New Designs for Water and Sanitation Transactions

Making Private Sector Participation Work for the Poor

Water and Sanitation Program

An international partnership to help the poor gain sustained access to improved water supply and sanitation services

PPIAF
PUBLIC-PRIVATE INFRASTRUCTURE ADVISORY FACILITY

Meike Van Ginneken

Guy Stubbs

WSP-SA/Guy Stubbs

WSP-AND

WSP-AND

Guy Stubbs

PPIAF
1818 H Street, N.W.
Washington, D.C. 20433
Phone: +1(202) 458-5588
Fax: +1(202) 522-7466
Email: info@ppiaf.org
Website: http://www.ppiaf.org

Water and Sanitation Program
1818 H Street, N.W.
Washington, D.C. 20433
Phone: +1(202) 473-9785
Fax: +1(202) 522-3313, 522-3228
Email: info@wsp.org
Website: http://www.wsp.org

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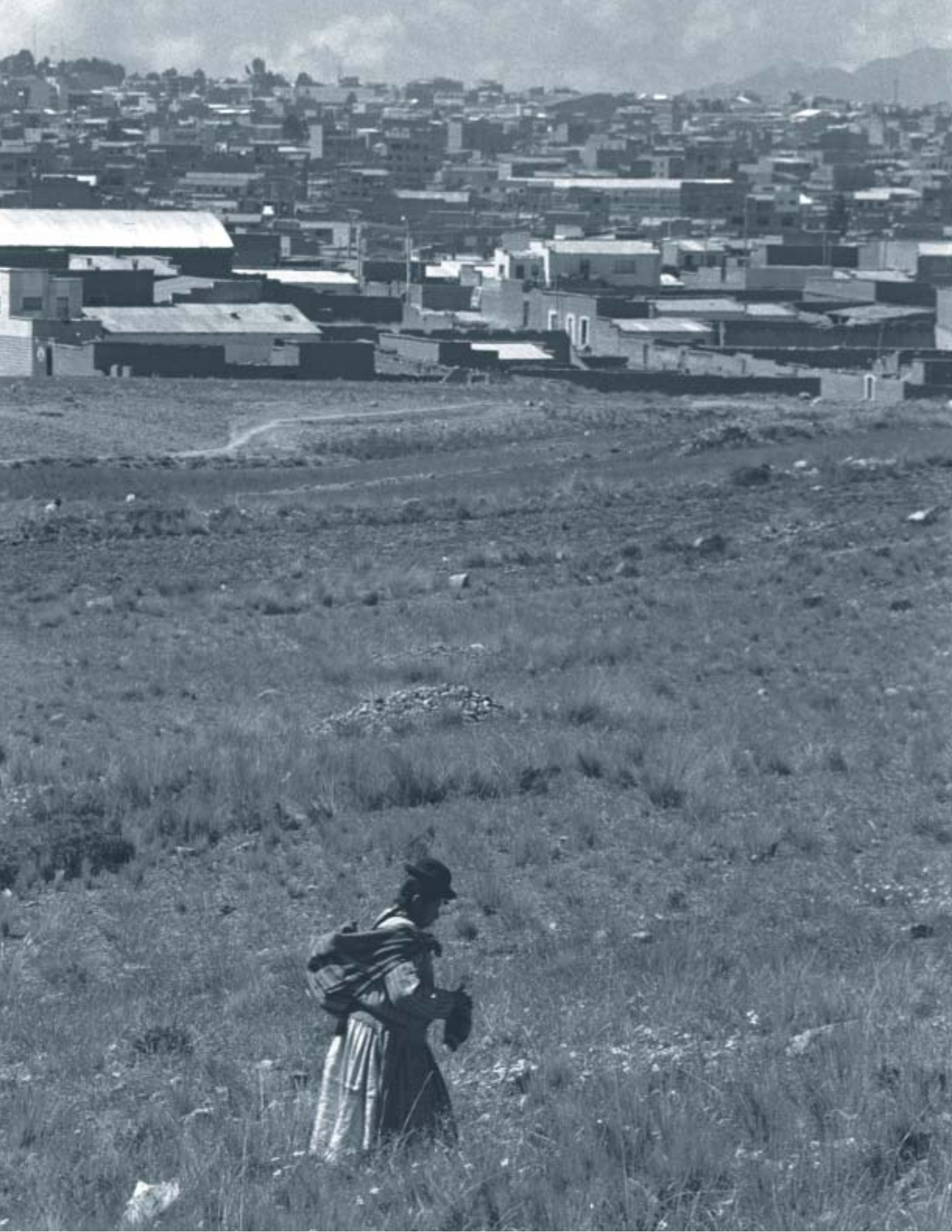
List of Boxes



Preface

The Paris Seminar

Over the past few years the Water and Sanitation Program (along with a number of other specialist water sector agencies) has been increasingly engaged in the design of private sector transactions because of their potential to impact, positively or negatively, on the lives of the poor. As part of this effort the Water and Sanitation Program, with financial support from the Public-Private Infrastructure Advisory Facility (PPIAF), held an international seminar in Paris in December 2000. The seminar aimed to enhance the capacity of both economic and transactions advisers (building on their legal, regulatory and contract perspective) and water and sanitation professionals (building on their poverty reduction perspective) to develop new designs for water and sanitation transactions.

This seminar was part of an on-going set of initiatives relating to private sector participation and the poor in the infrastructure sectors. A previous conference in London in May 2000 (Infrastructure for Development: Private Solutions and the Poor) had raised the issues which were discussed in depth at the Paris seminar.

The objectives of the seminar were to:

- build capacity of economic and transaction advisers to understand the reality facing poor consumers of water and sanitation services, and the necessity to explicitly address their needs in contracts, regulatory and legal instruments;
- build capacity of water and sanitation professionals working on poverty to understand the potential of the various private sector participation instruments to structure outcomes; and,
- utilize the combined expertise of the two groups to generate new models for addressing the needs of poor consumers in private sector participation instruments.

Structure of this Document

This document contains a synthesis of the work done at the seminar, along with additional material that was developed by the participants subsequently. Rather than present a formal 'proceedings' the authors have aimed to develop a practical structured document, drawing on the debates at the seminar, supplemented by additional material. The intention of this document is to provide guidance specifically for those commissioning and executing technical assistance to governments interested in exploring the potential for reform involving the private sector. (The target audience, therefore, includes transaction advisers including lawyers, economic reform advisers and water and sanitation sector professionals.) The document assumes a fairly high level of knowledge of the general issues relating to private sector participation in infrastructure provision and focuses specifically on what might be needed to ensure that transactions deliver benefits to poor consumers (both present and future) as well as the better-off.

Obviously this is a complex and highly technical subject; as the document has been developed the authors have striven to balance detail with clarity and maintain a degree of general applicability in the arguments that have been developed. For more specific information on the cases and arguments the authors have provided further references.

This document does not contain a blue-print or off-the-shelf solution for would-be reformers, rather it provides some principles and guidelines which could be used as a cross-check to ensure that the transaction designers deal with the poor explicitly and sympathetically in each individual case. Neither does the document seek to advocate the involvement of private sector players; the intention is rather to show interested readers that the poor can benefit if the realities of their situation are understood and explicitly addressed.

The document is divided into six chapters and annexures:

1. **Significance of Poverty in Transaction Design** — what is the extent and nature of urban poverty in developing countries, and what is the nature of the water supply and sanitation market among poor consumers?
2. **Elements of Urban Water Sector Reform** — what are we trying to achieve through sector reform, and what tools are at our disposal?
3. **Legal and Policy Frameworks** — what is the legal and regulatory framework in which water supply and sanitation services are delivered, and what are their relevance to the issue of serving the poor? What can we learn by comparing the legal frameworks of France to those of England and Wales?
4. **Making the Contract Work for the Poor** — what are the different contract types, and what is the relevance of contract type when it comes to serving the poor? How can we contract specifically for such things as increased number of connections, innovative and appropriate levels of service, and the use of alternative providers?
5. **Tariff and Subsidy Design** — what types of tariff structure exist, and how are water supply and sanitation subsidies delivered? How can we effectively deliver subsidies to the poor?
6. **Timing It All Right: Information Collection and Consultation** — what needs to be done to ensure that vital information on the poor is available in a timely way? How can meaningful consultation be included in the transaction process?
7. **Annex**

A Word about Sanitation

Increasing access to improved sanitation for poor families, particularly in urban areas, is a crucial part of the development process. Sanitation is often a neglected area when compared to the water sector, with levels of investment and coverage lagging far behind (percentage coverage for sanitation has actually fallen in Africa over the past ten years).

For these reasons the work described here initially set out to examine both water supply and sanitation issues. However, sanitation differs in certain fundamental ways from water supply:

- firstly, it is even less likely than water to be a networked or utility service. While sewered sanitation is the norm in most developed countries, on-site sanitation (pit latrines, septic tanks etc) are often more appropriate and feasible;
- secondly, in situations of extreme poverty, demand for sanitation lags behind demand for water supply and funds for sanitation do not form part of household budgets. Experience shows that creating informed demand for sanitation requires long term investments of resources;
- thirdly, sanitation with full treatment is expensive and many sector professionals agree that high levels of subsidy are probably required in sanitation (and indeed most developed countries subsidize the subsector). It is difficult to achieve economic viability in the subsector; and,
- finally, sanitation is often a municipal function, and reforming service delivery is linked to a wider process of municipal reform.

Because of these technical challenges, the latent nature of demand and its institutional complexity, sanitation has often been omitted from private sector transactions. Where it is included it is almost always in the form of requirements to expand sewered sanitation (La Paz/ El Alto being a high profile example). Once neworked or sewered sanitation has been defined as the objective most of the issues of transaction design become common to both water and sanitation. However, the inclusion of sanitation does introduce more challenging policy and legal issues and may introduce the need for additional institutional reform upfront (establishing, for example, appropriate roles for local government vis a vis a private operator and other state entities responsible for oversight of a contract). Many governments decide to omit sanitation from private sector transactions either because they feel the subsector is not suitable for such a reform, because they feel that local and decentralized technical solutions are more

suitable, because they are concerned (probably with some justification) that the sector will not be attractive to the private sector, or because "getting water right" is seen as an over-riding policy objective which must not be jeopardized by the addition of more institutional challenges.

Many of the ideas presented here are relevant to sanitation; small-scale providers are key players in many cities in sanitation as in water. The arguments presented for placing emphasis on expansion, promoting appropriate levels of service, allowing multiple-service providers, adopting appropriate technical standards, engaging in meaningful consultation and so on, are equally applicable to sanitation as for water. Clearly there is a need for further specific thinking about sanitation, and also a need to ensure that governments, when embarking on reform, make a conscious effort to decide how sanitation will be dealt with and whether it is appropriate to use the same reform instrument for sanitation as for water or whether alternative approaches will be needed to ensure that vital investments are made and services improved.

