

# Our water, our waste, our town

Supporting civil society to engage in urban water and sanitation reforms

# 3

## Management options available to government in reforms

This section explores the pros and cons of the various management options open to governments when tackling water and sanitation reform. They can either plan to turn around public utilities, or choose from a variety of different contracts to engage the private sector in service delivery.

# Management options available to government in reforms

## Part one: Background

There are two main ways that urban water systems can be run:

1. As public utilities
2. As profit-making private companies

There is also a range of other options such as cooperatives and social businesses, ie businesses that reinvest their profits in the business in order to achieve social goals rather than benefit their shareholders.

The public sector-run utility is by far the most common type of urban water service delivery around the world. However, in many countries, particularly in developing countries, the public sector is criticised for poor service. Several stakeholders agree there is a rationale for both water and sanitation sector supply side reforms. Until recently, the World Bank and other international finance institutions argued four points:

1. There is a need for massive investments in urban water supply, sewerage and sanitation
2. Major changes in the ways water utilities operate are pre-requisites for investments
3. These changes are required urgently

4. Private sector participation, (including its most extreme form – privatisation), would accelerate the introduction of modern management techniques and is the most effective means by which such changes could be introduced

The debate over privatisation and the various incentives for attracting multinational companies and private sources of finance to invest in public water utilities has dominated utility reform since the 1990s.

But things are changing. In 2004, the World Bank said it would lend money to water utilities regardless of what management model they used as long as the schemes proposed were sound.

Increasing attention is now being given to reforming public utilities. Most people have accepted that the public sector is going to be the main provider of water systems in the foreseeable future. Therefore public utilities must be improved if the public are to be better served. Indeed, many of the potential benefits of privatised water systems can be incorporated into public utilities. And as times change, some water systems are beginning to contain elements of social businesses.

## Exercise 3.1



### Thinking about management models

Before you read any more of this section of the manual, stop and think about why there has been extensive debate about different options of delivering water services: public, private, cooperative, social. What are your initial ideas as to why this is? Brainstorm ideas, as a group, for 20 minutes.

### Are reforms pro-poor?

Poor communities need an adequate and reliable supply of water at an affordable price. The central questions for any reform should be whether and how effective it is in improving poor people's access to affordable water and sanitation services. CSOs can judge proposed reforms by considering the key criteria below or issues of concern to the urban poor.

Proposed reforms that are pro-poor should include:

- A priority on expanding the water network to poor neighbourhoods and assisting residents to have connections
- The utility accepting a Universal Service Obligation ie responsibility for serving all of the city or town, especially those areas beyond the water supply network which require service by other methods
- A priority on providing adequate levels of services to poor neighbourhoods
- A guarantee of good quality water
- Tariff reform to ensure affordable prices for poor people and free water for destitute people
- A commitment to higher standards of environmentally responsible water resource management, eg in wastewater treatment and management of urban wetlands
- Stronger management of the water utility, such as:
  - increased financial and management autonomy
  - improving corporate oversight and public reporting
  - setting clear and agreed performance targets
  - increased customer service orientation
- Good governance – expanded opportunities for all sections of the city or town to have a voice in setting investment priorities and guidelines for operations; full and timely reporting on performance etc
- Separation of roles (ownership, operations, policy setting, economic regulation, environmental regulation, finance etc)

- Incentives for management and staff to achieve expanded

coverage and improved service levels

## Part two: Public utility turnaround model

Over 90% of urban water supply services are run as public utilities. Many face difficult management challenges and provide very poor services. Public water utilities are often limited by under-investment and political interference; such factors can be addressed with political will. Many of these public utilities need to be “turned around”, ie improved with reforms.

This is possible.

Evidence shows that public utilities can do well with support, time and autonomy. This has happened in Kampala in Uganda, Tamil Nadu in India, Recife in Brazil and Phnom Penh in Cambodia. With reforms, utilities in these places have expanded their services to reach more

people, moved towards cost recovery and reduced the amount of water lost through leaks.

