .(PD Naidoo & Associates (Pty) Ltd)
- Wilson, I. (Mvula Trust)

ANNEX C: STRATEGIC FRAMEWORK FOR WATER SERVICES TARGETS

Target		Means of verification	Responsibility (To achieve target)
ACCESS TO SERVICES			
1	All people in South Africa have access to a functioning basic water supply facility by 2008.	Census; sample surveys undertaken by DWAF.	Water services authorities supported by DWAF.
2	All people in South Africa have access to a functioning basic sanitation facility by 2010.	Census; sample surveys undertaken by DWAF.	Water services authorities supported by the DWAF and the National Sanitation Task Team.
3	All schools have adequate and safe water supply and sanitation services by 2005.	Reporting by education departments. Results of random sample survey of schools, undertaken annually by DWAF.	Provincial Education Departments supported by National Department of Education and Department of Public Works.
4	All clinics have adequate and safe water supply and sanitation services by 2007.	Reporting by health departments. Results of random sample survey of clinics, undertaken annually by DWAF.	Provincial departments of health supported by National Department of Health and Department of Public Works.
5	All bucket toilets are eradicated by 2006.	Census.	Water services authorities supported by DWAF.
6	Investment in water services infrastructure in the sector totals at least 0.75% of GDP.	Intergovernmental fiscal review.	National Treasury.
EDUCATION AND HEALTH			
7	Hygiene education and the wise use of water are taught in all schools by 2005.	Curriculum includes hygiene education and wise use of water.	National Department of Education.
8	70% of households with access to at least a basic sanitation facility know how to practise safe sanitation by 2005 (and 100% by 2010).	Random household sample surveys undertaken by DWAF every three years, starting in 2004.	Water services authorities, supported by DWAF.
FREE BASIC SERVICES			
9	Free basic water policy implemented in all water services authorities by 2005.	Annual reporting by water services authorities; random audits by DWAF.	Water services authorities.
10	Free basic sanitation policy implemented in all water services authorities by 2010.	Annual reporting by water services authorities; random audits by DWAF.	Water services authorities.
INSTITUTIONAL DEVELOPMENT AND PERFORMANCE			
11	A national institutional reform strategy is developed by June 2004.	Cabinet memorandum submitted and accepted.	DWAF (together with SALGA[12] and SAAWU[13]).
12	The institutional reform of regional water services providers is completed by 2013.	Regional water services providers are established where appropriate.	DWAF (together with SALGA and SAAWU).
13	All assets of water services schemes are transferred from DWAF to water services authorities by 2008.	DWAF asset register.	DWAF.

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[12] South African Local Government Association.

[13] South African Association of Water Utilities.

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Target		Means of verification	Responsibility (To achieve target)
14	By-laws are promulgated in every water services authority area by 2005.	Register of by-laws (held by DWAF).	Water services authorities.
15	All water services authorities report annually on progress against their water services development plans by 2005.	Progress reports submitted to DWAF. Register of progress reports (held by DWAF).	Water services authorities.
16	All external water services providers are rendering services in terms of a contract with the applicable water services authority by 2005.	Contracts are lodged with DWAF.	Water services authorities.
17	All water services providers are rendering services in terms of a business plan by 2005.	Business plans lodged with water services authorities. Random audits by DWAF.	Water services authorities.
18	All water services authorities have adopted a set of key performance indicators that include those set out in Annex 2 by 2005 and report on these annually.	Reports lodged with DWAF.	Water services authorities.
19	DWAF reports on sector development and progress annually.	Annual report by DWAF.	DWAF.