Acknowledgements

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This document is the result of over 12 months of work by a large number of professionals many of whom have given their time and expertise at no cost. Firstly, thanks are due to the participants at the seminar in Paris who provided the framework and ideas for the document now presented. Many of the conclusions were reached at that meeting and have only required minimal additional work. Annex 3 contains a list of participants.

This activity was managed by Barbara Evans, Senior Water and Sanitation Specialist at the Water and Sanitation Program. Other members of the task team were Clarissa Brocklehurst and Mukami Kariuki (who first articulated the idea for the seminar).

Specific contributions to the final document were made by Mukami Kariuki (Chapter 1), Clarissa Brocklehurst (Chapters 1,2 and 4), Barbara Evans (Chapters 1 and 2), Sophie Tremolet, with inputs from Marie Marguerite Bourbigot (Chapter 3), Shane Rosenthal and Ian Alexander (Chapters 1 and 4), Dale Whittington and Kristin Komives (Chapter 5), and Thelma Triche (Chapter 6). Additional substantial support and input to the structure of the entire document were gratefully received from Ian Alexander and Shane Rosenthal. John-Pierre Florentin and Bernard Portier provided input to the West African case studies. Detailed comments on the text were provided by Penelope Brook, Ken Caplan, John Davies, Jan Janssens, Apurva Sanghi, Heather Skilling and Marc Vézina.

Clarissa Brocklehurst developed the text into the ordered whole presented here, and Vandana Mehra supervised the design and production of the document.

Barbara Evans
Senior Water and Sanitation Specialist
Water and Sanitation Program

1 The Significance of Poverty in Urban Water Sector Reform[1]

1.1 Why are we talking about the poor?

As a result of rapid urbanization and declining economic performance, many urban centers in developing countries are experiencing a substantial increase in the number of people living in poverty. For instance, in India in 1994 it was estimated that 30.5 percent of the urban population country-wide was poor[2]; in 1998 it was estimated that the proportion of households falling under locally-defined poverty lines was 53 percent in Lagos, 46.6 percent in Nairobi, 44.4 percent in Recife and 44.3 percent in Dhaka[3]. Urban poor populations are also growing quickly: in Bangladesh the growth rate in urban slums was estimated in 1993 to be four times that of the country's population as a whole[4].

Many of these poor people live in unplanned settlements with limited access to affordable and reliable water supply and sanitation services. The unbearable conditions that result lead to high rates of waterborne illnesses, loss of livelihood and loss of human dignity; all of which will increasingly take a toll on the economies of these cities and the countries in which they are located. Yet the poor of a city are important residents, both in their own right and because they supply many of the goods and services that keep the city running. There is ample evidence to show that incremental improvements in water supply and sanitation can have major positive impacts on health, efficiency and productivity. In addition, poor health among the poor is an issue for everyone — inadequate sanitation impacts the city as a whole and causes serious negative health externalities; improving water supply and sanitation provision to the urban poor remains an urgent priority.

Poor households want access to water and sanitation for reasons of dignity and convenience as well as for improved health and hygiene. In many cities the poor have made clear their desire to be legitimate customers of the water utility, buying water and sanitation services like any other residents. This demand for better water supply and sanitation provided through formal channels is high, clearly expressed and accompanied in many cities with a willingness to pay. However, it is a demand for services which are appropriate and affordable. Since the poor comprise the majority of potential new customers in most cities, utilities need to have the skills, knowledge and will to adequately respond to this demand and to design services with the particular needs of low-income customers in mind.

A fully functioning and sustainable utility is clearly the key in any attempt to better serve the poor. However, many of the reform measures which are often suggested to achieve this — more cost recovery, less tolerance for illegal or informal connections and the introduction of a private operator whose motives are related to making a profit — are perceived by some groups to have anti-poor characteristics. In fact many of these reform measures can work to the advantage of the

1 Primary contributors: Mukami Kariuki, Clarissa Brocklehurst and Barbara Evans.
2 World Bank Development Indicators 2000, World Bank (using a nationally defined poverty line).
3 UNCHS Global Urban Indicators Database 2 (1998 data).
4 Bangladesh Urban and Shelter Sector Review, UNDP and UNCHS (Habitat), June 1993, quoted in Black, Maggie, Mega Slums, the Coming Sanitary Crisis, WaterAid, 1994.

poor if they are specifically designed to do so, and are based on a good understanding of the water supply and sanitation market among the poor.

Where this is not the case reform measures may be skewed disproportionately towards providing improved services for the well-off, rather than new services for the poor, often based on the assumption that general improvements in city infrastructure will benefit the entire city population, including the poor. Without proper analysis of the impacts of reform and how benefits will be distributed, there is always a possibility that benefits will flow to the better-off, at least initially[5].

For instance, if increased coverage is not made a priority, the efficiency gains of private sector operation will result in better service for already connected customers, but un-connected customers, who are more likely to be the poor, will see no change. Tariff reductions will likewise benefit the connected. In Buenos Aires, for example, the concession for the water utility was awarded to the bidder offering the lowest tariff, resulting in an immediate benefit to existing users. However, the connection fee was re-designed to include an infrastructure charge meant to finance the expansion of secondary networks. This connection fee was completely unaffordable for the poor, who made up most of the unconnected consumers in the city, leaving them unable to access the service even at low tariffs. For further discussion of this case see Box 4.4.

1.2 Nature of the water supply and sanitation market among the urban poor

Given that such a huge unserved poor population exists, it can be concluded that the poor constitute a potentially large market for utilities that are given room to innovate on more suitable service delivery arrangements. Future utility efforts will need to be focused on understanding and explicitly addressing the conditions under which the poor gain access to water supply and sanitation services. While the situation varies from city to city, the water supply and sanitation market among the poor commonly exhibits the following characteristics:

Poor utility performance hurts the poor more than others. The poor suffer first (and most) from the effects of declining utility performance. During shortages, rationing of water affects the poor most adversely as their storage facilities are either non-existent or inadequate. They are commonly dependent on daily wages which means that any time spent queuing for and collecting water cuts into their earnings. Utilities that are slow to repair leaks in general are even less likely to respond to requests for service from poor neighborhoods; people with little political influence must resort to bribery in order to obtain services they should be entitled to, or else they go without. Fundamentally, utilities with financial difficulties find it difficult to extend service to new areas, particularly the challenging areas of the urban poor.

The poor pay a high price for water. Despite the perception that the poor cannot pay for water, there is increasing evidence that the poor do pay, and often pay more than the better-off consumers: for instance paying for water from vendors at high cost, bribing water officials, paying fees for access to illegal connections to slum landlords, or queuing for long hours at public water sources[6].

5 For a discussion of the distribution of benefits from private sector participation, see Van den Berg, Caroline, Concessions: Who Wins, Who Loses, and What To Do About It, Public Policy for the Private Sector, Note No. 217, October 2000.

6 For a discussion of the amounts the urban poor pay for water, see Bhatia, Ramesh and Falkenmark, Malin, Water Resources Policies and the Urban Poor: Innovative Approaches and Policy Imperatives. Water and Sanitation Currents, UNDP-World Bank Water and Sanitation Program, 1993. For a discussion of the poor's willingness to pay, see Willing to Pay but Unwilling to Charge, UNDP-World Bank Water and Sanitation Program South Asia, 1999, and Russell et. al., Investing in Water Quality: Measuring Benefits, Costs and Risks, IADB 2001.

Alternative providers are an important way for the poor to get services: Responding to demand from non-networked and underserved consumers, small-scale providers including private companies and non-governmental organizations, have developed innovative 'products' (kiosks, delivery services, packet/bottled water, independent networks etc). In some countries, these providers account for up to 70 percent of urban service provision[7]. While the price of water supplied by alternative providers is generally higher than that charged by the utility, these prices are not necessarily usurious, but often reflect the real costs of the small operators.

Cash flow is an issue in buying water supply services. Utilities often struggle to bill all of their customers, and try to keep their administrative costs low by billing on a monthly, quarterly or even a bi-annual basis. Poor households on subsistence incomes find it difficult to pay large, infrequent bills. They prefer to purchase water as and when they have the funds available, on a daily or per container basis. In Kenya, it was found that this is one of the reasons that the poor use water vendors[8]. Likewise, high, one-time connection fees can be a deterrent to the poor who wish to connect to the network.

Land tenure is a constraint to getting good services. The poor often reside in unplanned or informal areas, and they may lack the legal status to demand, or qualify for, direct access to formal services under existing legal and regulatory frameworks[9]. Granting tenure may be the subject of other government reform measures, and is invariably outside the mandate of water utilities. For the purposes of the water sector, simply de-linking rights to service from tenure status may be adequate to facilitate increasing the number of people connected. However, continued uncertainty about long term occupancy rights may discourage people from making investments, such as paying connection costs or installing household plumbing.

Many poor households currently do pay for water, and in fact pay high prices for low quality water, some of which is actually stolen from the utility. Given this, providing better services to them should have the dual benefit of improving revenue for the utility *and* improving affordability and quality of service to the consumer, thus confirming the status of the poor as legitimate customers.

1.3 Traditional utility responses to the needs of the poor

The market for water supply and sanitation in low-income areas is complex with wide variations in demand. Most utilities have not responded to the range of options demanded by consumers and instead have provided only two alternatives, a conventional private connection, or a prescribed standard 'poor people's' solution such as communal standposts or public bathing blocks. In the former case, the technical and service standards designed for conventional service in middle and high income areas are often assumed to be suitable for low-income communities when in fact flexibility and innovation are required to enable affordable service delivery in the difficult physical environments of most informal settlements. Opening up technical standards for review and adaptation is, therefore, an essential aspect of improving services to low-income communities. In the latter case, 'poor people's' solutions often go hand-in-hand with an

7 Collignon, Bernard and Vezina, Marc, Independent Water and Sanitation Providers in African Cities, WSP 2000.
8 Kariuki, M. and Mbuvi, J. Urban Water Supply and Sanitation Services in Low Income Urban Settlements (sub-report of Review of the Water Supply and Sanitation Sector Joint World Bank, KfW, GTZ and AFD Mission November 20 to December 17, 2000).
9 See, for instance, Water Supply and Sanitation Problems in the Slums of Mohammedpur, Dhaka, WaterAid 1997.

assumption that services for the poor must be supplied for free or at very low prices, below the cost of supply. This results in water delivery to the poor being perceived as strictly a public service obligation, which is given little priority.

The requirement to have a title deed or other formal land ownership documentation and the existence of high up-front connection costs (both official and unofficial) further limit access to the poor. If they are served at all, they are often expected to pay more in the form of deposits as a measure to reduce risks to the utility. Unserved consumers in informal settlements are forced to take the initiative and gain service 'through any means and at any cost', for instance through illegal connections and unauthorized service providers, which hampers the utility's efforts at cost recovery.

