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Private Operators delivering performance and efficiency for water-users and public authorities

Jack Moss - AquaFed

Introducing AquaFed

All sizes

AquaFed

THE INTERNATIONAL FEDERATION OF
PRIVATE WATER OPERATORS

www.aquafed.org

All countries

**All business
models**

AquaFed
THE INTERNATIONAL FEDERATION OF
PRIVATE WATER OPERATORS



URBAN

AquaFed's Mission

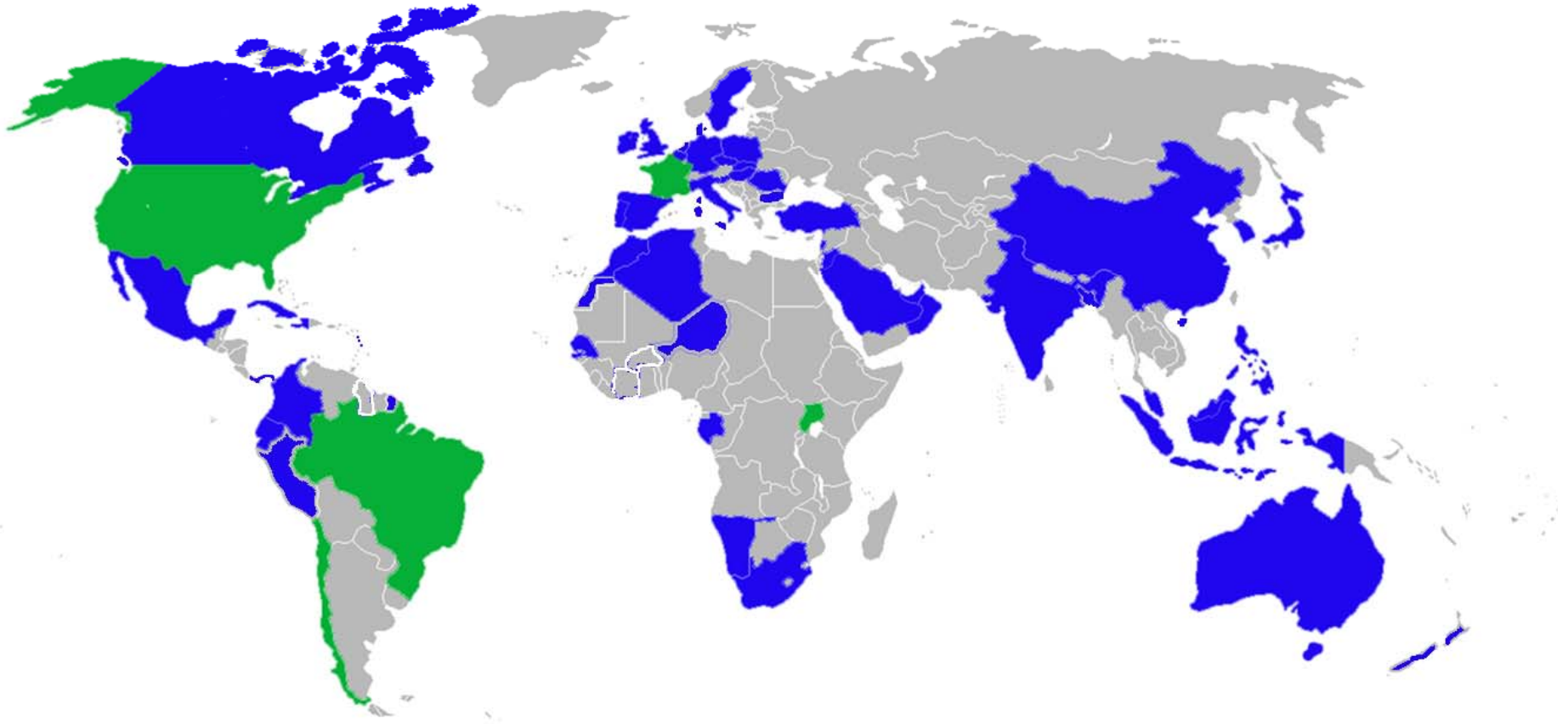
***To connect private water operators, international public institutions
& civil society organisations***

- ① Provide a **channel** between private water & wastewater providers and **international stakeholders**
- ② **Contribute to solving** the world's water issues by working with the international community and **sharing the expertise** of the private sector
- ③ **Explain** various PSP models so they are **understood and available as options** for public authorities to **choose**

Introducing AquaFed

- Accredited EU/EC and UN ECOSOC
- Our Members are instruments of public policies
- Our positions are not exclusive to the private sector
 - Global contribution to solving the challenges of delivering public water and sanitation services