ANNEX D: DEFINITIONS OF TERMS

Average incremental cost	The discounted value of future supply costs divided by the (similarly discounted) amount of additional water/wastewater to be supplied/treated.
Basic sanitation facility	The infrastructure necessary to provide a sanitation service which is safe, reliable, private, protected from the weather, ventilated, keeps smells to the minimum, is easy to keep clean, minimises the risk of the spread of sanitation-related diseases by facilitating the appropriate control of disease-carrying flies and pests, and enables safe and appropriate treatment and/or removal of human waste and wastewater in an environmentally sound manner.
Basic sanitation service	The provision of a basic sanitation facility which is easily accessible to a household; the sustainable operation of the facility, including the safe removal of human waste and wastewater from the premises where this is appropriate and necessary; and the communication of good sanitation, hygiene and related practices.
Basic water services	A basic water supply service and/or a basic sanitation service.
Basic water supply facility	The infrastructure necessary to supply 25 litres of potable water per person per day supplied within 200 metres of a household and with a minimum flow of 10 litres per minute (in the case of communal water points) or 6,000 litres of potable water supplied per formal connection per month (in the case of yard or house connections).
Basic water supply service	The provision of a basic water supply facility, the sustainable operation of the facility (available for at least 350 days per year and not interrupted for more than 48 consecutive hours per incident) and the communication of good water-use, hygiene and related practices.
Bulk water services provider	A bulk water services provider is any person who has a contract with a water services authority or another water services provider to sell water to, and/or accept wastewater for the purposes of treatment from, that authority or provider.
Capacity building grant	A consolidated capacity building grant administered by DPLG.
Civil society	That part of the society that is not part of the state. Organisations of civil society are all formed voluntarily by citizens on the basis of common concerns and interests.
Community-based water services provider	A not-for-profit organisation situated within a defined community that is mandated by that community to provide a specific municipal service to that community on behalf of the municipality, provided that (1) all members of the governing body of the organisation are nominated members of the community and are permanently resident within the community, (2) all employees of the organisation are members of the community and are permanently resident within the community, and (3) the area constituting the community is defined by the municipality.
Consumer charter	A statement by a water services provider that sets out the duties and responsibilities of both the water services provider and consumers with respect to each other.
Consumer contract	The contract, concluded or deemed to be concluded, between the water services authority or water services provider and an end consumer for the provision of water services, incorporating the rights and obligations of the parties as set out in the water services authority's by-laws and, where appropriate, the conditions of supply of the water services provider. (A consumer charter can take the place of individual consumer contracts.)
Economic costs	The direct (financial) and indirect costs associated with the provision of the service. Indirect costs include environmental and other externalities and economic opportunity costs.
Financial costs	All financial costs directly associated with the provision of the service including (but not limited to) operating costs, maintenance costs, depreciation costs, finance costs and necessary and prudent financial provisions (to account for bad debt, for example).
Formal connection	A connection approved by a water services provider including any connection which is formally registered with a water services provider.

Industrial wastewater	Wastewater arising from mining, manufacturing, electricity generation, land-based transport, construction or any related activities. (Consistent with definition of disposal of industrial effluent in the Water Services Act.)
Industrial water	Water used for mining, manufacturing, generating electricity, land-based transport, construction or any related purpose. (Consistent with definition of industrial use in the Water Services Act.)
Integrated development plan (IDP)	A municipal plan as defined in the Municipal Systems Act of 2000.
Interim sanitation service	A temporary sanitation service is an interim measure and should provide privacy to the user, be readily accessible and in close walking distance, and provide for the safe disposal of human waste.
Interim water supply service	A temporary water supply service is an interim measure and should provide, within reasonable walking distance, water of an adequate quality from a health point of view.
Local government equitable share	A constitutionally protected unconditional grant from national government to local government to support the operating costs of basic services.
Local water services provider	A water services provider providing water services to only one water services authority.
Municipal infrastructure grant	A conditional grant from national government to support investments in basic municipal infrastructure.
Potable water	Water used for drinking or domestic purposes of a quality consistent with SABS 241 (Specifications for Drinking Water) as may be amended from time to time.
Regional scheme	A water services scheme that crosses water services authority boundaries.
Regional water services provider	A water services provider that operates a regional scheme.
Retail water services provider	Any person who has a contract with a water services authority to assume operational responsibility for providing water services to one or more consumers (end users) within a specific geographic area.
Sanitation services	The collection, removal, disposal or treatment of human excreta and domestic wastewater, and the collection, treatment and disposal of industrial wastewater. This includes all the organisational arrangements necessary to ensure the provision of sanitation services including, amongst others, appropriate health, hygiene and sanitation-related awareness, the measurement of the quantity and quality of discharges where appropriate, and the associated billing, collection of revenue and consumer care. Water services authorities have a right but not an obligation to accept industrial wastewater from industries within their area of jurisdiction.
Service delivery agreement	A contract between a water services authority and a water services provider for the delivery of municipal services, or between water services providers.
Wastewater	Used water resulting from the use of water for domestic or other purposes which may include or exclude human excreta.
Water board	A water services provider which is an organ of state and whose primary function is that of bulk water services provider.
Water resource	Any water resource as defined in the National Water Act.
Water sector	Includes both water resources and water services.
Water services	Water supply services and/or sanitation services, or any part thereof. (The definition of what constitutes water services was extended to include all aspects of the service necessary for the provision of an adequate service, specifically the business processes (such as billing and revenue collection) and the communication of what constitutes good hygiene and water- and sanitation-related consumer practices.)