Despite the fact that alternative providers often offer the only service available to the poor, some governments have been reluctant to acknowledge their function in the market, or to provide a workable way to make them part of the formal sector; even going so far in a few cases as to accuse them of illegally competing with the main operator[10].

From the above discussion it should be clear that there is often a mismatch between what poor consumers want and what utilities can provide. In the context of an overall reform the poor may thus have a very strong interest which, as mentioned earlier, is not always addressed.

1.4 What are the concerns of the poor in urban water sector reform?

Working from the experiences of the sector, it can be hypothesized that the poor have three main concerns when urban sector reform is proposed, and with it possible changes to the way services are delivered:

- the price of the service being delivered;
- *expansion* of the system in order to add new connections in previously unconnected neighborhoods; and,
- service levels, such as water quality, hours of service, speed of response to service calls and the nature of administrative services such as billing, connection applications.

In terms of *price,* low-income households will be acutely interested in ensuring that they pay prices that are as low as possible and may be in favor of cross-subsidy schemes which are designed to charge the poor less than the non-poor.

In terms of *expansion,* the unconnected poor will be interested in how expansion is prioritized. Will they be offered a connection, and if so, when? Both existing and potential consumers who are on low incomes will be interested in the way in which connection costs are recovered. Will the full cost of a connection (including the cost of tertiary network installation) be passed on to new customers, and if so will it be through up-front connection fees, or as a charge recovered over time, which is much more feasible for the poor? An alternative approach would be to share the burden of expansion among all consumers, through a general tariff increase or a special fee, which will benefit the poor if they fall into the unconnected group. (A third option is that no connection costs are charged at all, and that households are provided with connections financed by funds from the government; a variation on this would be that only poor households receive free connections.)

In terms of *service levels,* both connected and 'to-be-connected' low-income households

10 This is balanced by examples of other governments which have supported the role of alternative providers. For a longer discussion of these issues, see Collignon, Bernard and Vezina, Marc, Independent Water and Sanitation Providers in African Cities, WSP 2000 or Solo, Tova, Maria, Competition in Water and Sanitation: The Role of Small-Scale Entrepreneurs, Viewpoint, Note No. 165, December 1998, the World Bank. More information is available on the WSP website at http://www.wsp.org/english/activities/independent.html or on the World Bank website at http://www.worldbank.org/html/fpd/water/topics/ind_providers.html.

may be interested in ensuring that appropriate service levels are adopted. This may relate to quality of some service characteristics, such as hours of service (poor wage laborers need to be sure water is available in good quantities 24 hours a day, as they have no storage facilities and waiting or queuing for water costs them money) or billing arrangements (poor people find it hard to pay large annual or bi-annual bills, and prefer frequent billing); and possibly that multiple service levels are available, so that the poor can choose affordable alternatives, such as yard taps, communal standposts or small diameter networks, if they need to[11]. If poor households are already using an alternative provider, in the short term at least they will be concerned that this provider remains legal and able to operate.

The concerns of consumers regarding these service characteristics are summarized in Table 1-1.

1.5 Steps towards addressing the concerns of the poor

If the poor are to truly benefit from reform, the reform as a whole should be guided by two key principles:

Equity: The benefits of reform should accrue to the poor as well as to the non-poor; and

Sustainability: The reformed system as a whole should deliver a technically workable and financially viable service.

Once it is recognized that the poor are customers in the same way the rich are

Table 1-1
Concerns of consumers

Consumer type	*Concerned about service expansion*	*Concerned about price of service*	*Concerned about service levels?*
Poor Connected	No — except there may be a concern to limit connection cost cross-subsidies	Yes, strongly	Yes — concerned about hours of service and reliability as they have no storage facility
Poor Unconnected	Yes, strongly — concerned about how areas are prioritized for new networks	Yes, strongly	Yes — concerned about hours of service and reliability as they have no storage facility, also want flexibility and choice in service levels to ensure affordability
Better-off Connected	No — except there may be a concern to limit connection cost cross-subsidies	Less than the poor	Yes, but less so as they usually already have storage facilities; water quality will be their main concern
Better-off Unconnected	Yes, but know they are attractive customers for the operator; in any case can often afford to establish own alternative, non-network supply	Less than the poor	Yes, but less so, water quality and reliability will be their main concerns

11 For a description of the issues inherent in the multiple quality of service issue see either Baker and Tremolet, Viewpoints 219 and 221, October 2000, The World Bank, or Johnstone and Wood, Water and Sanitation in Low Income Neighborhoods: The Scope for Service Differentiation and Decentralized Management in Private Firms and Public Water: Realising Social and Environmental Objectives in Developing Countries edited by Johnstone and Wood, Edward Elgar (2001).

customers, then it becomes possible to address their concerns more effectively. Specifically, policy makers and service providers should be prepared to:

Keep the objective of improving the lives of the poor of the poor front and centre in the design of reform. The task of reform can be overwhelming, and policy makers and implementers find themselves facing many challenges and difficult decisions regarding institutional structures, tariff policies and sector governance and utility management models. However, it must be remembered that for most cities in the developing world, the poor, by virtue of their numbers and the conditions they live in, are *the* development issue, and must not be forgotten. Improvements, however well designed, which disproportionately benefit the better-off merely entrench the status quo. Chapter 2 discusses the elements of reform and points to areas where the concerns of the poor can be addressed.

Avoid the assumption that poor customers are high risk, low return customers in both economic and political terms. There is often a lack of information about the poor, and what levels of service they want and are willing to pay for; in addition, since poor consumers do not fit the profile of a 'normal' customer, it is often considered difficult to enter into contractual relations with them, and risky to engage with them at all. These assumptions, which may often be erroneous, hinder the design of appropriate operational policies.

Address the specific problems of informal settlements in water supply policy and related legislation. Although equity and poverty concerns are highlighted in national policy, it has often been assumed that the particular needs of low-income consumers can be addressed in the same manner as middle and high-income consumers. However, the informal nature of these settlements necessitates a different approach; one that starts with recognition of the need to serve them. Utilities have often been barred from serving them by policy, legislation or regulations that restrict access or hinder implementation. In the absence of a clear government policy and without a clear mandate, utilities cannot take up the challenge of serving the poor in an effective and sustainable manner. This is discussed further in Chapter 3.

Recognize that the main operator may not be the best service provider for the poor, and that alternate service providers have an important role to play. Independent providers may provide services which are more appropriate for the poor than those which can be provided by the main utility directly. Government policy and contract clauses which make alternate providers illegal will not serve the poor well. These issues are discussed further in Chapters 3 and 4.

Seek innovative ways to address the physical constraints to infrastructure and service provision in low-income areas. A common limiting factor in informal settlements is geographical location. Installing conventional infrastructure in rocky, hilly, waterlogged and crowded areas is costly, and may also simply not be feasible. However, the poor may be quite willing to accept (and pay for) non-conventional solutions if they provide the levels of reliability and quality they need at a price they can afford. The obstacle may be the standards set by government policies, regulators or contracts, not acceptability to the user. These issues are discussed further in Chapter 4.

Recognize that efforts to provide subsidies to the poor through water tariffs have often been unsuccessful. Many, and in some cities most, poor people do not have private connections, and use public water sources, vended water or non-utility sources such as tubewells. If they do use utility water it is from heavily shared connections. As a result tariff structures that set 'lifeline' tariff blocks targeted at the poor often miss the mark. High levels of subsidy have not brought about

the anticipated benefits, in many cases have benefited the rich or middle classes instead of the poor, and have made the poor unattractive customers which the utility has no incentive to serve. The policy of providing 'free' water to the poor through public standposts often backfires also, as these standposts offer such a low level of service that the poor are forced to look elsewhere. These issues are discussed further in Chapter 5.

Aim to reduce the distance between the utility and poor consumers. Any urban water sector reform, including the introduction of private sector participation, must actively seek and encourage new innovations to overcome the financial, legal and social constraints faced by the poor. Reform must also include the establishment of consultative and participatory processes which allow all consumers, especially the poor, to have a voice. These issues are discussed further in Chapter 6.

Designing private sector participation transactions to respond to the needs of the poor requires that local characteristics are well understood, supported by policy and regulation, and that explicit pro-poor provisions and incentives are built into contracts with private operators. This document now turns to the subject of designing these transactions.

2 Elements of Water Sector Reform[12]

This chapter briefly describes the common elements of reform in the water sector, and the possible implications of each for service to the poor.

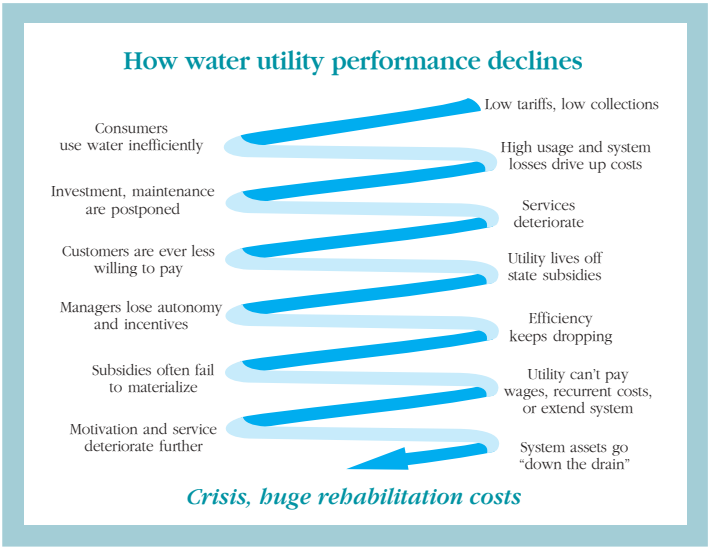
2.1 The need for reform

The governments of most countries have put in place monopoly utilities to run urban water supply and sewerage systems. This is because governments believe the nature of the infrastructure required, and the large economies of scale, mean these services are most efficiently operated by a single entity. The government thus gives one utility the right to operate, and subsequently regulates its prices and/or profit. In most cases this entity has been run and owned by the government. The public has become used to this and perceives services of these utilities as a 'public service' or even a 'social good'.

However, publicly run utilities in developing countries have been singularly unsuccessful in providing reliable water supply and sanitation services. Most find themselves locked in a downward spiral of weak performance incentives, low willingness to pay by customers, insufficient funding for maintenance leading to deterioration of assets, and political interference. This spiral is illustrated graphically in the following diagram[13].

Reversing this spiral requires a massive investment of time and political effort to:

- make institutional changes;
- improve policy;



- institute changes to the financial structure, including tariff;
- establish robust sector governance; and,
- introduce more efficient and professional management of the utility.

These interventions are interconnected, and implementing one will have little impact unless others are carried out at the same time.