AquaFed Members



AquaFed
THE INTERNATIONAL FEDERATION OF
PRIVATE WATER OPERATORS

National Members
Corporate Members

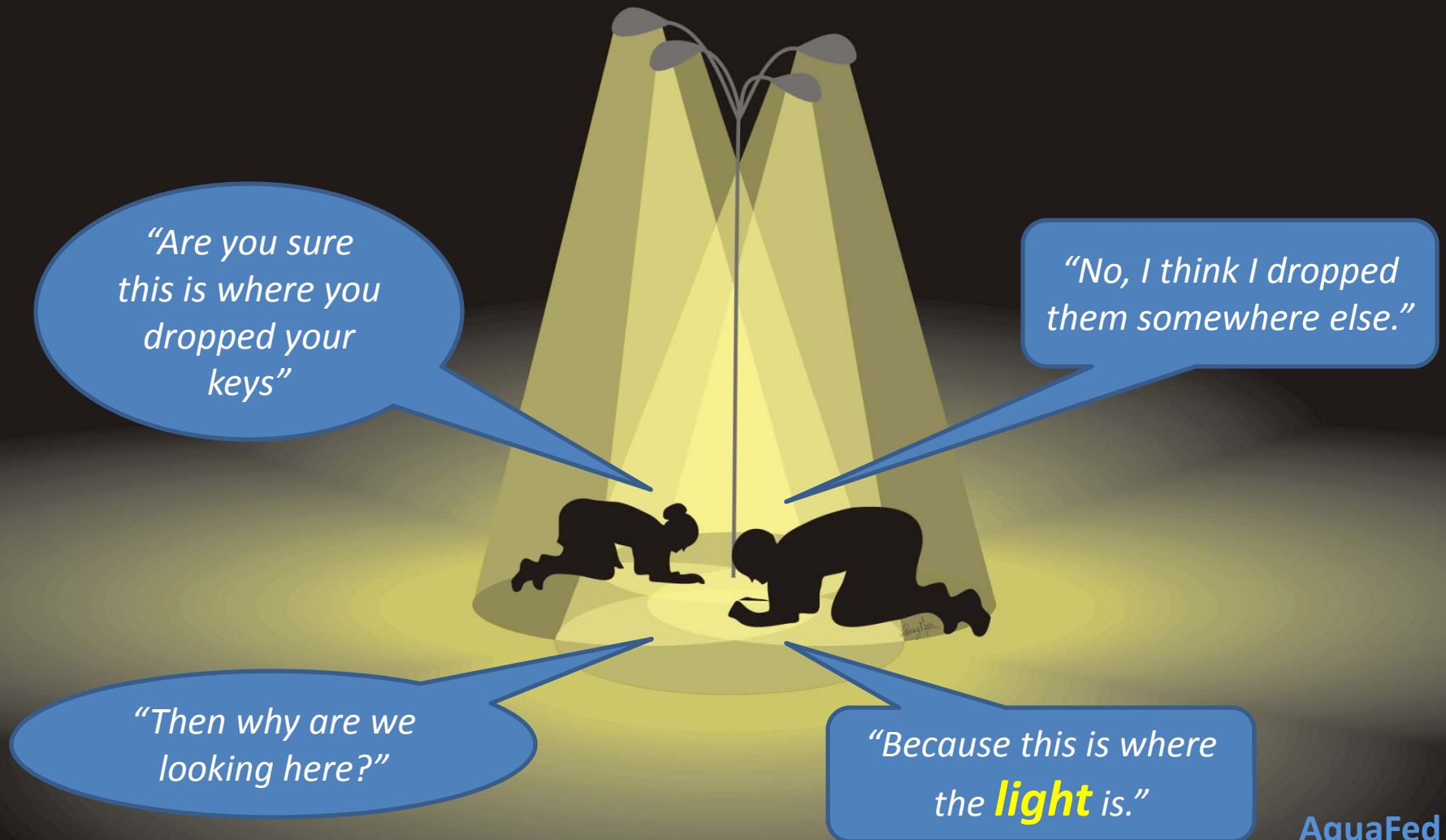


URBAN

Public and Private water operators face the same constraints

- The majority of difficulties that face operators of public water and sanitation services are the same for all operators – Public, Private, or Mixed
- AquaFed's aim is to identify the difficulties and help find solutions
 - Lack of political commitment
 - Un-realistic, contradictory or changing objectives
 - Short-term vision
 - Unsustainable economics
 - Weak regulation

