# **Public Private Partnerships** *and the* **Poor**

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# **Public Private Partnerships**and the **Poor**

# Interim findings – Part B Case studies

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## With assistance from

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# **Executive summary**

The purpose of this report is to inform the audiences about the research findings so far and to indicate the directions in which the project is heading. The objectives of this report are to:

- evaluate the results of these studies within the framework outlined by the inception report;
- report the challenges and opportunities faced by Public-Private Partnerships in their efforts to improve the quality and quantity of the services available to the poor; and
- suggest lessons from the case studies that will be useful when thinking about the poor in the planning and implementing of future projects that use PPP.

This report represents only a synthesis of interim findings. The detailed interim findings can be seen on our project WebPage:

http://www.lboro.ac.uk/departments/cv/wedc/projects/ppp-poor/index.htm

The research is only in its second year and many research activities are still ongoing, so any conclusions reached are susceptible to changes. We have tried to provide evidence for our findings as much as possible in this short report, but for more interested audiences a review of our detailed report is recommended.

This report synthesises the results of seven case studies, and the interim findings of the PSP strategy (as seen by a consulting firm Halcrow Group Ltd).

# Section 1

#### Introduction

'Private Public Partnerships and the Poor in Water and Sanitation' is a new project funded by the Department for International Development's (DFID) Infrastructure and Urban Development Department.

The project team includes WEDC, Loughborough University; International Institute for Environment and Development (IIED), London; Halcrow Management Sciences, Swindon; and local project partners in the focus regions. The project will be managed by WEDC, Loughborough University UK.

# **Purpose of the study**

To determine workable processes whereby the needs of the poor are promoted in strategies which encourage public-private partnerships (PPPs) in the provision of water and sanitation services.

# **Project duration**

June 1999 - March 2003

# Why we are doing this project

Many bilateral and multilateral agencies are strongly advocating the involvement of the private sector through public-private partnerships as a means of delivering better water and sanitation services. At the same time, these agencies require their programmes to have a clear poverty focus. PPP arrangements are now being implemented and proposed in low-income as well as middle-income countries. The number of poor people affected by such arrangements is growing and there is a need to establish the conditions under

which they are likely to benefit. This will assist donors to focus their support. Many PPP arrangements concern water supply; given the crucial importance of sanitation in relation to the objectives of many donors, there is an urgent need to explore to what extent sanitation figures in PPP arrangements.

# Focus of the project

The project will address how to develop and/or improve workable processes to provide water supply and sanitation services to the poor through Public-Private Partnerships. The work will centre on the distribution and collection end of the supply chain, close to the final users. This is generally where obstacles to provision for the poor manifest themselves; there is scope for innovation and choice with respect to both the technologies available and the institutional and management arrangements adopted.

The key issues in defining workable processes centre around organisational relationships between organisations that are qualitatively different. We expect to be concerned principally with relations between disparate organisations — e.g. local user associations and private firms, municipalities and vendors. We are less concerned with relations between two formal commercial providers, and with relations between different public sector authorities. Similarly, totally autonomous forms of provision (for example by community initiatives alone) are not a particular concern. The public sector (local authority or state) will feature in all cases, either directly (for example as a regulator) or indirectly (for example as principal where a commercial firm acts as an agent).

# What the work will produce

The proposed outputs are:

- Inception report (September 1999);
- Interim outputs: findings from in-depth case studies analysing both formal and community-based PPP arrangements in the focus regions (end of 2000);
- Draft guidelines (for review) on pro-poor strategies for formal and informal PPP arrangements including draft monitoring indicators (end of 2001);
- Final guidelines (during 2002);
- A journal article.

# Who should read this report

Although this report will be of interest to any professional in water and sanitation, procurement, or governance, it is targeted to the following readership:

- policymakers who are developing strategies which optimise investments in water and sanitation sectors;
- staff of local government, NGOs, and CBOs who are involved with programmes to improve water and sanitation facilities; and
- staff involved with water and sanitation contracts within the private sector.

# **Structure of the report**

The structure of the report is as follows:

- Aims of project;
- Purpose of this report;
- About the PPP/PSP process;
- About the case studies:
- Where we are: The findings to date;
- What to do: Some emerging themes.

# Section 2

# **Background to PPP**

# **About the PPP/PSP process**

The involvement of the private sector in partnership with government has been advocated by International development agencies as a means of improving the development of sustainable water and sanitation systems. The phrase 'public-private partnership' or PPP or Private sector participation (PSP) is used in this report as a general term covering a wide range of partnerships between utilities, governments, and communities in order to improve or maintain existing infrastructure and to extend services.

Governments turn to PPP arrangements for the provision of urban services for a variety of reasons. These may include:

- increasing urbanisation;
- incapacity of government to keep pace with service provision;
- financial difficulties and the ensuing difficulties of funding public infrastructure and services;
- dying public institutions; and
- uncontrollable unions in the public institutions.

In addition, International Financing Institutions (IFIs) require that certain indebted countries reduce domestic spending as part of Structural Adjustment Programmes. IFIs promote the idea that the private sector is more efficient and effective and produces a better service.

Currently organisational relationships between the public and private sectors for the provision of water and sanitation is represented by a variety of contract systems such as full privatisation (divestiture), concession, lease, BOT (Build Operate and Transfer), service contracts, and

relational contracts with the informal sector. It can be argued, however, that it is only the most complex organisational relationships with the formal private sector, such as concession and lease, that effectively enable the public sector to use the full resources of the private sector. Informal water service providers remain the prime source of services to the poor.

The four-phase process of engaging the private sector for the provision of water and sanitation services is outlined in the Halcrow study of large-scale, private sector procurement:

#### Phase 1: Pre-bidding: Planning and consensus model, scale and scope of PSP

- Consideration of PSP
- Development of overall policy to secure an economically advantageous PSP arrangement
- Investigation of PSP options
- Selection of preferred option
- Development of detailed PSP format

# Phase 2: Procurement: Bidding, selection of operator, negotiation, and drawing up of contract

- Procurement of PSP arrangements
- Selection of bid list of technically competent and financially sound companies
- Pre-qualification
- Bidding
- Technical negotiation
- Financial closure
- Awarding of contract

#### Phase 3: Operation: Implementation, operation, delivery, and regulation

- Implementation of PSP arrangements
- Establishment of operational autonomy from government
- Duties of regulator

#### Phase 4: Termination: Handover of assets, renegotation of contract, evaluation

- Regulation of PSP arrangements and re-settling prices
- Termination of contract
- Evaluation of success and failures of PSP

## About the case studies

The case studies illustrate:

■ the different types of PPP and the different contract types and administrative arrangements which are evolving in different developing countries;

- various models of private sector participation;
- various motives for entering a PPP;
- the balance of power within PPP arrangements;
- key stakeholders in the process;
- whether the process is driven primarily by external or internal forces;
- local pressure in favour of change; and
- the degree of interest in participation in the project.

The case studies differ in the scope and scale of the project/programme they cover, from an illustration of the attempt to privatise the KWSB (Karachi Water and Sewerage Board to the Awami tank micro-study. There are also differences in the type of PPP and contract adopted, from informal contracts based on a common understanding between a community and CBO to the Durban study where roles and responsibilities were all clearly defined in different agreements. The case studies are useful in their exploration of the qualitative impacts of PPPs and their presentation of successful and unsuccessful projects. The issues raised in each of the case studies helps promote an understanding of the relationships between the different types of organisations involved and how these relationships influence the provision of water and sanitation to the poor. The case studies suggest that the success of interventions depends upon the social and political context and government commitment. Their wider relevance will be in communicating the impact of PPPs to others, although the problems that emerge are context specific (limited in space and time) and require tailormade solutions.

The criteria upon which the selection of the case studies was based included:

- nature of the issues addressed
- geographical spread
- availability of local researchers
- links with on-going British concerns
- different types of PPP
- variety of relationships between the public and private agencies
- variety of stages of organisational relationship
- range of motives for PSP
- socio-economic heterogeneity
- mix of successes and failures

The framework for this report is based on the 'Key Issues and Questions' presented in the Inception Report, which are:

- contractual issues
- institutional issues
- imbalance of power
- monitoring
- management issues
- determinants of organisational changes
- dynamics
- risk and liability
- financial issues/tariffs technology and infrastructure
- livelihoods
- sanitation
- participation
- incentives and potential for cross subsidy
- community inputs
- information
- regulation

# Section 3

# Where we are: findings to date

■ A checklist of questions, developed from the case study analysis

# **Contractual processes**

- Are the poor mentioned in the terms of reference?
- Do contracts define social and public health objectives?
- What are the (governments/private sectors) motivation for entering into a PPP?
- Does the contract clarify roles and responsibilities of the private partner, public sector and consumers?

#### Institutional

- Do the institutions involved (Government, private sector partners, NGOs etc.) have an explicit community focus or community base?
- Does the PSP have sufficient motivation to include low-income customers in the agreement?
- Do municipality staff have an incentive and capacity to make a PPP successful in reaching the poor?

## **Transparency and responsiveness**

- What mechanisms are available to communities to place pressure on the government/private sector to respond to their needs?
- How can the private sector be made more accountable to the poor and more acceptable in the case in international PSPs?
- Has government displayed a democratic, accountable and transparent approach to PPP?

## **Information**

- Has information about poor consumers been included in the development of the PPP?
- Has information about the PPP been provided to the consumers?
- What channels of communication are available to the consumers and the poor in particular?

# Regulatory

- Does the regulatory framework in place as a result of PPP have any relevance to poor consumers?
- Are complaint mechanisms any different as a result of PPP?
- If yes, are there any perceived and actual differences in the eyes of poor consumers?

# **Monitoring**

- What aspects of service delivery and/or infrastructure performance are monitored at the local level as a result of PPP?
- Does this feedback to the operator?
- Is there any discernible outcome of this monitoring which feeds back and impacts (+ or -) on poor communities?

# **Technology**

- Are there any changes to technology or more rapid moves towards changes already taking place, as result of PPP?
- What or who has driven these changes?

#### **Financial**

- Have changes to tariffs for poor consumers resulted from PPP?
- What are the reasons for changes to tariffs?
- How were changes determined? Was there any consultation process or consideration of impact (+ or -) on poor consumers?
- What were consumers perceptions of impact of tariff changes e.g. perceptible differences to service levels (+ or -) as a result?

# Risk and liability

■ What changes have occurred to the apportioning of risk between public and private sectors as a result of/during the subsequent operation of the PPP?

■ Is there any discernible difference/impact on poor consumers as a result of these changes?

# **Burden on poor consumers**

- Is there an increased non-financial burden on poor consumers as a result of PPP?
- Are costs higher or lower than before the PPP?
- Do the poor perceive any benefits in PPP e.g. in service?

# Section 4

# **Key findings**

This section aims to analyse the contextual factors explicit in the success and failure of strategies to promote the needs of the poor within PPPs. This will be done with reference to the framework outlined in the Inception Report. In general, the partnerships outlined above are ongoing long-term processes and thus it is not possible to make a final assessment of their success in meeting the needs of the poor at this stage. Certain factors can be identified, however, which are promoting or hindering the degree to which these PPPs have been successful.

# Legal issues

- 1. The public sector has difficulties providing water and sanitation to illegal settlements. Lack of legal land tenure is the main hurdle to extending water and sanitation infrastructure services to the poor. Land tenure is normally perceived as a prerequisite for the installation of permanent infrastructure. For many years Cato Crest had no municipal investment before the land was handed over to Durban Metro and they installed standpipes and ground tanks. The regularisation and notification process was undertaken by SKKA in the katchi abadis before the social and physical services were provided. The private sector, however, can operate without fear of condoning the squatters' activities. In Kibera the improvements in water supply, as a result of the partnership, gave residents hope that they would be given title to the land.
- 2. Informal settlements tend to be unsuited to the installation of conventional infrastructure according to a prescriptive approach, so there is a need to find alternative technologies and a flexible approach (as done by OPP). Typically the private contractor will not invest in infrastructure in an area from which they may be evicted, yet the PPP arrangement in Cato Crest illustrate how technology can be relocated in case the settlement is moved.

- 3. Contracts can avoid specifying a pre-defined type of infrastructure to support this flexible approach. It would also leave more room to manoeuvre if the settlement is upgraded. Provision should be made to ensure that the private contractor does not supply a lower quality of service to the poor (i.e. lower than other areas in the neighbourhood and lower quality of service than that specified in the contract).
- 4. Halcrow's study calls for the definition of water as a basic human right and proposes the adoption of a charter for the sector (which will have impacts on the grey issues, i.e. legality of land tenure, disconnection rights, and minimum health standards to be attained). There may be a role for civil society in gaining access to legal mechanisms for the poor and shaping these mechanisms to represent their interests.
- Non-payment is dealt with in a variety of ways in the case studies. In Queenstown, under the concession contract, customers' bills are increasing because of the shift from flat rate payment to metered charges and stricter enforcement of credit control (as a result of the municipality's customer management). The municipality bears the risk of non-payment by households, whereas WSSA is guaranteed payment (at a rate per kiloliter of water metered at each connection) regardless of the household's payment levels. It is stated on the bill that failure to pay by the due date will result in disconnection. Residents can go to the municipality and make arrangements to pay off their outstanding amounts over a number of months. If no arrangements are made then the electricity and water is disconnected. If there is still no payment then the municipality hands over the debt to lawyers who can then recover the property of the defaulters. Disconnected households are still charged for the fixed portion of their bill and the reconnection fees is R150. The decision to increase the reconnection fee from R88 to R150 was taken in February 2000, in response to increases in non-payment.

In the Cato Crest study, these disconnection issues didn't arise because the system allowed households to control the volume supplied each day, rather than fixing a monthly price. The use of ground tanks also involved a system of pre-payment and so avoided the incidence of bad debts. Tank purchase was subsidised and could be paid for in full or by deposit and instalments to lower the affordability barrier. To buy water residents paid for a monthly fee of R10.70 for a card, which they gave to the water bailiffs who ensure that their tanks are full for the next month.

Most of the water used in the Kibera settlement is 'unaccounted for', the revenue for which is usually collected by privateers. Water vending

is a major income-generating activity for the people in the settlement. A major aim of the project in the settlement is to provide a new source of revenue for the city council. In Kibera, all non-metered connections are illegal and owners are supposed to apply to Nairobi City Council for formalisation of their supply, otherwise they face prosecution. Every authorised connection receives a bill from the NCC and village committees are supposed to monitor all connections and keep a list of all legal connections. In the past illegal connections have been tolerated by the NCC, however, management has failed to stop the numbers of illegal connections from rising further.

In Dolphin Coast non-payment also leads to disconnection. The risk of being cut off is greater now that a private company is providing the water. It was reported that when dealing with the council people could generally delay payments, and people argue that the government should be providing them with water free of charge. With unemployment in the area at 40-50 per cent, people who had Level 4 service have reverted back to Level 2 so that they can pay their bills.

6. Informal settlements may not be explicitly mentioned in contracts, as in the KWSB negotiations even though these may represent a large proportion of cities, thus the contractor is under no obligation in these areas.

#### Informal vendors

- 1. Water vending has a significant role as both a service to the poor and as a source of income. This is recognised in Kibera settlement, and the resale of water is being regularised and the management of collective water supplies is being delegated to committees and individuals. The VWSA's role is to organise the subcontracting of the micro-enterprise, monitor the service, and providing technical assistance. Communities were also involved in the installation work, which was sub-contracted to local people working together.
- 2. There is an opportunity to challenge what is traditionally thought of as public-private partnership. There is potential for small-scale initiatives, rather than large-scale projects. The small-scale or informal private operators should be strengthened and links made with the public sector. Smaller operators can make contracts with consumers, and entrepreneurs compete for clients meaning an efficient, competitive, and replicable service. Small-scale operators often only target the poor and un-served customers making them highly relevant to the discussion of how best to target the poor when extending water and sanitation coverage.

3. The private sector might insist on a level of monopoly with regard to provision, in order to decrease security and risk, and the nature of the sector means that it is hard to introduce competition. The danger of a monopoly is that tariffs and connection charges may be set too high, so the poor do not get better access to supply under PPP. Large-scale monopolies are not the natural service provider and should be prevented from squeezing out informal vendors.

#### Other issues

- 1. The South African legal system did not allow for the delegation of billing and collection to the private sector at the time the contract was drawn up. This lack of control over customer management presented a significant risk for WSSA.
- 2. Within the negotiations for KWSB's PPP, legal groups were able to exploit legislation to protect the poor from the possible negative consequences of privatisation.
- 3. The absence of internationally recognised minimum standards for services to vulnerable groups means that advisors have to set their own standards and obtain government approval.

#### Contractual

- 1. The contractual process may involve:
- governments and large-scale private operators (KWSB and Queenstown Examples);
- utilities and households (Cato Crest Example);
- utilities and community managers (Awami tanks and Cato Crest Examples);
- municipality and small operators (Kerabi Example).
- 2. An examination of the contractual side of PPP arrangements shows that the needs of poor users do not appear to be taken into account at the initial stages. Thus, there is a need for better understanding on how to incorporate their needs at this stage.
- 3. The decision to engage in PPP reflects government needs rather than a conscious decision to reach poor users.

Table 4.1 A summary of findings: legal issues in PPP							
Factors contributing to success	Factors impeding success	These constraints can be overcome by:					
Community level     Use of legal groups to protect the poor during PPP negotiation     Community managing services	1. Community level Poor may not have access to legal mechanisms intended to protect them No right to demand infrastructure provision in informal settlements	Community level     Citizen's Charter for basic rights to water     Accountability of public and private sector     Community Planning     Advocacy					
2. Government level Regularisation and notification processes in illegal settlements Partnerships with informal water vendors Interim measures for provision in informal settlements Social development agendas Enabling legislation to strengthen existing provision for PSP Recognition of PSP in UK Government white paper Legislation allows local government to enter into an agreement with PSP	2. Government level  New legislation is not implemented to cover the transfer of operations from public to private sector  Sectors are not free to work with informal or illegal residents  Uncoordinated support to sector planning  Political instability and divisions along party lines  Lack of commitment to special rights of vulnerable members of society  Economic change and SAP  Rapidly changing legal framework  Coalitions of interest steer change in legislation  Restrictive legal framework	2. Government level Legal standards for land tenure, disconnection rights Minimum health standards Measures for inclusion of illegal settlements in PPPs Minimum standards of service for vulnerable groups National commitments to poverty reduction, gender equality Institutional, administrators, academic, and professional support Publicise rights Determination of tariffs by local authority Specific regulation for municipal service partnership and local authority water bylaws					
3. Implementing agency	3. Implementing agency Private sector sets own standards Large sector monopolies may squeeze out informal vendors Private sector working within municipal constraints Cherry picking of areas where the concessionaire is likely to have regular revenue	3. Implementing agency Informal vendors are accounted for as stakeholders Accountability Community planning Adopt a longer term development focus Clauses in the contract which set parameters for operations					

- 4. Wider social and public health objectives are not typically defined or included within contracts.<sup>1</sup>
- 5. A review of the needs of the poor in contracts focuses on the extent of coverage and level of service and technology, tariff structures, and financial arrangements.
- 6. Government bargaining power seems to be reduced when working with PPP. To lure private sector interest, governments may offer contracts that present less risk and/or underwrite the risks of the private contractor. The management contract negotiated in the privatisation of KWSB was a typical commercial deal, with ambiguities, which favoured the private operator, with no reference to setting out specific services to be delivered in the contract. The contract also made no reference to the existing informal arrangements between the staff and low-income customers or the role that vendors play in water supply.
- 7. In situations where the private sector has greater control to decide what level of service and how much to charge, there is greater scope to determine the extent to which the service to the poor is improved or not. If the private operator regards the poor as more risky this will have an impact on the level of service provided to low-income areas.
- 8. The Cato Crest case study highlighted the benefits of creating a formal agreement between households and utilities, and making explicit reference to the provision of water to low-income users. The use of a specific provision in the contract relating to levels of service to specific groups contractually obliges all stakeholders in the partnership and ensures that all understand their roles and responsibilities.
- 9. The need for contracts to be renegotiated during their course was highlighted in the Queenstown Study. It is difficult to predict how conditions will change and account for this in a contracted agreement. The concession contract with WSSA is an example of a contract that was extended to account for new realities and development challenges.

<sup>1.</sup> Although the feasibility of holding the private sector accountable for these wider issues, which are outside their direct control, these issues relate back to the vision of what PPP is intended to achieve.

PART B: INTERIM FINDINGS AND CASE STUDIES

	Country	Defined needs of poor	Full cost recovery	Determination of tariffs left open	Ability and willingness to pay studies	Information campaigns	Inclusion of interim measures for poor
1	Malawi: Technical assistance	×	<b>v</b>	N/a	N/a	N/a	N/a
2	Mozambique: Transforming water sector	×	•	V	V	~	•
3	Trinidad: Selection of private operator	5	4	4	5	5	5
4	Antalya: Implementation of new institutional arrangements	5	4	4	4	4	5
5	Ethiopia: Regional capacity building	5	?	4	5	5	5
6	Bursa: Institutional restructuring	5	4	4	5	5	5
7	Ghana: Increase PSP in water sector	5	4	4	4	5	5
8	Dhaka: Strategy study	5	4	4	4	5	5
9	South Africa: Advice and guidance	N/a	4	N/a	N/a	N/a	N/a
10	Zambia: Lusaka concession	5	4	4	4	5	5
11	Grenada: Institution assessment	5	4	4	5	5	5
12	Ghana: Water sector study	N/a	N/a	N/a	N/a	N/a	N/a
13	Guyana: Water sector study	5	4	N/a	4	4	5
14	India: Strategic review	4	?	?	4	4	?
15	Poland: Water sector benchmark	N/a	N/a	N/a	N/a	N/a	N/a

Tat	Table 4.2 PPPs rarely account for the poor (cont.)							
	Country	Defined needs of poor	Full cost recovery	Determination of tariffs left open	Ability and willingness to pay studies	Information campaigns	Inclusion of interim measures for poor	
16	Oman: Privatisation study	5	?	4	5	5	5	
17	Russia: Commercial investigations	N/a	N/a	N/a	N/a	N/a	N/a	
18	Brazil: Institutional arrangements	4	?	?	?	4	5	
19	Sri Lanka: Strategic investigations	4	4	4	5	5	5	
20	UK: Vulnerable customers	4	N/a	N/a	N/a	4	N/a	

Legend:

✓=Yes, covered

X=No, not included

?=uncertain

N/a=not applicable

- 10. The training of community plumbers was of great potential benefit in reducing the burden of O&M at the household level. No contractual agreement was set up between WSSA and the plumbers, however, and the plumbers were free to charge commercial rates, which were too expensive for households to afford.
- 11. The contract in the Cato Crest study draws attention to four areas within which special provision is made to low-income users:
  - 1) Types of provision and level of service
  - 2) Financial costs
  - 3) Payment arrangements
  - 4) Roles and responsibilities
- 12. Halcrow's report illustrates just how rarely PPPs account for the poor.