2.2 Responsibilities in a reforming environment

Reform must take place in an environment in which three distinct responsibilities are clearly defined and allocated:

- policy remaining with government;
- regulation being undertaken by an independent and trusted institution; and,
- service provision being carried out by professionals, as it is crucial to introduce a separation between the business of providing

12 Primary Contributors: Clarissa Brocklehurst and Barbara Evans.
13 Thanks to Gouarne, Vincent for permission to use this graphic.

water supply and sanitation and the business of governing (or politics). This implies a commitment on the part of the government to release control over the direct provision of services, and to build capacity for effective regulation and dispassionate monitoring of performance.

Civil society (represented by citizen's groups, non-governmental organizations, labor unions and other associations) needs also to be involved in the process of reform; it is not enough to voice the concerns of the poor — all players need to be engaged in a constructive search for solutions to the challenge of serving the millions of poor consumers. Civil society groups bring valuable knowledge of the reality of the lives of the poor, and may take on a variety of roles: service providers, advocates, advisors, intermediaries. There are several examples worldwide of partnerships between the government, the private sector and civil society organizations in service provision (see Box 2.1).

Box 2.1

Business Partners for Development

Business Partners for Development (BPD) is an informal network of partners that seeks to demonstrate that strategic partnerships involving business, government and civil society may present a successful approach for the development of communities around the world, and that these three sectors can achieve more at the local level than any of the groups acting individually. In the water and sanitation sector BPD has supported and studied projects in Colombia, Indonesia, Haiti, Bolivia, Argentina, South Africa and Senegal. In Bolivia, for instance, civil society groups helped to organize groups of slum dwellers to install and maintain low cost condominial sewerage systems in partnership with a private water company and the municipal authorities. In Cartagena, a partnership between the private operator, neighborhood committees and the municipality is experimenting with flexible systems for billing and payment, including locally based billing through neighborhood offices. Initial findings from the network show that tri-sector partnerships can be successful in bringing new approaches and innovation to the sector, but only if the motivations, incentives and obligations of each stakeholder are understood and recognized.

2.3 Tools of reform

2.3.1 Institutional change

Water sector reforms can only bring in greater efficiency and accountability if they are carried out in the context of overall institutional reform. It is clear that as the sector evolves, and governments and the public increasingly require a focus on long term financial sustainability and customer service, the institutions in the sector will have to change. These changes will involve a re-examination of both roles and structures.

Many different institutional models exist for water service delivery in developing countries, each with its own strengths and weaknesses. For instance, a Corporate Board may deliver services to the municipality, but be separate in many ways as it reports to a state, province or even national government, or a Water Board may function as a department within the city administration, and lack autonomy. The inefficiencies and inequities of each institutional model need to be resolved if other changes are expected to have their intended impact. For example, a common thread in all these models is that utilities report upwards to the next level of authority, be it the national government, state government or the city, not *downwards* to customers[14].

A common reform measure is bringing in the private sector to provide specialized expertise,

14 Nagari: Proceedings of the Twelfth Meeting of the Urban Think Tank, Mumbai April 2001, Water and Sanitation Program -South Asia.

Box 2.2

Johannesburg city restructuring

In Johannesburg, South Africa, duplication of services in overlapping urban centers was resolved by centralizing municipal authority into one city management but de-centralizing services such as water, solid-waste collection and public transport into companies with different types of public/private partnerships. Both the companies and city politicians are now responsible for service delivery directly to the citizen — an important structural change which altered the nature of accountability and the efficiency of service delivery. The central government financed some of the cost of the transition to the new city system, acknowledging that city restructuring has a national impact[15].

efficient management and new sources of capital. In order for private sector participation to be possible in the first place, a suitable 'employer' must exist in order to contract the services of the private sector — this implies the need for effective local government institutions who:

- have a clear idea of the services they want and the extent to which they should be delegated to a private party;
- stand to gain from the efficiency that the private sector can provide; and,
- have the mandate to enter into contractual arrangements.

See Box 2.2 for an example of municipal reform in South Africa.

2.3.2 Tariff reform

Tariff reform in the water sector is both enormously political and widely misunderstood. Even in the absence of other reforms, changes to the tariff setting process, tariff structure and rates can be very beneficial to long term service goals for the sector. The benefits of tariff reform often do not emerge in public debate, however, and the common perception is that the poor will suffer through changes to tariffs. This is despite the fact that there is ample evidence that poor people are often willing to pay for good quality, reliable services and want to become valid customers of the utility[16].

Reform needs to be carefully designed with the ultimate objective in mind. Tariff 'reform' often involves changing the tariff levels, but not the tariff structure, so that poorly targeted consumption subsidies (which often simply benefit high volume users with private connections) persist. In addition to raising tariffs so that utility revenue meets real costs, tariff reform ideally revises the overall structure of a tariff, and brings it in line with the reality of how people use water (through shared connections, for instance, or from vendors)[17]. There have been cases, for instance in Manila, where private sector participation has been initiated without changing tariff structures, so the private sector operator merely inherits the inequities and distortions of the old structure.

It is often assumed that a private sector operator will take over the unpleasant responsibility of revising tariffs, but in fact responsibility for tariff setting invariably remains the responsibility of the government. In the case of service contracts and management contracts, the operator does not make his revenues from the tariff, so there is no incentive or mandate for him to propose changes. Under an affermage, the operator collects the tariffs, but remits all but his agreed fee to the government; this fee is not differentiated by customer class and is unrelated

15 ibid, 2001.
16 see Willing to Pay but Unwilling to Charge, UNDP-World Bank Water and Sanitation Program South Asia, 1999.
17 Tariff increases must also be carefully phased, and accompanied by improved services. Asking users to pay more before they have observed an improvement in service levels is unlikely to be successful.

to the tariff. Likewise, under a lease the lease fee paid to the government is also unrelated to the tariff or the class of customer served. Under a concession contract, the operator bears the tariff risk, and can propose tariff changes; during the course of a 20 or 25 year contract he will certainly do so, however, these changes must be approved by the government. Where a regulatory system is established, regulators investigate the proposals before the government approves them, in order to make sure the tariff changes are justifiable and in line with the contract.

Issues of how private operators are remunerated are discussed in Chapter 4, and tariff issues are discussed further in Chapter 5.

2.3.3 Improvements to sector governance and regulation

Governments still regulate many infrastructure sectors through line departments, which may also be responsible for service provision. In other cases, regulatory bodies have been created which are institutionally distinct from sector ministries, and have their own legal personality. There is no uniform approach to specifying the roles and powers of regulatory bodies. This partly reflects the fact that the creation of these bodies has been driven by individual sector ministries who have adopted different approaches. There is also no single right answer as to what form or powers a regulatory authority should have, and the best framework will vary from country to country, and from sector to sector.

Many regulatory agencies have introduced greater transparency into the way prices are set and business conducted in the industries they regulate than was the case under the government. Examples of this include:

- public consultative processes when regulators are deciding on methodologies and principles involved in regulation;
- public hearings on tariffs to which all stakeholders are invited, and at which views on tariff proposals are heard; and,
- advisory committees, which are composed of stakeholder representatives.

Regulation should be carefully designed to be responsive to the needs of the poor. Of course, independence and autonomy will equip a regulator to make decisions that benefit all consumers, but it may be necessary to ensure that the regulatory body is well informed of the specific impact of its decisions on the poor, and to empower it to be innovative and deviate from convention if it sees that this will be beneficial. It is also important to make sure that the regulator has a well-established way to listen to the concerns of consumers, and that this mechanism is inclusive of the poor[18]. None of this will work unless the regulator has some degree of independence and adequate resources to carry out this mandate.

Fundamentally a regulator requires a clear policy environment in which to function — it is not the role of the regulator to set policy but to ensure that it is implemented.

These issues are discussed further in Chapter 3 of this document.

2.3.4 Establishing efficient and professional management of the utility

Efficient and professional management of the utility is vital in achieving financial sustainability, customer responsiveness and optimal use of resources. In many cases, professional management is sought from the private sector, through engagement of a private operator under some sort of delegated management mechanism. The private operator is expected to act in

18 See Smith, Warrick, Regulating Infrastructure for the Poor: Perspectives on Regulatory System Design, presented at Infrastructure for Development: Private Solutions and the Poor, May 2000.

partnership with government, the regulator and other stakeholders.

When private sector participation in the provision of water supply and sanitation services is proposed, there are often fears that the poor will not benefit, but will in fact be disadvantaged. Opponents to private sector participation express concern that private sector participation will result in higher tariffs, that private providers will favor high income consumers, and that social goals, such as the provision of hygiene education or low cost sanitation, will not be met. However, the reality is that the private sector, if given the right tools and incentives, is more than willing to service low-income consumers[19]. At the same time, it is unrealistic to expect the private operator to be spontaneously motivated to service a challenging customer class. The operator needs to be encouraged through policy, regulation, legal reform, contract design and compensation

Each type of private sector participation provides different options for achieving social objectives. The remaining sections of this document argue that, where private sector participation occurs, concerns regarding service to the poor can be addressed through the skillful design of contracts, in combination with better regulatory environments, good tariff reform and attention to process, including careful research, open consultation and stakeholder engagement.

19 Some of the large operators have demonstrated this through initiatives which are focused on finding solutions for service to poor areas. See, for instance, the document entitled Alternative Solutions For Water and Sanitation In Areas With Limited Financial Resources by Lyonnaise des Eaux (now ONDEO), 1998, or the work of Vivendi in Durban to develop low cost sewerage (described in Brocklehurst, Clarissa, Durban Metro Water: Private Sector Partnerships to Serve the Poor, WSP, 2001). Many operators are also participants in Business Partners for Development.

3 Legal Frameworks[20]

3.1 Introduction

Most analysts of water sector reform around the world would agree that a crucial element in the success of private sector participation is an appropriate legal framework. Currently, privatization legal advisers tend to focus on making the legal framework more conducive to private sector participation and on introducing legal safeguards to clarify the relation between governments and private operators[21]. This is an important focus for private sector participation to succeed, but additional issues also need to be considered if the poor are really going to benefit.

There are two major ways in which legal frameworks can have a positive impact on the poor:

- a clear legal framework reduces the risks of regulatory uncertainty for the private investor, thereby reducing the overall costs of the project and leading to lower tariffs than otherwise needed; and,
- legal frameworks can contain specific provisions targeted at improving services for the poor.

This chapter is mostly concerned with the specific measures that can be taken to make legal frameworks more responsive to the needs of the poor. These are considered to take two major forms:

- defining a legal framework for provision of water services to the poor, either through the definition of universal service obligations (which must be adequately funded) or the specification of coverage; and,
- adopting clear and transparent procurement rules and competition legislation, allowing flexible service levels and removing exclusivity rights in order to allow small-scale independent providers to compete with the main operator.