The Lamp-post Syndrome



The Lamp-post Syndrome

Regulation

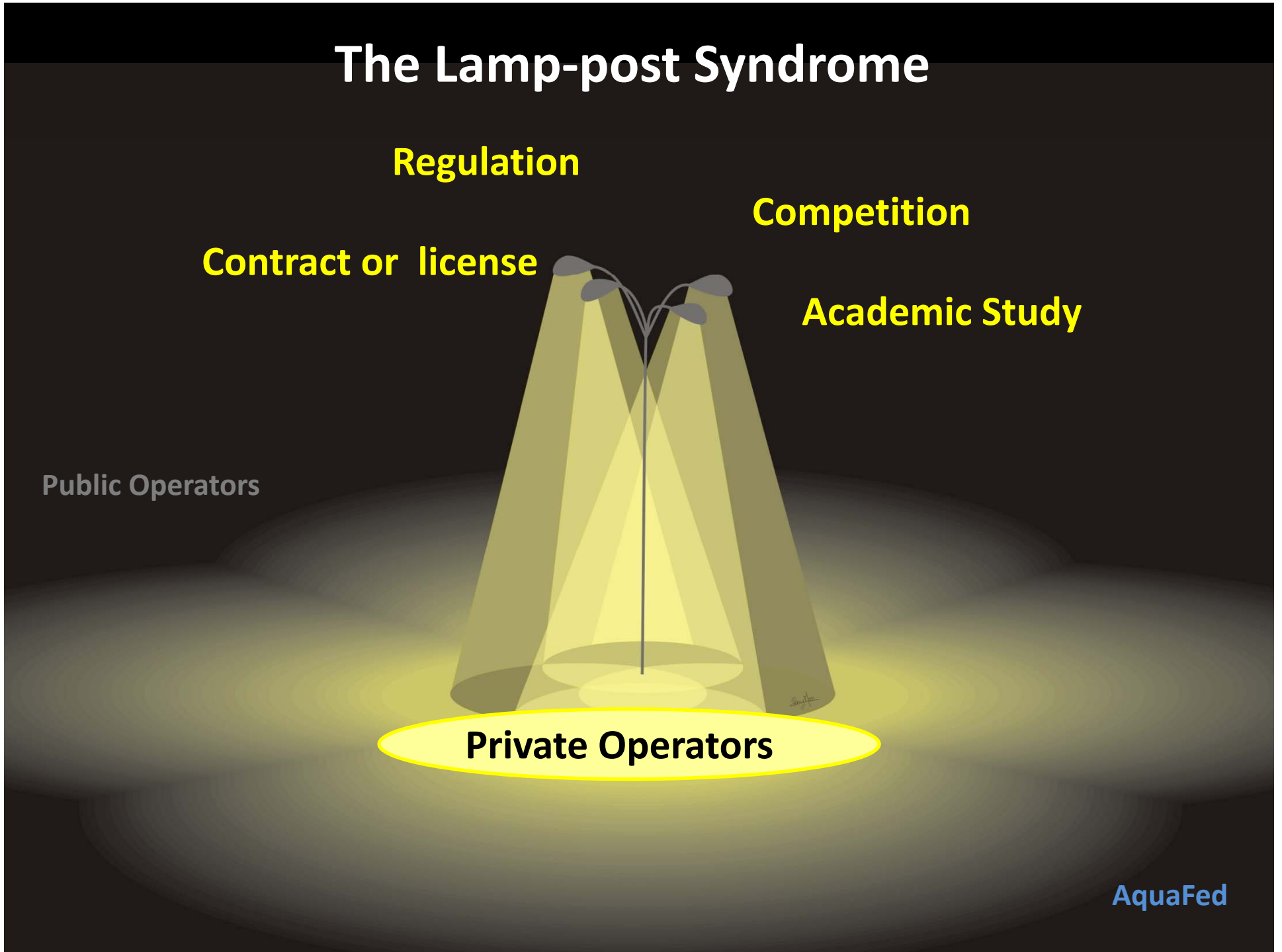
Competition

Contract or license

Academic Study

Public Operators

Private Operators



4 lights illuminate only a minute part of the sector

The lights of:

Regulation

Competition

**Contract
or license**

**Academic
Study**

**PPP Contracts
& Regulated Utilities**

Direct Public

Indirect Public

Semi-formal

Informal

"Market" share 50%

< 10%

40%

**Unregulated,
Uncontested
limitless
Natural Monopolies**

**Lightly regulated
Uncontested
Mostly limitless
Natural Monopolies**

**Time Bound
Regulated & Contested
Natural Monopoly
Service**

**Partially regulated
Private solution to
need for service**

**Unregulated
Open Market response
to real needs**

AquaFed

Study of performance of PSP arrangements in Water and Sanitation Services

AquaFed

THE INTERNATIONAL FEDERATION OF
PRIVATE WATER OPERATORS

Private operators
delivering performance
for water-users
and public authorities



Examples from across the world

➔ Evidence of good results obtained by public authorities who have engaged private operators

➔ Based on facts and measurable achievements

➔ Showing diversity of private operators

➔ Released in the WWF6 in Marseilles



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Methodology for PSP cases studied

- The cases presented in this brochure illustrate **many types of performance** resulting from private management of public services (PSP)
- In each field case **only a few types of performance achieved** are described even if other useful results have been obtained
- These cases have been selected to show the **wide diversity of countries, types and sizes of partnerships and operators**
- There are many other successful cases in the world



Dimensions of performance studied (1/2)

1. Implementing the human right to safe drinking water

- Extending access to water to un-served people Improving accessibility of water for everybody
- Improving availability of water
- Securing water safety
- Improving acceptability of water
- Contributing to affordability of water services
- Ensuring more equitable water supply

2. Improving wastewater management

- Extending wastewater collection
- Protecting the environment from wastewater pollution