### i. Advantages of public utility turnarounds

- New knowledge and skills developed during the reform process are more likely to stay in the country if management of the water utility remains with the public sector
- A public utility will respond to unanticipated issues and events during the reform process in a manner that serves the national interest. The private sector will perceive these as beyond its contract and seek more money



*A communal water point in the city of Gwalior in the Indian state of Madhya Pradesh.*

WaterAid/Marco Betti

### Box 3.1 - Conditions for public utility turnarounds

- A willingness among management, staff and the board to be self-critical, to acknowledge their shortcomings and be open to change and reform
- Development of a social vision to prioritise democracy, engaging local communities and avoiding security threats, such as riots and protests, induced by imposing unpopular policies
- Accurate information on the utility’s systems, operations and assets and use of this information to manage the service better
- A strong, capable board of directors with an appropriate “arm’s length” relationship to government
- Better management of utility staff that encourages initiative and gives frontline staff more powers
- Incentives for staff to meet or exceed performance targets
- A commitment to bring in fresh solutions to old problems and abolish rules and procedures that hinder good service
- Recruitment of new staff with better professional and organisational skills, and capacity building and training for current staff
- Recognition of the rights and responsibilities of consumers as well as less tolerance of irresponsible behaviour by consumer
- Improved dialogue with customers, and better customer service, such as quicker repairs of leaks
- Better communication to the public of how the utility is performing

#### ii. Challenges in public utility turnarounds

- Changes to turn utilities performing poorly around won’t happen overnight. They may perhaps take longer than

a private sector management contract, but the reforms are likely to be based on local values and culture and be more sustainable

- Theory needs to be put

into practice and a sense of urgency adopted – but a realistic schedule is key. Support might also be needed from other public utilities or consultants

- Leaders capable of making change happen need to be selected and supported by their board
- Public water utilities can be undermined by excessive bureaucracy as they tend to be modelled on governmental ways of managing people,

programmes, budgets, investments etc

- Sometimes public utility staff are appointed on grounds of nepotism and politics rather than because they are the right person for the job
- Public utility trade unions may resist change; they have to be brought along in the reform process
- Need to redress insufficient pay for utility workers

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## Questions CSOs can ask about turning around a public utility



### Checklist 3.1

- Q** Who manages the water system in your town or city? Is it a department of government or an autonomous utility? On what basis is it set up, ie is it a corporation?
- Q** What are the water utility's stated aims? Does it have a performance agreement?
- Q** Does the utility have a document that sets out what its commitments to consumers are?
- Q** How is it regulated?
- Q** Are there benchmarks and/or targets?
- Q** How many staff members does the utility employ?
- Q** How much independence does the utility have to manage its work?

## How to find out answers to the above:

- A Read relevant legal documents
  - A Contact the water ministry
  - A Contact the regulator
  - A Contact the utility
  - A Contact trade unions representing water utility staff
  - A Contact the development bank or donor supporting reform
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### Checklist 3.2

#### What CSOs can do to find out more about public utilities

- ✓ Find out if government interferes with the utility's management
  - ✓ Find out how interference occurs and the implication for the utility's efficiency
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## Part three: Private sector management model

Private sector participation (PSP) in urban water sector reforms is highly controversial. This manual does not set out to recommend or oppose it. That's a choice to be made by CSOs based on the situation in your local area. However, it's important that CSOs have an understanding of the various PSP options and how this works if the government strategy is to adopt Public-Private Partnership (PPP) options for water and sanitation reform.

### i. How PPP/PSP management options work

A private company is contracted and paid to help a public utility deliver a water system. This should relieve some of the responsibility from the public utility so that its staff can focus on what they can do well or learn how to better perform on what is required. There are five major ways in which a private company might be contracted to provide its skills and knowledge in the management of a water utility. These are discussed below.

The sixth PSP option - privatisation

- is rarely adopted, though is the most controversial, option of PSP. Under this, a private sector company acquires the assets of the water utility leading to the transfers of ownership and control of the utility to the company. The private company operates as a wholly private entity, but subject to government regulations.

It is important to avoid confusion over the different contract types as advocacy issues will be quite different for each.

### **Five major ways in which a private company might be contracted to provide its skills and knowledge in the management of a water utility:**

#### **1. Service contract**

The private sector assumes responsibility for specific tasks such as installing or reading meters, repairing pipes or collecting revenues. They receive a fixed fee for doing this.