This chapter works through the steps that should be considered when carrying out legal reform for private sector participation with the poor as a priority:

- ***Section 3.2*** presents the key legal issues that need to be reviewed when designing private sector participation that can increase access for the poor, and concludes with a checklist of principles for legal framework design;
- ***Section 3.3*** examines alternative institutional frameworks for water service provision (the 'French' and the 'English' models) and draws inferences regarding the institutional features that most benefit the poor; and,
- ***Section 3.4*** considers, in more practical terms, how legal issues can be addressed during the process of introducing private sector participation.

3.2 Legal issues in pro-poor transaction design

An important first step when examining potential private sector participation schemes should be to evaluate which legal issues currently limit access to water and sanitation services by the

20 Primary Contributor: Sophie Tremolet.

21 See, for example, "Concessions for Infrastructure. A Guide to their Design and Award", ed. Kerf, Michel, World Bank Technical Paper No. 399, World Bank 1998.

poor. Such issues either affect the poor directly, or they create disincentives for private operators to provide services in impoverished areas, which often have a reputation for being more difficult to serve, and less financially rewarding.

Those legal issues can be broadly organized into three groups:

- general legal framework;
- water and environment legal framework; and,
- water institutional and regulatory framework.

The analysis of each of these issues leads to the definition of 24 guiding principles for making legal frameworks more pro-poor. These guiding principles are intended to stimulate discussion, and recommendations would need to be tailored to the specific circumstances of each particular reform package.

3.2.1 General legal framework

Land tenure issues: The poor often lack property title. As previously discussed in Chapter 1 (Section 1.2), lack of legal title to land can hinder a customer from obtaining network supply. If the poor live in illegal settlements, they might be reluctant to invest in piped water services on land they might be evicted from. The legal advisers should, therefore, evaluate the government's policy towards illegal settlements and provision of public services to them. They should seek to understand whether the government is prepared to regularize illegal residents if they have significantly invested in the land, to de-link the right to service from tenure status, or whether they are seeking to resettle them. This can be achieved by examining the legal basis for pursuing such policies. However, because such policies are subject to frequent and unpredictable reversals, it might ultimately be necessary to provide for the granting of compensation to water service operators who have served displaced illegal settlements.

Principles for legal framework design:

- **The government's position on services to illegal settlements will be an important factor in decision-making by customers and operators in installing services, and should be carefully analyzed and evaluated.**
- **Consideration should be given to compensation if served illegal settlements are displaced.**

Judicial system: The poor lack means of recourse in the case of disputes. If the judicial system is corrupt, inefficient or costly, the poor are generally the first ones to lose out. It means, for example, that they would have very little formal recourse if involved in a dispute with water service providers. Legal advisers should, therefore, seek to assess the efficiency of the existing judicial system, and evaluate whether a low-cost court could be created to deal with customer complaints related to water services and other types of public services[22].

In addition, clear complaint mechanisms should be incorporated into the design of the water regulatory framework, perhaps in a simplified form so as to be more accessible to the poor. Consumer representative bodies may have a role to play here.

Principles for legal framework design:

- **The establishment of a low-cost 'small claims' court can be an effective way to provide the poor with legal recourse.**
- **Simplified complaint mechanisms will make legal recourse easier for all, particularly the poor, and should be incorporated in regulations.**

22 In Anglo-Saxon legal frameworks, 'small claims' courts have been set up to deal quickly with claims for small amounts of money. The Small Claims procedure was originally established to make it easy for the public to use the courts to recover legitimate compensation for claims below a certain ceiling without recourse to expensive legal advisers.

Procurement rules and competition legislation: The poor tend to suffer in systems where competition is stifled. A framework for ensuring that competition is fair and transparent would benefit customers in general, and the poor in particular. Legal advisers will need to review whether the legislation provides a clear and transparent framework for ensuring fair competition. At the stage of granting the contract, it is necessary to ensure that clear and transparent procurement rules are in place. These rules should require the organization of competitive tenders, as opposed to sole-sourcing.

In the case that competition between the main operator and alternate providers is allowed, it is also necessary to ensure that appropriate safeguards for ensuring fair competition are in place. If competition legislation is weak, the main operator might try to abuse its dominant position to drive alternative providers out of the market. Also, alternative providers might collude to maintain high prices or keep quality down in certain poor areas where they are dominant. Competition issues such as network access or bulk pricing are complex and require specialized skills, and normal courts would almost certainly lack capacity to deal with such issues. One example of a mechanism to ensure fair competition is a Competition Tribunal, which acts as a Court of Appeal to settle disputes between operators and between operators and regulatory bodies in all network industries (similar to the Competition Commission in the UK). The reality is that such tribunals may not be feasible in developing countries; in the case that they are established it is very important to ensure that they have both the capacity and willingness to deal with issues related to the poor. In the absence of such Competition Tribunals, it should be ensured that appropriate arbitration mechanisms are available. This can be achieved through the introduction of an international arbitration clause in the contract. However, from the point of view of the poor, this is only a second-best solution since it would not deal adequately with the legal issues relating to alternative providers.

Principles for legal framework design:

- **Transparent procurement rules make services less expensive for all, and should be used in awarding of contracts.**
- **A Competition Tribunal can be an effective mechanism for overseeing competition, but must have the capacity and mandate to deal with issues related to the poor. In the absence of a Competition Tribunal, an international arbitration clause should be introduced in the contract, but this is unlikely to deal adequately with issues relating to alternative providers.**

3.2.2 Water and environment legal framework

Water resources: A rigid definition of water abstraction rights may reduce service options for the poor. Water abstraction rights are not always well defined in developing countries. When the informal sector is abstracting water from wells dug illegally in a water-scarce area, this can lead to over-abstraction and rising resource costs. On the other hand, granting all water abstraction rights to the main private operator might be a disguised way of strengthening its exclusivity rights. One way of making transactions more pro-poor would be to define water abstraction rights more explicitly and to regulate abstraction better (to avoid over-abstraction) whilst granting some abstraction rights to alternative providers, in order to allow them to operate.

Better-defined water rights and a pragmatic approach to allocating them could be of help in ensuring that water is used more efficiently and that access is increased. In situations of scarcity, charging for water abstraction would also increase the efficiency of water use.

A further improvement would be to allow trading of abstraction rights, so as to allow maximum competition between the main operator and alternative providers. For example, if a main operator was not making full use of his abstraction rights, he would be allowed to sell them on to alternative providers operating in the area, who could use such rights to provide services in the area.

Principles for legal framework design:

- **Explicitly defined abstraction rights and improved controls will protect resources, but flexibility and pragmatism are important.**
- **Abstraction rights should be granted to alternative providers if this will allow practical and low cost access to the poor.**
- **Charging for abstraction or trading of abstraction rights will allow efficient water resource use and should be considered.**

Technical standards to ensure environmental and health outcomes: If set at levels which are too high, they might be unaffordable for the poor. As discussed in Chapter 1 (Section 1.5), technical standards are often set in isolation from tariffs for water and sanitation services, and may be applied uniformly regardless of the nature of the consumer. This is partly due to the nature of institutional arrangements: These responsibilities are generally assigned to different institutions and co-ordination tends to be limited. As a result, technical standards to ensure health and environmental outcomes tend to be set at relatively high, homogeneous levels, even though this sometimes results in over-design and the need to increase tariffs beyond levels affordable for the poor. (Furthermore, these standards are not always applied in practice.) Legal advisers will, therefore, need to review current standards and the mechanisms for setting them in order to assess how they could be revised in order to improve affordability for the poor. In particular, this might involve the setting of a wider range of standards[23].

Principles for legal framework design:

- **Tariff setting and standard setting activities should be coordinated.**
- **Flexible service standards which allow a range of options may be a practical and realistic way to make services to the poor more affordable.**

3.2.3 Institutional and regulatory framework

Institutional framework: If unclear, the institutional framework may delay the process of introducing private sector participation at the expense of everyone, including the poor. Legal advisers will need to review the institutional framework for the provision of water services so as to identify 'grey areas', such as areas where responsibilities are not clearly defined and potentially overlapping. In particular, it will be necessary to assess who has the power to grant private sector contracts, and to what extent transactions might be affected by the political cycle. See Box 3.1.

Principles for legal framework design:

- **The allocation of responsibilities should be analyzed, and 'grey areas' identified prior to legal framework reform.**
- **It is important to clarify who has the power to grant PSP contracts.**

Regulatory framework: Regulatory offices are often set up to regulate the main operator in a way that overlooks the needs of the poor. Usually, regulatory functions are not clearly identified and delineated within the institutional

23 This is one issue that it is possible to deal with after the transaction: An example is in Bolivia where the operator and regulator reached an agreement to allow the operator to install non-conventional condominial sewerage systems, which were later incorporated into national standards.

framework. In the first place, it will therefore be necessary to assess whether independent regulation is in place or if not, whether it is allowed by law and whether there are comparable precedents in other sectors.

If a regulatory office is in place, it will also be important to evaluate whether it is primarily in charge of regulating the main operator or whether it also deals with regulating small-scale independent providers. When regulatory offices are set up in the context of privatization of the main operator, they often tend to focus on customers who are connected to the main operator's network, although such an approach tends to ignore the fact that a large percentage of the poor may not be connected at all. It will, therefore, be important to broaden the remit of the regulatory office to cover alternate providers, but this will require appropriate capacity and training for doing so. Regulating alternative providers is a difficult and sometimes impossible task, particularly where they are essentially operating illegally: alternative methods of regulation (such as publication of comparative league tables) might be most efficient to protect customers from potential abuses, which requires regulating quality and avoiding collusion.

Principles for legal framework design:

- **The issue of whether independent regulation is allowed by law should be examined.**
- **If an independent regulator is established, it should be equipped with capacity to deal with the poor.**
- **The scope of the regulator's activities should be defined to include both the main operator and alternative providers.**

Contract Types: Some forms of private sector participation might not be allowed by law. As explained in the next chapter, private sector participation can be introduced via a variety of contractual forms, which have different properties and more or less potential to benefit the poor. In some countries, however, some of these contractual forms might not be legal. For example, outright divestiture is often not legal because water and sanitation provision is considered to be a public service, which means that a public entity must own the assets. Legal advisers should investigate the legal feasibility of various forms of private sector participation and analyze which form of private sector participation

Box 3.1

Institutional issues and private sector participation in water services in Brazil

Institutional issues are creating obstacles in the process of introducing private sector participation in the water sector in Brazil, although concession contracts have already successfully been signed in some states. On the one hand, the legal rights and authority to provide water and sanitation services seem to rest with municipalities (Article 30 of the federal constitution gives them responsibility over services of 'local interest', raising definition issues about the nature of water services). On the other hand, however, state governments have provided the bulk of the capital of the state-level water companies, so they usually own the assets and control such companies.