Dimensions of performance studied (2/2)

3. Improving relationship with water-users

- Satisfying users' expectations
- Making life of users easier

4. Improving efficiency of water utilities

- Reducing leakage and water losses
- Improving energy efficiency
- Securing revenue streams
- Managing infrastructure assets sustainably
- Optimising economics of public services

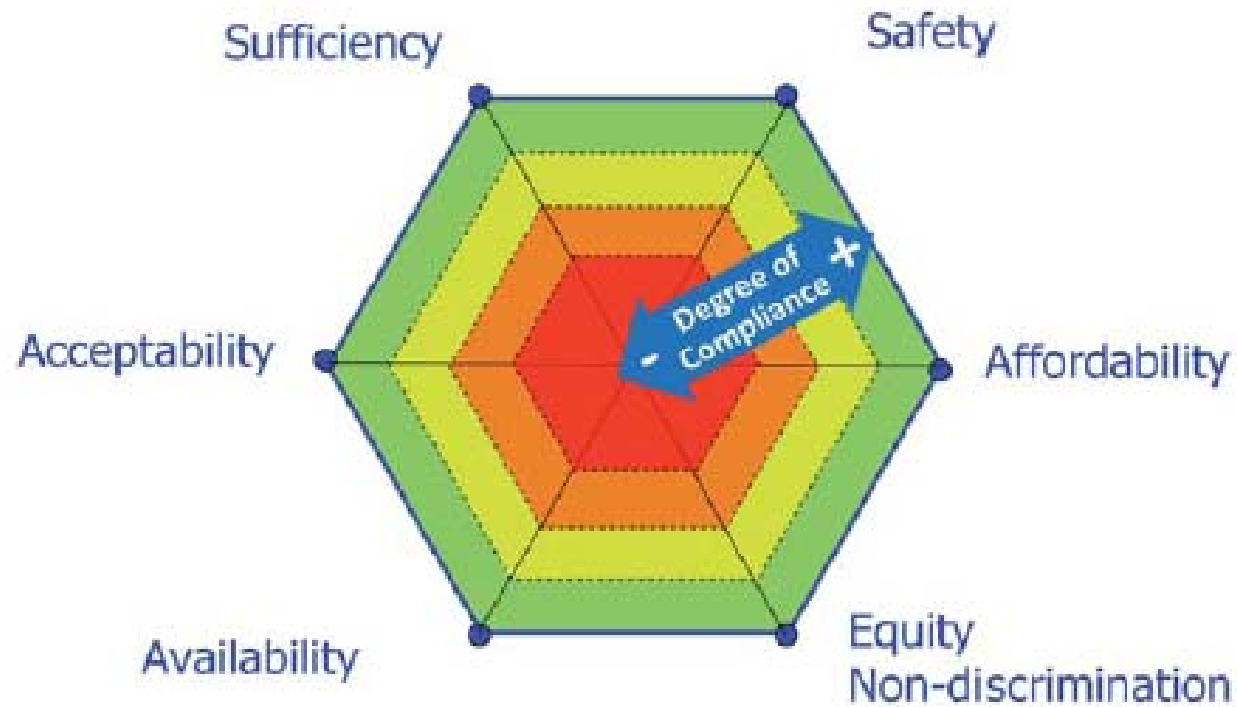
5. Raising and maintaining staff capacity