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Factors contributing to success	Factors impeding success	These constraints can be overcome by:
Community level  Community contracting  Collaboration with government in designing PPP  Employment opportunities created  Local enterprises developed  Equality in terms of service  Affordable services  Simple forms of contract  Formal agreements between households and PSP	Community level  View of the private sector as profiteers and mistrust of government  The level of service may vary between communities, depending on income  Communities needs and opinions are not accounted for in contracts  Roles and responsibilities of households are not clearly communicated  Communities are unaware of contents of contract	Community level ■ Payment and price conditions may be written into the contract to benefit low-income users, i.e. specific tariff structures
■ Understanding of social and environmental responsibilities ■ Stable political structures ■ Political will and consensus on type, scale, and scope of PPP ■ Transparency ■ History of public—community partnerships ■ Recognition of all stakeholders ■ Clauses in contract referring to low-income users ■ Money granted for feasibility studies ■ Information collected on housing, socioeconomic conditions, and existing infrastructure ■ Provision made for smooth handover on termination	Government level  Decisions to enter into PPP may be driven by powerful International Financing Institutions, rather than governments  Types of contract which are long term and of greater scope suggest greater risk  Contracts may be awarded to experienced international companies rather than local firms, who have a better understanding of the country and of non Western systems  Existing contracts are extended to include the poor but objectives are not revised in light of new realties  Contract based on monetary and fiscal issues with no explicit pro-poor factors  No capacity for evaluating bids  Time constraints when drawing up contract	Government level  The poor must be mentioned in the TOR Institutional and regulatory support for the poor Contracts may be won by the bidder who has an holistic pro-poor policy proposal rather than the lowest tariff Decentralising to the community level Increase contractual know how Getting all councillors and politicians 'on board' Close regulation of contracts and penalties imposed Clauses which state that if the concessionaire is unable to meet the customers needs it shall give preferences to basic water supply and sanitation

Table 4.3 A summary of findings: contractual issues in PPP (cont.)			
Factors contributing to success	Factors impeding success	These constraints can be overcome by:	
Implementing agency  Use of community liaison officers  Policy statements and objectives draw attention to the existence of disadvantaged users Use of formalised agreements and retail relationships  Multi-lingual agreements Clearly set out roles and responsibilities Representation of the poor within the production of terms of reference	Implementing agency  Lack of incentives for the private sector to cater for the poor and maintain the supplies they traditionally use, i.e. standpipes  Contracts may not include the requirement that affordable services are available to the poor  ToR drafted by advisors distant from sponsor's organisation  Competitive bidding dominates strategy forming process  Emphasis on upgrading infrastructure	Implementing agency Special terms may include the supply and service levels Set quality and quantity objectives Define responsibilities of each player Provide flexibility to the private sector to adapt solutions to changing contexts Mention specific deliverables Create awareness of contents of contract and involve poor in decision making Feasibility studies and risk analysis Incentives to the private sector	

# **Risk and liability**

Table	Table 4.4 Risk assessment in Queenstown			
	WSSA	Municipality	Consumers	
Risks	Unable to implement customer management	Lacks the technical experts to operate WSSA system	Customer management not sensitive to needs	
	Local government transition	Non payment by households (Ezibeleni 56 per cent non- payment and Mlungisi 55 per cent according to January 2000 statistics)	Mis-match between service level and affordability levels	
			Roles and responsibilities change	
			High bills: 50 per cent of households of households are paying more than 14 per cent of their household income on municipal services excluding electricity	
			Credit control	
			Disconnection	
			No choice in level of service	

Table 4.5 Risk assessment in Cato Crest			
	Households	Bailiffs	Durban Water
Risks	Household supply at risk if household has a bad relationship with bailiff	Risk of being ostracised from community	Constant support needed by bailiffs
	Access to public standposts dependent on bailiff's opening and closing times	Risk of implementing unpopular decisions	Expense of administrating bailiff system
		Low pay if control only a few manifolds	
		No long-term job security	
		Use electronic bailiffs	
Benefits	Quality and quantity of water improved	Employment creation	Able to control volume of water supplied rather than price
	Water supply is flexible with levels of service	Work on-going within the community	Pre-payment avoids consumer debts
	The system can be relocated if the township is formalised	Development of micro- businesses	Difficult to make illegal connections

Table 4.6 Risk assessment in Kibera			
	Household	Private Sector	Municipality
Risks	Insecure land tenure	Sidelining of those who depend on selling water to earn a living	Suspicion of community towards NCC projects
	Deterioration in service, water distribution, and potential higher rates	Divisions between new entrants and existing operators	Political risks
	Individual investment in water tanks and points	Threat of effective level of collection to survival	Lack of political commitment to assets being operated by non-NCC organisations
	Difficulties in passing decisions to improve distribution, network billing, and metering	Powerful community leaders	Fear of legitimising informal settlement
	Reluctance to invest in the area	Political manoeuvring could have a negative effect	To gatekeepers who seek rent for new connections instead of paying authorities

Table 4.7 Risk assessment in Dolphin Coast concession			
Siza Water Company	BoDC	Community	
Delays in the development of the area means the income accruing from water and sewerage services will have to be revised.	Problems are blamed on BoDC (people think that SWC is part of municipality)	High tariffs	
Unreasonable bulk water tariff increases by BoDC may lead to disenchantment with SWC	The will/ ability to penalise SWC for breach of contract	Cut off for non- payment	
Non-payment of water bills impacts on the water demand for the concessionaire	Loss of earnings; resources, experience, and technical know how have been given greater weight by Council than areas which could contribute to revenue of BoDC	Cherry picking of economically viable communities	
Stretching of municipal boundaries compels SWC to extend coverage	SWC may be unwilling to restart negotiations if there are structural faults in the implementation of the contract	Unsure of who is accountable for water and sanitation services	
Union activities in opposition to contract and privatisation of municipal services	SWC may run down assets if they experience problems		
The Lifeline tariff of 6 kiloliters of free water			

Ideally the poor would have the most to gain from PPPs, yet they also have the most to lose. The lack of explicit recognition or planning for the poor results in a multiplicity of unplanned risks to the poor. The impact on the poor, as a result of the risks of PPPs, includes: non-payment of bills, higher percentage of income spent on municipal services, disconnection and high reconnection fees and potential loss of assets through non-payment of bills.

Factors contributing to success	Factors impeding success	These constraints car be overcome by:
Back-up support for community-managed projects  User groups have the time and capacity to engage with water and sanitation services  Flexible levels of water supply with the potential to upgrade later  Link between levels of service and affordability  Customer management is sensitive to consumer needs  Clear cut lines of responsibility within the ability of the consumers to fulfil obligations  Strong labour guarantees  Extension of concession area to include poor areas  Engage mayor in major discussions	Community level  Choices of technology and levels of service are not offered  Pilot areas may not represent overall communities  Users are not consulted on the design of services or payment arrangements  Low-income families may then cut back on consumption to reduce the cost, engendering disparities in community welfare  PPPs are brought in to improve the water supply, then meters are installed to aid cost recovery, which restricts the access of low-income families  Households with more members are likely to use more water and face higher bills, which intensifies their financial problems  PSPs are perceived as many white and foreign	Community level Socio-cultural and political conditions that permit community involvement Stakeholders that have enough confidence in government to work with them Offering choice in technology Adapting blueprint pilot project to individual contexts Consulting with communities and responding to their concerns, thereby reducing the risks they face Taking measures to avoid marginalizing the poor Registering the PSP locally and including local partners in the partnership

Factors contributing to success	Factors impeding success	These constraints can be overcome by:
Government level  ■ Clauses in the contract which cater for poor customers  ■ Engage local stakeholders in information campaigns and consultation process  ■ Risk of non-payment reduced by providing levels of service	Government level  Lack of technical expertise  Non-payment by households  Administrative support  Suspicion of communities and political risks  Fear of legitimising illegal settlements	Government level  Ensuring that the agency and government support a poverty focus or participatory approach  Apportioning liability for service quality
Implementing agency ■ NGOs exist which have facilitation and technical skills and can enable community members to participate in water and sanitation provision	<ul> <li>Implementing agency</li> <li>Political manoeuvring</li> <li>Powerful community leaders</li> <li>Insufficient collection of tariffs</li> <li>Lack of demand due to low-income communities</li> <li>Local government transitions</li> <li>Unable to implement customer management</li> <li>Culture of non-payment</li> </ul>	Implementing agency  Ensuring that professionals and officials are willing to engage in capacity building and participatory approaches  Ensuring that interventions in water supply meet the principle of equality of access to services rather than the principle of ability to pay

## **Financial issues and tariffs**

- 1. Some of the problems faced by low-income households include high arrears, high repayment levels, disconnection, and the inability to pay reconnection rates. Metering puts additional pressure on the household budget. The structure of charges means that those on low incomes are under disproportionate pressure to economise. Impacts include less money for other needs and reduced water consumption.
- 2. Tariffs may rise under PPP, and in Queenstown 50 per cent of households were spending more than 14 per cent of their income on municipal

services. Residents had previously enjoyed a flat-rate, subsidised tariff. The price increased with metered water consumption and uniform service charges. Even with rebates for the poorest, people are still paying a high proportion for their income. The low levels of payment in Ezibeleni (56 per cent) and Mlungisi (55 per cent) are also a consequence of poor credit control and the absence of alternative financing mechanisms. This case study also raises the issue of the ethics of disconnection.

- 3. Subsidies may be used to ensure affordable services to low-income households, however they may also act as a disincentive to private companies, resulting in the poor receiving a low-quality service. One of the contributory factors to free water in Cato Crest was the government subsidy via national government transfer (equitable share).
- 4. Where tariffs are too low, the PPP's ability to expand supply is affect, which may have a negative impact on the poor who are unserviced.
- 5. The water supply programme can be made cheaper, as in the OPP model, by cutting infrastructure construction costs through use of cheaper materials and labour. The OPP sanitation model has shown that low-income families can construct and maintain an underground sewage system with their own funds, although the quality of construction may be reduced.
- The Cato Crest case study is an example of best practise in financial issues. The previous standpipe system led to low levels of payment. The use of ground tanks controls the volume of water supplied rather than the price, and prepayment for water supplied eliminated bad debt. The selection of technology also aimed to reduce administration costs. Ground tanks were convenient, the cost of the tanks was subsidised, and the water was cheaper than from the standpipes. Durban Metro had a flexible payment policy that enabled payment to be made up front and in full or in instalments, and they did not charge interest in the first six months to encourage speedy repayment. To pay for water residents had to go to the Durban Water offices and pay a monthly fee of R10.70. Having paid, the residents were given a card, which they gave to the bailiffs thus ensuring supply for the next month. The bailiff would then return the card to Durban Water at the end of the month and receive a commission of R3.50 per card. The system was selfregulating in terms of payment because people were required to pay up

front for the month, so there was no problem with non-payment. Durban Water controlled the price of water at the standpipes by posting notices on the price of water. Those without tanks purchased water directly from the bailiff's standpipe, and fluctuations in the price depended on the bailiff's mood (in spite of official notices at these standposts).

- Cost recovery does not always harm the poor, and the OPP model illustrates that those with an inadequate service are prepared to pay more for an improved service. This also illustrates the gap between planner's assumptions of what the poor are willing to pay and what the poor themselves will pay. The OPP research suggests that recovery of money from the poor for development projects had a poor history in Orangi. Development costs as charged may be about seven times the cost of actual labour and materials involved in constructing an underground sewerage system. Users were asked to pay R25 for something whose actual cost was only R1. These high costs were a result of high overheads, excess profiteering by contractors, kickbacks to government officials, and fees to foreign consultants. The conventional cost of building an underground sewerage system was clearly beyond the paying capacity of low-income families. By relating technical research and innovation to social reality, OPP brought the cost down to affordable limits. Their search to find affordable methods of constructing sanitation systems challenged engineering standards and procedures and the conventional manner of implementation of government agencies and commercial companies.
- 8. The lack of a pro-poor element in the WSSA contract meant that Mlungisi and Ezibeleni were charged the same as Queenstown, which was much better off.
- 9. The Kerabi case illustrated the point that residents in informal settlements pay more for water than other residents of Nairobi, who benefit from a subsidised tariff on their supply. Thus tariff structures may not be of benefit to the poorest where they lack access to the municipal supply.
- 10. Awami tanks were not run on a commercial basis, there was no payment for water or recovery of costs within the system. Although this was advantage, it gave communities little control or bargaining power over a limited and unreliable supply. The lack of cost recovery also meant that

KWSB failed to generate funds needed for further investment in longer term solutions.

- 11. Within the proposed KWSB PPP, the problem was financial, recovery of user fees through tariff enforcement needed to be improved. Consumers felt KWSB was a failure because of the poor service they received, however, and thus were unwilling to pay more for the same service.
- 12. In the Dolphin Coast, a four-tier system operates, with the first level technically free, although every connected household customer pays a connection fee. There is a Lifeline tariff of 10 free kiloliters but this does not appear to benefit households substantially since they still have to pay the basic sewerage and volumetric charges to be connected. Previously customers did not pay for sewerage as a service separately, now there is a standard charge built into water invoices and also a charge based on the volume of water consumed. The metered water bill is based on a basic charge and a volumetric charge based upon consumption through the meter. Residents do not know how water and sewerage tariffs are determined, however, and people still think there is corruption and profiteering in the tariff and billing system. The question of fixed charges is a burning issue in the townships and is a heavy burden on the urban poor, which reduces the welfare effects of the Lifeline tariff. Some people show a high level of commitment to paying, even to the extent of prioritising their water bills before anything else.

Table 4.9 A summary of findings: financial and tariff issues in PPP  Factors contributing to Factors impeding success These constraints can be			
Community level  Traditional forms of water supply may mean provision is not run on commercial grounds and water is not sold  Levels of service are matched to demand and affordability  Funds are allocated to households from council to assist poor families  Lifeline tariffs	Community level  Low levels of demand reflect lack of income and means private companies are unable to respond to needs  Costs are higher for established settlements  Attempts were made to enforce tariff collection without improving service  Reductions in unaccounted for water needed  High levels of unemployment	overcome by:  Community level  ■ Making credit available at reasonable interest charges, spreading charges, or taking into account labour contributions when setting tariffs  ■ Billing more frequently and providing convenient pay stations	
■ IFIs get the needs of the poor on the agenda for discussion ■ Government plays role in promotion of standards, levels of service, and setting of tariffs ■ Government plays role in promotion of standards, levels of service, and setting of tariffs	Government level  Subsidies are being used by non-poor  IFIs steer policy  IFIs pull out during operation and implementation phase  Government bears the risk of non-payment by households  Huge investment needs  Diminishing capacity to borrow[government?]  Budgetary constraints and declining resources from national government  No access to private capital markets	Instituting a code of practise for disconnection and setting a policy for non-payment of bills in household contracts, e.g. a home visits before disconnection  Examining alternative methods of charging for water, possibly based on the value of property or number of people in the house or reducing charges for those on low incomes  Ensuring that tariffs are appropriate, for example users could pay a charge that is relative to a proportion of income rather than amount consumed	

## Table 4.9 A summary of findings: financial and tariff issues in PPP (cont.)

### Implementing agency

- Arrangements that make payment agreements easier, i.e. payment in instalments available for those without bank accounts, cash payers can make more frequent payments if they wish, and there are more local payment offices
- The volume of water supplied each day is controlled rather than the price per month
- Pro-poor tariff structures are in place
- Pre-payment system avoids bad debts
- Recognition of those who earn a living as water sellers
- Cost of infrastructure is subsidised and people can pay off cost of tanks in instalments
- Water services is costeffective and efficient
- Levels of service are linked to housing and billed accordingly

### Implementing agency

- Lack of a demandresponsive approach
- Lack of incentives
- Need for full cost recovery
- Affordability barriers
- Price of water dependent on mood of bailiff
- Perception of the private sector as privateers
- Billing is unpredictable and infrequent
- Revision of tariff structure is mostly unrestricted and without any reference to any standard of accepted practise
- Losses anticipated during first few years

### Implementing agency

- Recovering costs from all users
- Ensuring transparency in the use of meters, demonstrating to households how meters work, and setting a specific day on which meters will be read and communicating this to residents.
- Providing basic services at affordable prices
- Recovering operation and maintenance costs
- Designing billing and collection systems to help low-income users to avoid debt, perhaps by offering frequent payment facilities allowing fortnightly as well as monthly payments
- Ensuring that repayment of arrears are set at affordable levels
- Studying the consequences of different charging policies
- Collecting and evaluating data when assessing the ability and willingness to pay of consumers and regions
- Recommending procedures for subsequent tariff adjustment, identify all costs associated with the provision of water supply

# **Technology**

Table 4.10 Assessment of technology choice in the case study locations			
Example	Technology	Advantages	Disadvantages
Kibera	Water vendors/ kiosks	People only pay for what they use	People still have to carry water  Expensive
Orangi	Communal tanks	Water brought close to homes Water is free	Some have to walk further than others Reduced bargaining power with municipality Irregular supply
Cato Crest	Standpipes	Cheaper in the short term than other services 'Pay as you go'	People still have to carry water  Reduced access to supply  Expensive as a long-term option
Cato Crest	Household tanks	Convenience	Investment costs  Quality of water  Consumption greater than supply
Queenstown	Yard connections	Water always available on site	High investment
Queenstown	Household connections	Convenience	Water use increases High costs, even if water is not used High investment
Dolphin Coast	Levels of service	Technology matched to affordability	Inequalities inherent in a tiered system based on ability to pay

- 1. The case studies covered two main types of technology: conventional; and alternative arrangements and innovative technical solutions.
- 2. Changes to technology as a result of the PPP arrangement were driven by:
- analyses of the settlements and needs;
- community preference as to type, cost; and convenience;
- the nature of the communities;
- knowledge of alternatives and technical know-how;

- the presence of proven models which can be adopted by local-income communities, i.e. designs have been simplified and costs reduced; and
- a willingness to experiment to find innovative alternatives to standard technological approaches.
- 3. The extension of the contract to incorporate Mlungisi and Ezibeleni brought new challenges to Queenstown Municipality. The level of service was already high (there were flush toilets and household taps). The extension of the contract was inherently political, as it was an attempt to equalise the different modes of delivery in the different parts of the town. 'We could not carry on with a dual system where the white part of the town received better service from the private operator while the other part received an inferior service from the municipality', said the mayor of Queenstown. It could be argued that in this case a technology which recognised the economic boundaries and limitations of poverty would have been better suited to this context.
- 4. Household connections are obviously not appropriate where residents might be evicted from a settlement, whereas standpipes and water kiosks can be permanent fixtures.
- 5. The development of new systems in Cato Crest came in response to public dissatisfaction and the lack of existing municipal investment in infrastructure. After consultation with residents, Durban Water installed a system that was simple and convenient, and provided an adequate supply of water that was suited to a low-income informal settlement. The technology can be upgraded later. Officials at Durban Water investigated several technical solutions in order to provide the most suitable service to the community. Standards (in terms of the norms of supply in the surrounding suburbs) were lowered in order to provide water supply infrastructure at a low cost and in a flexible way so that it can be removed or relocated in the event of the township being formalised. The infrastructure was also selected to create employment and work opportunities within the community on an ongoing basis. Like Cato Crest, the systems here were designed to reduce illegal connections while providing reasonably priced water.
- 6. The choice of technology also allowed the volume of water to be controlled rather than the price (i.e. ground tanks were filled once a day), and the use of a pre-payment system. The intention was to adopt lower forms of technology so that lower charges could be passed on to

the users. 'The tank system was much cheaper than buying water from kiosks.'

- 7. Temporary solutions were also used, e.g. the tanks or standpipes, and neighbourhood resale by individuals who have connections to the mains.
- 8. Although 60 per cent of Karachi's population residing in katchi abadis unserved by piped water or with incomplete water supply and sewerage arrangements, the proposed PSP did not have a clear strategy for providing water to such a large population. The poor tend to get water from vendors who get their water from broken mains, tubewells, wells, KWSB hydrants, spill points, river beds, etc. There is no convincing evidence in the proposed privatisation strategy about how the systems would improve after privatisation. Indeed, it appears that people would be paying more for the same or a deteriorating service.
- 9. The Awami tank is an example of how by 'lowering Western standards' more can be achieved. In this case the failure of the piped water supply has been remedied by adopting storage structures and the supply of water is facilitated through KWSB tankers and rangers. The concept of the tanks is welfare orientated and has been developed and sustained by low-income communities. Communities will need support when they are managing the construction and operation of technology, however, for example to improve the design and construction of the Awami tanks to prevent seepage, to improve the means of getting water out of the tanks efficiently, and to set up O&M responsibilities.
- 10. At a community workshop in 1997 a resident of the Dolphin Coast asked whether only those working would be provided for. The response was 'No, the services would be available for all'. The BoDC mayor states that the delivery of basic services to the communities disenfranchised by apartheid remains the primary objective of the council. In fact a clause in the concession contract states that if the concessionaire is unable to meet the requirements of all the customers within the concession area, it shall give preference to basic water supply and basic sanitation services. In practice, however, Level 4 sanitation (flush toilets) are being pushed for by politicians, yet this system is not really necessary in some areas.

Durban Water used a tiered provision system, implementing a variety of types of supply and levels of service running alongside each other.

Factors contributing to success	Factors impeding success	These constraints can be overcome by:
Community level Communities are responsible for managing and taking care of distribution subsystems and standpipes The technology is demystified and communities possess technical know how to improve and adapt standard designs to their situations Service levels and type of technology is matched to affordability levels Investment in infrastructure has an indirect benefit to household income	Community level  The social context  Existing levels of provision/ infrastructure  Alternatives and knowledge, i.e. people must understand the choice in levels of services  Nature of settlements  Local materials and skills  Decline in community interest in project  Top-down planning  Lack of motivation to repair  Most basic services can only be supplied at neighbourhood level  Individual solutions are not appropriate to high density areas	Community level  Gathering information Involving communities Regularising/ formalising communities Meeting needs/capacity Providing technical support Ensuring there is a shared vision of project Having NGOs act as intermediaries Understanding the technical options Knowing that technology is the means to an end for users but not the 'end' itself
■ Selection of infrastructure which creates ongoing employment — not just at time of construction Driving force for PSP is a desire for more efficient and responsive sectors	Government level  Normal government working practices and professional norms which are biased towards Western model  No records of condition of assets base  Lack of operational and maintenance capacity  Lack of technical skills  Uncertainty over policy standards	Government level  Ensuring that technical options fit with community and municipal technical and managerial capacity and that there is the technical know-how to operate and maintain the system at the end of the contract
Implementing agency Technology must be suited to context and adapted to means with roles and responsibilities clearly defined Technical feasibility is not the determinant of success Blueprints which enable community involvement and appropriate technology (i.e. OPP model) adapted to local context	Implementing agency  The replication of technology to other areas  Assumptions on which choice of technology is based  Ideas of what is acceptable in urban areas, i.e. sewerage rather than onplot sanitation  Inappropriate design and technology choice is often caused by lack of community involvement in project design  Willingness or ability to pay is not the only determinant of the choice of technology  Technical difficulties of expanding and running water networks (i.e. wastage of water from standpipes, pipe bursts, low pressure, inability to clean tanks inside, water temperature)	Implementing agency  Understanding all the implications, financing, and the roles and responsibilities for O&M, community mobilisation, technical advice, and the training of community members  Knowing that infrastructure is not the key issue; it is the overall service that determines user satisfaction  Gathering and assessing information regarding the applicability of the technology to project areas

This was necessary to meet customer's willingness to pay and demands for water provision.

11. Capacity building within the public sector is vital if the contractor is to hand the asset back to the municipality. The Queenstown municipality lacks the technical expertise to operate the system WSSA has implemented.

## **Sanitation**

- 1. Sanitation is not provided as often as water in PPP arrangements, and the lack of demand on the part of the users translates into lack of provision. This has significant implications for public health and necessitates the search for ways to make sanitation more attractive to private financing. In KWSB's contract sewerage is not even mentioned, since it is unlikely to fetch large returns for private operators. Even though the current infrastructure can only cope with 20 per cent of the sewage produced, no incentives were provided to encourage private sector involvement in sanitation.
- 2. NGOs with aims other than profit can be an effective option for PPP, since low-cost technologies are often unattractive to the private sector. The social marketing of sanitation is one approach that adopts health and hygiene as part of a marketing strategy, but experience suggests the importance of targeting other positive benefits such as reduced flies, reduced smells, and increased status.
- 3. The high cost of infrastructure and treatment facilities can be reduced, as in the case of the OPP model where financial responsibility is split between the household and municipality. OPPs sanitation model consists of self-managed, self-financed, and self-maintained latrines and underground sewerage lines.
- 4. The existence of low-cost, simple, on-site sanitation facilities in Cato Crest may have been a prohibitive factor to the extension of services by Durban Metro.
- 5. The regularisation and notification process initiated by SKKA meant that underground sewerage became an appropriate option for the informal settlement.

- 6. In Queenstown the services were developed by integrating responsibilities for both water and sanitation provision in the contract. In this municipality most homes had flushing toilets and residents paid a flat rate for sewerage. If their water is disconnected the toilets are useless. In addition the tangible benefits of repair and replacement of sewerage were not felt by households whose toilets were in disrepair, a symptom of the existing dependency on the municipality for the repair of households' systems.
- 7. Sanitation by individual initiative means that in Cato Crest pit latrines were dug without planning and there is now no space to dig new ones once the existing pits are full.

## **User's perspective**

- 1. User satisfaction is linked to:
- Customer services;
- Levels of service:
- Tariff levels:
- Clear understanding and acceptance of roles and responsibilities;
- Community committees and community development officers;
- Tangible benefits;
- Transparent processes;
- Meeting felt needs;
- Convenient and reliable supply.
- 2. Consumers tend to object to the involvement of private companies in their water supply and sanitation. This is especially true where foreign companies are involved. Commonly, this suspicion is precipitated by increases in tariffs which are perceived to be making profits for private companies at the consumer's expense. The user's perspective of the overall privatisation process can be characterised by: lack of consultation, concern over lack of public control or safeguards, fear of corruption, high tariffs, unemployment, and the assumption that there will be increased burdens on the common people who have no clear idea of the benefits. 'The TLC has a contract with a private company which we were not informed about'. 'We were told it comes from overseas and when it first arrived it was not introduced to us. We were not told anything.'