#### **2. Management contract**

The private sector company typically has responsibility for providing a senior management team to manage all the operations and maintenance of the water utility. For this they either receive a fixed fee or a fee plus performance-related payments based on set targets.

#### **3. Affermage contract**

The private operator takes responsibility for the operation and maintenance of the water

system's infrastructure, but the public sector usually retains responsibility for investing in the system. The private company is paid an 'affermage' fee by the contracting authority which is based on the volume of water produced or sold.

#### **4. Lease contract**

The private operator takes responsibility for the operation and maintenance of the water system's infrastructure but the public sector retains responsibility for funding future investments. The private company pays rent to the public utility to cover the costs of the infrastructure.

#### **5. Concession contract**

The private sector is given a long term right to use all of the utility's assets and take responsibility for all operations and investments. At the end of the contract, the government will take back ownership of the water utility and own everything that the private sector operator may have introduced to the system. The private sector company collects and retains the revenue of the water utility during the concession period. No revenue is paid to government during the period of this contract.

## ii. Advantages

- Under affermage and lease contracts the private sector operator is usually rewarded for increasing the volume of water sold so there is an incentive to increase the number of connections. This prompts the operator to look for ways to connect the unconnected (predominantly the poor). Under concession contracts too, there is a potential incentive for service expansion, as long as revenues cover the cost of new connections. If they are given the right tools and incentives, private sector operators can be very willing to serve low-income consumers
- The private sector company may bring managerial expertise, specialist skills and new technology to the sector. For example, they may have state-of-the-art billing methods, leak detection equipment and bring a focus on consumer service
- Working under a demanding contract can make the private sector company more efficient. Incentives can be established for reducing leaks, improving billing and collection, and better customer service
- Private operators may help protect the utility from political interference
- A private operator with a good credit record can support the case for loans and grants for investment in the water system

## iii. Challenges

- Under management and lease/affermage contracts, the government makes almost all major investment decisions. Clear and robust government policy is key to making sure that services reach the poor
- Under a concession contract the private operator makes more of the decisions. However, tariff decisions must be approved by the regulator. Obligations to provide subsidies (such as low tariffs for certain types of customers) may still be imposed on the private sector company
- In management contracts, the private sector operator is not usually given responsibility for expansion, tariff setting or level of service. Under a lease contract, the private operator keeps the difference between the tariff revenue and the fee they pays to the authority – which means there is little incentive to serve low tariff-paying customers
- As this business model is profit-based, the operator has to be encouraged to be pro-poor and made to do so through policy, regulation, legal reform, contract design and compensation. These are usually weak in developing countries
- Many of the utilities that were involved in some form of PSP in the 1990s have now

collapsed under the weight of economic downturns, debt from unrealistic bid proposals and risk assessments, difficult political relations with host governments, foreign exchange fluctuations and civil society campaigns

- Multinationals often run management contracts but their performance does not always meet expectations. This has fuelled speculation that the main reason for promoting PSP has not

been to improve services, but to provide an opportunity for profit. The private sector operator earns a lot of money even though they don't usually provide a large professional staff

- Putting together the contracts for PSP is complex and requires sophisticated legal knowledge and government resources. Many contracts are renegotiated before their term is completed

### Box 3.2 - Conditions for making PSP-based water reforms work

In practice, establishing PSP is controversial and fraught with difficulty and disappointments for all stakeholders. There are important conditions for making PSP work that exceed those required for reform of a public utility. Unfortunately, in most reform situations these are missing. They include:

- A clear government vision of what PSP will achieve
- Robust water sector policy reflected in contract conditions, including strong policy in terms of serving the poor
- An “unbundled” utility which has its assets, operations and regulatory functions separated
- A competent, confident and independent regulator, free from political interference
- A commitment from government to monitor how private sector companies comply with their contracts and deal with unexpected outcomes and changes in circumstances
- The availability to the private operator of information on the utility infrastructure, networks, management and technical challenges
- Government officials able and available to oversee the design of the contract, define the appropriate roles for the private sector and ensure a value-for-money selection of the contractor
- Members of the public who are alert enough to scrutinise reforms