6. Responding to natural disasters

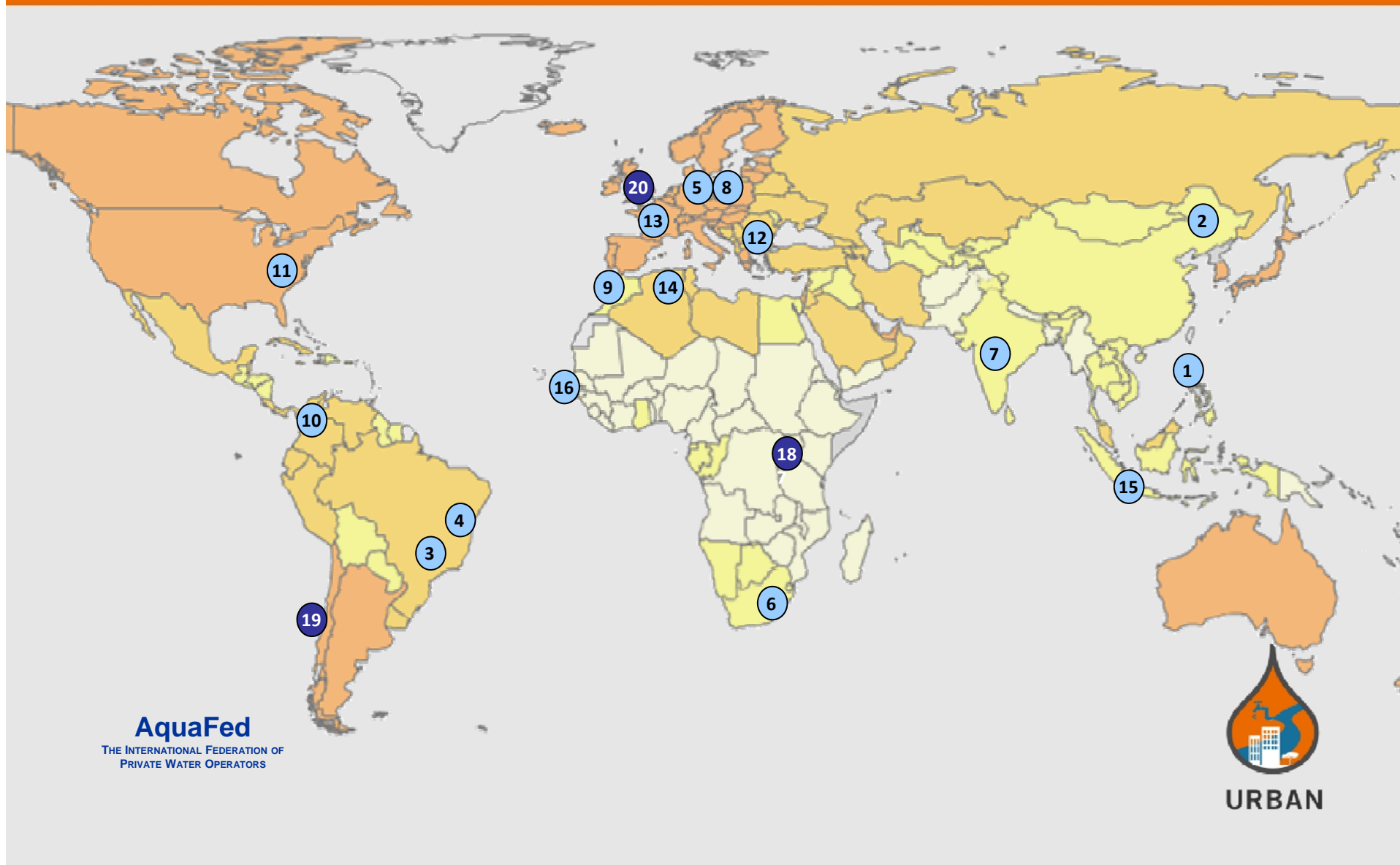


Focus on Dimension 1 : Implementing the human right to safe drinking water

A multi-dimensional right



Cases covered in the study : global map



List of water field cases studied

Field cases

N°	Country	Area	Operator	Population in the area
1	The Philippines	Apalit	Balibago	103,000
2	China	Shenyang SEDA	Shenyang Sembcorp Water	127 000
3	Brazil	City of Limeira	Foz do Brasil	280,000
4	Brazil	City of Petropolis	Aguas do Brasil	290,000
5	Germany	Rostock	Eurawasser	310,000
6	South Africa	Mbombela	Sembcorp Silulumanzi	440,000
7	India	Latur	SPML	500,000
8	Poland	Gdansk	Saur Neptun Gdansk	510,000
9	Morocco	Tangiers	Amendis	900,000
10	Colombia	City of Cartagena	Acuacar	1,000,000
11	USA	Part of Pennsylvania	Aqua America	1,400,000
12	Romania	City of Bucharest	Apa Nova Bucuresti	2,000,000
13	France	City of Paris (Central Paris)	Veolia Water / Suez Environnement	2,200,000
14	Algeria	Algiers (city and wilaya)	SEAAL + Suez Environnement	3,200,000
15	Indonesia	West Jakarta	Palyja	4,500,000
16	Senegal	Urban Senegal	Sénégalaise des Eaux	5,500,000