Table 4.12 A summary of findings: sanitation provision in PPP			
Factors contributing to success	Factors impeding success	These constraints can be overcome by:	
Community level  Local materials, a simplified design, and local labour can reduce the cost and increased choice in the sanitation system  Self-help initiatives, i.e. building a neighbourhood sewerage system or individual latrines	Community level  Low water use may militate against sewerage systems  Lack of interest on part of consumer  No choice in level of service  Individual initiatives are not feasible in highdensity settlement	Community level Promoting health and hygiene education Marketing sanitation socially Providing on-site and offsite latrines Adopting successful models	
Government level  Recognition of successful models and adoption of principles in own work  Understanding of the importance of sanitation  Making charges for sewerage-based systems and not for VIP latrines	Government level  Bias towards off-site disposal methods  Sewage treatment  Use of standard designs and expensive materials	Government level  Using OPP model, which frees up municipality's resources, leaving them to concentrate on the system, which is beyond the scope of the household  Making sanitation of equal priority to water supply  Understanding that sanitation does not equal sewerage	
Implementing agency  Level of service depends on residency patterns, i.e. simple and cheap pit latrines were used in Cato Crest, whereas in Orangi a relatively sophisticated sewerage system was installed once residents knew their future in the katchi abadi was secure	Implementing agency  Lack of private sector interest in sanitation  Sanitation perceived as more complex and expensive than water supply  Low-cost technologies are appropriate to the poor but are unattractive to private investors	Implementing agency  Obliging concessionaires to provide adequate sanitation to poor neighbourhoods within the conditions of the contract	

3. Participation of communities appears to be critical to the success of PPP design and management. The case studies where stakeholder participation was not initiated and developed were the least successful in terms of the perceptions of the poor.

PART B: INTERIM FINDINGS AND CASE STUDIES

Table 4.13 User participation in PPP			
Study	Participation	Outcome	
Kerabi	Yes	Ensured that project met needs: verification of plans and pipeline routes, gave information to planners, produced guidelines and monitored construction	
Awami Tank	Yes	CBOs used simple, affordable, and appropriate technology and managed the water supply from the tanks	
KWSB	No	Pressure from CBO/ NGO, legal, and professional groups meant that overall privatisation was deferred	
Cato Crest	Yes	Needs were matched to costs and a form of supply was developed that improved the quality and quantity of water available with a flexible level of service and payment	
Queenstown	No	Residents are unhappy with tariff design, customer services, and level of service	
SKKA	Yes	Community constructed, maintained, and managed system. The level of service is matched to ability to pay and felt needs	
Dolphin Coast	Limited	Consumers and workers unhappy with PPP	

- 4. The Awami tank and OPP case studies illustrate the power of collective activity. In these studies, faced with little alternative, social organisation was used to ensure collective activity in water supply and sanitation. People are able to organise themselves and collect finances as well as build tanks/sewers. Communities can work and invest to solve their own problems, but the precondition for this is that members of the community trust each other and there are clearly identified roles for the residents. Communities must also have the social, managerial, technical, and financial resources and willingness to build 'internal' sanitation/ tanks and maintain them. The other case studies illustrate a conflict between residents and their representatives, and highlights the problem of articulating the interests of the poor. There is the general feeling of frustration by residents that their local councillors are not helping them with their water problems, while councillors blame the residents for misrepresenting their cause, e.g. in Dolphin Coast, Kibera, and Queenstown.
- 5. User perceptions are vital in assessing the performance of services for the poor. Including the perspectives of the poor in the design and implementation of PPPs can be done by:

- a) recording customer complaints and the formal channels through which complaints are made; and
- b) using participatory techniques, such as public meetings, formal surveys, and consultative committees, and by working through CBOs and NGOs and PRA.

These are useful methods to discover user perceptions and opinions, find out what activities are currently being undertaken and by whom, and uncover the attitudes and perceptions of users concerning roles and responsibilities.

- 6. Customer relations and service and better payment arrangements do not necessarily happen under PPPs, as might be assumed. These must be adapted to the needs of the poor, for example they might need to be multi-lingual and must be in line with the resources of the poor; there is no point providing a telephone helpline number to people with no access to a telephone.
- 7. There is a need for a forum in which different stakeholders can and will participate. Often urban residents are excluded from the process of developing solutions because they distrust government agencies.
- 8. Successful partnerships rely on common vision and shared understanding. Thus the risks to the private sector of non-payment of bills and vandalism to infrastructure can be reduced by fostering partnerships between key stakeholders, such as local CBOs, NGOs, or the municipal council. Where partnerships are formed between competing interests, such as the water vendors in Kibera, there must be a clear demand for the partnership. Incentives must be identified to encourage stakeholders of all types to participate in the partnership.
- 9. Decentralisation may spark and maintain motivation and enthusiasm for the project at the community level. Participation will be higher if people see immediate benefits at the community level.
- 10. The OPP process of community participation focused on infrastructure items that the community felt were vital and so were happy to organise themselves around that objective. A detailed picture of resident's needs was gained through a collaborative approach and open consultation using a range of participatory techniques, community mobilisation was

arranged through the formation of committees, and flows of information to stakeholders were ensured.

- 11. The KWSB example illustrates attempts to gain public support through awareness-raising campaigns, education about PPPs, and intensive communication through public meetings, talks on local radio, and interaction with community leaders.
- 12. Community structures were promoted in cases where professional structures fail to maintain supply, for example in the Orangi example. There is a risk of resistance from residents if PPPs do not engage with the existing structures, for example non-payment was used as a weapon of protest of the weak in Queenstown.

Table 4.14 User perspectives in Queenstown Municipality		
Issue	Comment	
Water supply improvement	'The TLC has a contract with a private company which we were not informed about.'  Value of upgraded infrastructure and reduction in number of burst pipe was not felt by those interviewed	
Convenience	Inconvenience in terms of having to make own repairs and the possibility of disconnection	
Affordability	'The situation is worse now, bills are higher and our services are being cut.'	
Availability	Service remained constant in terms of quantity and supply	
Complaint systems	'This contract between TLC and WSSA is creating confusion as to when and how much a person is going to pay. Before in the old days we knew who and when to pay for the services and how much.'	
Level of service	'I have not even spent a night in my new house, but have already received a number of bills which I have not paid and I have now been disconnected.'	
Meter readings	'Sometimes they don't read the meter for ages – my meter is covered with grass.'	
Rebates	'Even if you qualify for the rebate you still have to pay a lot.'	
Assets seized	'Black people are being exploited by CEO and his lawyers.'	
Customer service	'We go to the town clerk, then we are referred to the treasurer then back to the town clerk — at the end of which you are frustrated and your feet swollen.'	

Table 4.15 User perspectives in Cato Crest			
	Ground water tanks	Free water	
Water supply improvement	More convenient than standpipes	69 per cent say a change for the better	
Convenience	Tanks filled at a specific time each day	Always have access to supply	
Affordability	For the majority tanks are affordable, at a payment of R 10.70/ month. Tanks are cheaper than standpipes.		
Availability	'The water is enough. We did not consume all of it.'	Not all houses now get a supply, and there is no water at weekends	
Complaints system	Many different ways to complain	Reduced possibilities; people unsure of whether they can complain	
Problems	Bailiffs, the quality of supply, damage to pipes, and drops in pressure. The 'committee did not do their work properly. Our leaders did not have skills.'	12 per cent say they have experienced problems, 10 per cent say change for the worse.	
Replicable	59 per cent of residents would like to see the system replicated, 24 per cent believe that it should only be temporary		
Bailiffs	71 per cent felt the relationship was OK	Communities now have added responsibilities	
Durban Water	72 per cent felt the relationship was good		

Table 4.16 A summary of findings: community participation isues in PPP			
Factors contributing to success	Factors impeding success	These constraints can be overcome by:	
Community level Roles, responsibilities, and expected outputs determine user perspectives Strong popular, political pressure Popular demand Organisation Improved water supply Financial stability Technical and managerial skills Representation and accountability	Community level  Lack of inclusion in the process  Lack of information about the process  The poor are forced to innovate by their poverty, yet the ability of individuals to generate, implement, and transfer skills varies greatly  Divided communities with no leadership and no history of collective action  Dependency thinking  Lack of power and capacity  Stakeholders are not willing to participate towards a common goal	Community level  Making opportunities for residents to deal face-to-face with officials  Using the informal sector advantage of greater means of communication with households  Using skills, co-ordinated activity, and co-operation  Accessing capital, resources and awareness, and knowledge	
Government level  Users' opinions are actively sought and built on in the provision of water  Government decentralises and works through community liaison officers and community community community community enanged projects	Government level  Lack of political will to resolve problems  Corruption in government  Lack of democracy for incorporating opinions and voices into national debate  Lack of user pressure may mean that their voices are subsumed  Hierarchical and secret negotiations about PPP	Government level  Promoting decentralisation and democracy  Using potential for ground-up development Promoting analysis by communities (with support) of their problems and needs, and reinforcing and fostering their own knowledge and capability	
Implementing agency Setting up institutions which facilitate the integration of low-income groups Decentralising power to the community level Transparency and accountability in implementation	Implementing agency  User perceptions are not sought, thus users have little opportunity to identify priorities for change, express levels of satisfaction with existing services, or analyse problems  Poor information exchange	Implementing agency Aiding community analysis and learning communities agendas, enabling communities to organise for action Communicating to households and outsiders face-to-face; building interaction and exchanging communication between stakeholders	

## **Information**

- 1. Lack of information regarding the poor in the Queenstown contract meant that although water provision in low-income areas was an explicit part of the contract, providing an *affordable* service to the poor was not. There is a lot of confusion within the low-income areas as to responsibilities. Some people claim that the municipality never informed them that it was their responsibility to make repairs themselves. 'This contract between TLC and WSSA is creating confusion as to when and how much a person is going to pay. Before in the old days we knew who and when to pay for the services and how much.'
- The rangers in the Awami Tank study took baselines studies of demographics, human resources, and social data, and mapped existing supplies and infrastructure inventories before scheduling water supply. These techniques were used in conjunction with mainstream and traditional information channels, such as village elders. The general assumption in the katchi abadis is that a piped water supply is a feasible option and that they are a priority, in terms of supply, for KWSB. This assumption constrains the further development of the Awami tanks. KWSB is not communicating the real situation to communities and so these communities are taking a hand-to-mouth approach to water supply, rather than developing long-term strategies. There are activists who are pressing KWSB for answers, however. 'We have telegramed the KWSB, phoned them, and run after them for water provision... I have telegramed the governor, chief minister, prime minister, etc.; in one day I sent 18 telegrams. But these black sheep only forwarded our applications. I myself met Mr Misbahuddin, the chief engineer of the Water Board, more than 20 times and carried out meetings. But all his promises were fake.'
- 3. The stakeholders within the KWSB privatisation process where unsure of what to expect from privatisation since they were not involved in the process, they were only informed about it. If user groups and other stakeholders had been integrated into the process then there might not have been such widespread opposition.
- 4. After five years the Kibera PPP is still unfinished, and although communities were involved in the construction of the scheme they have not been informed as to the reason for the delay. Selective communication is a form of power.

- The Cato Crest Study is an example of good channels of communication. User perspectives were sought and used, Community Management Committees were established to create an interface with Durban Water, financial issues were taken into account, technology was adapted to the community, and operation schedules publicised. Durban Water used notice boards to highlight the cost of water and the opening times of the standpipes, and the telephone numbers and post boxes that could be used for feedback. This process ensured that all the problems associated with privatisation could be addressed before the project was initiated. For example, before searching for solutions to the problems in Cato Crest, Durban Water conducted a number of meetings to research people's needs and preferences. Their overall approach rested on understanding consumers' needs and providing a service that suited their particular context. Seventy-two per cent of people felt they had a good relationship with Durban Water, and the key to the success of this relationship is the role of the community liaison officer.
- 6. The KWSB case study illustrated a variety of ways of communicating information, e.g. through meetings, posters, radio, etc. In addition to the marketing of strategies, there is a need for data collection to develop appropriate strategies. Attempts to develop a broad-based consensus on the need for PSP in KWSB included an intensive media campaign, televised debates, seminars, workshops, question-and-answer sessions with a cross section of people and organisations, press releases and the briefing of journalists, and the use of the electronic media. Efforts were also made to ensure that accurate and impartial information was made available in Urdu and English. Yet residents were still unsure as to the benefits of a public-private partnership.
- 7. 'Without informing and consulting development does not work' (Major Muraj, November 2000). Residents have stated they were not consulted by the borough about the concession/SWC, and many feel that they were only told that the company would provide water. The common perceptions are that: 'No one ever voted for Siza water to come here'; 'The agreement was between the company and the whites at the town board'; and 'It is our elected representatives that are the problem. They sign agreements without consultation with the community'. The residents feel that in the past issues were brought to them and they were told what was going to be done for them. There seems to be the feeling that the residents themselves cannot report breakdowns and there is the perception that the local ward councillor is not helping them with their

water problems. 'We never hear anything about them [SWC] now. Only two or three people are in the know. The whole community is not satisfied about this. The community seems to be those three people'. There are also very few public telephones in the areas which defeats the reporting process, even if the residents have the contact number available. Information channels include two full-time community liaison officers, community liaison committees, development committees, monthly meetings with BoDC, two customer service offices, newsletters distributed with bills, community notice boards, face-to-face communication, posters, schools liaison, functions, and activities. Despite all these channels community members complain of water bills taking priority over all other household expenditure even when services have not been used, problems with the service, lack of consultation, and lack of welfare assistance. In the present accommodation most people have been exposed to living in 'formal' houses for the first time. Council officials and the management of SWC state that the communities were told of the implications of full water and sewerage connections before taking occupation. 'If you go to their offices to query this [increasing bills], they will tell you that the community signed an agreement. We do not know who signed the agreement on our behalf.' Siza Water Company have posted notices on the boards to explain tariff increases and how they are calculated, along with newsletters sent with bills and newspaper adverts, yet people still feel 'kept in the dark'. Households have been told about electricity, water, schools and the rates they would pay for different services, and yet they say, 'We could not foresee the problems we are experiencing now'.

8. There is a need for communication channels between households and CBOs and other grassroots organisations, in addition to flows of information upwards to other stakeholders.

Table 4.17 A summary of findings: issues concerning information and communication in PPP Factors contributing to Factors impeding success These constraints can be success overcome by: Community level Community level Community level Demand for improved Mass media or printed Capacity building water and sanitation press may be exclusive Strengthening civic to the poor involvement services Leadership and ability to Willingness to pay for Developing strategies various levels of service that demand network with local government not sought government Capacity and willingness Suspicion of government responsiveness Skills training and to demand information and private sector from government about Payment arrangements confidence building Establishing common are not discussed Representation of Customer services are goals different community not based on consumers groups in development needs committees Difficulties in reporting Social cohesion faults/ pipe bursts Poor areas have different priorities and so different needs for information than richer areas Government level Government level Government level Collaboration with The public sector may Defining target project partners to not hold data on audiences influence information informal settlements and Selecting appropriate be unwilling to do so communication channels exchange Encouragement and Inaccurate interpretation Interviewing equipping of newly of the needs and representatives of target formed committees priorities of stakeholders audience Effective management Goal of project is Holding focus group and administration maintained by a reduced discussions Collecting data Systematic data number of stakeholders collection and analysis to i.e. reduced number of Promoting PPP develop appropriate stakeholders Ensuring adequate participating out of total strategies consumer orientation Knowledge is shared and number of beneficiaries. Using participatory working methods roles are understood Lack of accountability Institution building

Table 4.17 A summary of findings: issues concerning information and communication in PPP (cont.)			
Factors contributing to success	Factors impeding success	These constraints can be overcome by:	
Implementing agency  Building partnerships with the poor  Use of solutions based on local capacity  Address issues which improve opportunities and services as well as equity and barriers to participation  Promote ownership of services by the poor  Enabling information exchange through community-based institutions  Establish clear roles and responsibilities  Flexibility  Simple and easily understood contracts	Implementing agency Collecting information can be expensive and delay the process The information to be collected might not be readily available The agency must know where that information can be found; publicly administered information systems may be poor or non-existent Information regarding communities may not be recorded in a formal way Qualitative data may be more difficult to collect than quantitative and may require participatory techniques Lack of baseline data	Implementing agency Investing in face-to-face communication, which is the most effective means of gathering or disseminating information but also the most time consuming Learning from communities as well as collecting information about them Capacity building in private institutions Increasing the involvement of stakeholders in decision-making and sanitation Training to improve interactions with communities Collecting data on willingness to pay and potential revenues from different levels of service	

# Regulation

- 1. Lack of competition may lead to monopoly and regulation must ensure the private sector does not exploit a monopoly situation. Those regulating the privatisation of KWSB made no provision to check the operation of a monopoly or impose penalties for sub-standard performance. There were no defined procedures for routine external monitoring of performance and no checks on leakage and theft.
- 2. Regulators have a responsibility for dealing with complex social and environmental standards or leakage targets and the number of new connections. NGOs lack the government's regulatory powers.
- 3. The introduction of the ground tank system together with water bailiffs significantly improved the supply of water to residents. The tanks were a response to dissatisfaction with public standpipes. Meetings were held and technical solutions provided for a more convenient service to the community. Seventy-two per cent of residents felt their relationship with Durban

Water was good. The key to success between Durban Water and the bailiffs and the relationship between Durban Water and ordinary households can be put down to the involvement of the community development officer. The bailiffs' performance was monitored by Durban Water through monthly bailiffs meetings and through visits by the CDO. The CDO assisted both residents and bailiffs in any problems they were having with water supply. The bailiffs also completed data sheets, which recorded consumption according to meters to ensure no leakage and calculate amounts payable to Durban Water by the bailiffs. Residents in Cato Crest, before the introduction of free water, had many different ways to complain. Avenues for dialogue with customers included notices, telephone numbers, post boxes, bailiffs, CDOs, committee members, and Durban Water. The shift to free water has placed a significant strain on the system, however. Durban Water's link with residents has been eroded, as the bailiffs no longer operate. People are unsure who to complain to, or if indeed they can complain. The lack of interfaces between WSSA and communities in Queenstown also created confusion in the complaints services.

- 4. Customer management is a function of Queenstown Transkei Local Council, but the system in place has ample scope for misunderstanding and mistrust. Residents can raise issues through their councillors, but this is not an effective channel. Residents feel that unilateral decisions are taken without their involvement. Residents can also raise problems through civic associations, e.g. South African National Civic Association. WSSA does not have direct access to ordinary residents but provides funding for the salaries of the municipal staff dealing with water and sanitation complaints, and there is also a 24-hour emergency line. WSSA would ideally like to be responsible for customer service as there is a deep dissatisfaction with the way customer services operates.
- 5. In the Dolphin Coast there are two full-time community liaison officers from the BoDC who deal with various community issues. They are responsible for communication with communities through community liaison committees. The officers also meet monthly with the communities' development committees, and various media are used to communicate with all stakeholders ranging from meetings to community notice boards. The BoDC feel that they are working well with communities, but the communities do not share this view and feel that SWC does not assist in any real manner. The BoDC feels that it does not have the capacity for monitoring and reporting and is dependent on legal, technical, and financial experts a consortium of Deloitte & Touche,

Shepstone & Wylie Legal Services, and Bosch & Associates. SWC may be fined up to R500,000 for infringements and penalties to meet performance targets. SWC also produces an annual report on service levels and has to make copies available to customers (as well as publishing a summary for customers) and produce a five-year plan as part of the monitoring process.

6. To facilitate the flow of information and interaction between various participating agencies and communities, sociological consultants were hired to ensure sustained communication and liaison between all the parties, especially to the community in Kibera. However, the Kibera case shows how regulation ambiguities in the partnership have the potential to result in the deterioration of services and increased water prices. It is difficult to state what the future role of the stakeholders will be in the Kibera Water Project since the project is still uncompleted five years on.

## Institutional

1. There are two types of service delivery illustrated by the case studies:

The blueprint approach:

- Expanding conventional services so that an equal level of service is provided regardless of ability to pay and local conditions.
- Assuming that requirements are equal throughout municipality and can be met in the same ways.

The customer-orientated approach:

- Assessment of demand, market research.
- Offer of a range of technical and institutional services adapted to local conditions.
- Social marketing of services and technologies.
- Role for CBOs/ NGOs in communicating local conditions and in training and monitoring.
- 2. The OPP-SKKA case study illustrates the potential of a 'positive shadow' or 'twinning' arrangement to generate technical assistance. SKAA are able to develop policies and procedures that facilitate the implementation of OPP's concept of external and internal infrastructure. SKKA engineers were supposed to design systems based on OPP's

PART B: INTERIM FINDINGS AND CASE STUDIES

Table 4.18 A summary of findings: regulation issues in PPP			
Factors contributing to success	Factors impeding success	These constraints can be overcome by:	
Community level Community and civic organisations work together	Community level	Community level	
Government level  Council determines the water quality and sanitation required  Council determines the level of investment  Council uses legal, financial, and technical experts to compensate for lack of capacity  Set fines for infringements  Sets targets for reporting	Government level Regulatory systems have been slow to address social issues Inexperience of regulators Bias towards price and environment Lack of legal standing Rich and poor users have differing requirements and aspirations which needs to be translated into regulatory framework Being short-changed by the PSP Lack of capacity for monitoring	Government level  Establishing safety nets for the poor  Being more responsive to consumers  Obeying environmental protection directives  Setting health standards  Using assets efficiently  Setting fair tariff prices  Making water available to the poor	
Implementing agency Reporting to the municipality is done on a quarterly basis Concessionaire produces annual reports Copies are made available to customers and executive summaries are sent with bills	<ul> <li>Implementing agency</li> <li>Generates excessive profit</li> <li>Successes in terms of more efficient infrastructure not felt by consumers</li> </ul>	<ul> <li>Implementing agency</li> <li>Holding meetings or using other ways to communicate progress to those who are illiterate</li> <li>Holding forums to monitor consumers' perceptions of progress</li> </ul>	

design standards. The SKKA engineers and field staff, however, had difficulties internalising the concepts of adaptation to local conditions and innovation and in applying them to their working practise. They also were not very interested in communicating with the communities. The real success in this case study was the work OPP has done in mobilising and training community members through the effective interaction between qualified professionals and low-income communities. The OPP provides the technical support, tools, and prolonged association that

enable communities to construct and maintain their own sewerage systems.

- 3. Community-focused and community-based pilot projects were particularly successful. There is a need to create the demand for local organisations, and to find ways to help local institutions to come together, thus enabling community institutions to be aware of and articulate local needs.
- 4. The design of implementing institutions is important; this involves learning and enabling institutions with more recognition and rewards: designing and managing incentives for the private sector together with supportive leadership.
- 5. The operating procedures of supporting institutions should be flexible and emphasise what staff has learnt.
- 6. Para-professionals can be used to implement and scale up programmes.
- 7. The role that training and dissemination can play in research and innovation is an important one.
- 8. Policies and resources should be shifted away from technical prescriptions towards locally available resources, skills, and knowledge.
- 9. When NGOs are working with, and not for, government, the benefits include increased credibility of government staff, the synergy of multiple perspectives, joint planning and support, greater efficiency in the use of resources, and more accountability.
- 10. The decentralisation and democratisation of institutions is important too. If local people can see the possibility of implementing their own plans and take key decisions regarding implementation, they are more likely to participate and projects are more likely to be successful.

## **Management**

Management systems can include:

■ large water and sanitation schemes managed by a utility involving the private sector;

PART B: INTERIM FINDINGS AND CASE STUDIES

Table 4.19 A summary of findings: institution issues in PPP		
Factors contributing to success	Factors impeding success	These constraints can be overcome by:
Community level  Willingness to participate and capacity of residents  Tradition of self-help initiatives	Community level  Lack of key technical skills  Lack of institutional relationships at local level  Lack of representatives of women and other excluded groups  Powerful groups capture project	Community level  Using local institutions as channels for dialogue
Government level	Government level  Difficulties for the public sector in undertaking new roles  Unwillingness to adopt standards lower than western codes or below best practise  Inter-agency disagreements about responsibility  Grey areas  Lack of specialist skills	Government level Introducing monitoring system Meeting staff training needs Producing a change in staff attitudes Encouraging use of local consultants
Implementing agency  History of private sector and NGO involvement in water and sanitation  Decentralisation and management at the lowest levels	Implementing agency  Foreign firms which have not transferred skills and information  Political instability  Lack of continuity between different sector managers  Distanced from target consumers	Implementing agency  Compelling agencies to have local partner as means of empowerment

- water supplies principally managed by municipalities with the involvement of CBOs;
- water and sanitation schemes managed principally by user groups, NGOs, and CBOs; and
- household components of systems which are the responsibility of the household.

- 1. Provision to low-income groups often translates into higher management costs. In low-income areas little water is consumed, so bills are small. Thus, money that will need to be spent on administration, for example for reading meters and maintaining user files, may present too high a risk, especially if there are also a high numbers of unpaid bills.
- 2. The implications for the poor may be higher tariffs or higher connection rates, making the service unaffordable. This may be avoided by introducing flat rates, but this would be unprofitable for the operators if there are many low-volume users.
- 3. The Awami tanks are managed through by the community, usually elderly or retired men from the neighbourhood level. They organise community labour to build tanks, identify land for the tanks, and ration and timetable supply. These activities depend on the capacity and good will of residents as well as the feasibility of increased interaction between residents.
- 4. It might be assumed that there are incentives for households to manage their facilities and keep pipes and latrines in good order. In Queenstown, however, residents were unwilling to carry out repairs themselves or unable to hire plumbers to do so. This may have been because residents had invested little in the system it was initially delivered in a top-down fashion and after the PPP residents were given responsibilities which they are unwilling to accept.
- 5. Effective management systems require well-defined roles and responsibilities, which can be described in contracts or are based on customary law, that is they must exist on a basis of common understanding.
- 6. The cost of management and administration should be considered from the outset. In Cato Crest each bailiff was responsible for 200 customers and was monitored through meetings, records, and community development officers, which cost Durban Water a lot of time and money. More rigorous selection of bailiffs, especially with regard to entrepreneurial spirit, would have made the managerial input side of the scheme more feasible.