Water services agent

A legal entity that provides services to water services providers. The distinguishing characteristic of water services agents is that they do not assume full operational responsibility for the physical provision of water and/or sanitation services, but rather provide support services (for example, meter reading) to water services providers.

Water services authority

Any municipality that has the executive authority to provide water services within its area of jurisdiction in terms of the Municipal Structures Act 118 of 1998 or the ministerial authorisations made in terms of this Act.

Water services development plan

A plan for water and sanitation services in terms of the Water Services Act.

Water services institution

A water services authority and/or a water services provider.

(It is useful to restrict the term water services institution to just a water services authority and/or a water services provider. Previously, water services intermediaries were included in the definition of water services institution. The responsibilities placed on water services intermediaries are different in nature to those placed on water services providers and water services authorities and hence it is appropriate to distinguish between these in the more generic definition which is used for the sake of conciseness.)

Water services intermediary

Any person who is obliged to provide water services to another in terms of a contract where the obligation to provide water services is incidental to the main object of that contract.

Water services provider

A water services provider is:

- any person who has a contract with a water services authority or another water services provider to sell water to, and/or accept wastewater for the purposes of treatment from, that authority or provider (bulk water services provider); and/or
- any person who has a contract with a water services authority to assume operational responsibility for providing water services to one or more consumers (end users) within a specific geographic area (retail water services provider); or
- a water services authority which provides either or both of the above services itself.

Water supply services

The abstraction from a water resource, conveyance, treatment, storage and distribution of potable water, water intended to be converted to potable water and water for industrial or other use, to consumers or other water services providers. This includes all the organisational arrangements necessary to ensure the provision of water supply services including, amongst others, appropriate health, hygiene and water-related awareness, the measurement of consumption and the associated billing, collection of revenue and consumer care. Water services authorities have a right but not an obligation to provide industrial water to industries within their area of jurisdiction.

(This definition of water supply services no longer restricts water supply services to the supply of potable water but includes all water supplied by or on behalf of a water services authority.)

About Triple-S

Triple-S (Sustainable Services at Scale) is an initiative to promote 'water services that last' by encouraging a shift in approach to rural water supply—from one that focuses on implementing infrastructure projects to one that aims at delivering a reliable and indefinite service. The initiative is managed by IRC International Water and Sanitation Centre in the Netherlands in collaboration with agencies in different countries and with funding from the Bill & Melinda Gates Foundation.

About *South Africa: Lessons for Rural Water Supply—Assessing progress towards sustainable service delivery*

This study, commissioned by Triple-S, seeks to shed light on the progress in achieving scaled-up sustainable rural service delivery. It examines a number of service delivery models currently being implemented in South Africa, by identifying their strengths, challenges and limitations. The study also identifies key conclusions for achieving more sustainable service delivery in South Africa. It is one of 13 country studies done as part of a broader international study.

For more information and access to the other country reports, literature reviews, and the synthesis document please visit http://www.waterservicesthatlast.org.

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