Cases at country level and global level

Country level

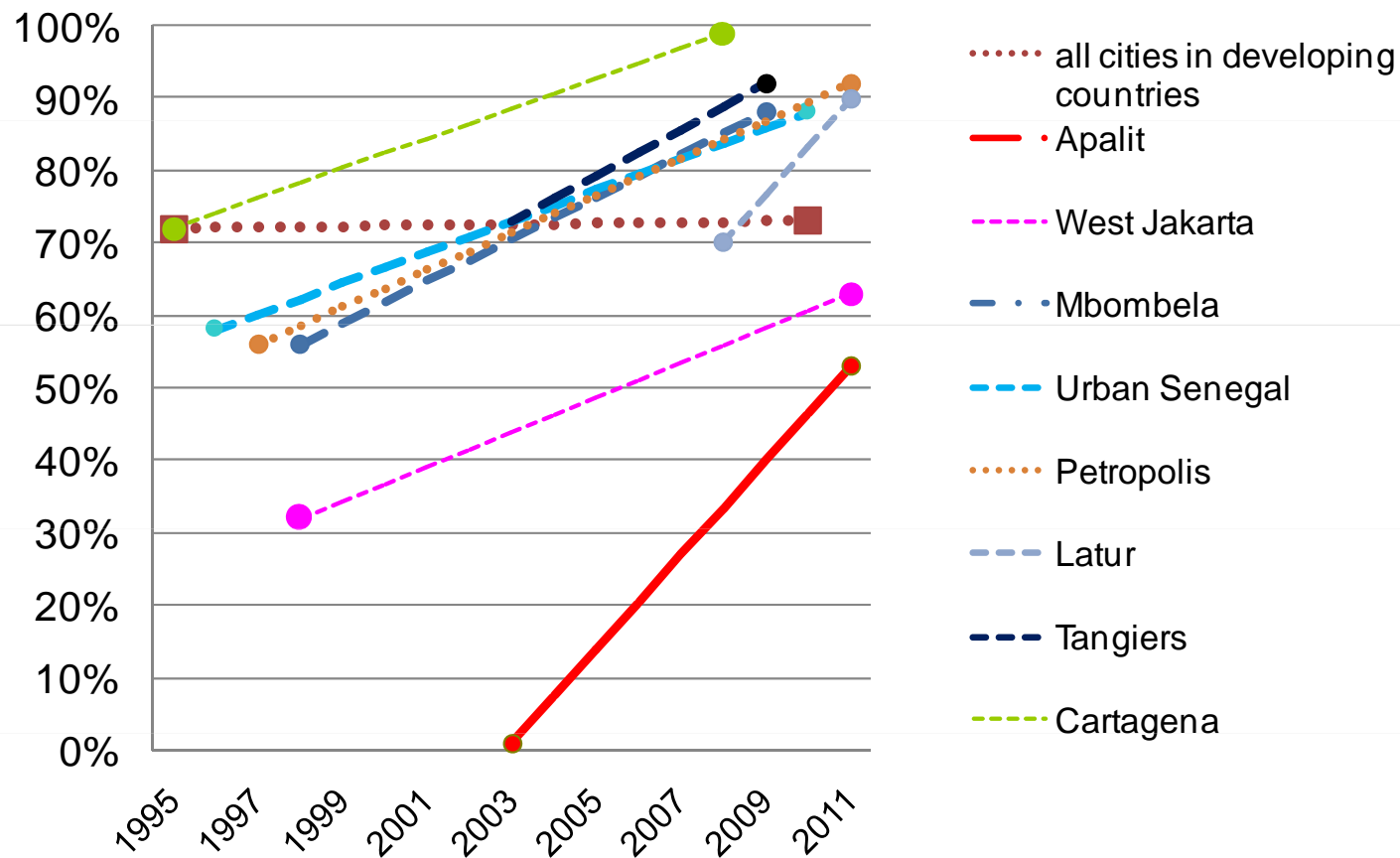
N°	Country	Area	Operator	Population in the area	Page
18	Uganda	Small towns	Members of APWO	880,000 ¹	48
19	Chile	Urban Chile	Members of ANDESS	15,000,000 ²	50
20	United Kingdom	England & Wales	Members of Water UK	55,000,000 ³	52

Global level

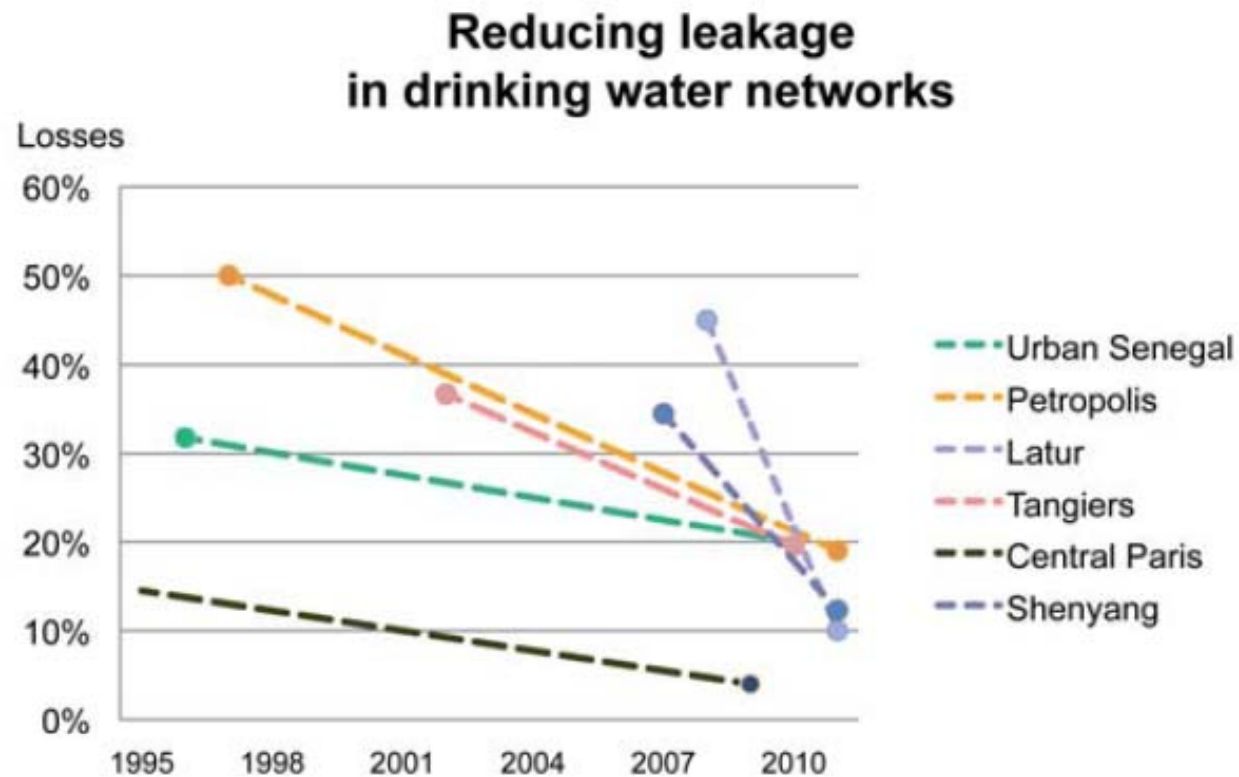
N°	Country	Area	Operator	Population in the area	Page
21	Developing Countries	Locations supplied by private operators	Many private operators	160,000,000	56