Factors contributing to success	Factors impeding success	These constraints can be overcome by:
Community level  People understand who is responsible for what  There is a role for civic and community organisations  Simple technology was used  There was good leadership  Organisations were autonomous	Community level  Expectations of voluntary inputs were too high  Committees that failed to reflect the diversity of community meant that those with power were able to capture resources	Community level  Establishing long-term programmes for integrated support  Establishing potentially independent co-operatives  Forming user committees  Increasing 'room for manoeuvre'  Building capacity for community management  Developing skills in management, technical skills, conflict resolution, etc.
Government level  ■ There was capacity building of staff involved in PPP  ■ Management and administration were effective  ■ Customer orientation was carried out  ■ Good communication existed  ■ Councillors were used as an effective channel through which residents can raise issues  ■ Provision was made in the contract to use local labour, local materials sourced from local suppliers, and labour intensive techniques	Government level  Lack of clarity regarding roles and responsibilities  Inventories of assets did not exist, so work was replicated  Constant changes in leadership and inter-party rivalry  Corruption  Lack of transparency and accountability	Government level  Planning strategically, i.e. incorporating discrete activities into an overall master plan for the city  Co-ordinating inputs  Developing human resources  Responding to consumers
Implementing agency Reduced administration costs Good communication Direct access to residents Effective monitoring and evaluation Improved customer management and revenue collection Working through existing organisations Outreach programmes Winning bidder discussed with workers issues concerning their welfare and work conditions	Implementing agency  The culture of the organisation  Grey areas of responsibilities  Negotiations with unions are time consuming	Implementing agency Installing management systems for resources and personnel Co-ordinating activities between different agencies Budgeting for the cost of management in low-income areas Providing incentives for management Ensuring accountability to communities

### **Discussion**

- 1. **Privatisation does not de-politicise water**, either at the citywide level or the local level. In Jakarta, water was a highly political issue during the transition from the Suharto regime largely *because* it was private (and because the Suharto family had business interests in the consortia involving both Thames and Lyonnaise). In Buenos Aires, politics including electoral politics were central to getting water to the communities that we studied. Although the water company was not directly engaged in community politics, politicians did 'promise' to bring water, and the water company complied (on the one hand, without a request from the government, would not have wanted to provide water, and on the other hand, in at least one case, AA had favours to ask such as whether they would be allowed to build a water treatment plant in the area).
- The signing of the agreement does not end negotiation, again either at the city or the community level. Both in Buenos Aires and Jakarta there have been substantial contractual renegotiations of the overall concessions. At the community level in Buenos Aires the issues to be negotiated included labour contributions, how the bills would be collected, what size pipes would be used, and so on. In Jakarta, the communities I visited did not seem to feel that anything much had changed with privatisation (indeed, the people we talked to had to go and get their bills to verify which company they were buying water from, and even that the name had changed from the old public company), but both the water companies and groups in communities seem to be open to negotiating new provisioning arrangements. In both cities, there is clearly scope for improving relations between communities and utilities, and while it does make a difference that the utility is private, it being private does not determine how services will be provided, to whom or even, in practice, at what price.
- 3. **Private companies have a lot to learn about operating in low-income areas**. This was particularly evident in the Buenos Aires case, although in the areas studied the difficulties were at least partly overcome by partnerships, of sorts, with NGOs or CBOs. The learning curve seems to involve years rather than months, and could probably extend over the length of even a 25-year contract. A good initial agreement could help both to support this learning process and to ensure that it motivates the

company to serve low-income areas better rather than simply serving them at less cost, but much also depends on continuing relationships between the company, the public partner, civil society groups, and the customers. (In this context, it should be kept in mind that the public utilities were not very responsive to low-income communities, and hence did not transfer much knowledge on how to work in low-income areas to the private companies.) Equally important, partnering with NGOs and CBOs can, in the right circumstances, help companies along their learning curve while also increasing the capacities of NGOs, CBOs, and residents to engage with PPPs – though partnership is perhaps too strong a term for relations which are and should be based on overlapping but distinct interests.

- NGOs, CBOs, and residents have a lot to learn about private companies. At the community level, it can be hard to perceive any differences between the private utility and the pre-existing public utility. A sense of continuity is reinforced when, as in the case of Jakarta, most of the utility staff is kept on. While the consumer relations person at Thames Java emphasised the effort she goes to inform local groups of the new arrangements and how the company intends to operate, given the large population involved such information spreads slowly. Thus improvements in customer services that the private company sincerely does intend to do could easily be lost due to insufficient customer awareness. Also, the different incentives the managers and owners of the private company face with respect to leakage, illicit activities on the part of their staff, and the like, may be potentially important but go unrecognised at least for some years. Finally, NGOs and CBOs have an important role in keeping PPPs accountable – a role which can be difficult to reconcile with that of working with, or in some cases for, private companies in water provisioning.
- 5. Insecure tenure is not an insuperable obstacle to water connection, but can easily politicise the process in poor areas, even when the provider is private. In Buenos Aires, Operator did not want to provide water to an informal settlement except at the request of the government, and getting the government to request water would almost certainly be interpreted by the community as providing more security (the latter also

<sup>1.</sup> Unfortunately, I do not think we will be able to comment specifically about the implications of this on the basis of the case studies.

held in Kibera, Nairobi, where the utility is still public). In such cases, it is difficult to see how a PPP agreement could target low-income communities (or even agree on high connection rates) without a strategy for dealing with tenure and related issues, although this strategy need not start with (or even involve) full conferral of tenure. It is also important to keep in mind that tenure is rarely a yes/no question, and in Jakarta, for example, there are numerous different forms of tenure, and insecurity is as likely to arise from developmental threats as from ownership disputes.

The historic perspective is clearly lacking in much of the current debate. Indeed, private ownership of water systems, and public—private partnerships, are often presented as new innovations, set to cure the ills of public provisioning. When viewed historically, however:

- 1. Private provisioning, and public—private partnerships of one form or another, is nothing new to the water (and sanitation) sector. Indeed, the history of the water sector has been one of shifting roles for both private and public sectors, but also for civil society groups.
- 2. Commercial pressures have rarely if ever been sufficient to motivate private enterprises to provide adequate water and sanitation to low-income residents. This can be demonstrated empirically and explained economically (monopolies, public health externalities, information asymmetries). Particularly during the 19th and early 20th centuries in Western Europe, the most common response was to try to switch to public provisioning, or to engage in what would now be termed public—private partnerships. There is clearly scope for improving relations between communities and utilities, and while it clearly does make a difference that the utility is private, it being private does not determine how services will be provided, to whom, or even in practice at what price.
- 3. Private companies have a lot to learn about operating in low-income areas. A good initial agreement could help support this learning process and help ensure that it motivates the company to serve low-income areas better, rather than simply serving them at less cost, but much also depends on continuing relationships between the company, the public partner, civil society groups, and customers. Equally important partnering with NGOs and CBOs, can in the right circumstances, help companies along their learning curve while also increasing the

capacities of NGOs and CBOs and residents to engage with PPPs. NGOs and CBOs and residents have a lot to learn about private companies. At the community level it can be hard to perceive any difference between the private utility and pre-existing public utilities. A sense of continuity is reinforced when most of the utility staff is kept on. Intended improvements in customer services from the private company could easily be lost due to insufficient customer awareness. Also the different incentives the managers and owners of the private company face with respect to leakage, illicit activities on the part of their staff, and the like, may be potentially important but go unrecognised. Finally NGOs and CBOs have an important role in keeping PPPs accountable – a role which can be difficulties to reconcile with that of working with, or in some cases for, private companies in water provisioning.

- 4. The current shift back towards private provisioning and new forms of public private partnerships, particularly in developing countries, is justified primarily on the grounds that the public sector is inefficient and in any case does not have the capacity to provide adequate water and sanitation. Also, it is often argued that the politicisation of water and sanitation interferes with efficient provision (e.g. prices are kept low for political reasons, but the requisite funds to compensate for the resulting revenue shortfall is either not made available or is spent inappropriately). Insecure land tenure is not an insuperable obstacle to water connection, but can easily politicise the process in poor areas, even when the provider is private. It is important to keep in mind that privatisation does not de-politicise water either at the city-wide level or at the local level.
- 5. It would seem, however, that motivation to serve low-income areas is also often lacking in the public sector, and that the problem is not just politics but the wrong kind of politics. Indeed, it is when political pressure is being constructively brought to bear on the public sector that the most significant improvements in water and sanitation have been made in the past, whether the resulting response has been public, private, or some combination. Crudely speaking, if public provisioning failed the poor because the public sector was not motivated to serve low-income areas, then the public–private partnership that emerges is also unlikely to serve the poor.
- 6. One major historical shift has been the emergence of large multinational water companies, and this is central to the current increase in

PSP. Historically, one of the reasons for shifting responsibilities to the public sector has been that water companies did not have the capacity to develop the large-scale systems needed for large cities. Currently, even large cities in developing countries do not have the administrative or managerial, let alone the technical, capacities of the large water companies. It is indicative that whereas historically it has been small towns that were more likely to be supplied by private companies, private companies are now ignoring small towns. But perhaps more important in the long run, the multinational character of water companies involved in the current wave of privatisation raises issues of accountability and international politics. It is not at all hard to imagine a future when it will seem to have been incredibly foolish for international agencies to actually promote the involvement of multinationals in such a potentially sensitive area as water provision.

Viewing these historical lessons from an NGO perspective, one possible conclusion is that PPPS must be open and able to respond to public pressure constructively, and that civil society organisations need to have the capacity to apply pressure constructively. This applies not to the initial bidding alone, but all stages.

A second conclusion is that while it is very important to try to make PPPs work for the poor, this is probably best done within the context of a broader pro-poor strategy that extends beyond PSP. In other words, PPPs should not be allowed to reduce accountability for providing an equitable water system, or to restrict measures taken in support of the poor to changes in the agreement between public and private sectors.

When thinking about targeting the poor, it is important to analyse how the differing characteristics and causes of poverty make people vulnerable to changes in their situations. At the household level we can conceptualise the production of well being through *inputs* (employment, income, entitlements, access to services, etc.), *processes* (use of services, enrolment in school, etc.) and *outcomes* (life expectancy, etc.). Poverty (as people perceive it themselves) will have many dimensions, and not only the lack of wealth implicit in the narrow technical definition. Such a multi-faceted approach may encompass social inferiority, physical sickness, vulnerability, physical and social isolation, and powerlessness. As water and sanitation policy can improve standards of living through a variety of measures, it can also tackle other faces of poverty, such as vulnerability. Especially vulnerable groups are households dependent on wages without access to other assets (e.g. land or

savings), people living on the edge of large cities with no access to alternative housing, and female-headed households.

This review suggests that on the whole private sector partnerships, in their various guises, have led to improved service quality, expanded coverage, efficiency, and reduced water losses. The analysis also suggests a need for realism in expectations for private financing. Technical improvements to supply do not always result in increased user satisfaction. There are many problems with rational policy prescriptions, such as is the government accountable to disadvantaged groups? Does the machinery for implementation exist. or do institutions have to be transformed and strengthened? and Will targeted reduced tariffs work?

In short, there are no standard prescriptions or models but a need for innovative and practical solutions. A water and sanitation project does not take place in a vacuum; there are relationships between users, the company, staff on the ground, and households, and an actor-orientated perspective is required to understand policy impact. It must also be acknowledged that policy is a process, and that outcomes may not be as planned and may be variable and inconsistent between areas.

The objective of this document is to assess the status of PPP experience, as illustrated by case studies, and to report concrete findings within the framework of the key issues, as stated in the Inception Report. The goal of this report is to ensure that PPPs effectively and efficiently address the needs of the poor, thus enabling PPPs to contribute to the overall aim of poverty reduction. Its purpose therefore is to make recommendations to improve the effectiveness of PPPs from the case study analysis. The scope of work covers both water supply and sanitation in urban areas of developing countries.

The literature review provided a discussion about the various types of PSP contract, including pros and cons of each model and reports from case studies where forms of PSP are underway. The review made reference to the degree of efficiency and improvement under PSP and the effects on the costs to the public sector. The review also reported a dearth of material that specifically discusses the needs of poor users with regard to private sector involvement and issues, which directly affect low-income groups, i.e. levels of services, risk, and regulation. Thus, the extent to which improvements have benefited the poor is difficult to assess. The PPPs in the case studies are still developing, but the limitations and successes of these experiences of reaching the poor with water and sanitation can be highlighted.

# Section 5

# Conclusion

In conclusion, the case studies and reviews illustrate *policy as a social process* involving actors and social struggles. Effective strategies to improve well-being include public participation in policymaking and state accountability. Expenditure in PPP arrangements is important, but only in a social context that renders it effective.

Public action, in terms of public support for services, involves the participation by the public in the process of social change. The Durban case study illustrates collaborative action — people supporting government actions, strengthening the PPP arrangement and the take up, and supporting the services offered. The KWSB case study points to a more adversarial approach, where the public demands the government to initiate a service and the government reacts to social pressure, public criticisms, and political activism. The success of a PPP arrangement depends on government accountability in terms of positive accountability — the state takes responsibility for action (improving services, etc.), and negative accountability — responsibility if things go wrong. An examination of the policy's effectiveness is necessary, but needs thorough reference not only to policy, but also to social and political processes, and the context within which a policy is designed and implemented.

When attempting to draw lessons from past experience it is important to focus on the historical perspective – the process of change, and the processes that shaped and defined the government's role and that of the public sphere. In short, why action was deemed necessary. The role of the actors (civil servants, government departments, international donors, pressure groups, trade unions, active citizens, and social movements) is also key to the success or challenges of the agreements. The actors interests should also be analysed – who are they, how do they push their agendas, and why might actors be resistant to change?

Policies normally have winners and losers, so there are rarely neutral actors as stakeholders receive burdens and benefits to different degrees. It is important to analyse who puts issues on the agenda, keeps issues off, gets the best decisions, and captures the policy when it is implemented.

So how do the poor get policies on the agenda and how can they hold the state accountable if they do not benefit? If policy is conceived of as a social process then it may be helpful to think in terms of the current debate on *social exclusion*. This term highlights economic, social, and political dimensions that are not explicit in the 'poverty line' approach. This approach recognises that certain groups or individuals experience marginalization, discrimination, relative deprivation, precarious social rights, and vulnerability. The multi-dimensional character of deprivation affects people's access to social services, welfare/ security networks and political representation — which is pertinent to attempts to make PPP arrangements more accountable to the poor.

Table 5.1 A summary of potential factors promoting and hindering success in PPPs

#### Success promoted by:

#### 1. Government level

- Stable governments
- Continuity in policymaking and implementation of policies
- Willingness to co-operate with NGOs
- Understanding of community needs
- Capacity building of staff involved in PPP
- Political will
- Recognition of all stakeholders
- Transparency
- Consensus on type, scope, and scale of PPP
- Contractual know-how
- IFIs who get the needs of the poor on the agenda for discussion
- Government interfaces with communities
- History of public-private partnerships
- Conducive environments, i.e. advocacy, policies, stakeholders, salaries, and job security
- Decentralising power and control from top levels

#### Success hindered by:

- 1. Government level
- Lack of communication with communities
- Changes in policy in the water sector
- Lack of information on operational sector/ the noor
- Absence of Citizen's Charters for basic rights for water
- Lack of legal frameworks which permit transfer of operation from public to private sector.
- Absence of legal standards for land tenure, disconnection rights, and minimum health standards
- High reliance on external funding and financial austerity policies
- Lack of democracy to incorporate opinions and voices into national debate
- Regulatory systems that have been slow to address social issues (bias towards price and environment)
- Lack of user pressure, which may mean their perceptions can be subsumed
- Lack of established practise of contracting out services
- Lack of potential to reinvent themselves
- Planning not being part of municipal culture
- Suspicion of government

Table 5.1 A summary of potential factors promoting and hindering success in PPPs (cont.)

#### Success promoted by:

- 2. Implementing agency
- Understanding low-income consumers' needs
- Having information on consumers
- Keeping residents informed and building a close relationship of trust with customers
- Providing levels of service suited to context
- Employing professionals that reflect critically on their own blueprints, values and methods.
   Acting as catalysts and facilitators and mobilising local capability
- Bottom-up planning
- Maintaining work ethic and commitment of staff
- Flexibility
- Outreach programmes to the community
- Group ownership of programme
- Better use of existing resources
- 3. Community level
- Strong popular political pressure
- Popular demand
- Financial stability
- Bargaining power
- Technical and organisational skills
- Representation and accountability
- Agreeing that poor people can and should do much of their own investigation, planning and analysis
- Clear roles and responsibilities

#### Success hindered by:

- 2. Implementing agency
- Uncertainty over policy standards
- Technical difficulties of expanding/ running networks
- Designs for low-income settlements incurring long payback periods and high costs
- Blanket solutions and standardisation
- Privileged access to information and secrecy
- Talking down to consumers hierarchy and control
- Lack of acceptability
- Inappropriate rewards
- Isolation from beneficiary community
- Differing motivations
- Inability to address the structural factors that cause poverty
- Public perception of agency as privateer
- Low levels of demand (reflecting lack of income), which means that the private sector are unable to respond to needs
- 3. Community level
- Dependency thinking
- Lack of entrepreneurial spirit
- Complex, diverse, and risk-prone areas where poor live
- Lack of capital/ awareness/ skills
- Divided communities/ no history of collective action
- Rhetoric on participation
- Lack of capacity on behalf of community leaders

Unsuccessful relationships have been characterised by action based on demand and confrontation.

The key factors in the success of these PPPs (with respect to their impact on the poor) can be characterised as:

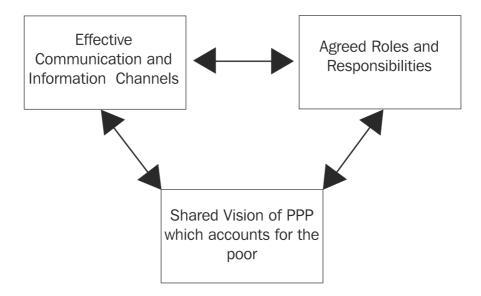


Figure 5.1 Overlapping factors

Different stakeholders in the PPP can have different views on the process. In many instances the rules, role and responsibilities are not evolved and communicated. For some PPPs are purely commercial transactions, for some political exercise and for some the water should not involve any profit making elements. A shared vision can be developed by different stakeholders to serve the poor while meeting their core organizational objectives.

Table 5.2 Vision about PPPs based on findings so far			
Findings	Recommendations		
<ul> <li>Vision of the PPP</li> <li>Development is perceived differently by different community groups</li> <li>Stakeholders do not share the same priorities and vision of PPPs</li> <li>Community-based development plans</li> <li>Community support</li> <li>Municipal support</li> </ul>	Vision of the PPP  Promote integrated planning from CBO and municipalities Priority is access to basic services Provide regular tangible improvements Incorporate NGO models into development plans		
Communication/ Information  Limited communication between CBO and municipal government  Effectiveness of PPPs depends on community negotiation and support  Promote organisation at the community level  No formal communication channels exist between community and private sector/municipal government  Execution of plans are facilitated by multistakeholder groups	Communication/ Information  Capacity building for local community members/ neighbourhood leadership  Regular feedback of activities  Dissemination of information  Attendance of community meetings  Invite municipal members/ PSP to community meetings  Identify opportunities to work together  Build informal contacts between stakeholders  Integrate community into existing management structures  Implementation groups should include CBO, municipal government, NGO, and service provider		
<ul> <li>Roles and responsibilities</li> <li>Municipal governments are unable to carry out traditional responsibilities effectively</li> <li>NGO/ private sector are increasingly taking on development planning and implementation responsibilities</li> <li>Private sector has the potential role to link municipal government and community</li> <li>The political will and ability to adapt roles and responsibilities is not always evident</li> </ul>	Roles and responsibilities  Formalise agreements of new roles and responsibilities for municipal government and community  Promote participatory planning at the municipal level  Identify stakeholder priorities and agree scope of planning process and methods of working  Strengthen municipality to ensure future sustainability of PPP and increase capacity		

to address local problems

# Section 6

# Vicious circle in the search for public-private partnerships

Before embarking on a public–private partnership the following questions needed to be considered:

- 1. What exactly is the problem the PPP will address, i.e. financial, more efficient levels of service, or more equitable levels of service?
- 2. Is the PPP the only way of addressing these problems?
- 3. Can the negative effects of the PPP be foreseen and how will they be avoided?
- 4. What would happen if no PPP took place?

The following general themes can be expected:

- The most common user complaints are the high cost of water, limited customer services, and poor arrangements for payment, in addition to the problems of communicating with companies.
- In some cases the private sector's perception of the efficacy of their measures to help the poor did not match those of the families themselves. There is a need for sustainable CBOs that express community needs and devise, promote, and reinforce development proposals. Their role in the prioritisation and solving of local problems has been acknowledged in attempts to make private sector participation more accountable to the poor. The poor have capacities that may not be obvious, but undermining these capacities increases the poor consumer's vulnerability.

- Government scepticism and traditional working methods mean reduced receptivity to joint improvement plans. Projects may be determined according to political agendas rather than based on local needs and be undermined by lack of municipal experience and resources. Governments need to display democratic, accountable, and transparent approaches to PPP.
- Good community-based initiatives exist within highly mobilised communities. Communities must be involved from the outset in a full discussion of the implications of different infrastructure options. This can be achieved through the democratisation of the decision-making process. Communities must have an understanding of what PPPs will deliver and of how their needs will be addressed. People want to know whether the overall service provision has been improved by the PPP, not what percentage of pipeline has been replaced.
- Stakeholder roles and responsibilities should be agreed according to knowledge and resources. The vision for the provision of water and sanitation in some cases was maintained by a reduced number of stakeholders; all stakeholders should share a common vision within the development plan and work together. There is a need for a formal space for stakeholder participation with fair and unambiguous rules for discussion, negotiation, and agreement; and these forums should ensure that all stakeholders have a presence.

## **Information**

Lack of information about poor consumers together with the minimal time available at the contract preparation stage contributes to the lack of direct inclusion of the poor in the development of the PPP. NGOs may have a key role in developing an information base about the needs of the poor, prior to the start of contract development process.

One action that could help solve this problem is the development of a leaflet (as a project output) for local NGOs explaining the need for this process and what key information is needed in order to represent the needs of the poor consumers' well in advance.

In addition to the need for information on consumers, there is a clear need to provide information to consumers. Most of the case studies highlight the fact that most poor consumers felt that they had not been well informed about the PPP before it was implemented, that payment arrangements and the setting

of tariffs were not discussed with them beforehand, and that customer services were not based on consumers needs. Lack of information about one's situation and future options is disempowering; it reduces the capacity to determine one's own interests.

Communication is a vital component of PPPs and investment in this are will pays dividends. When communities collaborate in PPPs, they place the municipal government and private sector under pressure to respond to their needs. Access to information enables the poor to confront those making the decisions. An important lesson is that lack of information does *not* mean that low-income communities will comply with the partnership; instead of being obedient the poor are more likely to retaliate with non-payment of bills. Thus, information gathering should not be extractive but should be a two-way process of communication and should seek the views of those least able to promote their opinions through the normal channels. Examples of effective communication channels include the use of CBOs and the face-to-face communication used in Cato Crest, Dolphin Coast, and Orangi. This promoted an opportunity for feedback both to and from communities, where other customer service mechanisms were inaccessible (for example where there were few public telephones or high levels of illiteracy).

## **User satisfaction**

User satisfaction is linked to access to information, customer services, levels of service, and tariffs and collaboration within the PPP design. The case studies where stakeholder participation was not initiated and built on in the development of the PPP were the least successful in terms of user perspectives. The partnerships in Cato Crest, Orangi, and to some extent Dolphin Coast had fostered a common vision and shared understanding, were more successful, and consequently non-payment of bills did not become an issue. Traditional attempts to target the poor recognise that development is a process by which vulnerability is reduced and capacities are increased. To a great extent these case studies reflect these intentions, by creating positive changes in well being and in the ability of low-income communities to control their lives. At odds, however, is how equality and the equity goals of development work which address the causes of people's vulnerability can be incorporated into PPPs which tend to pursue other objectives (namely profit). Within PPPs, meeting the needs of the poor tends to be a means to secure ongoing activities (i.e. servicing previously un-serviced areas as a means of securing more revenue which enables them to further expand supply), rather than to secure more ends-orientated objectives.