The legal question of who should be in charge of organizing the privatization process and, most importantly, of who should receive the proceeds of such private sector participation if private operators were to have to put down an initial outlay, is therefore a very important issue (the 'poder concedente' issue), because it is one with sizeable financial implications. Failure to solve this issue at the Federal level has led to long and bitter discussions between municipalities and state governments, and in 1998 it led to the failure of the proposed privatization of CEDAE, Rio State's water company.

Box 3.2

Development of the water legal framework in Bolivia[24]

In ***1992***, the Ministry of Urban Affairs of Bolivia developed National Regulations for Water and Sanitation Service in Urban Areas. These regulations defined in-house water and sewer service (as opposed to public standposts, tanker truck delivery and latrines) as the only acceptable long-term water and sanitation solution for urban areas. In practice, however, these regulations were not widely enforced and local political priorities had more influence on service outcomes than did national guidelines.

In ***1994***, the government created an independent regulator for the water sector, the *Superintendencia de Aguas*. The specific powers of the regulator were defined in the ***1997*** Regulations for Institutional Organization and Concessions in the Water Sector, which also established that water and sanitation services, previously controlled and supervised by municipalities, needed to have a concession from the Superintendent for service provision.

In ***1997***, the Superintendent approved a concession contract for Aguas del Illimani to provide water and sanitation services in La Paz and El Alto. One major objective of this contract was to achieve the universal service objectives articulated in the 1992 Regulations by extending in-house water and sewer connections in the concession area. Under the strict control of the regulator, this objective is on its way to being achieved. However, the strict definition of water services in the Regulations and the concession contract appeared to be too restrictive, as it ruled out cheaper service options that might have been more suited to the needs of the poor. A new Water Law was passed in 2000 to specify the regulatory framework with respect to service delivery which was initially defined in the contract with Aguas del Illimani.

might benefit the poor most in the specific context. If a concession model was deemed most appropriate to deliver required improvements, for example, it might be necessary to pass a general law allowing this form of private sector participation. This would require additional time which must be allowed for in the process.

Principles for legal framework design:

- **Consideration must be given to that form of private sector participation which would be most pro-poor in the given circumstances.**
- **If necessary, new laws should be passed to allow the most pro-poor form of private sector participation possible, and adequate time must be allowed for this in the transaction process.**

Competition in the water sector: Important service options for the poor might be closed if exclusivity rights are granted to the main private operator. As mentioned above, the poor may benefit from having alternative providers supply services, either alongside or in competition with the main private operator. Legal advisers will, therefore, need to assess carefully whether alternative providers are legally authorized to operate in the current framework and what the legal status of existing providers is (many might have chosen to remain in the informal sector, even though they could be legally authorized). An indication of this would be if several providers (in plural) are mentioned in the legislation and regulations. Another indication would be related to how coverage for the main private operator is defined, either in the legislation or in the contract (see the Bolivian example opposite). In drafting the contract, legal advisers should seek to limit the main operator's exclusivity rights, even though

24 See: Komives, Kristin, "Designing Pro-Poor Water and Sewer Concessions: Early Lessons from Bolivia". Available on Rapid Response Unit web-site: http://rru/worldbank.org.

temporary exclusivity might be allowed, and some assurance may need to be provided to the operator that other large operators will not be allowed to enter the market. This is discussed in more detail in Chapter 4.

Principles for legal framework design:

- **Exclusivity rights for the main operator should be limited in order to allow alternate providers to offer low cost services to the poor.**
- **The legal status of alternate providers is an important issue which must be addressed to ensure that they are allowed to operate.**

Tariff-setting and social principles: Principles for providing services to the poor are not always clearly defined. Legal advisers must examine where tariff-setting principles are currently defined, if at all, and which institutions are responsible for setting tariffs. If general principles for setting tariffs are defined in the law, it will be important to examine whether 'social objectives' are also defined, and whether there is any indication as to how they should be balanced with economic efficiency principles. For example, if the law contains a 'non-discrimination' principle, it will be important to understand how this is interpreted, as various interpretations might have different social implications: does it mean that everyone should pay the same tariff (which entails a certain level of cross-subsidies), or that everyone should pay according to the costs they impose on the utility (which might be detrimental to the poor, given that the costs of serving them tend to be relatively high, or beneficial if it makes them financially attractive customers which do not need to be avoided)?

Some legal frameworks might include notions of 'public service' (or Universal Service Obligation - USO), imposing a general obligation on a given provider to make services available to the entire population within its service area on equitable terms. Whether such notion exists or not would have an impact on how social obligations might need to be defined in the contract. In any event, legal advisers should examine the issue of how social obligations (defined either in implicit or explicit terms) are to be funded, and whether it might be possible to set up a dedicated fund to finance new connections. One way of making such universal service obligation more realistic, at least in the short term, would be to define coverage in a flexible manner, which would include provision of services via low-cost solutions.

More details of tariff issues are provided in Chapter 5.

Principles for legal framework design:

- **The way that tariff setting principles are defined in law, and whether rules for providing 'social services' (such as USO) are in place will have a major impact on tariff structures and levels, and hence both affordability for the poor and incentives for the operator. If USOs are in place, it must be clear how they are to be funded.**
- **Flexible definitions of coverage which allow low-cost solutions will benefit the poor.**

Consultation provisions: The poor need to be able to express their preferences through consultation and engagement. Legal advisers must examine whether consultation mechanisms have been explicitly written into the legislation and whether they concern the poor in particular. Ways of achieving regular consultation and engagement include setting up consultation committees (potentially at the level of the regulatory office) where the poor would be specifically involved, and facilitating partnerships between civil society, the government and the private sector operator (additional recommendations for introducing consultation mechanisms are provided in Chapter 6).

Principles for legal framework design:

- **Legal provisions which make consultation a requirement will allow the poor to express their preferences and priorities.**
- **Consultation committees and stakeholder partnerships involving the poor should be considered.**

3.2.4 Summary of guiding principles for legal reform

Table 3-1 summarizes the 24 guiding principles for legal reform established in this section.

3.3 Design options and their implications for the poor

3.3.1 Key questions

Once these legal issues and broad guiding principles have been identified, it is important to go further and define a legal framework, which can best meet the needs of the poor. The next section analyses key design questions which have an impact on the poor. These are:

Institutions

- At what level of government should water services be provided and regulated? Should municipalities be responsible for water services?
- Should a national regulator be created to oversee local contracts?
- What additional system of checks and balances should be in place?

Competition

- How should competitive pressures be exerted: Via competition for the market, via regulation or via in-market competition?
- Should monopolies be protected via exclusivity or should other providers, such as small-scale independent providers, be allowed to compete?

Form of private sector participation

- Can water companies' assets be sold to private operators or do they have to remain in public hands because of their 'public service' nature?
- What controls can the public authority exert to preserve public interest?

Services to the poor

- Can services to the poor be secured via a broad definition of water as a public service or are specific service obligations required?
- What institutional forms for delivering subsidies can be put in place?

This section draws on a comparison between the 'English' and the 'French' institutional models for water service provision to formulate recommendations on key design options for developing countries[25].

Why use such comparison as a basis for analysis? Because legal advisers working on the introduction of private sector participation around the world often come across what, on the surface, appears to be irreconcilable differences between the French and the English legal traditions in countries that either used to form part of their colonial empires or to be subject to their cultural and legal influences. It is, therefore, important to understand what these traditions are and how they have evolved in the countries where they originated from. Also, legal frameworks which are put in place in developing countries draw elements from both systems, such as the framework for the 1993 Buenos Aires concession contract which combined a concession contract drawn from the French model with a English-style regulatory structure.

The key characteristics of the two models are summarized in the Table 3-2. The rest of this section provides explanations about these key

25 The terms 'French' and 'English' are used here to describe the current institutional arrangements for water and sanitation service delivery in most of France and in England and Wales, respectively.

Table 3-2
Comparison between the French and English models

Key aspects	*French model*	*English model*
Institutions	• Municipalities in charge • Checks and balances	• Regional private companies • National water regulator • Appeal: Competition authorities
Competition	For the market, at the end of long-term contracts Financial market competition[26]	• Financial market competition • Comparisons by the regulator • Market competition
Form of PSP	Water is a public service: only delegation contract is possible	Sale of assets and simultaneous granting of operating license
Services to the poor	Notions of public service, Universal Service Obligation (USO)	Non-discrimination

characteristics, drawing key implications for developing countries.

3.3.2 Institutions

Level of decentralization. In the French water sector, responsibility for water and sanitation services is given to municipalities, the lowest level of local government. The sector is, therefore, more decentralized than the English one, which is organized on a regional basis under the scrutiny of a national water watchdog. Decentralization can have positive and negative implications on water services for the poor. On the one hand, a decentralized system means that water services can be more responsive to local issues. On the other hand, and as the French example illustrated in the recent past, decentralized services might give way to higher levels of corruption due to a lack of regulatory capacity at the local level[27]. Recent attempts at creating a strong national water regulator in France have failed, mostly because municipalities did not want their independence to be limited, even though there is some evidence that the quality of the regulatory regime would be improved by information sharing and price comparisons at a central level. Various 'checks and balances' have gradually been reinforced over the years, which are based on the existence of a strong network of public institutions.

In a large number of developing countries (especially Latin America and transition countries of the Former Soviet Union and Eastern Europe), water services are managed at municipality level. It is important to note that municipal water services are not necessarily the hallmark of a 'French tradition' however. In French-speaking West Africa, for example, water service provision remains highly centralized with simply a distinction between urban services, which have often been the subject of private sector

26 Financial markets put pressure on publicly listed companies to improve their performance so as to satisfy shareholders' expectations and protect themselves from potential mergers.

27 Before the Sapin Law was passed in 1993, under-the-table payments were not explicitly prohibited in France. This led to incidents of corruption, some of which have led to legal proceedings, such as that affecting the city of Grenoble.