A few illustrations of the findings : Dimension 1

Increasing water supply coverage in cities



A few illustrations of the findings : Dimension 4 Improving efficiency of water Utilities



A few illustrations of the findings : Dimension 4

Improving efficiency of water Utilities

Other significant examples :

Energy optimisation is key : *In **Bucharest** the annual electricity consumption has been reduced by 75% between 2000 and 2010*

Bill collection : Water utilities must collect the monies due to them from users if they are to deliver a good service : *cases of **Mbombela, South Africa**, and small towns in **Uganda** provide examples of significant improvements in billing and cash collection*

Asset stewardship : *In the **Central Paris** water distribution case more than 50% of the distribution networks were renewed by the private water operators and the average “functional” age of the distribution networks is now 21 years younger than it was at the beginning of the PPP contracts 25 years before.*

Focus on Dimension 5 : Raising and maintaining staff capacity

Algeria : Algiers :

- Transfer of know-how to the 4,500 employees of the company and its 1000 managers part of the contract,
- 55,000 training days undertaken from 2006 to 2011 , through trained trainers (70% of them Algerian)

Morocco : Tangiers :

- Massive training effort : 160,000 hours of training between 2002 and 2010 , 26 hours of training per staff per year
- Construction of a new training center (1,300 m2) allowed to deliver official diploma in water, sewerage and electricity

Sample of form for a PPP case : South Africa - Mbombela

Mbombela, South Africa

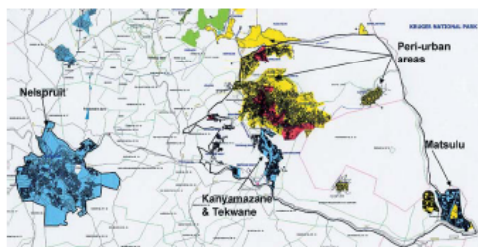
Population: 440,000

Organising authority: Mbombela Local Municipality. In 2000 Greater Nelspruit Transitional Local Council (created in 1994) merged with White River and Hazzyview to become Mbombela Local Municipality.

Water and sewerage operator: Sembcorp Silulumanzi.

Location: Greater Nelspruit area. Nelspruit is the capital of the province of Mpumalanga, South Africa. The concession covers the city of Nelspruit, and the main Nsikazi townships of Kanyamazane, Tekwane, Msogwaba and Matsulu. It also extends to other peri-urban areas such as Zwelisha, Mpakeni and Luphisi.

Total population in concession area is 440,000 of which currently 380,000 are receiving the services (2011).



PPP description

Sembcorp Silulumanzi (formerly known as Greater Nelspruit Utility Company) is the water utility in charge of the Greater Nelspruit area. It is a subsidiary of Sembcorp Industries of Singapore.

On the advice of the Development Bank of Southern Africa, a request for proposal was issued in 1996. The Transitional Local Council selected Sembcorp Silulumanzi by a process of competitive bidding among 5 other companies and in 1999 the contract was signed. The concession agreement was approved by

the Department of Constitutional Affairs and the Department of Water Affairs and Forestry. Operations started in November 1999 and the duration of the contract is 30 years.

Sembcorp Silulumanzi operates, maintains, replaces and upgrades the assets leased from the council. The assets will be transferred back to the council at no cost and in the same or better condition at the end of the concession. The PPP is regulated by a Concession Monitoring Office within the municipality.

Context and PPP objectives

Nelspruit Town population was 25,000 in 1990 and the majority of households were mid to upper class. In 1994, when Greater Nelspruit Transitional Local Council was created, the area increased by over 8 times and the population to 250,000. The total income of the area, however, was only 38% greater. This was due to the fact that the new areas included were less wealthy and had a significant proportion of informal households, particularly the peri-urban areas which had 100% informal households. Consequently, when the operations started in 1999, 56% out of the 43,000 households were informal. Thus, the access to water service was limited, 44% of all households and almost 80% of informal households did not have access to water supply.