#### **Sanitation**

In general, sanitation is less procured than water in PPP arrangements, however the Orangi and Dolphin Coast studies provide the exception. The Orangi model illustrates how demand on the part of the users translates into a willingness to pay for and construct latrines and sewerage lines. The case of Dolphin Coast matches levels of sanitation to levels of income, pit latrines being an affordable option for those on low incomes. This case contrasts with Queenstown, where blanket levels of service were provided across the municipality, which resulted in added pressures on the budget of low-income households.

# **Technology**

Consumers are not concerned with the percentage of pipeline replaced under a PPP arrangement, unless it has regular tangible benefits at the household level. In general people are concerned with securing an adequate level of service which is affordable. In some cases PPPs are initiated where there is existing infrastructure, thus there is no 'blank sheet' on which to tailor services for the poor. These cases tend to be less successful in meeting the needs of the poorer households. Where PSPs are presented with a blank sheet there tends to be more scope to develop appropriate levels of service, depending on the municipality's objectives. Those private sector partners who take a more holistic approach, with a view to using the technology as the means and not the end, tend to be more innovative in their search to find solutions that fit the context. Again, the ability to meet water and sanitation needs of the poor, through the selection of the 'right' technology, seems to be linked to processes such as capacity building, empowerment, and organisational development. Thus, the question arises, should PPPs be held to development standards?

#### **Financial**

Lack of information about the poor, the choice (or lack) of technology, and the lack of a pro-poor emphasis in the contract, typically mean that tariffs are not set in consultation with the poor. Exclusion from the decision-making process fosters the perception that higher tariffs under PPPs are used to make profits for foreign companies. Tariff levels are an issue particularly for those who have not paid for water in the past, those who have paid a flat rate, and those who have developed a culture of non-payment. The means through which payment is enforced is also an issue, and the accumulation of heavy arrears, high disconnection rates, and high reconnection costs also harm the poor

consumer. An integrated approach to the question of finances would address the factors in the PPP, which undermine security of low-income households, factors that will vary according to gender, age, wealth, class, and ethnicity. Such an approach would involve an examination of why low-income households might become more vulnerable in this context (i.e. lack of resources, forms of social and economic exclusion) and assess whose decisions and choices put the poor at risk and how these actors can be held accountable.

#### Institutional

A key theme in the success of PPPs was the democratisation and decentralisation of institutions to the community level. Those projects with an explicit community focus or community base were particularly successful. In these PPPs the emphasis was placed on developing strong local capacity for training and support for local organisations. Those partnerships where hierarchies of power and control existed, where staff were unwilling (or unable) to adopt new roles and responsibilities or standards below best practise, failed. In these cases there was a clear mismatch between the structures, obligations, and priorities of the PSP and municipal government and the insight of those whom they intended to serve. International PSPs cannot easily understand and know of the potential sources of support for communities in-country and how these might facilitate communication. This may explain why they are unable to decentralise control to the community level. In addition the selection of a PSP with experience in different international settings does not necessarily mean that they are able to translate this experience easily into a blueprint approach. In these cases there is a need for clear policies to help create a shift in these agencies' way of thinking and practice. Municipal staff should therefore be given incentives to make the PPP successful. They could also be trained in organisational behaviour and management, in addition to appropriate assessment and monitoring techniques in order to develop capacity. All actors must be clear about the purpose, values, and roles it wishes to play in the PPP and monitor and modify negative outcomes. Actors should have the capacity to organise, to communicate, to strategize, and to question. NGOs tend to have the capacity to assess what kind and level of support is needed for a more inclusive and equitable society.

# Legal

The existence of legislation, which allows governments to enter into PPP agreements, is part of the enabling environment, which is taken to be a

precursor to the development of PPP arrangements. The allocation of roles and responsibilities within the PPP may also depend on legislation. For example South African legislation did not provide for the delegation of billing and collection to the private sector. This incurs risk to the municipality. The absence of legal mechanisms also implies risk for the consumer in terms of legality of land tenure, disconnection rights, and access to water as a basic human right. Where people are ignorant of their legal rights these rights can be denied; people who know what their rights are and which organisations will defend them are in a better position to defend themselves in disputes over water and sanitation provision. Resolving these problems entails negotiation between the differing interests, and more thorough preparation, on the part of the municipality, in anticipation of PPP arrangements. Increasing the poor's ability to have their say in decisions that affect their lives means open and accountable political structures. This is one step toward reducing the vulnerability and marginalization of low-income consumers.

#### **Contract**

The case studies illustrate how differing motivations for entering into a PPP determine how effective the partnership will be in meeting the needs of the poor. These motivations are often explicit in the terms of the contracts drawn up, and few mention the poor in the terms of reference or define social and public health objectives. These contracts often represent the financial needs of the concerned municipality and not those of the lowincome consumers. There is scope then within the preparation of contracts to improve their insights into broader development policy and practice. It can be assumed that concession, lease, and service contracts represent reduced risks to low-income consumers, provided these households are informed and included in decision-making processes and that the capacity exists to continue operations once the contract is terminated. Those cases where the idea of the contract was decentralised to the household level were successful in that they clarified individual roles and responsibilities and secured agreement to such. The contract must also make provision for monitoring. This would involve checking objectives against performance and detecting unintended results/ difficulties, and indicating where and how plans should be adapted to improve future practise. Monitoring must also assess the relevance, effectiveness, efficiency, impact, and sustainability of achievements.

## In general, successful PPPs tend to:

- Provide affordable water and sanitation for those previously excluded from formal supplies
- Offer alternative forms of technology in response to unmet needs
- Provide information in appropriate forms, e.g. local radio, newsletters, face-to-face
- Identify the agents who may assist, e.g. CBOs, religious groups, unions, NGOs, popular organisations
- Increase a community's confidence in directly assessing and finding solutions for water and sanitation problems themselves, or increase their confidence in the ability of the PSP to do so
- Increase the consumers' participation in decision-making
- Acknowledge the connection between day-to-day living conditions and the wider social, political and economic context, and reflect it in tariff design
- Create a demand pull on the authorities
- Create skills in construction, social analysis, and dealing with politicians/bureaucracy
- Create better relationships within communities

# **Appendix**

## **Case studies**

# **Queenstown, South Africa**

#### **Box A.1 Key issues** — Queenstown

- Pro-poor policies were not in place before the contract was extended
- Levels of service offered
- Inadequate relationship between private sector, community, and government

## **Background**

This case study reviews the impact of a concession contract between the Queenstown Municipality and the Water and Sanitation Services South Africa (WSSA) on the provision of water and sanitation for poor residents living in the Queenstown Transitional Local Council Area. Queenstown has a population of approximately 20,000 and is predominantly a poor town. It comprises three distinct areas: Queenstown (the original municipal area with a well-off population), Mlungisi, and Ezibeleni. Mlungisi and Ezibeleni have a high level of service (in-house water supply and flushing toilets for Ezibeleni, and outside flushing toilets and taps in Mlungisi). The development of Mlungisi and Ezibeleni is summarised in Table A.1

Table A.1 Time-line of events in Queenstown			
	Event	Outcome	
1960	Development of Mlungisi	Provincially administered township	
1970	Development of Ezibeleni	Transkei-administered township	
1989	Investigation of alternative service delivery option by Municipality of Queenstown	Findings of situation due to fiscal stress and fear over a deteriorating quality of service	

Table A	Table A.1 Time-line of events in Queenstown (cont.)				
1992	Concession contract between Municipality and WSSA for Queenstown	A contract for the O&M and management of the water and sanitation system for 15 years. WSSA took over a well-functioning system.			
1994	Transition to democratic government				
1995	First democratic local government elections	Incorporation of Mlungisi and Ezibeleni into Queenstown Municipality			
	Contract with WSSA extended to cover Mlungisi and Ezibeleni	Coverage by WSSA increased by 170,000 people. The hope was to increase efficiencies and savings.			

Figure A.1 summarises the relationships between stakeholders involved in the PPP.

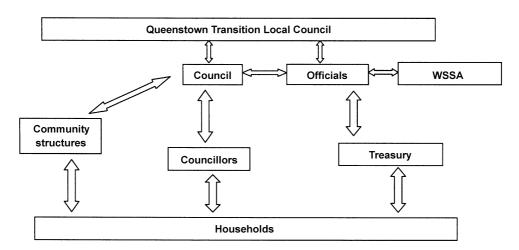


Figure A.1 Summary of the relationships involved in Queenstown PPP

At the macro-level the contract has had a positive impact on the provision of water and sanitation services. Table A.2 illustrates the problems with water and sanitation services under both public and PPP service provision and proposals for improvements.

Residents have access to better infrastructure and better quality water. The tariffs for water and sanitation are standard across the Queenstown municipality, and residents are charged a fixed fee of R24.20 for a minimum of 10

Table A.2 Analysis of the problems experienced under both Municipal and WSSA service provision, proposals for improvement and stakeholder responsibilities			
	Municipality	WSSA	
Problems with system	Collapse of infrastructure Technical and managerial capacity constraints	Associated with payment and customer service	
Improvement proposal	Alternative service delivery options	Tariff design to reflect pro-poor policy/ customer services	
Intended stakeholder	Partnershin hetween	Partnershin hetween community and	

**WSSA** 

Municipality and WSSA

kiloliters of water and a fixed fee of R30.26 for sanitation. No jobs have been lost as a result of the partnership and the employment conditions for the WSSA employees are better in terms of career opportunities, welfare loans, and educational opportunities. WSSA have also supported the wider community by funding local charities, fire hydrants, and a playground. WSSA have also established a long-standing relationship with a local small business, which uses labour-intensive methods to replace pipes. WSSA has extended coverage to new low-income housing developments in the former townships (which are funded through government subsidies) and the municipality has installed some public standpipes for people living in informal settlements. User perceptions of the new supply in Mlungisi and Ezibeleni, however, indicate that the benefits of the PPP have not been felt directly by the consumer.

#### Box A.2 Key findings — Queenstown

responsibility

- Outreach/education programmes are vital
- Interfaces between community and utility operator should be developed
- Response time to complaints needs to be improved
- Accuracy and frequency of meter readings should be improved
- Convenient pay points and clear and understandable bills would improve customer management
- A contract between WSSA and households would be of benefit
- Credit control and disconnection policy should be revised
- Technical improvements do not necessarily equal systems improvements
- 'No major complaints or problems from members of the public' (Chairperson of South African National Civic Organisation in Queenstown) does not mean public support

Outlined below is an analysis of the Queenstown PPP and the roles and responsibilities in the contract.

Table A.3 SWOT a	analysis of the Quee	enstown PPP	
Strengths	Weaknesses	Opportunities	Threats
Increases in efficiency of service provision	PPP perceived distinctly differently by different stakeholders	Formalise agreement of new roles and responsibilities	Lack of interest in settlements
Municipal interest to develop new working partnerships	Not based on shared vision of the future development of settlement	Discussion of possible roles and responsibilities for implementation	Lack of links between community and WSSA
Prioritise access to basic services	Full community support not achieved	Promotion of integrated development plans at community and district levels	Pro-poor policies not in place before entering into partnership
Quality of supply improved	Implementation did not produce regular tangible improvements	Integrate communities into existing management structures	Lack of means of measuring impact on poor
Expansion of services	Facilitation of multi- stakeholder implementation groups not achieved	Improve customer service	Lack of political support for poor
Investment in communities	Ineffective communication channels between communities and WSSA	Implement sound tariff structure	
Monitoring and evaluation of technology and infrastructure	Lack of community management		
	Anti-poor tariff policy		
	No choice in level of service		
	Strict credit control measures		

PART B: INTERIM FINDINGS AND CASE STUDIES

Table A.4 User perceptions			
Water supply improvement	'The TLC has a contract with a private company which we were not informed about.'		
	Affects of upgraded infrastructure and reduction of pipe bursts not felt by those interviewed.		
Convenience	Service is inconvenient, as customers have to make their own repairs and face the possibility of disconnection.		
Affordability	'The situation is worse now, bills are higher and our services are being cut.'		
Availability	Service remained constant in terms of quantity and supply.		
Complaint systems	'This contract between TLC and WSSA is creating confusion as to when and how much a person is going to pay. Before in the old days we knew who and when to pay for the services and how much.'		
Level of service	'I have not even spent a night in my new house, but have already received a number of bills which I have not paid and I have now been disconnected.'		
Meter readings	'Sometimes they don't read the meter for ages – my meter is covered with grass.'		
Rebates	'Even if you qualify for the rebate you still have to pay a lot.'		
Assets attached	'Black people are being exploited by the CEO and his lawyers.'		
Customer service	'We go to the town clerk, then we are referred to the treasurer then back to the town clerk, at the end of which you are frustrated and your feet swollen.'		

Table A.5 Roles and responsibilities in Queenstown contract			
	Current roles and responsibilities	Suggested roles and responsibilities	Potential conflicts
Municipality	Setting of tariffs Standards and levels of service Paying the contractor	Revision of customer management Development of technical and managerial capabilities Shared responsibility	Planning capacity weak due to lack of financial resources Political instability Changing government priorities Dependence on external funding

Table A.5 Ro	oles and responsibilities in Q	ueenstown contract (con	t.)
WSSA	Operational side  Handover of assets to the  Municipality at end of contract	Take over full customer management and responsibility from council	Resistance on part of community to work with WSSA
		Recover income directly from consumers	Unwilling to invest in community plans
		Promote integration of communities into management	
Community organisations		Co-ordinate with WSSA for collective solutions	Capacity building takes time
		Identify problems and priorities at community level	Long-term commitments NGOs perceived as
		Intermediary in building local stakeholder relationship	competition
		Capacity building for new community leadership	
		Promotion of WSSA work	
Households	For any problems with services on their plot	Input from communities used in the formation of indicators to measure impact	Short-term vision Need for tangible results
		Suggest how pro-poor policies would reflect needs	Rejection of WSSA

# **Cato Crest, Durban**

# Box A.3 Key issues — Cato Crest, Durban

- Pro-poor policy in place
- Information gathering used to discover needs of residents and inform a pro-poor policy
- Relationship between Durban Metro, community, and community development officer
- Levels of service available
- Levels of administrative support needed

#### **Background**

This report highlights the findings of research into the impact of the arrangements between Durban Water and a number of water bailiffs in the provision of water to poor residents living in Cato Crest, Durban. Cato Crest is an informal settlement established in the 1980s. The majority of

residents were unemployed, poor, and faced the constant threat of eviction by the provincial government which owns the land. The settlement had no municipal infrastructure. The water situation improved after the provincial government handed over the land to Durban Metro, who installed public standpipes and later ground tanks. These developments are presented in Table A.6:

Table A.6	Table A.6 Key observations			
	Intervention	Benefit	Negative effects	
Prior to 1993	Standpipes	Water supply in settlement	Fluctuating price depending on bailiff	
		Later benefits for those who cannot afford tanks	Limited access	
			Water portage still necessary	
			Low levels of payment	
			High wastage of water	
1994	Ground tanks	Less pressure on bailiffs	Not everyone can afford tanks	
		Convenience	Water quality problems	
		Increase in supply quality	Bailiffs' pay depends on amount of water sold	
		Household responsibility		
		Cheaper to have tank than use standpipes		
		Bailiffs given loans to start micro-businesses		
1997	Free water	First six kiloliters of water free/ household/month	Neglect of technical aspects of supply that were responsibility of bailiffs	
		People with ground tanks and those using public standpipes are not charged	Public taps/manifolds (devices which control water distribution to households) are not controlled	
			Loss of interface with bailiffs/ Community Development Officers	

Figure A.2 summarises the contractual relationships.

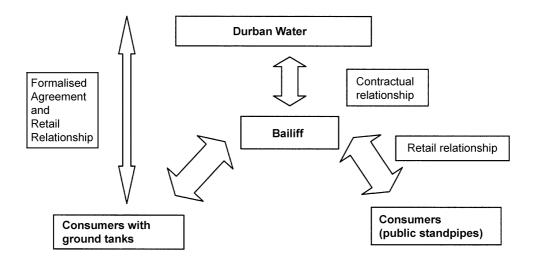


Figure A.2 Contractual relationships in Cato Crest

Durban Water pioneered this innovative system and put in the groundwork in order to 'make it happen'. The groundwork included community mapping and information gathering, outreach to households — keeping residents informed and building a relationship of trust with the consumers, appointing a community development officer, and setting up community committees. The preparation also involved substantial support and training to the bailiffs to ensure the system would function effectively.

The bailiff had a standpipe on his property, which is metered and from which he sells water to those customers who cannot afford a ground tank. The relatively higher price of water bought from the standpipes promoted the purchase of tanks. At a fixed time of the day the bailiff filled all the tanks through a manifold and small diameter pipes which connected customer's tanks to the main supply. Table A.7 explores the bailiffs' own perceptions of their job:

Table A.7 The b	ailiffs' perspective
Job satisfaction	Only 1 in 5 reported liking her job  All bailiffs regarded their relationship with Durban Water as good.
Remuneration	Payment of bailiffs created mistrust within the community, as payment depends on the amount of water sold and number of customers. No job security. 'Many people did not like me because they thought I was getting money to improve my life. If I bought new shoes they suspected that I was using Durban Metro money.'
Problems	High level of support needed from Durban Water; problems include stress, hostility from the community, and no time for other things. 'Yes there were people who were opposed to the bailiffs. If they failed to pay and water was cut they blamed us. There were also problems when you opened late or closed early.'
Perks	Increased power within the community, standpipe on property, and opportunities to start small businesses (but in practice most lacked entrepreneurial spirit).

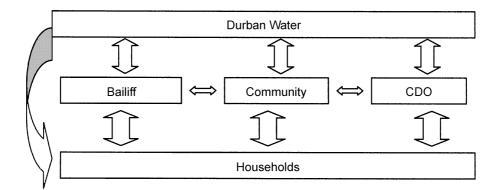


Figure A.3 Summary of the stakeholder interactions involved in the Cato Crest PPP

Durban Water subsidised the cost of providing the tanks and connections. In 1998 the tanks cost the household R230. Households could either pay the full amount or pay a deposit then pay instalments over an 18-month period. Durban Water encouraged households to clear the debt within six months by not charging interest in this period. Durban Water also set the price of water at the standpipes at 20 cents/25 litres. Table A.8 attempts to synthesise the roles, responsibilities, and investments implicit in the Durban Water contract system.

The initiative to provide all consumers with their first 6kl of water for free was thought to be more cost effective, especially with a government subsidy

Table A.8 Roles	s, responsibilities	and investments		
	Community	CDO	Durban Water	Bailiffs
Roles and responsibilities	Prepayment of water supply	Technical supervision	Support bailiffs	Control supply and recording consumption
	Maintenance of own tanks and supply pipe	Assist bailiffs and residents	Outreach to households	Attend monthly meetings
	Buy another tank if the first is stolen or damaged	Monitor bailiffs	Monitor bailiffs	Record manifold meter readings daily
		Act as interface between community, Durban Water, and bailiffs	Operate and maintain main pipes, meters, and manifolds	Selling standpipe water and filling tanks
		Dealing with complaints		Maintenance of standpipes and manifolds
				Record and report faults
Investment	Unskilled labour in pipelaying		Deposit of R200 for the franchise standpipe	Infrastructure in the informal settlement
	Payment for tanks and pipes from tank to manifold		Businesses at standpipes, i.e. spaza shops	Investment in bailiffs' training and businesses

for poor households taken into account. Durban Water raised their block tariff structure, which meant that consumers using large amounts of water were subsidising those using little.

## ${\bf Box\ A.4\ Key\ findings--Cato\ Crest}$

- Establishment of community committees by Durban Water were useful forums for consumers and the community development officer provided an interface with Durban Water
- Service coverage was extended with a convenient, reliable supply
- A choice of services were offered within an affordable range available
- Contracts enabled all players to understand the rules of the game
- Focus on community outreach and understanding consumers underpinned the partnership

Outlined below are the community perceptions of Durban Water's performance and an analysis of the Durban Water programme:

Table A.S	9 Community perceptions of	Durban Water's performa	nce
	Of the system	Of the bailiffs	Of Durban Water
Positive	'People are happy, it is easier for people to get water. They don't have to go long distances for water.'	'We trusted the bailiffs. They were always there when we needed them. They were doing a good job.'	'We never had any problems with them. They explained everything to us. Whenever we had problems they attended to them effectively with open arms.'
	'Ground tanks are good because we always have water.'	'They were approachable and understanding since they were staying within community.'	'The relationship was good. There was a very good working relationship with the CDO and the community.'
	'Ground tanks allowed us to do other activities because we had time. There were no more queues.'	'Bailiffs were important. In their absence people were going to leave taps open leading to water wastage.'	
Negative	'The main problem is that of pipes; they are always damaged because they are exposed.'	'Sometimes bailiffs would go to church and there was no one to serve us. They will have left keys with someone but when you went there we were told they don't have the keys.'	'Durban Water did not respond to people on time.'
	'Some people find it difficult to drink the water as it causes diarrhoea.'	'People selling water used to close the taps and this affected the relationship.'	'The relationship was not very good because we never met them to discuss water supply issues.'
	'Tanks are not right because there is not pressure in the tanks so the water comes out slowly and people have to wait a long time to fill their buckets.'	'Bailiffs were very cheeky. They used to shout at customers and were very unhygienic. They did not listen to anyone.'	
	'Some people did not have the money to buy ground tanks.'	'They were not people orientated. When it was closing up time at 6pm they would close regardless of the queue.'	
	'The problem with the tanks is that dirt accumulates inside. People did not know how to clean them.'		
	'When its hot, the water gets hot because the tanks are outside.'		
	'Enemies could open the tanks and poison them.'		

Table A.10 Analysis of	the Durban Water prog	gramme	
Strengths	Weakness	Opportunities	Threats
Expansion of services	Selection of bailiffs who needed substantial amounts of effort and resources for capacity building	For the community committees to become involved in O&M	Lack of transparency
Levels of service available	Change in pricing policy meant loss of CDO and bailiffs – and thus the interface with Durban Water	Community funds for maintenance	Lack of interest in the system from communities and Durban Water
Reduced threat of eviction	Wastage of water	Sanitation projects	Increasing growth of the settlement
Improved revenue collection	Neglect of maintenance for infrastructure	Training and capacity building for community caretakers of the services	Informal status of Cato Crest
Consumers are organised and involved in management	Change in roles and responsibilities	Government policies in support of private running of utilities	
Introduction of management and administration procedures	Cost recovery too expensive	Increasing the interface between Durban Water and communities	
Clear roles and responsibilities	Conflicting roles of Durban Water and government		
Tailor-made for the community			
Investment in community (establish committee, bailiffs enterprise development)			
Explicit pro-poor policies allowed people to buy tanks and pay bills			

	Previous roles and responsibilities	Current roles and responsibilities	Suggested roles and responsibilities
Government		Government subsidy	Revision of perception of PPP and provision of services to informal areas
Durban Water	Facilitation of supply Support to bailiffs Outreach to households Monitor bailiffs Operation and maintenance of main pipes, meters, and manifolds Setting tariffs Subsidise ground tanks	Raised block tariff structure Operation and maintenance of infrastructure Supply first 6kl of water free Dealing with complaints	Represent communities Share responsibilities for management of basic services Capacity building for community representatives Improve water infrastructure maintenance, and reduce leakage Improve sanitation/environmenta health Communicate with communities Revise customer management
Bailiffs	Control supply and recording consumption Attend monthly meetings Supply water to consumers Distribution Operation and maintenance Liasing with CDO/ Durban Water Sell tanks Open standpipes Management Dealing with complaints Acting as the face of Durban Water	N/A	Renewed role in monitoring wate supply in the community, in addition to maintenance activities Potential to continue as an interface between the community and Durban Water
CDO	Technical supervision Assist bailiffs and residents Monitor bailiffs Act as an interface between community and Durban Water and bailiffs Dealing with complaints	N/A	Renewed role as intermediaries in relationship building between community, Durban Water, and municipal government Development of sanitation infrastructure with communities Manage and co-ordinate implementation of alternatives Promote participatory planning a municipal level
Community	Prepayment of water supply Maintenance of own tanks and supply lines Buy another tank if theirs is damaged or stolen	Maintenance of own tanks and supply lines Buy another tank if theirs is damaged or stolen	Share responsibility of management of basic services with Durban Water Capacity building for community representatives Identify and prioritise local problems Manage projects at neighbourhood levels Promotion of successful community projects

# Awami Tanks in Orangi Town, Pakistan

#### Box A.5 Key issues — Orangi Town

- The private-public partnership depended on:
- Suitable management and mechanisms
- Existence of welfare-orientated community institutions
- Previous experience of informal sector provision of health and education facilities

#### **Background**

Squatter settlements are normally at the tail-end of the Karachi Water and Sanitation Board's (KWSB) supply, where the service or supply frequency is either totally missing or of poor quality. In these areas community organisations, local religious institutions, and law enforcing agencies have helped develop a system of supply and storage. The Awami tanks are a micro example of this; they are a form of storage that facilitates the supply of basic quantities of water to tail-end areas or communally owned sites. Supply of water to the tanks is facilitated through the KWSB tankers and rangers, but sometimes it is inadequate and local people pool together the cost of a commercial tankerload of water independently of the KWSB. This case study illustrates how communities can co-operatively address basic needs. There has been no widespread community conflict in the routine operation of the Awami tanks despite the general situation of acute water shortages, overall feelings of desperation, and the low economic status of households. Table A.12 presents an historical perspective of Orangi's water supply:

Table A.12	2 Timeline of interventions in Orang	gi's water supply system
Year	Event	Outcome
1965	Orangi Township established	Population of about 900,000 living in 94,122 houses with an average income of Rs.1650
	Water supply through private tankers	
1982	Hub River used as source	
1984	Piped water supply	
1994- 1995	Government of Sindh Privatisation Strategy	Pressure from NGOs, CBOs, and professional groups deferred overall privatisation
	Adequate water supply	Major cause of expansion of Orangi

Table A.12	Timeline of interventions in Orang	gi's water supply system (cont.)
2000	Hub River source fails	Water production dropped from 447 million gallon/ day in 1999 to 435 mgd in 2000
	KWSB administration and Government of Sindh review options of privatising parts of systems	
	Measures taken by KWSB	Tankers and upgrading of pumping facilities using Indus River as source

Since the decline of the Hub River source of water people have experienced a shortage of water, and the administration is unsympathetic to the search for alternatives.