### Box 3.3 - PSP: WaterAid's position on PSP

- Privatisation or PSP should not be imposed on poor countries through aid conditions, trade rules or conditions for debt cancellation
- National and local governments are ultimately responsible for providing their citizens with water and sanitation. They should make the decisions on how services are provided in their country in a transparent way that involves local communities and others
- Even where the private sector is involved, ownership and control over water systems and water resources should never shift from the public to the private sector
- Solutions should be pro-poor, affordable and sustainable
- All service providers (whether public, community or private) must be regulated and their performance monitored to ensure they are accountable. Ideally this should also involve service users
- Local people must have their say in the provision of their water and sanitation facilities
- The role of small and medium size private water providers (whether for-profit or not-for-profit) must be acknowledged and regulated. Poor people often rely on these providers as their only or main source of water



#### Checklist 3.3

### Questions CSOs can ask about PSP

- Q** Is there PSP in the management of the water utility in your town or city?
- Q** If not, might there be in the future?
- Q** If there is PSP, what type is it – a multinational company, private company from your own country or small scale independent providers (SSIPs)?
- Q** What type of PSP contract exists or is being planned? There are many types of contract under which a private operator can be engaged – make sure you understand the differences

## Questions CSOs can ask about PSP (continued)

- Q What was/will be the arrangements for bidding for and the award of the contract?
- Q How transparent is the process?

## How to find out answers to the above:

- A Read relevant legal documents
- A Contact the water ministry
- A Contact the utility
- A Contact the development bank or donor supporting reform
- A Contact trade unions representing water utility staff
- A Contact the regulator
- A Read the utility's plan
- A Contact the state asset holding company
- A Get hold of the private sector contract

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## What CSOs can do when a PSP approach is proposed

- ✓ Campaign for the extension of services to poor communities and subsidies for connecting the poor in private sector contracts
- ✓ If the government has promised to invest in water systems find out where that investment will come from. Government investment offered under a management or lease/affermage contract is dependent on the government actually having



Checklist 3.4

access to sufficient funds for the investment

- ✓ Press the government to make public the contract, or at least key provisions relating to operator performance targets benchmarks and pro-poor targeting
- ✓ Find out if private sector contracts allow operators to drive out SSIPs. These are often important service providers for the poor but may be squeezed out as networks expand
- ✓ Push for private sector operators to have customer service oriented targets for water quality, hours of service, water pressure etc, rather than internal targets like specifying type of pipe, diameters, depth of trenches etc. This will give operators room to explore innovative solutions to low-cost service options
- ✓ Understand the arguments for PSP, what the main forms of PSP are, how PSP fits into overall reform, and what the implications of PSP can be for the poor
- ✓ Examine the issues and decide whether your campaigning will take the form of outright opposition to PSP, lobbying for changes in the contract to make it pro-poor or monitoring compliance
- ✓ Share your expertise with private sector staff and ensure, before their contract ends, skills are transferred to the public utility

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### Case study 3.1 **Senegal - Private sector reforms**

In 1995, Senegal undertook major reform of its urban water supply sector. The bankrupt public sector utility that had managed water supply in urban areas since 1983 was dissolved, and a new State Asset Holding Company was created to manage the sector.

The government engaged a private water company to run the production

and distribution systems under a 10-year affermage contract combined with incentives to reduce leakages, improve billing efficiencies etc. At the time of the reform, over a million people living in urban areas had no access to water from the network at all, and over 850,000 used public stand posts to obtain their water.

The private sector operator was paid depending on how much water it sold. There was therefore an incentive to add more customers to the network, including those who were poor. The government paid the operator for making new connections. This fee covered the operator's costs and allowed for a margin of profit.

Over 60,000 subsidised "social connections" were installed by the operator between 1996 and 2002. Extensions to the network, paid for by the State Asset Holding Company and implemented by the operator, also benefited the poor when they were laid in low-income neighbourhoods – the only areas that remained unserved. These extensions increased the number of tapstands and averaged over 150 kilometres per year.

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### The Philippines - Private sector reforms

### Case study 3.2

In Manila, the management of water delivery was handed over to the private sector through two concession contracts, one for each half of the city (East and West Manila) in 1997.