Some of the main performance targets assigned to the operator to be achieved by 2009 were:

- 24 hour water supply to all formal households by 2009
- to use best efforts to improve the number of households in informal areas with a 24-hour water supply
- to comply with national water quality standards
- to improve revenue collection
- annual customer satisfaction survey and follow-up actions to address issues identified
- community-oriented training and development programmes

Basic water supply has been expanded from 56% of the population to 89% in only 5 years.

The proportion of informal houses with no access to a water service reduced from 79% to 9% from 1999 to 2009, in spite of the increase of informal houses.

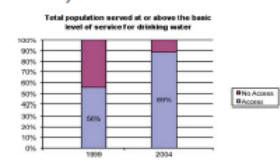
The proportion of revenue collection out of the total bills increased from 73% to 78%.

Sembcorp Silulumanzi is one of the few water systems to obtain the Blue and Green Drop awards.

- Extending access to water to un-served people
- Ensuring more equitable water supply
- Securing revenue streams

Extending access to water to un-served people

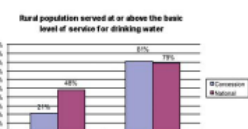
The company achieved the first target: areas with a 100% of formal houses, such as Nelspruit and Tekwane, had full coverage of basic water supply, 24 hours a day and 7 days a week, by 2009. Over and above the 24-hours services, the operator was successful in connecting all customers in these two areas to sewer network. Overall performance figures are also remarkable, especially considering the demographic expansion. The population has grown by 65% between 1999 and 2009, with most of this growth concentrated in informal areas, an increase of 20,000 informal houses. In spite of the high level of growth of the population, the concessionaire improved the coverage of basic water supply from 56% to 89% of all households in only the first five years of the concession.



Equity & non-discrimination

It is important to note the efforts made by the company to supply water in areas where most of the houses are informal. In 1999, none of the informal houses received water 24 hours a day, and 79% of informal houses did not receive water at all and the remainder only received water irregularly. In 2009, only ten years later, in spite of the growth in number of informal houses, the proportion of informal houses with no access to water supply was reduced significantly from 79% to only 9% and 81% of informal houses were receiving water every day.

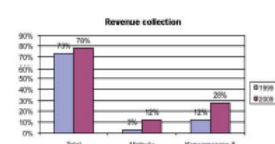
The same improvement can be seen in the statistics in rural areas. In 1999, only 21% of the rural population of Mbombela Concession was served at or above the basic level of service. This figure is far lower than the average national statistics, where 48% of rural population had access to water. After the first ten years of the concession, the percentage of rural population with at least a basic level of service increased to 81%, which is above the national average of 79% in 2009.



Securing Revenue Streams

For political reasons, the percentage of revenue collection was low in Mbombela. This was because refusal to pay for any municipal or government provided services was used as a form of protest against the apartheid government. Without the payments it was very difficult to support the development and operation of the water and sanitation systems. One of the main goals of the concession was to convert this strong culture of non-payment for water services. Among the contractual requirements to be achieved by 2009 there were targets for revenue collection for each area.

The efforts of the concessionaire to address this problem have allowed an increase in the total revenue collection from 73% of the total bills in 2000-2001 to 78% in 2008-2009. The best improvements have been in Matsulu and Kanyamazane and Tekwane as shown in the following graph.



Other significant improvements

One of the main improvements is the water quality. The Sembcorp Silulumanzi systems obtained the South African Department of Water and Environmental Affairs's Blue and Green Drop awards. This was due to the good condition of infrastructure, thanks to a good maintenance program, including efforts and investment spent to upgrade the existing infrastructure. All that having tariff levels similar or lower than comparable municipalities across South Africa.

See ref. 29

A PPP case in Africa : South Africa – Mbombela : Main achievements

Water and sewerage operator: **Sembcorp Silulumanzi**.

Location: **Greater Nelspruit area. Nelspruit** : provincial capital Mpumalanga, South Africa.

Total population in concession area is **440,000** of which currently 380,000 are receiving the services (2011)

Coverage : Basic water supply has been expanded from **56%** of the population to **89%** in only 5 years.

The proportion of informal houses with no access to a water service reduced from 79% to 9% from 1999 to 2009, in spite of the increase of informal houses

Revenue collection : The proportion of revenue collected / total bills increased from 73% to 78%

Water quality : **Sembcorp Silulumanzi** is one of the few water systems to obtain the Blue and Green Drop awards.

World Bank report on PPPs in Water:

> 25 million people have gained Access to drinking water network

Thanks to 36 PPP contracts serving initially **48 million** people in various developing countries, **24 million** people, **mostly poor**, have gained access to tap water

From : 48 to 72 million : increase of around **50%** in less than 10 years

Also summarised in the study

Source: World Bank Report, P. Marin, 2009

Summary and take away message

→ Cases studied show that public Authorities can obtain outstanding results from engaging private water operators

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