Factors constraining KWSB supply:

- Decline in performance;
- Hub River source of supply failed leading to a drastic shortfall of production:
- Heavy debts amassed by KWSB (Rs.46 billion);
- Mismanagement of the KWSB;
- Misappropriation of donor funds;
- Overall macro-economic situation in Pakistan.

Underground water pipes have been laid by a variety of agencies in Orangi, but with few exceptions the water had not been supplied through them. In addition, water supply through the pipes is often contaminated and considered unsuitable for drinking, so people have to boil their drinking water.

Local communities decided to use the traditional method of the Awami tanks as a last resort for water supply. In some cases the government surveyed areas and built the tanks and in others people built tanks themselves. People provided land from their own plots to build the tanks, and tanks were also constructed near mosques. The unreliable and limited supply from the rangers, however, means that some tanks are filled twice a week whereas in other areas it is once a fortnight, and so the community occasionally has to use private tankers.

The majority of people see the Awami tanks as a temporary measure. It is feared that if the current policy changed and water supply were no longer

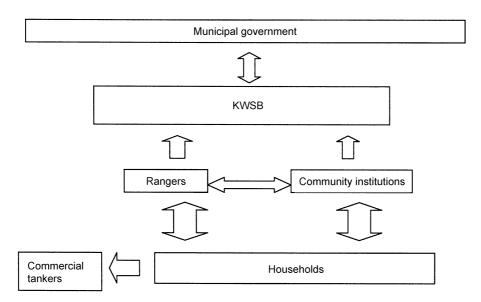


Figure A.4 Summary of stakeholder interactions

under the charge of the Rangers, the existing system of water supply through the Awami tanks would be affected. For the Orangi area it is clear that the piped water supply will remain grossly inadequate for the near future, and the government alone cannot deliver the services because of it's limited capacity to address the problems. The municipality will have to rely on the mechanisms of partnership that have evolved from peoples' initiatives. Awami tanks could be developed further, in terms of the design and construction of the tanks. Considerations include the reduction of water loss by seepage and the installation of pumps to improve access to supply. Communities may also negotiate with KWSB to pay for a regular supply instead of using private water tankers in times of crisis, which supply water unfit to drink. What the communities really want is a piped water supply.

#### Box A.6 Key findings — Orangi Town

- Widening water supply options means providing choice. Choice may be constrained by lack of information or lack of knowledge about the impacts or consequences of any one option, and by the latent, unexpressed, and partially informed demand.
- Government policies may militate against certain technical options for the poor.
- Water and sanitation services should be demand driven.
- Technical know how must be transferred to the poor if they are to manage their supply.
- Interventions should be matched to the attitude, knowledge, and expectations of the user communities.

The following summaries include an analysis of the Awami tank programme, describe the roles and responsibilities of the Awami tank system, and indicate consumer perceptions of the tanks.

Table A.13 Analysis	of the Awami tank pro	gramme	
Strengths	Weaknesses	Opportunities	Threats
Awami tanks are a last resort	Frequency of supply is inconsistent between areas	Build tanks at the corner of each lane	PPP denied to people (as it creates a burden on citizens)
Water is more available when the rangers' tanks fill the Awami tanks	Tanker's load may be divided between a number of tanks	Increase water pressure in lines so that water from tanks can reach homes	View of Awami tanks as temporary
Water is free	Rangers may not be permanent	Repair pipelines	Unregulated price and quality of water from private tankers
People can access supply as and when needed, providing the tanks are full	Dependence on private tankers to top up supply	Identify alternative water sources	Lack of transparency
The tanks are co- operatively built	People may live far from tanks	Augment supply	Incompetence of KWSB
Community management and regulation	Those with greater resources can build tanks on their land	Increase water supply from tankers	Lack of political support
Use of mosque to announce water availability	Consequences for women in purdah	Political support	Lack of interest in settlements
Self-help tradition in Orangi	Vandalism of government-built tanks	Supportive policies for community partnerships in PPP arrangements	
	Discord in community regarding water		

Table A.14 Ro	les and responsibilities	s in Awami tank PPP	
	Current roles and responsibilities	Suggested roles and responsibilities	Potential conflicts
Government		Revision of planning perception of PPP	Resistance to develop partnerships with people Unwilling to invest in community-derived plans
KWSB	Facilitation of supply	Represent communities  Share responsibilities for management of basic services  Capacity building for community representatives  Improve water infrastructure, reduce leakage, introduce alternative sources of supply, collect tariffs  Use money directed to Awami tanks for long-term solutions  Communicate with communities	Short-term vision, unwilling to be involved in long-term planning Dependence on external funding Weak planning capacity Limited resources Develop a plan
Rangers	Supply tanks normally once a week, Surveys of water deficit areas Making timetables for provision	Intermediaries in relationship building between community, KWSB, and municipal government  Development of infrastructure with communities  Manage and co-ordinate implementation of alternatives  Promote participatory planning at municipal level	Short-term vision Limited experience Limited roles Rejection of rangers as a legitimate representative
Community	Mohalla/Masjid (religious and traditional structures in community) responsible for  distribution operation and maintenance liasing with rangers ownership of tanks building tanks, management announcing water availability	Share responsibility of management of basic services with KWSB  Capacity building for community representatives Identify and prioritise local problems  Co-ordinate with NGOs and legal aid groups for collective solutions  Manage projects at neighbourhood levels  Promote successful community projects	Technical support and training Negotiate with KWSB for regular supply for payment Water is not thought of as a tradable good Perception that poor should not have to pay

פ												
	Frequency of acquisition	Views on Awami tanks	Type/ size of tank	History of tank	Management of tank	Distribution of water	Problems	Solution	Civic agencies responsible	O&M of tanks	Handling of money	Overall performance
н	Once a week	Shortage of water	٥.	10 years old	Masjid community	People's own responsibility	Bigger tank needed	Increased supply	Water board	Masjid community	Water is free	Satisfactory
7	Wee kly	Problems with pipe supply	10 tanks	Masjid community built	Masjid community	Announceme nt through speakers	Pipeline out of order	Pipeline from the tank	KWSB	Self help	Supply is free	Not considered a permanent solution
ო	As per need	Awami tanks are temporary response to lack of water	Four tanks	Built in 1990 through self help	Mr Mohammed	25 houses / tanker	Inadequate water supply	Pipeline repaired	Government	Mohalla community	Rs.40 collected [per person/ week/ what?]	Supply satisfactory, but water quality is bad
4	Three days	Water expensive so tanks established	Four-five tanks	Built six months ago	Mohalla committee	People's own responsibility	Pipeline needs repair	Pipeline repaired	Rangers	Self help	Water is free	Temporary
r2	Two days	No piped water so tanks established	Two tanks	OPP helped build it seven years ago	Rasool Ahmed	People's own responsibility	Contamination of water supply by oil	Pipeline repaired	Water board	Self help	Water is free	Should be improved

Respondents:

A Qari and religious teacher from Gulshan-e-Zia, Orangi Town Shopkeeper from Maywati Colony, Orangi Town Retired man from Gulshan-e-Zia, Orangi Town Rickshaw driver from Yaqoobabad, Orangi Town Mills labourer, Orangi Town

# Aborted privatisation of KWSB, Karachi

#### Box A.7 Key issues — KWSB, Karachi

- Pro-poor policy not in place before contract negotiated.
- ToR makes little explicit reference to the poor (except with reference to the tariff bid, which should be minimised in favour of customers). Key words in ToR are transparency, measurement, competitive base, output, and efficiency.
- Disparity of perception of PSP between government and stakeholders (service delivery vs. financial recovery of KWSB).
- Transparency of process, inclusion of stakeholders
- Consideration of alternatives
- Theft and leakage problems
- Billing and tariff disputes have led to court cases

#### **Background**

The Karachi Water and Sanitation Board (KWSB) was formed in 1981. Karachi was facing acute water shortages, with both water scarcity and poor levels of service. People were getting water from water vendors who obtained their supply from broken mains, tubewells, or wells but the quality was generally poor. The Government of Sindh accepted the possibility of private sector participation on three conditions:

- 1. the entire PSP process had to be totally transparent;
- 2. the best available expertise had to be acquired; and
- 3. there had to be close association from the World Bank.

The discussion for the privatisation of KWSB took place in the context of low tariff levels, poor recovery of dues, political interference, obsolete technologies, and overstaffing. The KWSB was not meeting the increasing demands being made on the service and the growing expectations of consumers. Despite loans and technical assistance from donor agencies the situation did not improve, so the government saw an attempt to use PSP as justified. The main objective of the PPP arrangement was to make KWSB a financially viable enterprise. Table A.16 shows the main events in KWSB's history:

Attempts to privatise the KWSB were widely opposed, not least because privatisation would mean profit for the contractor with no viable accountability measures. (The perceptions of the different stakeholders are summarised in the appendix.)

Table A.	16 Timeline of events in KWSB's history	
	Collection of drinking water from wells and reservoirs	
1852	Establishment of Karachi Municipality	
1885	Piped water distribution	
	Dumlottee Well Water Supply Scheme	Two wells supply the city
1947	14 wells in use	
1951	Greater Karachi Bulk Water Supply Scheme	Will be completed in four phases
1953	Karachi Joint Water Board established	
1957	Karachi Development Authority established	
1967	Phase 1 completed	Supplying up to 70 million gallons per day
1972	Phase 2 completed	Another 70 mgd supplied
1977	Phase 3 completed	Another 70 mgd supplied
1981	Karachi Water Management Board created	Takes responsibility for water distribution and cost recovery powers throughout metropolitan area
1983	Karachi Water and Sanitation Board created within the Karachi Municipal Council	
1985	Phase 4	Another 78 mgd supplied
1994	World Bank Mission on water and sanitation visited Karachi to hold discussions with the Chief Minister of Sindh	
1995	Follow up World Bank mission presented a blueprint for radical reform of Karachi's water and sanitation sector	
1995	KWSB, senior government officials, and Sindh Chief Minister attend PSP seminar	Attempt to demonstrate commitment to idea of PSP
	Government of Pakistan founded Privatisation Commission to privatise key public sector units	
1996	89 mgd from Hub River	
	Another 42 mgd from Indus	
	KWSB separated from KMC with a budget from provincial government	
	Consultants assist government of Sindh to prepare to involve PSP in water and sanitation sector	
1998	Pre-qualification stage of the bidder selection process completed	
	Bidding process started	

Among the components of KWSB considered potentially suitable for initiating the privatisation process, bulk supply is the foremost. The Bulk Water Supply Department supplies water to large-scale residential, commercial, industrial, and manufacturing units.

# **Bulk water consumers of KWSB**

In part the financial crisis of KWSB was a result of the non-recovery of dues and bills from consumers, in particular retail consumers. According to KWSB records there were 1.1 million bills issued in 1998-99, and only 7 per cent were recovered.

The Bulk Water Supply Service is structured to provide water in appropriate quantities to large-scale residential, commercial, industrial, and manufacturing units. Water connections of 2' dia and above are categorised as bulk water outlets. This system is governed by a separate structure of tariff and management procedures. In the main, the level of service has been rated as satisfactory and the Bulk Water Supply Service is relatively stable in financial terms.

Bulk water supply is one of the major earners for KWSB; it accounts for almost one-third of the revenue (see Table A.17).

Table A.17 Bull	water supply: Estimates	of receipts (1999–20	000)
Year	Receipt (in millions of Rupees)	Total Receipts (in millions of Rupees)	Percentage of total receipts
1998-1999	830.00	2305.00	36
1999-2000	905.50	2504.233	36.16

The tariff structure of the bulk water supply has changed over time. In 1981 it was estimated on the basis of net annual rental value of the property. In the following years it was estimated on the basis of unit water costs (see Table A.18).

PART B: INTERIM FINDINGS AND CASE STUDIES

Tal	ble A.18 A r	eview of	the tariffs	for bulk v	water sup	ply**, 20	00		
No.	Category	From 1 April 1981	From 1 December 1985	From 1 July 1989	From 4 August 1992	From 1 November 1994	From 1 July 1995	From 1 November 1996	From 1 April 1998
1.	Commercial/ industrial not connected with water line	6.5% NARV*	9.75	15.00	23.00	30.00	39.00	49.00	49.00
2.	Commercial/ industrial connected with water line (un metered)	9% NARV*	13.5	21.00	32.00	42.00	55.00	69.00	69.00
3.	Metered domestic (per 1000 gallons)	1.96	5.50	8.50	15.00	20.00	26.00	34.00	44.00
4.	Metered industrial/ commercial (per 100 gallons)	1.96	9.00	14.00	25.00	33.00	43.00	56.00	73.00

Table A.19 Database of Co	onsumers 1998–99		
Category	No. of connected properties	No. of unconnected properties	Total No.
Residential	387,020	131,194	518,214
Flats	208,533	14,686	223,219
Residential/commercial	17,712	497	18,209
Industrial commercial	35,576	25,528	61,104
Hospital/school/ Mosque/ imambargah	131,025	38,498	169,523
Under construction	1,563	1,895	3,458
Vacant/others		1,311	1,311
Shops	20,236	107,562	127,798
Total	801,665	321,171	1,122,836

Source: KWSB, Basic Facts

\* Net Annual Rental Value – it is a measure to determine the basic market value of the property concerned.

\*\* Water bills sent to consumers also included are the relevant government taxes as applicable.

A standard procedure of bulk supply connections is adopted for the small and medium-sized consumers. The consumers notify KWSB of their water requirements, which is approved by KWSB after review. They received their water according to the agreed rates and tariffs. Backup maintenance and upkeep is covered in the contracts, but it is rarely fulfilled by KWSB in situations of breakdown or scarcity of water. Very large consumers, such as Pakistan Steel Mills, had to construct part of their supply infrastructure themselves. For small and medium-sized consumers, KWSB provides the connections up to the property line and the consumers install internal piping and fixtures themselves.

### **Tariffs and billing**

With very few exceptions, the bulk consumers found the tariffs satisfactory, but were critical of the billing and recovery procedures. There were several chronic billing disputes that are still not resolved, for example the Defence Housing Authority have not paid their water bills for about three years. Many consumers were also of the view that KWSB 'over bills', i.e. they supplied less than the contracted quantity. Karachi Port Trust and Pakistan Steel own and manage a fleet of water bowsers to supplement their water needs and ensure supply, and other consumers do the same using private water vendors. Industrial and commercial consumers are willing to pay even higher tariffs for greater water allocations, but as water is in limited supply, their demands cannot be met.

# **Operation and maintenance**

Almost all consumers have arrangements requiring KWSB to carry out routine operation and maintenance of the infrastructure. When a breakdown occurs KWSB staff undertake repairs, but routine maintenance is almost non-existent. KWSB is also unable to check the water thefts from the supply lines to the bulk consumers.

# Client/consumer satisfaction

The bulk consumers were critical of KWSB's inability to satisfy their demands. Abrupt and anomalous breakdowns, inconsistent frequency of supply, poor quality of water, loss of supply pressure, and the inability of

<sup>1.</sup> According to KWSB staff, small scale bulk consumers are those whose requirement is less than 100,000 gallons per day; medium scale are these who consume less than 500,000 gallons and large scale are consumers who use more than 500,000 gallons.

KWSB to respond to crisis situations were some of the common complains expressed by the consumers.

#### **Future requirements**

According to the reported needs, there is a massive demand for water in the bulk consumer sector, mainly because of expansions in the operations of existing consumers. These consumers are sceptical of KWSB's capacity to provide more water. It was generally found that the bulk consumers located along the National Highway had fewer complaints related to supply, as they were near to the main source of water pumping and distribution. The consumers in District West, however, experienced acute problems during the past three years when supply from the River Hub dried up.

# Possibilities and prospects of public-private partnership

In view of the existing situation, the prospect of a pubic-private partnership in the bulk consumer sector seems a good idea to some consumers, many of who have growing water requirements, which the KWSB has been unable to meet. A prime reason for this inability is the absence of capital to finance the increase in supply. It was thought that KWSB's revenue recover could be improved if better contracts were developed, and this might also reduce the high number of billing disputes in the bulk supply sector. A public-private partnership might also be the opportunity to develop viable contracts covering operation and maintenance of the infrastructure related to supply and storage.

# Box A.8 Karachi Key findings — KWSB

- Recovery of revenue may be improved by linking water charges to land, gas, etc.
- Accurate metering of water supplied to consumers, this will improve revenue generation/ recovery
- If tariffs are to be more aggressively recovered there must be tangible benefits for consumers; i.e. improved quality and quantity of water and a reliable supply.
- Clearly define the objectives of PSP in collaboration with stakeholders.
- Improve management practises and provide redress for complaints and design tariffs.
- Set a standard policy in negotiation with consumers.
- Un-bundle water and sanitation services and hand over to decentralised organisations
- Water is perceived as a public good, therefore there is potential to improve supply through participation. There is a role for consumers in monitoring water and sanitation PPPs.
- Recognition of informal side of supply and the role of vendors
- Different levels of service not available (choice)

Below is an analysis of the aborted KWSB PPP, and a table of the perceptions of bulk water consumers of KWSB.

Table A.20 Analysis	of KWSB PPP		
Strengths	Weaknesses	Opportunities	Threats
Reduced political interference	Informal water supply activities of KWSB staff not recognised	Government policies in support of privatisation	Lack of transparency in the negotiations
Improved revenue collection	Only the interests of the private sector are safeguarded	Existing supportive legislation	Lack of popular support
Introduction of commercial skills from the private sector	Poor communities are forgotten	Opportunity to generate revenue to balance budget deficit	Political repercussions of privatisation
Introduction of management and administration procedures	Monopolistic tendencies of utility company	Extension and improvement of existing supply	Unionism
Autonomous water body	Conflicting objectives	Tariff levels designed with poor in mind	Stakeholders are not included
Strong regulation	Small numbers of legal connections		Retrenchment of staff
Consensus within government for continuing privatisation	Contracts do not follow prescribed administration procedure and are not transparent		Population growth
Control of thefts and leakage	Selection of only foreign firms in bidding		

Table A.21 Pe	Table A.21 Perceptions of bu	ulk water consumers of KWSB	mers of KWSB					
Consumer	Year connection obtained	No. of O&M staff	Water need (gallons/day)	Problems 1.	Problems 2.	Tariff design	Future demands	Suggestions to improve KWSB performance
Pakistan Steel	1978	256	20mgd	No problem; has own canal supply, reservoir, filtration plant	No need to improve the system	High water rates is the biggest problem	60mgd	Confident that KWSB will meet responsibilities
Defence Housing Authority	1954, 1978, 2000	40	8mgd	Supply is less than need	Uncertain supply	Financial obligations settled with KWSB	10mgd	Improve pump houses, avoid monopoly
SITE	1950	108	15mgd	Supply is short of need	KWSB not meeting obligations		20mgd	Control of waste and leaks, additional sources
Karachi Port Trust		33	4mgd	Shortage is a problem as is low pressure	Water supplied through 1.3 connections		Growing at a rate of 10 per cent	Systems should be computerised, desalination plants added, and finances restructured
Export Processing Zone	1981	ιο	3mgd	Needs are met through reservoirs, overhead tanks	KWSB is meeting its responsibility	Water supplied at the commercial rate	Additional 0.5mgd	System is working satisfactorily
Civil Aviation Authority	1990	20	1mgd	Needs are met	Potential shortage in future supply	KWSB charges more than they actually supply	1.5mgd	Improve bulk supply, and reduce illegal connections leakage
Aga Khan University Hospital	1984	\ \	0.6 mgd	KWSB is meeting obligations	Automatic operation of pumping stations	Negotiating a tariff revision	Double in 10 years	KWSB may hire management consultants

Table A.22 Per	ceptions of KWSB staff of PPP option
Potential for improvement	'The object of privatisation should be to improve services of management.'
Alternatives	'First attempt should be to recover the bills. If the shortfall continues then privatisation may be considered as an option.'
	'To improve the system the source of water has to be expanded.'
Impact of services	
Complaints	'People may not benefit from privatisation as no mention is made about expansion of service coverage.'
	'Privatisation process seriously began at the behest of World Bank.'
	'Privatisation is undertaken without consulting KWSB Staff.'

Table A.23 Per	ceptions of water traders of PPP option
Potential for improvement	'The poor are already purchasing water at high prices. Thus if service levels improve as an outcome of privatisation, it may not be a bad choice.'
Alternatives	'Due to poor service, KWSB is not able to recover its bills.'
Impact of services	'Performance of KWSB in the post-privatisation situation will be measured through water charges they would levy on customers.'
	'Water vending practise will continue despite privatisation. It will continue to serve the population that it is serving at the moment. KWSB feeds a limited clientele and area.'
Complaints	'Privatisation will not solve the problems of KWSB. The government should invite all the stakeholders to discuss the issues related to privatisation.'
	'It is the responsibility of government to check the quality of water being supplied through the different bodies.'

Table A.24 Per	ceptions of builders/developers of PPP option
Potential for	'There is the possibility that water quality will improve after privatisation.'
improvement	'Water supply will improve after privatisation. The private sector will also ascertain smooth and periodical recovery for the water sold. However, this would largely depend upon the process, procedure, and system.'
	'The administrative and managerial performance of KWSB will improve after privatisation. Technical standards will also improve. Staffing will be rational. More funds will be available for the development and extension of network.'
Alternatives	'The main reason that led to privatisation were massive leakage, theft, and ill monitored recovery. KWSB has the potential to rectify its defects but it doesn't have the will to do it.'
Impact of	'Tariffs will rise monumentally.'
services	'Privatisation may help in removing the serious ills of KWSB.'
Complaints	'The current adopted process of privatisation is not appropriate. The KWSB is being directly sold to a foreign company.'

Table A.25 Pe	erceptions of local politicians of PPP option
Potential for improvement	'The objectives of privatisation should be to improve the institution's performance keeping the service cost within affordable limits of common citizen.'
	'Objective of privatisation should be to provide best service at affordable prices.'
Alternatives	'A pre-requisite to financial improvement of KWSB is to have honest and clean people in all it's departments.'
	'Alternative path is to increase the salary scales of workers to prevent them entering into corruption.'
Impact of services	'The quality of water and sewage network is least likely to be improved after privatisation.'  'Its impact on the paying consumer will be disastrous due to high tariffs.'  'Privatisation will have grave social implications.'
Complaints	'It is illogical to contract out KWSB to foreigners. Local managerial groups should be formed for the purpose.'

Table A.26 Per	ceptions of consultants of PPP options
Potential for improvement	'Better efficiency, improved management and on-time supply may result from private sector.'
	'Only affluent areas will benefit from privatisation.'
Alternatives	'Demand and supply should be assessed.'
	'Consumption and not the locational characteristics should be made the basis of water charges.'
	'Decision-making should be done transparently.'
Impact of services	'As a result of privatisation people will have to pay extra charges for the same kind of service as is available to them today.'
Complaints	'Monopolisation should be avoided.'  'Privatisation will be unjust for Karachi.'

Table A.27 Pe	rceptions of city administration of PPP options
Potential for improvement	
Alternatives	'Sources of water supply have to be expanded and new services explored.'  'Innovative solutions were not devised, i.e. recycling of sewage and desalination.'  'Before resorting to privatisation other alternatives should be carefully studied.'  'Privatisation is not the solution for the faulty billing, recovery and operational system.'
Impact of services	'Private entrepreneurs will find it even more difficult to recover revenue.'  'Disconnecting unpaid water connections from different low-income localities can become serious issue.'
Complaints	'It is only the World Bank which is pushing privatisation.'  'Privatisation is not available from the security point of view.'