Table 3-1
Checklist for designing pro-poor legal frameworks

Legal issue	*Implications for the poor*	*Guiding principles*
	General legal framework	
Land tenure issues	The poor often lack property titles	1. The government's position on services to illegal settlements will be an important factor in decision-making by customers and operators in installing services, and should be carefully analyzed and evaluated 2. Consideration should be given to compensation if served illegal settlements are displaced
Judicial system	The poor lack means of recourse in case of disputes on service provision	3. The establishment of a low-cost 'small claims' court can be an effective way to provide the poor with legal recourse 4. Simplified complaint mechanisms will make legal recourse easier for all, particularly the poor, and should be incorporated in regulations
Procurement Rules and Competition framework	The poor suffer from systems where competition is stifled	5. Transparent procurement rules make services less expensive for all, and should be used in awarding of contracts 6. A Competition Tribunal can be an effective mechanism for overseeing competition, but must have the capacity and mandate to deal with issues related to the poor. In the absence of a Competition Tribunal, an international arbitration clause should be introduced in the contract, but this is unlikely to deal adequately with issues relating to alternative providers
	Water and environment legal framework	
Water resource legislation	A rigid definition of water abstraction rights may reduce service options for the poor	7. Explicitly defined abstraction rights and improved controls will protect resources, but flexibility and pragmatism are important 8. Abstraction rights should be granted to alternative providers if this will allow practical and low cost access to the poor 9. Charging for abstraction or trading of abstraction rights will allow efficient water resource use, and should be considered
Technical standards	If set too high, they might be unaffordable for the poor	10. Tariff setting and standard setting activities should be coordinated 11. Differentiated service standards may be a practical and realistic way to make services to the poor more affordable

	Institutional and regulatory framework	
Institutional framework	Lack of clarity might delay the process at the expense of everyone	12. Allocation of responsibilities should be analyzed, and 'grey areas' identified prior to legal framework reform 13. It is important to clarify who has the power to grant PSP contracts
Regulatory framework	Regulatory bodies tend to focus on regulating the main operator	14. The issue of whether and independent regulation is allowed by law should be examined 15. If an independent regulator is established, it should be equipped with capacity to deal with the poor 16. The scope of the regulator's activities should be defined to include both the main operator and alternative providers
Form of PSP	Some forms of private sector participation might not be allowed by law	17. Consideration must be given to the form of PSP which would be most pro-poor in the given circumstances 18. If necessary, new laws should be passed to allow the most pro-poor form of PSP possible, and adequate time must be allowed for this in the transaction process
Competition issues	Exclusivity rights reduce service options for the poor	19. Exclusivity rights of the main operator should be limited in order to allow alternate providers to offer low cost services to the poor 20. The legal status of alternative providers is an important issue which must be addressed to ensure that they are allowed to operate
Tariff setting and social principles	Principles for setting tariffs to the poor are not always clearly defined	21. The way that tariff setting principles are defined in law, and whether rules for providing 'social services' (such as USO) are in place will have a major impact on tariff structures and levels, and hence both affordability for the poor and incentives for the operator. If USOs are in place, it must be clear how they are to be funded 22. Flexible definitions of coverage which allow low cost solutions will benefit the poor
Consultation mechanisms	The poor need to be able to express their preferences in consultation	23. Legal provisions, which make consultation a requirement will allow the poor to express their preferences and priorities 24. Consultation committees and stakeholder partnerships involving the poor should be considered

participation, and rural services, which remain under state supervision.

Regulatory capacity at municipal level tends to be weak, however. In such contexts, setting up a national regulator might be attractive, but there is a risk that this might encounter resistance, especially from civil society organizations who sometimes oppose regulatory reform without examining the advantages it might bring for better transparency, and therefore, better services to the poor.

In existing contracts, the compromise has been to create an independent regulatory body for water contracts in the largest towns (such as ETOSS for Aguas Argentinas or MWSS for Manila), but these institutions tend to be mostly concerned with overseeing the activities of the main water operator in the capital city[28]. Ways of coordinating central regulatory oversight with municipalities should therefore be further explored.

Key Implication: Decentralization may make services more responsive to the needs of the poor but increase the risk of local mismanagement. Regulatory oversight at the national level should be encouraged.

Regulatory stability. One substantial difference between the two systems lies in how existing regulatory rules can be modified. In France, public authorities can potentially modify the contract at any time on a unilateral basis if it is to protect 'public interest', and provided appropriate compensation is offered to the operator. Although this is theoretically possible, in practice, existing concession contracts are relatively difficult to reopen.

In England and Wales, even though regulatory rules appear much clearer or at least more stable, water utilities claim that they have been unfairly affected by unilateral changes in policy (such as the windfall tax introduced by the new Labor Government in 1997 to shave off some of the extraordinary profits made by water utilities' owners following privatization, and the apparent under-pricing of the assets at the time of sale). In response to these policy and regulatory issues, water utilities want to clarify their licenses so as to understand better how they will be treated by the water regulator at and between Periodic Reviews.

This points to a very important aspect of legal framework definition for developing countries: whether the legal framework should be very explicit (either in legislation or in the contract) or whether it should allow a certain degree of flexibility, with references to general notions such as 'public interest'. For such regulatory flexibility to be possible, 'mutual trust' is absolutely key. But this kind of mutual trust might be precisely what is missing in a developing country context. In the early days of private sector participation in Argentina, for example, the government was not perceived to be credible by private investors, due to the period of hyper-inflation which had preceded privatization initiatives. In order to provide guarantees for investors, prescriptive privatization laws were passed (for example, going as far as establishing that the rate of return on investments in the electricity sector should be 14 percent). Governments need to be aware that too prescriptive primary legislation might tie their hands in future, and that might work against the interests of the poor who benefit from flexible services which incorporate innovative low-cost solutions.

Key Implication: The right balance must be struck between defining key regulatory principles in broad terms (such as the 'public interest') and being overly prescriptive. The former requires a strong degree of mutual trust whereas the latter might prevent delivery

28 The responsibilities of MWSS could potentially be extended to the national level.

of flexible services, which better serve the needs of the poor.

3.3.3 Competition

Forms of competition. Competition is applied in very different ways in the two systems. In theory, four types of competition can be introduced in the water sector (described below ranging from the most liberalized form down to the most regulated form of competition):

- competition ***via financial markets***: Financial markets put pressure on publicly listed companies to improve their performance so as to satisfy shareholders' expectations and protect themselves from potential mergers[29]; and
- ***market*** competition created by requiring water operators to grant access to their network to potential competitors on fair terms;
- competition ***for*** the market, where companies compete at regular intervals for a time-bound contract which usually grants them exclusivity rights over an operating area; and
- ***comparative*** competition, created by the regulator by comparing private operators' service performance using econometric techniques.

The French system gives pre-eminence to competition for the market, with private operators having to compete every 10 to 15 years for contract renewal (a draft law currently under review seeks to strictly limit contract length to 12 years). In England, the regulator (Ofwat) has traditionally relied on comparative competition but is now gradually introducing competition for the market as well. Both systems rely on detailed competition legislative frameworks, which have recently been harmonized in the context of the European Union.

Different types of competition might be more or less appropriate in developing countries. If regulatory capacity is weak, but fair competition can be ensured at the tendering stage, competition for the market might be sufficient, at least in the first instance — this might require exclusivity to be granted to the main contractor, however. If the emphasis is on service diversification, then competition in the market might be allowed, so as to give small-scale independent providers the opportunity to enter the market.

Key Implication: Different types of competitive pressures might need to be applied, depending on the level of sophistication of the regulatory regime. In all cases, conditions for a 'level playing field' need to be in place.

3.3.4 Forms of private sector participation

Due to the definition of 'public services', which include provision of water supply and sanitation, an outright sale of assets is not possible in the French system, and private sector participation can only be introduced through the signing of delegation contracts. In England and Wales, on the other hand, assets were sold on the stock exchange and private companies are allowed to earn a financial return on the whole of these assets (although only on the basis of a regulatory asset value, which is substantially lower than the modern equivalent asset value).

In most developing countries, the suggestion that public assets might be sold is met with suspicion and there is often a preference for the French model. The difference between the two models, and in particular between concession contracts and licenses, is often over-estimated, however. The Secretary of State in England and Wales has the right to withdraw the license and transfer it to someone else if the company does not deliver: in this way ownership rights are severely limited by regulatory powers. One of the main differences between the two systems is that, in an outright sale of assets, money changes

29 This form of competition applies to publicly-listed water companies in both the French and English systems.

hands whereas concession contracts can be awarded on the basis of selection criteria, such as the volumetric tariff or coverage targets. Termination provisions also tend to be more developed in concession contracts, since the contract holder must obtain full remuneration for any assets it has invested in during the life of the contract.

Key Implication: Differences between the French concession model and the British licensing model are often over-emphasized. Both contracts can be terminated by the public authorities in case of gross misconduct. What is important is that termination clauses provide adequate comfort to the private operators that they would not be dismissed without compensation.

3.3.5 Services to the poor

The two systems have quite different conceptual basis for providing water services to the poor, but in both models measures have been recently introduced to try and improve poor customers' access to water services.

In France, water services are defined as 'public services'. In the French legal tradition, a public service is defined as any activity that must be carried out, regulated and controlled by public sector bodies because it is essential to the fulfilling of social goals. Over and above private sector contracts, three basic legal rules apply to all public services: Continuity, equality between users and continuing adaptation to changes in circumstances[30]. In addition, public service providers tend to operate under a general notion of 'universal service obligation', which requires that they offer services to everyone under equitable terms. In France, affordability has not traditionally been an issue, but recent initiatives were taken to try and improve water services for the poorest. For example, a law passed in 1998 declared that 'any household in a precarious situation has the right to obtain financial assistance in order to secure access to water'. A law currently under discussion envisages banning disconnection outright.

The over-arching principle for dealing with the interests of poor customers in the English regulatory model is a relatively blunt instrument; 'Condition E' of water companies' licenses prohibits undue discrimination (a water company should not show 'undue preference for, or undue discrimination against, any individual or class of customer'). This principle is currently understood as a requirement to establish a uniform household tariff across a water company's territory, even though service conditions might vary substantially. This means that rural consumers, who might generate quite high costs for the water companies, are charged the same tariff as urban consumers. (The recent introduction of market competition, however, means that new entrants can 'cherry-pick' the most profitable consumers.) The water regulator has also introduced requirements for providing services to customers with 'special needs', which may include customers with payment difficulties. Further, the Water Industry Bill recently granted protection from disconnection to private homes and public sector bodies who are responsible for providing health, educational and social services.

Key Implication: This distinction highlights the need for developing countries to define what is meant by universal service in clear and unambiguous terms. In particular, they will need to define whether a uniform tariff policy is required and if so, how it can be justified from the point of view of principles such as a commitment to financial sustainability and economic efficiency.

30 Equality between users is interpreted to mean that water tariffs should be the same for categories of users, but it does not mean that water tariffs should be similar between neighbouring municipalities for example. In fact, tariffs tend to differ quite substantially from one municipality to the next.

3.4 Addressing legal issues during the process of introducing private sector participation

This section discusses how legal issues identified as constraints for the poor can be addressed, in practical terms, during the process of introducing private sector participation. First, it is important to define the scope of legal changes that can realistically be achieved within the scope of the privatization process. Some broader legal reforms might require too much co-ordination with other policy-making bodies to be feasible, although this partly depends on the time available for carrying out the transaction. Second, it will be important to discuss the type of legal instruments that might be most appropriate for addressing such issues, and especially the type of contractual instrument for private sector participation.

3.4.1 Which legal issues can realistically be addressed?

It is not realistic to suppose that all the legal issues set out in this chapter can be addressed during the process of introducing private sector participation. In fact, doing so would often go beyond the remit of a privatization legal adviser.