The contracts included coverage targets, and the operators are allowed to use innovative technology and SSIPs by virtue of what the contracts do not say: they do not contain strict standards for what constitutes a connection and do not disallow third party provision.

Households served through means other than conventional connections can still be added to the population that counts as "covered" so there are incentives to include the poor to meet coverage targets.

In a densely-populated, hard-to-reach slum area known as Bayan Tubig, an underground water line was installed to carry water to the edge of the neighbourhood. The line connects to many meters from where each homeowner makes his or her own connection through small diameter plastic pipes. Responsibility for maintenance of the plastic pipes lies with the customers. This transfers the cost of leakages to customers.

Although the concessionaires for West Manila collapsed, the East Manila

Case study 3.2 concessionaire, Manila Water Company, had recorded the following improvements by 2007:  
(continued) **Net income** – an increase from P558 M in 2002 to P2,419 M in 2007  
**Non-revenue water** – decreased from 63% in 1997 to 23% in 2007  
**Water coverage** – an increase from 58% in 1997 to 99% in 2007  
**Staff per 1,000 connections** – decreased from 9.8 staff members in 1997 to 1.6 in 2007.

### Exercise 3.2



#### Conditions for making public sector water reforms work

Consider the information in the box entitled “Conditions for making public sector water reforms work” on page 65. How many of these conditions do you think could be met by your town or city at the moment? If the condition is not met, what would need to happen for the situation to improve? Go through the conditions one by one and debate these questions as a group.

### Exercise 3.3



#### Private sector participation (PSP)

Split into four groups. Each group should discuss what the main forms of PSP are, how PSP fits into overall reform and what the implications of PSP can be for the poor. One person can take notes on a flipchart to present to the rest of the group. When the groups come together again, work together to decide whether your campaigning will take the form of outright opposition to PSP, whether you’ll lobby for changes in the contract to make it pro-poor or monitor compliance.

## Part four: Social business management model

Water utilities are like businesses. They need to perform well or they can cause harm to their customers, the economy and municipal authorities. They must provide a service ideally

on a 24/7 basis or as close to that as possible, to an expanding number of people, who often demand increasing volumes of water. They have to pay for their staff, infrastructure and equipment, power supplies and operations. Utilities are, therefore, complex.

To manage such complexity requires smart management, a motivated and well-equipped workforce, adequate cashflow, available credit, efficient billing and collection, management information, excellent customer service and care, a vision and plan. All of these elements can also be found in businesses.

But a water utility is more than a business because it manages a resource that is both publicly-owned and essential for life. The product – water – is sold without competition, as a monopoly. It has a significant bearing on social objectives such as poverty reduction, school attendance and public health. Extracting water from natural sources and its subsequent disposal after

use has significant environmental implications. Such responsibilities bring a level of expectation, regulation and accountability that no private sector business faces.

This is why public water utilities can be a good example of social business. A social business can earn a profit. But the investors who support it do not take any profits out of the company; rather they reinvest these funds towards achieving its social goals.

Public utilities require a new business model to succeed. Elements of such a model are emerging as more utilities see water as a human right which should be affordable to all.

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### What CSOs can do to make the social business model work

- ✓ Help public utility managers recognise their unique role as both a business and provider of an essential social service
- ✓ Ensure the social business concepts and ethos are part of reform discussions and proposals
- ✓ Argue that the right staff recruitment and performance contract procedures are essential if the utility is to put in place a professional and competent management and workforce
- ✓ Argue that any reforms should aim to make public utilities improve their performance and deliver affordable services to poor people living in your town or city



Checklist 3.5

## Part five: Conclusion

### i. Three guiding principles for pro-poor contract design

#### 1. Expansion

It is often poor people who aren't connected to the water supply, so it's in their interests if utilities expand their networks.

But governments often lack resources to finance network expansion to poor neighbourhoods. Some operators may be reluctant to invest in poor neighbourhoods' water systems. They fear the risk of non-payment or think they will make less revenue per connection than in other areas because poor people are perceived as low volume consumers.

However, network expansion can be encouraged by all private or public sector contracts. Concessions may, in theory, have an advantage in attracting large-scale private investment but this is not common in practice. Operators can be given targets and incentives to extend coverage to the poor, but they need to be able to identify poor areas in order to do so.