Table A.28 Pe	rceptions of citizens' groups of PPP options
Potential for improvement	'Privatisation is a good option. The present system is disappointing for those who pay their bills but do not get water.'
	'Low-income localities mostly steal water. It is causing burden on paying citizen.'
	'Administratively KWSB may improve.'
	'In order to improve water supplies and sanitation services and to make people pay user charges, KWSB should be privatised.'
Alternatives	'As an alternative, decentralisation at all levels should be undertaken.'
	'If core government departments settle their water bills, then perhaps privatisation will not be needed.'
Impact of	'Privatisation will not improve the level of service. People will pay high for inferior service.'
services	'Water quality will not improve.'
	'Privatisation will put the burden on common people. It will give rise to price hikes, unemployment and will end to public control.'
	'Privatisation will be protection for the paying citizen.'
Complaints	'It is difficult to believe a foreign investor will come and invest in a sector where the government itself is not investing.'
	'Situation of sewage will get worse.'

Table A.29 Po	erceptions of residents of PPP options
Potential for improvement	'In terms of improvement of services, privatisation may be useful.' 'Privatisation will be beneficial.' 'Financial bungling on the award of contracts, corruption, wastage of water and political interference will be controlled.' 'KWSB and private company should form a partnership.'
Alternatives	'If KWSB stays a government institution it will be favourable to poor.'  'Staff should be protected during privatisation.'
Impact of services	'Outcome will be increase in user charges' 'Privatisation will give rise to monopoly by buyer 'We have no idea as to what the benefits will come from privatisation.' 'The benefits to the citizen are not clear.' 'The government will not safeguard people's interests.' 'Privatisation will force the people of squatter settlements to safeguard their internal infrastructure to avoid losses and theft.' 'We doubt privatisation will do any good to the existing system.'
Complaints	'People's representatives should be assigned the task of monitoring the performance of private companies.'  'While PPP is not a bad option it may not be properly carried out in KWSB's case due to the culture of developing monopolies and bypassing rule and regulation.'  'People should be involved in process.'  'We cannot pay inflated bills of water any further.' 'If we get clean drinking water which is devoid of all impurities and the supply is continuous then we may think of paying more. But we know this can not happen.'

Table A.30	Table A.30 Bulkwater consun	ısumers							
Consumer	Year connection obtained	No. of O&M staff	Water need (gallons/ day)	Problems 1	Problems 2	Problem 3	Tariff design	Future demands	Suggestions to improve KWSB performance
Printing Corporation	1977	7	0.45 million	No complaints (has own reservoir)				No need to enhance supply	Quantity and quality is adequate
Sindh Medical College	1973	_	Consumed by 300 students, teaching and admin. staff	Availability of funds	lllegal connections	Suction pumps		Extension of college will mean added demand	Tackle water quality
Pakistan Railways	1947	81	1mgd	Shortage of water	Repair and maintenance of the system		Less supply more payment	Demand is increasing	KWSB should guard against the illegal connections
Jinnah Post Graduate Medical Centre	1947	ю	9mgd	Supplied twice a day but not at night	Meters are out of order	Insufficient supply	Bills and tariffs are important issue	Patients are increasing in numbers	
OJHA Institute of Chest Diseases		ഹ	27,000	No great problems	New buildings applying for connections	Hospital system is damaged			Generally no problem
Machine Tool Factory	1967	12	000'09	No problems	Factory has an overhead storage tank	Occasional scarcity of water		No plans to increase water requirements	No problems

Table A.30 I	Table A.30 Bulkwater consu	sumers (cont.)	(						
Consumer	Year connection obtained	No. of O&M staff	Water Need (gallons/ day)	Problems 1	Problems 2	Problems 3	Tariff design	Future demands	Suggestions to improve KWSB performance
Shipyard and Engineering Works	1951	9	13,000		50 tankers	Shortage during peak hours	Downsizing KWSB is an issue	Increase in tariffs	Research into re-structuring
National Fibre Ltd.	1978	1	100,000	200 extra tankers needed to meet demand	Shortage of water and not enough connections		No problems	200,000/ day More water reserves to meet demand	Restructuring the bulk water supply
Darus Salam Co-op Housing Society	1970	7	KWSB is fulfilling needs	No problems with service	Bulk grating and screen gets clogged		Billing and payment regular	Future needs will increase with number of houses	Infrastructure development will meet demand
Karachi Awami Markaz	1982	35	6-7,000	Lack of pressure and shortage of water	Only one connection is not enough	Bulk water supply is not working well	No tariff problem	More than 10,000 people visit the area – increase	Restructuring may be an option
Liaquat National Hospital	1958	ω	38-50,000 gallons a day	Current demand is 38-50,000 gallons a day. Six to eight tankers are needed to meet demand	Supply is not continuous	Only 3' connection is available		Water need will increase to 200,000 gallons/day in five years	Only KWSB will be able to meet demand

# Sindh Katchi Abadis Authority – Orangi Pilot Project collaborations in Karachi, Pakistan

# Box A.9 Key issues — SKAA-OPP, Karachi

- Community constructed, maintained, and managed activities are more effective than externally driven ones
- Professionals and householders may have different views of what is and is not affordable
- Sanitation depends on individual perceived needs
- The changing role for NGOs as intermediaries between communities and government
- Building partnerships requires flexibility
- Demystification of technology/expertise is important
- Can the project staff cope with high management burdens?

# **Background**

Sindh Katchi Abadis Authority (SKKA) is a provincial government organisation. It was formed in response to the declaration of the Prime Minister in 1986 that all katchi abadis (informal settlements) existing before 1985 would be regularised. SKKA is an autonomous advisory body and a research and monitoring unit with the mandate to advise the local councils in their work related to the regularisation of the katchi abadis. The aims and functions of SKKA include:

- the declaration and regularisation of katchi abadis as stated in the SKKA Act 1987 and government policy;
- the upgrading and development of katchi abadis; and
- the provision of social and physical services in notified katchi abadis, through collaboration with NGOs, government agencies, or international donors.

The OPP considers itself a research institution whose objectives are to analyse the outstanding problems of Orangi and then, through action research and extension education, find viable solutions. These solutions can then be applied, with modifications where necessary, to other settlements and become part of state policies. Dr Akhtar Hameed Khan proposed collaboration between the OPP Research and Training Institute and SKKA; OPP had developed a model which SKKA could use for upgrading katchi abadis in Orangi. The OPP adopted a model of research and extension for small farmers that assumes that small farmers can and should manage and finance their own farms, but that assistance should be given to them in terms of research, extension, and provision of reasonably priced services and supplies. Based on these principles, the OPP has evolved a number of programmes. Box A.10 describes the principles that apply to OPP programmes:

#### **Box A.10 OPP programmes principles**

#### Reducing cost involves:

- researching simplified designs;
- making standardised steel shuttering;
- surveying and mapping;

#### Extension refers to:

- finding activists in the lanes;
- training lane managers and masons;
- providing accurate plans and estimates;
- loaning tools and shuttering; and
- providing social and technical guidance and supervision.

#### Low-cost sanitation programmes

The stages of work involved in the sanitation project are:

- 1. Documentation of existing sanitation and water supply in the settlements
- 2. Identification of external water and sanitation supply for the settlements
- 3. Preparation of detail design, cost estimated by SKKA engineers, and design and cost reviewed by OPP-RTI
- 4. Approval of project by community activists
- 5. Financing and contracting arrangements by SKKA
- 6. Supervision of work by SKKA engineers/OPP/community
- 7. On completion, cleaning and checking of lines
- 8. Awarding of 'No Objection Certificate'

The OPP's work has shown that people can finance and build sewerage systems in their neighbourhoods, once the 'Four barriers to the acceptance of the OPP Concept' were overcome. These barriers are:

- I Psychological
- II Social
- III Economic
- IV Technical

The OPP's sanitation model consists of self-managed, self-financed, and self-maintained sanitary latrines and underground sewerage lines. This system is called 'internal development' by OPP. In contrast, people cannot build 'external development', which consists of trunk sewers, treatment plants, and long secondary sewers, because this is the role of the state. Box A.11 details the hierarchy and components of sanitation infrastructure.

# Box A.11 Hierarchy of sanitation infrastructure The modern sanitation system consists of four levels: I Inside the house: the sanitary latrine II In the lane: underground sewerage lines with manholes and house connections III Secondary or collector drains IV Main drains and treatment plants Community more able to manage Less able to manage

An official agreement was made between SKKA and OPP-RTI in 1994. Although the OPP model had proved successful in other instances, problems were encountered when SKKA attempted to apply it. The documentation of the existing infrastructure and services within the katchi abadis was to be a collaborative effort between SKKA, the communities, and OPP. In practice, however, SKKA showed little initial interest in the work the community had done in the documentation process, and SKAA field staff displayed a lack of interest in communicating with communities or showing them any respect. Table A.31 summarises the roles, responsibilities, and investments involved in the OPP model.

Table A.31	Roles, responsibilities, an	d investments in the OPP n	nodel
	Community	OPP	Municipality
Roles and responsibility	<ul> <li>finance, manage, and maintain internal sanitation, as well as monitor external sanitation acquire leases, submit lease costs, and assist in the preparation of documents of existing facilities, identify external sanitation and water mains work and approve the designs</li> </ul>	<ul> <li>provide training and advice to SKKA</li> <li>document existing facilities in water supply and sanitation and water mains</li> <li>provide designs and estimates for external sanitation</li> <li>carrying out monitoring and implementation provide training and advisory services to communities</li> <li>monitor external development</li> <li>loan tools and shuttering</li> </ul>	■ finance, manage, and implement external sanitation and water mains provide survey, detailed design, estimates, supervision, monitoring and documentation work
Investments	■ financial, time, and energy	■ No financial investment but investment in empowerment and capacity building – no handouts but hand ups!	

# Box A.12 Key findings — SKAA-OPP, Karachi

- Key to the success of the partnership was ownership of OPP model. This requires institutional change for both communities and government agencies. SKAA engineers and field staff were not able to internalise OPP's concepts or apply them to their work, particularly the innovative approach demanded by OPP design standards, which are based on local not 'text book' conditions.
- The role of the NGO is important in developing equitable relations between the stakeholders.
- Communities had a deep-seated mistrust of all government agencies and their bureaucratic practices were perceived as corrupt and uncaring.
- SKAA engineers blamed OPP and their model when problems arose, which created distrust between all stakeholders.
- Community partnership is a time-consuming process.
- Conflict with the organisational cultures between OPP, SKKA, and communities.
- Continuity was highlighted since SKKA's approach was very much dependent on the Director at any one time.
- There are obvious incentives for communities but not for SKKA, thus governments need to provide incentives for staff to co-operate.

Summarised below is an analysis of the OPP partnership.

Table A.32 Analysis	of OPP partnership		
Strengths	Weaknesses	Opportunities	Threats
Popular organisation	OPP has no regulatory powers	OPP model to become official policy	Competition to official services
Popular participation	Design concept (sewage treatment/ clogging of channels)	OPP involvement in policy issues	Lack of supportive legislation
User models which are appropriate to overcome physical, social and economic problems of low-income settlements	Design elements (problems with manholes and covers, position and depth of sewage line)	Promotion of macro- level solutions (based on models of sanitation, health, housing, and economic issues)	Lack of government commitment/ ability to fulfil its side of the bargain
People can and do accept the model	Quality of work	Wider adoption of OPP model	Government working practises

PART B: INTERIM FINDINGS AND CASE STUDIES

Table A.32 Analysis	of OPP partnership (c	ont.)	
Use of farmer research and extension approach or 'Farmer First' model	No master plan	Development of approach to water supplies	Government capacity and capability
Identification of internal and external sanitation	Self reliance, dependence on community labour/ financing		Not a quick fix solution, but a time-consuming process
Tradition of self help, community-based organisation in Orangi			Community does not take responsibility for infrastructure development
Health education project component			
Holistic approach to development			
Self-managed, self-financed, and self-maintained system			

Table A.33 Roles ar	nd responsibilities in SI	KKA-OPP PPP	
	Current roles and responsibilities	Suggested roles and responsibilities	Potential conflicts
Government	Finance, manage, and implement external sanitation and water mains  Survey, detailed design, estimates and supervision, monitoring and documenting work	Revision of perception of OPP model Revision of customer management Sharing of responsibilities Uptake of appropriate engineering standards and levels of service to low-income communities	Resistance to develop partnerships with people Unwilling to invest in community-derived plans Short-term vision, unwilling to be involved in long-term planning Weak planning capacity Limited resources

Table A.33 Roles an	d responsibilities in S	KKA-OPP PPP (cont.)	
OPP	Provide training and advice to SKKA  Documentation existing facilities in water supply and sanitation and water mains  Designs and estimates for external sanitation  Monitoring and implementation  Provide training and advisory services to communities  Monitor external development  Loan of tools and shuttering	Represent communities to municipalities  Share responsibilities for management of basic services with government  Lobby for adoption of OPP model as government policy  Capacity building for municipal engineers as well as community representatives  Intermediaries in relationship building between community and KWSB and municipal government  Promotion of participatory planning at municipal level Promotion of successful community projects	The need of communities for ongoing technical support and training  The difficulties of OPP negotiating with SKKA  The freelance perception of OPP by government
Community	Finance, manage, and maintain internal sanitation as well as monitor external sanitation  Acquire leases, submit lease costs, and assist in the preparation of documents of existing facilities  Identify external sanitation and water mains work and approve the designs	Develop infrastructure with government  Manage and coordinate implementation of alternatives  Share responsibility of management of basic services with KWSB  Capacity building for community representatives  Identify and prioritise local problems  Co-ordinate with NGOs/legal groups for collective solutions  Manage projects at neighbourhood levels	Short-term vision Limited experience Limited roles Perception that poor should not have to pay

# Kibera, Kenya

#### Box A.13 Key issues — Kibera, Kenya

- The unrecognised informal privatisation of the water sector
- The poor's dependence on informal vendors both for supply and as a source of income
- The introduction of alternative management systems
- The political dimension of partnerships in water supply
- Suspicions about partnerships

# **Background**

Kibera is the biggest single informal settlement in Nairobi with a population of about 1 million. In 1989 Nairobi City Council (NCC), with assistance from the World Bank, implemented the 'Third Nairobi Water Supply Project'. The aim of the project is to expand water supply to low-income areas of the city in order to improve the living conditions and health status of the poor. Kibera was selected as the pilot area for the project and the Kibera Water Distribution Infilling Component was initiated. This was the first attempt by NCC to provide adequate, reliable, cost-effective water supply to an informal settlement.

Infilling involves the testing and commissioning of 21.6km of galvanised steel pipe at an estimated cost of US\$360,000; bulk metering; mapping; and other measures to provide better tools for managing water supply. The project aimed to improve access and reduce the price of water sold at kiosks and other outlets by privateers; provide a new source of revenue for NCC; increase business opportunities; and provide a model for replication in other informal settlements.

The role of small-scale investors and operators is significant within Kibera. Various private-sector actors sell water from official water outlets and through water kiosks and individual connections.

- 1. Community-based organisations play a leading role in provision of water.
- 2. Individuals have also come together in associations to provide water to residents in time of shortage. They either provide water from their own waterpoints or by transporting water from neighbouring estates to sell within Kibera. Unlike the water sold by CBOs, vendors capitalise on water shortages, selling water at Ksh10-20/20-litre jerrycan while CBOs sell for Ksh2, irrespective of shortages.
- 3. Other individuals with water connections (tanks and points) supply water within the informal settlement water for free but expect some form of relationship or reciprocity.

All the above represent private involvement in water supply within the settlement. The problem is that during times of inadequate supply people pay higher prices, and mis-management means that once the commodity is sold all the profits are pocketed by people with connections without any payment made to the Water and Sanitation Department. These privateers are typically unorganised and have not been recognised as partners and stakeholders in the supply of water to Kibera.

The Alternative Management Arrangement study identified a solution to the inefficiencies of the current system:

- Establish a Village Water Sellers Association (VWSA).
- VWSA buys water in bulk from WSD, replacing current individual interactions.
- Members of VWSA purchase water from VWSA.
- Members retail water, and pricing allows implementation of best practices.
- Water transactions are on the basis of prepayment or payment on with-drawal.
- There is unhindered competition between kiosk owners.

The proposal to introduce alternative management arrangement systems is intended to allow the private sector a greater role in the process and to reduce the mismanagement and bureaucracy which has public sector efficiency.

The water project is uncompleted five years on. Objectives such as the improved distribution of water have not been achieved, there has been no increased access, and prices have not come down. Ambiguities in regulations may cause further deterioration of the service and of water distribution, and push rates and the number of illegal connections higher. But by the end of the project there is hope that the alternative management arrangement system could be instituted with PPS co-operation. Within these new institutional arrangements there is an unclear role for NGO/CBOs, however.

#### Box A.14 Key findings — Kibera, Kenya

- Incentives for participation need to be well defined for all stakeholders.
- Common goals and visions need to be established, as well as the roles and responsibilities of stakeholders.
- The interface between local authorities and communities has a key impact on success.
- Incentives created for a range of stakeholders.
- Certain groups have different levels of authority over the community.

The summaries presented below outline the roles and responsibilities in the Kibera contract together with an analysis of the Kibera PPP.

Table A.34 Roles ar	nd responsibilities in Ki	bera contract	
	Current roles and responsibilities	Suggested roles and responsibilities	Potential conflicts
Municipality	Provision of infrastructure Delivery of services Supervision of contract Maintenance of mains	Capacity building Institutional development Informing community about the collapse of the project Disseminate and promote experience Revision of planning procedures Promote participatory planning	Lack of community support Lack of political will to adapt rules and responsibilities Lack of financial resources to complete project Rent seeking Effective mechanisms to regulate performance through competition and contracts
VWSA	Alternative management arrangement system Institutional arrangements Hire manual labour from community Monitoring role	Build local stakeholder relationships O&M of water and sanitation infrastructure Promote VWSA within community Tariff design (should it reflect cost recovery)	Effectiveness depends on community recognition and support Resistance to new partnership Limited experience of project management Does not represent communities Channels for communication between municipal
Household	Involved in the verification of plans Information to planning teams Manual labour Verification of routes for the pipes and laying down of guidelines for engagement Village sub-groups formed to monitor the relationship both physical and social between construction and community Maintenance, ensuring no vandalism or deliberate damage	Share responsibility for management of basic services Technical support	Suspicion of NCC Lack of legal status Lack of municipal support Limited communication Identify opportunities to work together Contracts between stakeholders

Table A.35 Analysis	of Kibera PPP		
Strengths	Weaknesses	Opportunities	Threats
Self-help initiatives	Competition between vendors and co- operatives	Drainage and sanitation projects	Lack of political consensus on PPP
Community-based organisations/ institutions well developed before project	Loss of profit/sidelining of vendors	Involve community leaders/elders to influence opinion	Financial constraints
Recognition of informal vendors	Contractors not working to schedules	Secure land tenure so that people can make further improvements to houses and environment	Rent-seeking politicians
Infrastructure development in squatter settlements	Unclear how acquisition of materials and expenditure relates to technical aspects of supply	Alternative management arrangement systems	Power structures in community/ council and Nairobi 'Mafia'
Reduce price and increase supply	Clash between technical and sociological aspects of project	Consensus building	Corruption
Community participation	Partnerships not clearly established	Learn from experience	Community are fed up of paying for services which are not being delivered
	Mismanagement		
	Lack of agreement on tariff		
	Project only 85 per cent complete		

Table A.36 Stakeho	lder perceptions in Kibera
Community	Community members are tired of paying for services that they do not get and so advocate for a private investor to take over. People are dissatisfied with corruption and inefficiency within public utilities and Nairobi City Council (NCC) and there is suspicion towards any NCC project, as the community feels that they might never see its completion.
	The benefits of privatisation are well understood by residents. The community feels that water shortages may be reduced, there will be an improved availability of water in the settlement, and that a constant price for water may then be achievable.
Municipality	Nairobi Municipality appears far from reaching a consensus on the issue of privatising water.
	There have been disagreements between the World Bank and the City Council on tariffs, i.e. whether or not tariffs should reflect cost recovery.
	Possible benefits are perceived as a new pool of revenue for the Municipality from the project and a reduced management load.
CBOs	CBOs have played a leading role in the provision of water to the community and have invested in laying their own pipeline. Proceeds from water have been shared to improve individual income-generating projects.
	Water has become a rallying point of agitating towards improved services through CBOs and has thus given the CBOs a powerful voice within Kibera.
Structure owners/ residents	The water project may lead to further government investment in the settlement and so feel more secure and hope that the government may give them title deeds, which will enable further developments.
	Structure owners have mixed feelings about the public-private partnership.
Dissatisfied residents	A few individuals have sabotaged connections to the main line. There were opportunity costs involved in the decision to offer labour to the project, and the owners of houses which were in the path of the proposed pipeline had to demolish them. Other dissatisfied residents missed out on the opportunity of employment on the project. Even those that did get jobs may not have been adequately compensated for their time.
Project staff	Poor attendance of consensus meetings and the inability of local institutions to make quick decisions in case residents were offended caused delays to the process. Insecurity and drunkenness were also raised as issues.
Neighbour to Kibera	Neighbours are supplying water from private mains connection to Kibera and are undecided private-sector participants.
Water vendors	Water vendors have many fears about privatisation, including both the possible sidelining of those who depend on water vending to earn a living and the vendors' existing assets; it is feared that these initial investments may be wasted once the new project is completed, that is when people are connected to the new mains.

of water shortage.

Water vendors also fear that they will lose out financially because once they register with VWSA they will no longer be able to charge higher price during periods

# The Dolphin Coast Concession

# Box A.15 Key issues — Dolphin Coast, South Africa

- Tariff and operational issues
- Social development
- Strong labour guarantees and staff funding
- Use of Dolphin Coast as a pro-poor pilot project in South Africa
- Channels of communication
- Levels of service and housing development

# **Background**

Post-apartheid South Africa has inherited a massive backlog in the provision of basic services to previously disadvantaged communities, and delivery of water is judged to be the most significant indicator of progress. A variety of public-private partnerships have been proposed to solve the perceived incapacity of local government to service the needs of the rural and urban poor in South Africa. The Dolphin Coast is situated 70km to the north of Durban along the North Coast Development Corridor. It is made up of two parallel strips: one an affluent recreational zone and the other an area of poor residential communities.

The Dolphin Coast Concession covers settlements of urban and peri-urban areas. An initial survey showed that there were 28,000 (unofficially 50,000) people in the area, which includes those with low levels of service or no service at all. As already stated the Dolphin Coast is divided into two distinct areas. The East is the coastline and has a wealthier population (average income is R3,500 per month) and fewer and less dense households (with 2.8 people per household). On the West Side, however, residents earn less than R800 per month (roughly at the poverty line), and there are 4.4 people per average household. Only 10 per cent of the total water supplied goes to the poorer neighbourhood; the average monthly water consumption in the East is 119,800kl, whereas in the West it is only 30,010kl (figures from October/ November 1999). At the moment 80 per cent of Siza Water Company's income comes from 20 per cent of its customers on the East Side. The fact that the majority of people in the Western townships earn less affects demand and payment for water and sanitation services. Table A.37 illustrates the development of the Dolphin Coast Concession.

Financial constraints and cut-backs in delivery were the impetus both in policy and in practice for the involvement of the private sector (rather than

PART B: INTERIM FINDINGS AND CASE STUDIES

Table A.37 Chronology of Dolphin Coast Concession development				
Pre-1994	Water provision by North Coast Water Supply Corporation			
Pre-1994	Refuse removal, control rooms, and maintenance of parks and gardens outsourced			
1995	Council took responsibility for water and sewerage services			
1/3/96	BoDC (Borough of Dolphin Coast)inherited water and sanitation services			
27/11/96	Decision to enlist private partner in water and sanitation service			
12/96	Found out that it was impossible to finance new water and sanitation service			
1996	BoDC approached by DCD (Department of Constitutional Development)and DBSA(Development Bank of Southern Afirca) for assistance			
27/2/97	DBSA asked for Request for Proposal document for BoDC			
4/97	15 firms submitted proposals			
31/8/97	Detailed bids received			
11/97	Council announced preferred bidder			
1/98	Minister of Constitutional Development and Provincial Affairs visit to announce the successful bidder			
11/97 – 12/98	Negotiations with stakeholders			
29/1/99	Concession Contract signed			
1/4/99	Asset register handed over to Siza Water Company			
1/4/99	Concession commences operations			
8/99	President Thabo Mbeki receives Freedom of Borough and praises the concession			
09/99	Siza Water Youth and Community Development Fund launched			
7/2000	BoDC receives Provincial and National Local Government Housing Award			

explicit equity or pro-poor components). Dolphin Coast faced budgetary constraints and declining resources from national government as a result of a shift in policy (i.e. financial austerity, diminishing capacity to borrow, poor revenue performance, lack of technical skills and the need for the development of low-cost housing).