Good tariff policy and specific bonus payments will encourage operators to find ways to help poorer consumers such as subsidising connection charges and offering credit.

#### 2. Multiple providers

Alternative water providers may be able to provide a more appropriate level of service to poor consumers or provide service until such time as network expansion occurs.

Exclusivity can prevent alternative providers from working in an operator's service area, or from serving certain categories of customers.

Contracts that only allow one operator to deliver water to a community stop alternative providers from offering services which might be better suited to poor people. Exclusivity clauses in private sector contracts should therefore be avoided. If some type of exclusivity is necessary, it should be restricted to network services. Coverage should be defined in a way that encourages operators to collaborate with alternative providers where they are able to provide similar services at lower cost or sooner.

#### 3. Multiple service levels

Technological innovations can reduce costs and hence the price of service to all consumers, including the poor. Conventional service may not be possible at all in some poor neighbourhoods.

Rigid standards, for example on what size, type and supplier of piping should be used, limit the choice of technology, and reduce incentives for the development of innovative solutions.

Standards are often an effective mechanism for bringing about improved service quality, but if badly designed can hinder network and off-network provision in poor areas.

Input standards are warranted under certain contractual forms, but they may stifle innovation. Where possible, it is better to use output standards and leave the operator to decide about means, materials and methods.

It is important to set minimum standards on water quality, quantity, pressure and continuity, but flexibility can be allowed in how these are met.

## ii. Common ground

Regardless of the management model in place for urban water systems, governments have a responsibility to ensure they are well managed and committed to continual improvement in service levels and expanding connections. All utilities should be accountable for their performance and have sufficient independence to be able to manage their operations to the best of their ability.

## iii. Management options

Nations, cities and towns should be able to take an informed decision about which of these approaches (or blend) make best sense for them at the time of reform. A pro-poor perspective does not support decisions that see profit as the main



driver of change but that which favour locally-made choices that commit to real improvements in services to the poor and consider how these may best be met.

There is a role for the private sector, but this should be decided by national governments through a transparent process that allows local communities to have their say.

There is not one single solution to ensuring everyone gains access to water and sanitation, so it is impossible to say in general terms whether it is a good idea for private, public or community organisations to be involved in the delivery and management of services.

Each circumstance must be looked at individually and a suitable pro-poor, affordable and sustainable solution found to fit each community.

*A water kiosk run by the government water company Jirama in Antananarivo, Madagascar.*

WaterAid/Marco Betti



## What CSOs can do to encourage the best model of urban reform

### Checklist 3.6

- ✓ Find out whether reform models include:
  - A priority to expand the water network to poor neighbourhoods and assist residents and communities to have connections
  - A responsibility for serving all of the city or town, especially those areas beyond the water supply network who will require service by other methods
  - A priority to provide adequate levels of services to poor neighbourhoods
  - A promise to provide good quality water for all users
  - Tariff reform to ensure affordable prices for poor people and free water for impoverished people
  - A commitment to higher standards of environmentally responsible water resource management, eg in wastewater treatment and management of urban wetlands
  - Better management of the water utility
  - Better opportunities for all sections of the city or town to have a voice in setting investment priorities and guidelines for operations
  - Separation of water system roles (ownership, operations, policy setting, economic regulation, environmental regulation, finance, etc)
  - Incentives for management and staff to achieve expanded coverage and improved service levels
- ✓ Make the case for the ultimate goal of the reforms to be water coverage for all

- ✓ Understand the risks and benefits of different reform options and share this analysis with communities, government and utility staff
- ✓ Build on the global experience of urban water reforms
- ✓ Make the case for adequate preconditions for successful reform to be in place and try to understand the characteristics of a well-performing utility



### Choosing a water management system

What water management system would work best in your town or city? Divide into three groups. Each group should take a different model: the public utility model, PSP and social business. How would the models work in practice in your town? Spend an hour coming up with pros and cons and then share this information with the rest of the group.

## Exercise 9

### *By now you should...*

- Understand the debate around public and private management delivery of water supplies
- Have an understanding of the social business mode
- Be familiar with management options
- Be aware of the pros and cons for each management model



## Recap

### Next steps...

Understanding governance and relationship with consumers