The search began for a private-sector partner with worldwide experience in the field for a long-term exclusive concession contract. The process of preparing the concession took close to two years to complete at a cost of R2.4 million. The final document is 265 pages long and required inputs from technical, legal, and financial experts. It was felt that the PPP should provide services to the poorest of the poor as a contractual obligation. Before implementation BoDC consulted with councillors, Ratepayers Associations, the Chamber of Commerce, local farmers, newspaper reports, DBSA, and SAMU [what are these?]; but there was no mention of the need for monthly charges for water and sanitation which subsequently became an issue. Interfaces for communication during the contract implementation include Community Liaison Officers, Community Liaison Committees, two customer service offices, newsletters distributed through customers bills, community notice boards in Zulu and English, face-to-face communication, posters and flip charts, and schools liaison.

The R1 billion concession to manage the local authority's water and wastewater services for the next 30 years was won by SAUR Services (The South African arm of SAUR International). The BoDC signed a 30-year contract with Umgeni water, since there is no to treat the water Siza Company supply. Table A.38 attempts to summarise the perceived benefits of the PPP according to different stakeholders.

The contract covered four levels of service:

- Level 1 service, where communities provide their own water services (e.g. river water), i.e. there is no water supply from SWC and there is no sanitation
- Level 2 service is a standpipe with a VIP for each household
- Level 3 service provides for a 200-litre tank and a septic tank for each household
- Level 4 service is a full water connection with a flush toilet for each household

There is a clause in the concession contract which states that if the concessionaire is unable to meet the requirements of all the customers within the concession area it shall give preference to the provision of a basic water supply and basic sanitation service, which is Service Level 2. This is specifically aimed at the poor, as are clauses in the contract that provide for the council and concessionaire to assist indigent families to pay for the supply of basic water services.

PART B: INTERIM FINDINGS AND CASE STUDIES

Table A.38 Benefits of the Dolphin Coast PPP			
BoDC	SWC	Customers	
Liabilities are off town balance sheet	O&M targets are on track	Tariffs are now lower (according to officials)	
Municipality is able to borrow money for the first time in three years	Project hailed as success	Rapid response to complaints	
Won Provincial and National Housing Awards 2000	Won the recognition of US government	Unaccounted for water has dropped from 30 to 16 per cent in a year	
Congratulations of Thabo Mbeki in 1999	Example of PPP without sacrificing delivery to the poor	Tariff collection rate increased by 75 per cent to 97 per cent	
BoDC mayor is invited to lecture on the achievements of the Dolphin Coast Concession	SWC praised for bringing international knowledge and expertise, and for upgrading water and sanitation systems	Full-time Community Liaison Officer	
	Increased numbers of employees	Three Siza Customer Service Centres	
	3 per cent of salary bill is used for training of staff	User-friendly payment procedures	
	Staff share ownership scheme	New standpipes and house connections	
		Service upgrades	

The service level a family chooses will depend on various factors, including employment status and affordability. Residents may start at Level 2 and upgrade to Levels 3 or 4. The tariff is 10 cents for a 25-litre bucket and for an expenditure of R5 a family would get 1.25 kiloliters. The sewage charge has been built into the water invoices and a sewage tariff is based on the volume of water consumed. Durban Metropolitan Council has also pioneered provision of free water for the first 10 kiloliters — a so-called 'Lifeline Tariff'. It is hoped that this service will be implemented throughout the country, but this tariff has had hardly any impact here, because the fixed charges far outweigh unit-based consumption charges.

The contract sets the parameters under which the SWC will operate. This includes the extension of services to the RDP areas, the employment of local labour and the funding of development projects. SWC is therefore unable to service only lucrative areas. It was anticipated that the development work might lose money in the first 10-15 years. The concession agreement made strong labour guarantees, provided for training and development programmes, and permitted continued union activities by workers. Water and

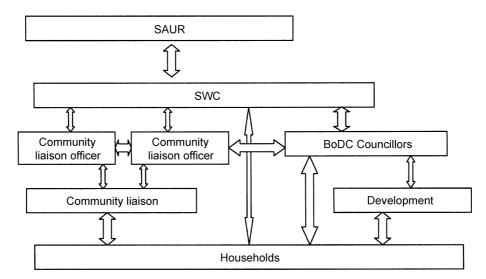


Figure A.5 Summary of stakeholder relationships in the Dolphin Coast

sanitation services are directly related to the extent of housing development, thus housebuilding programmes in the townships affect both supply and revenue generation (unemployment is 40-50 per cent). The SWC needs increasing revenue that depends upon the rate of improvement in previously unserviced areas and the rate of construction of new houses.

### Box A.16 Key findings — Dolphin Coast, South Africa

■ The small size of the municipality and the surrounding industrial and economic base, level of housing development, structure of the council, and business experience of the councillors are all structural factors that contribute to the perceived success of the project.

Private sector initiatives have been encouraged by favourable policy and legislative environment, e.g. the 'Growth, employment, and redistribution programme' prioritised the involvement of the private sector in development activities. The policy trend towards PSP in local government has seen the preparation of enabling legislation to strengthen existing provision for PSP.

The concessionaire undertakes to use labour within the concession areas. The concessionaire will use materials produced within or sourced from suppliers within the concession area, in addition to labour-intensive techniques.

- Unambiguous signals were sent to union opponents of PSP, yet negotiations with unions still took over a year. Dissatisfaction from the communities served and from company employees reflects the widespread feeling that proper consultation about the concession and services has not taken place. People are unhappy with the management of the services and the fixed charges for water and sewerage.
- The disparity between residents' and representatives' points of view suggests that the views of the poor are not articulated and that councillors are frustrated that the poor are not towing the line.
- Residents need to know how to read their meters and put a stop to what they perceive as fraud.
- Fixed charges drastically reduce the welfare of the poor, especially those on pensions who need house connections and find it difficult to physically access street dispensers.
- The driving force for the contract was primarily financial, yet the needs of the poor were on the agenda, i.e. the Lifeline tariff and choice of levels of service.

The following are summaries of the perceptions of Level 2 consumers, Level 4 consumers, councillors and workers about the Dolphin Coast Concession. There follows an analysis of the Dolphin Coast Concession.

Table A.39 Level	2 consumers' perception of the Dolphin Coast Concession		
Issue	Comments		
Alternative water source	'As it is raining we are happy as we are getting water from the river. In winter it is hard as the river dries up.'		
Consultation	'We were told it comes from overseas, when it first arrived it was not introduced to us. We were not told anything.'  'There was not enough consultation and we could not foresee the problems we are experiencing now.'  'We were told in such a way that most people accepted what was offered.'		
Breakdowns	'The problem with the system is that it easily breaks down, and you have to travel long distances in search of water. Then you find long queues at the one or two standpipes that are working.'  'There is a problem with machines breaking down. Sometimes even if you have money in your card, water does not come out of the tap. We then report to SWC who come and repair. The taps work for a few days but they break down again. Sometimes water keeps on coming when there is no card in it.'  'You have to report to the councillor's house and she will pass on the message the following day if she likes.'		
Charges	'We preferred the company that provided us with free water.'  'When they installed the new system they told us that it was 6c per 25-litre container but we do not get this. Sometimes the machine charges 18c and sometimes 24c per 25 litres. If you have 6c left in the card you may not get any water. The machines have problems reading the cards.'  'Pre-paid is the best option. People are very happy, as it is affordable at R3.94 per kiloliter, this is way below Durban and KwaDukuza.'		
Relationship with councillor	'Sometimes the councillor chases you away without hearing your problem. She does not ask you what the problem is and sometimes she tells you this is not an office.'		
Water quality	'We are not satisfied because the water is not cleaned. Not even once have we heard that the water is interrupted for one hour for cleaning and treating.'  'Even when you come across something in the water you must throw it away and continue to fetch your water.'		
Preferences	'Individual households have their own meters in the places I have been in rural areas. It's only that I don't know which company is providing that water because to me it's a good system. They are not paying any charges except for water consumption. They last paid R50 for the installation of pipes then they never deposited any more money. The R50 was kept by the Amakhosi so that if anything happens to the pipes they can be repaired from these monies collected from these tribes.'  'Even at Folweni they are using the same system. Each and every household has water in its yard. Even if you had to pay R250 for pipe installation that is a one-off payment after that you only pay for water consumed.'		

Table A.39 Leve	el 2 consumers' perception of the Dolphin Coast Concession (cont.)
Umgeni Water	'There is a house which I used to visit they paid about R10 or R20. Umgeni Water supplied them with water.'  'Other places still use Umgeni and have no problems. We did not look closely at that but now as we see we are convinced something was offered to some people in certain offices. I think our organisers were given something in exchange for putting us at the mercy of the company that is making money, that is why we are oppressed. This thing is between Siza, the municipality, and our councillors. These three are benefiting through us.'
Tokens	'Before this arrangement we were getting tokens far away at Shakaskraal and they were closed on Saturday and Sunday.'  'When the money is finished in the tokens we go there and recharge them for whatever amount you want'  'They tell you it starts from R10, but in other places they recharge for R5 so we end up not knowing the right thing.'  'Like me I have just bought a R10 card for electricity. It is the same with water these people are crooks.'
Sponsorship by SWC	'They sponsor our children to play soccer with our money. They are taking more from us and giving back too little. We are not happy with that because those of us who are not so poor as to have our kids paid for by the company, we are not getting anything.' 'Even if Siza wants to sponsor us we are oppressed here. Even if they want to do something you will never know because we are not near them. It is our leaders who have close contact with the company. They know everything, even when they lie and use those benefits for their own interests we will never know.'

Table A.40 Level	4 consumers' perception of the Dolphin Coast Concession
Issues	Comments
Source of water	'Most of the time we fetched water from the river. Then they installed the taps where we bought our water at 25 cents a container. This was followed by a coin-operated system, where you put 5 cents in a slot and then the water came out. Finally they have installed this token card system.'
	'I started by fetching water from the community standpipes. I was then allocated to one of the houses with water inside. I used to fetch the water from the standpipes at 25 cents a container, but now I cannot even talk because I am suffering too much.' [something missing here? why worse off
Satisfaction	'We are not satisfied because it is too expensive and the price is continuously rising. It is not constant.'
	'Even when the water supply to the house has been shut off, the billing continues.'
	'There is nothing that Siza Water is doing for us. I decided to dig a pit latrine and stopped using the toilets inside the house. But I always receive the water bill.'
	'I first occupied my house in December last year, but the bill that I received indicated that I started using the water in August. The bill arrives monthly, you pay and they still shut off water without any notice.'
	In my opinion since I do not want to talk on behalf of the whole community, Siza Water is failing to deliver. The company is exploiting us. Everyday their rates are increasing. You can try your best to save, but if you are supposed to pay R75, the bill may come out at R89.'

Toble A 40 Level	A consumers' negeration of the Delphin Coast Consession (cont.)
Table A.40 Level	4 consumers' perception of the Dolphin Coast Concession (cont.)
Consultation	'As far as I can think, I do not remember the community being involved in making the agreement to transfer water provision to Siza Water Company.'
	'There was no vote within the community when Siza Water Company entered the area. The agreement was between the company and the whites at the town board. The community was never involved.'
	'It is our elected representatives who are the problem. They sign agreements without consultation with the community. For example, if Siza Water wants to do something, they should come and tell us that Siza Water is planning this Because our representatives are not doing that, tomorrow Siza Water can charge us R300, we will have to pay because there is no one who is speaking for us.'
Breakdowns	'There is a Siza Water Customer Services Office at Shakaskraal. I have personally reported there three times about a burst sewerage pipe. Till today no action has been taken.'
	'If the pipe bursts in the house at night, you cannot shut off the water. If that happens you are supposed to phone. There are no phone booths nearby and sometimes you might not even have the money to phone.'
Charges	'The community has a problem with the rise in water rates because Siza Water made an agreement with the councillors without involving the community. They make their agreements privately in the offices and maybe they also make payments to each other. In the end this affects us negatively.'
	'Another thing which is happening is that there have been numerous meetings organised here in the hall for Siza Water Company to come and address us. Every time we have come here and waited for Siza Water representatives to come but every time they have not pitched up. I now tend to believe that they know the corruption they have made, hence they are afraid to face the community. They know they will have a problem if they come to address the community.'
Payment	'I never miss even one payment. Sometimes I even go without food. When I get my pension, I first pay at Siza Water and Dolphin Coast.'
	'There are people who are working, they use water to wash in the morning then they go to work. Some do not even have children and sometimes even the wife is working. They use water again when they come back from work but when the statement arrives; the amount to be paid is almost the same for everyone. Some people work at Ballito as sleep-in domestics, but they also pay the same amount as everyone else.'
	'I am staying alone in my house but I pay R75 every month. I ask myself why because I usually wash a pair of trousers and a shirt to save water.'
	'In my house the water supply was shut off a long time ago. Still the statement arrives.'
Meter readings	'The problem with these statements is that they are behind by one month.'
	'Sometimes if you are lucky you will see the meter readers.'
Relationship	'These two entered into our area in a subtle way to make profits. They came to make profits not to help people. Take my case, I am a pensioner. Sometimes I go without food because I have to pay for this water. I am 64 years old. Where do they think I would get money to pay for water? Really if they had come to us before, we would not have agreed to let Siza Water operate.'
Quality	'The toilet and the drinking water tap is in the same room. You are ashamed if a stranger
	asks you for drinking water because you have to fetch it from the toilet.'  'They do not put pills or chemicals to clean the water. We want to see water sometimes having a change in colour to show that it is being cleaned. Now it is as if we are drawing water from the river or pool. We are fed with poison.'

Table A.41 Councillors opinions of the Dolphin Coast Concession			
Issue	Comment		
Charges	"When it comes to water rates, we are facing a problem, which is not a result of the concessionaire. The concessionaire takes water from the bulk suppliers and then distributes the water to the people. Our bulk supplier recently raised its rates. The cause of that I think is not our problem. We told them that we do not think that the rise in rates is a good thing."		
	'Siza Water has basic charges which people are not happy with. If you are in arrears they also charge you high interest. People are not happy about this. We have had talks with SWC and I am confident we are going to solve this. But if you look at the water rates, minus the basic charges and the interest, the water is very cheap. There are families that would pay about R16 a month.'		
	'We have not heard of anyone who cannot afford to pay for water. If there are people who cannot afford they should come to us otherwise we will never know.'		
Community participation	'We communicated with the people from day one in planning, up until the last house was built and allocated. I would say that the people were involved.'		
Squatters	'Our biggest problem is the farmers around us. They fetch people from far away places to come and work on the farms. Once they lose their strength they are fired and evicted from those compounds. Some of these people have been here for eight even 10 years and beyond. They already have families here. That is why we are building houses, yet new shacks are coming up daily.'		
Consultation	'We as ANC councillors had to get the mandate from the people. We consulted the people and involved them. In disadvantaged areas there are development committees. They also sit in our meetings and have input. In that way I think the whole community was involved in the whole process. It was explained to them the route we were taking and why. The majority of people were happy, especially with the structures.'		
	'When people are called to meetings they do not come to air their views. Then those present elect themselves on the basis of friendship and take decisions for the people; they do not get mandates from the people. People are crooks, they need to be monitored.'		
	'Civics people are not neutral, even we councillors are heavily critized by them. We do inform them about what is happening. The problem is that they do not understand what is happening.'		
Unions	'The workers were worried that if they were transferred to the private company they would lose their benefits and job security. We addressed that problem.'		
Complaints	'In a meeting I called two weeks ago, none of those with toilets inside told me of any problems. Actually no one has said we must do away with this PPP or get rid of SWC. They only talked about minor problems that can be easily rectified.'		
	'There is a problem with us black people, most of the time we want to see money coming to us as individuals. We do not appreciate what goes to the community as a whole.'		
	'My ward people are satisfied, they are getting water in a satisfactory manner. The problem is that the community does not want the response time to be too long.'		

Table A.41 Councillors opinions of the Dolphin Coast Concession (cont.)

not yet occupied the houses.'

Allocation of houses	'In my ward when the houses were allocated they made a mistake, and about 10 to 12 people were wrongfully allocated. These people are unemployed so they were wrongfully allocated water-borne sewerage houses. I think it is wise to take people who are working and earning maybe R1500 or R2000 to stay in VIP system
	houses.'  'Also there were people who were allocated houses but were not aware of the
	allocation. The municipality started charging them from that time though they had

'If you allocate a house you should ensure that the person can survive and sustain

the services, i.e. a pensioner should be allocated a house with a VIP system. The problem is not with the people who cannot afford to pay for the services, but with people who allocated the houses.'

'You know there is this culture of non-payment, which is a problem among us. Sometimes it is not because we cannot afford, but we are negligent. So I think we need to enforce Masakhane programmes on our people. Once people have an understanding that they have to pay, since there is nothing for free, I think this would run smoothly.'

'The problem we have, which is not really that of the company, is that most of our people are illiterate. They do not know the right channels in case they want help. To give you an example, sometimes the standpipe is broken. Two or three days elapse without it being repaired. I take the phone and phone the toll free number to the municipality. You just phone and tell them to report to Siza that there is a breakdown. In all the cases I have reported, they have responded within three hours, even at night. I do not know whether they give me special treatment because I am a councillor.'

'A councillor puts a sense of urgency in the process.'

'In my own opinion this basic charge should be scrapped. The person should pay directly for the amount of water used.'

'We have a problem. People from Shakashead have to travel about 10 kilometres to pay for water. I think that problem needs to be solved by us as councillors. There should be a Siza water office in the area. Then it would be easier for people to pay for water and recharge token cards.'

'Many are positive. Even those I met on the street, when I asked about working conditions at Siza they were positive, new posts were opened and local people were employed.'

'The only problem is that people still do not know what they should do to get help from Siza and yet the agreement clearly details this.'

'The government saw this (concession) as a way out. People were not going to lose out. A person can monitor his or her consumption and knows how much water there is in the card and the amount of water he or she can get.'

Defaulters

Breakdowns

Basic charges

Customer service office

SWC workers

Metering

Table A.42 Wo	rkers perceptions of the Dolphin Coast Concession			
Issue	Comments			
Transfer from BoDC to SWC	'When we signed up we were not happy. We signed as if we were forced.'			
	'We were happy with Umgeni Water; we wanted to work for it. We do not know what happened in the discussions.'			
	'I am happy working for the present company. Because it's an international company, it operates in 19 companies in Africa. That's when I realised that Umgeni was just a drop in the ocean.'			
Job description	'There are things hidden in the job description, you end up doing what you should not be doing.'			
Training	'I am looking for a place where I can be sent for training.'			
	'I have no problems because I have been trained. The only problem is that my skills are not being put to good use.'			
	'My concern is that I want to do a supervisory course. My bursary from the company was approved after applying but they told me they are still looking for a place where I can be trained.'			
	'We go for training but when we come back there are many plumbers and staff end up doing what they are not supposed to be doing.'			
Changes after joining SWC	'I can say the work that I do is slightly worse. This company promised us so many things at the beginning which were not delivered.'			
	'At the municipality it was better, they are still paying us what we used to earn at the municipality. There is too much work here.'			
	'We are taking things as they are. We cannot see where the company is going right or wrong since it is still a new company. I will wait until the end of next year and see how much salary increase they give us, if I am not happy I will leave and look for work elsewhere.'			
	'Conditions have changed for the better, e.g. contributions to SANLAM, and staff were to get profit-based shares after five years, but within one year the company made 104 per cent profit that made us qualify for shares.'			
	'My salary has not been adjusted but I feel it is a challenge because I am not at that level of being a plumber. I am looking forward to a better grade and I am content with the benefit for the time being.'			
Union members	'We have started working with the new unions. We have started serious discussions with them concerning us workers. They have not spoken to us but we have paid for about four months.'			
	'The previous union SAMWU came to an end when everything had been signed and there was nothing that could be done. We are members of NEHAWU but do not know the numbers here. We were stranded when the previous union did not seem to worry about us.'			

Table A.42 Workers perceptions of the Dolphin Coast Concession (cont.)			
Team work	'We work as teams and each team has responsibilities. There is a lot of difference with our previous work.'		
	'We work alone because you can go to work with someone and that trusted person who is believed to know the work will drop you at work and you will be left to do the hard labour by yourself.'		
Breakdown	'At the beginning the breakdowns were frequent but now they are few because we are now using plastic pipes instead of asbestos pipes which are being replaced. To repair the pipes it depends on the size of the pipes and the time of the breakdown.'		
	'There used to be many breakdowns but we have replaced the pipes so that they don't burst. It's quick to repair because we know what we are doing.'		
Equipment	'Yes we have enough equipment. Other things are fine, there is a safety committee that has started work this month.'		
	'We have all the necessary equipment.'		
Employment contract	'They said they follow the municipality rules and will not change anything. The municipality offered subsidies now they say they do not have that, you have to work for five years for the municipality to be entitled to the money.'		
	'In the first place they told me they do not have any benefits. I had benefits with Umgeni Water. Medical aid is not shown in the payslip.'		
	'When a person comes from outside with a lot of paperwork and an interpreter you are going to sign and your statement is going to be changed and put in the way they like.'		
Salary	'Other staff are not happy. I get the impression that it was better where I was working before because I earned the full amount.'		
	'I earn wages that I used to earn before. The company should help us by lending us money up to R10,000 so that we are able to fulfil our needs.'		
	'The salary that I used to get two years ago I still get it now.'		

Table A.43 SWOT Analysis of the Dolphin Coast Concession			
Strengths	Weaknesses	Opportunities	Threats
Guarantees of labour under PPP	Union opposition	Review of tariff structure	Lack of transparency
Unique structural factors which contributed to success	Cherry picking of project area	Review of system of payment and charges	Attempts to make the project a blue print
Favourable policy and legislative environment	Councillors not reflecting community's view/ voices of dissent	Improve customer relations and process of consultation	Increased revenue for PSP depends on rate of construction of new housing
Use of local partners in PPP	Dissatisfaction of communities and company employees	Improve frequency and transparency of meter reading	Fixed charges for water and sanitation
Labour-intensive techniques and local materials used in implementation	Not enough consultation	Improve breakdown response and complaints system	Disparity of views between different community groups in Dolphin Coast
Explicit pro-poor policy and preference given to the poor in the contract	Poor management of services	Demonstrate water quality	Disparity of capacities between different community groups in Dolphin Coast
Community participation	Unhappy with fixed charges for water and sanitation	Match housing to water and sanitation needs more effectively	
Levels of service	Financial impetus for the project		
Interfaces for the community to communicate with PSP	Workers unhappy with the transfer under PPP		
Lifeline tariff			

PART B: INTERIM FINDINGS AND CASE STUDIES

	Current roles and responsibilities	Suggested roles and responsibilities	Potential conflicts
SWC	The right to possess, use, operate, maintain, manage, rehabilitate, redesign, remove, improve, and expand existing work at their own risk  Meet prescribed level of service which are based on affordability and take full commercial risk by maintaining and developing the infrastructure  Provide the service  Bill customers  Responsible for tariff collection  SWC leaves existing and new assets  Concessionaire to acquire full rights of ownership of all new works acquired by it during the contract term  Take-over all existing debts pertaining to the service networks	Represent communities  Share responsibilities for management of basic services  Capacity building for community representatives  Improve water infrastructure, reduce leakage  Communicate with communities and not just representatives  Improve tariff and operational issues  Improve means to complain and their suitability to the Context – ensure that where telephone hotlines are promoted, there are telephones  Disseminate and promote experience  Develop relationship with communities  Settle disputes regarding tariff levels	Short-term vision, unwilling to be involved in long-term planning of work as a 'development agency'  Limited profits in first few years  Dissatisfaction from communities regarding consultation about the concession and from company employees – union threats

Table A.44 Roles and responsibilities in Dolphin Coast PPP (cont.)			
Council	Determination, amendment, and approval of all water and sanitation tariffs  Responsible for the discharge and payment of all amounts to the concessionaire  Other financial obligations associated with or connected to the existing works  All fixed assets including new infrastructure invested by SWC will remain the property of BoDC	Intermediaries in relationship-building between community and KWSB and municipal government  Develop infrastructure with communities  Manage and coordinate implementation of alternatives  Promote participatory planning at municipal level  Extend pilot to other low-income communities  Ensure that poor are benefiting from the Lifeline tariff  Extend assistance to low-income families in paying bills  Potential to develop role as a channel for information between communities and SWC	Limited resources/ physical/ financial and management capacity limits the impact council can have on low-income communities  Limited role in operations  Limited replicability of project because of the exceptional circumstances in Dolphin Coast
Community	Payment of bills Reporting of problems	Share responsibility of management of basic services with SWC  Capacity building for community representatives  Identify and prioritise local problems  Co-ordinate with NGOs/legal groups for collective solutions  Ability to read meters  Manage projects at neighbourhood levels  Promotion of successful community projects	Communities are hostile to foreign company Lack of consultation High reconnection and disconnection costs Water is not thought of as a tradable good Perception that poor should not have to pay Representatives are inadequate