It will be important to think ahead about the amount of time required to bring about necessary legal changes. This will clearly depend on local circumstances and on a trade-off between speed and quality of the legal framework design. Poverty issues are difficult to tackle in an appropriate way: a considerable amount of information is likely to be required, much of which is unlikely to have been collected beforehand by public utilities because they simply did not deal with the unconnected or illegally connected poor.

Legal advisers should point out the limitations of the legal reforms that they propose, some of which will be due to legal constraints beyond their mandate or power to modify. If possible, it will be preferable to identify legal constraints early on in the process, possibly at a pre-feasibility stage. If identified at a pre-feasibility study stage, processes for partially lifting some of these constraints could be initiated in parallel with private sector participation. If this is impossible, knowledge of such constraints would also give incentives to governments to think more creatively about the type of services they can hope for. For example, if in-house water services cannot be provided to informal settlements and the majority of poor people live in such settlements, the regulator and private operators would need to think about providing alternative solutions, such as shared or communal services.

3.4.2 How should legal constraints be addressed?

Legal issues identified in this chapter can be addressed either in:

- *Primary legislation*: Laws which need the agreement of the executive and the legislative to be modified;
- *Secondary legislation*: Decrees and regulations which can be modified by the executive; or,
- The *contract*, which usually requires the agreement of both parties, except in cases of unilateral changes.

There must be an appropriate balance between what should go in the legal framework and what should go in the contract. This will mostly depend on the degree of credibility that the government enjoys with private investors. As a rule, the law should contain elements to which policy makers want to demonstrate some sort of 'irreversible commitment', i.e. elements that cannot be modified following a change in government. This will increase investors' confidence in the regulatory regime and reduce their cost of capital, bringing lower tariffs to everyone, including the poor.

The legal framework should also be defined in a way that makes reform practicable and avoids the pitfalls experienced elsewhere, examples of

Box 3.3

Examples of inappropriate allocation between laws and contracts

In ***Latin America***, legislation tends to be very specific, specifying the allowed rate of return for example. As the cost of capital is likely to be affected by market conditions, it would have been preferable to define a methodology for its calculation in the contract for example.

In ***Senegal***, the regulatory framework for the water sector is contained in a complex web of contracts whereas the sector law is extremely succinct. The Asset Holding Company (Société de Patrimoine: SONES) oversees the activities of the operator (SDE). Four contracts govern the sector:

- a concession contract between the state and SONES;
- a planning contract between the state and SONES;
- an affermage contract between the state and SDE; and,
- a performance contract between SDE and SONES.

The regulatory framework for the sector is being prepared, and there are concerns that it will be difficult to develop without having to renegotiate those contracts, especially as the intention is to introduce a regulatory agency with the remit of regulating alternative providers as well as the main operator, SDE.

which are discussed in Box 3.3. There are other considerations in deciding what should go in a framework law, as opposed to individual contracts. Whether or not to have a general framework law partly depends on how many such transactions need to be carried out throughout the country: If contracting out is feasible for other utilities throughout the country (medium-sized towns) and the government wants to facilitate this, it might be preferable to make the law quite detailed so as to provide guidance to smaller towns which might lack regulatory capacity.

However, if replication around the country is hoped for, it is also important not to be too prescriptive, since what might work in one city might not be as practical in another city. For example, a participatory process leading to private participation may be more important for ensuring success in a city where policy makers lack legitimacy, and less important where they have a reputation for competency and fairness. Introducing a blanket provision requiring the organisation of a consultation process in each locality where private sector participation is introduced might simply be excessive. Also, in cities where the poor are relatively well-off and many have connections, flexible service standards may have fewer benefits than elsewhere.

If replication throughout a country where conditions vary substantially is the objective, then it might be necessary to define several tiers of procedures, depending on certain criteria (a detailed tendering mechanism for larger towns and a simplified one for smaller ones, for example).

3.5 Conclusion

This chapter has sought to emphasize that legal constraints and key design issues should be considered as a whole before turning to the analysis of the most appropriate contract form for private sector participation.

Such an 'overall' approach to legal issues helps draw attention to the fact that what is important for the poor are water services as a whole, not only the services provided by the main operator. This is based on the observation that in most developing countries, the poorest are currently not connected to services provided by the main operator, and have to rely on services from alternative providers. In such situation, legal and regulatory oversight of the main operator alone would not be sufficient to improve service access by the poor.

Given that it is often the intention of government that eventually the utility, and therefore the main operator, will serve the majority of the population, it is also very important to turn to the analysis of various forms of the contract with the main operator, and how they can be made to work for the poor.

4 Making the Contract Work for the Poor[31]

The previous chapter highlighted the range of legal issues that need to be addressed in the reform process and pointed out that there is often some flexibility regarding how each of these can be addressed, either in legislation, or through the legal instrument which empowers the private sector operator and sets out its obligations — the contract[32].

This chapter explores the range of forms and designs of contracts, and how they can be used to guide and direct the private sector. It argues that careful contract design is vital for realizing the potential of the private sector to serve the poor.

4.1 Types of contract

In order to discuss the potential of various contract types to be pro-poor, this chapter presents a typology of the contract types and their characteristics. It is not the role of this document to provide a comprehensive overview of different contract types and all the different variants that exist. Rather, a simple typology is proposed here that can then act as a reference for assessing the interaction between contract type and service provision to low income consumers[33].

While contracts can be designed in a myriad of ways, it is useful to distinguish three common types used widely in the water sector: management/service contracts, leases/affermages and concessions. Boxes 4.1, 4.2 and 4.3 contain examples of various contract types. Table 4.1 provides an overview of these, categorized by the allocation of risk (or responsibility) between the public sector[34] and the private operator; and the basis on which the private operator is remunerated. (There is a fourth type of contract, Build-Operate-Transfer (BOT) contracts, under which complete responsibility for an individual activity, such as the construction of a water treatment plant, is given to the private sector. No other responsibility is transferred. Payment is often on a fixed 'take or pay' basis which guarantees a certain level of revenue for the operator, but locks the utility into an inflexible liability. As BOTs merely maintain the status quo in management terms, they are of little interest in addressing the needs of the poor, and are not considered here).

As can be seen from the table, in the case of management or service contracts, the private operator is allocated only limited operational

31 Primary Contributors: Ian Alexander, Shane Rosenthal and Clarissa Brocklehurst.

32 The term 'contract' is being used here in the widest form possible and includes any legal instrument that fits the characteristics outlined in this section; including licenses.

33 While not all readers may agree with the typology presented here (this is an issue on which there are considerable differences of opinion among sector professionals) it should be borne in mind that it is intended as an aid to analysis for the purposes of this discussion only, and that it is not the intention of this chapter to provide a definitive typology for general purposes. There are several publicly available documents that provide a fuller description of contract type and the variants that have developed. See, for example, Toolkits for Private Sector Participation in Water and Sanitation (World Bank, 1997), Concessions for Infrastructure: A guide to their design and award (Kerf et al, World Bank, 1998) and Water Projects: A Commercial and Contractual Guide (Delmon, Kluwer Law International, 2001).

34 Here the public sector is used as an all embracing term covering various levels of government, agencies and possibly state owned enterprises.

Table 4-1

Typology of contract types

General contract type	*Nature of contract*	*Standard characteristics*		*Examples*
		Responsibility/Risk	*Remuneration*	
Management/ Service	Service Contracts: Private sector assistance for specific tasks (installing or reading meters, repairing pipes, collecting accounts) Management Contracts: transfers responsibility for management of operation and maintenance to private sector	Only limited operational responsibility given to the private operator	Fixed fee or fee plus performance-related payments based on a number of pre-set benchmarks	Johannesburg Amman Gaza Monagas (Venezuela) Gambia Mali Namibia Sao Tome and Principe
Affermage	The private operator takes responsibility for the operation and maintenance of the infrastructure but is not required to fund investment into the system. The contracting authority pays an affermage fee to the operator.	Greater responsibility given to the private company, including all management (technical and commercial) of existing operations. Funding of new capacity investment normally retained by the public sector Commercial risk exists if there is a possibility of a shortfall between revenues collected and the affermage fee	The operator is paid an affermage fee by the contracting authority which is based on volume of water produced or sold. The operator collects the tariffs into his own or the water authority account and remits the difference between revenues and the affermage fee he is owed. The affermage fee may be modified to include performance bonuses related to efficiency	Côte d'Ivoire Senegal Gdansk Niger Guinea
Lease	The private operator takes responsibility for the operation and maintenance of the infrastructure but is	Greater responsibility given to the private company, including all management (technical) and commercial) of existing operations	The operator collects tariffs into his own or the water authority account. The operator pays a lease fee (fixed in advance, normally	Mozambique

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General contract type	*Nature of contract*	*Standard characteristics*		*Examples*
		Responsibility/Risk	*Remuneration*	
	not required to fund investment into the system The operator pays a lease fee to the contracting authority	Funding of new capacity investment normally retained by the public sector. Commercial exists as the operator's revenue is dependent on tariffs	to cover the financing costs of the infrastructure) to the contracting authority. The balance of the tariff revenue is paid to the operator Performance bonuses may be paid related to efficiency	
Concession	Long term right to use all utility assets conferred on operator, including responsibility for all operation and investment. Assets revert to government at end of concession period, including any created by the operator	Complete responsibility for management and investment transferred to the private operator	Revenue collected	Manila Buenos Aires Gabon Casablanca Macao Cameroon Cape Verde Bulgaria Chile

responsibility and is normally rewarded either through a simple fixed-fee, or in some cases a fee affected by a set of predetermined performance benchmarks. As one moves from these contractual forms to the concession, the responsibilities and risks taken on by the private sector operator increase, as does the scope of its decision-making.

Contracts that allocate more risk to the private operator tend to yield higher efficiency gains (as the operator seeks to cut costs). Contracts that link remuneration to number of people served or amount of water delivered will result in investment (as the operator seeks to increase capacity). (Some contracts may link remuneration to the number served through a formula, others do it through simply allowing the operator to keep the revenues collected.) These contracts give a correspondingly higher level of autonomy to the operator, allowing it to make the changes necessary to lower costs, increase production and add revenue.

4.2 Allocation of responsibility for key service characteristics

When considering the impact on the poor, it is important to look at how contract design affects the way the operator behaves in terms of the key service characteristics the poor are concerned with: price, expansion and service levels (as discussed in Chapter 2).

The decision-making responsibility for these characteristics varies considerably between the contract types, reflecting the level

Box 4.1

The Côte d'Ivoire lease

In 1988, the government of Côte d'Ivoire signed a contract with SODECI to operate the urban water supply and sanitation system for a period of 20 years. SODECI is a private sector enterprise which had been responsible for operation and maintenance of all urban water systems since 1971. The French company Saur owned 46 percent of the shares of SODECI, with Ivoirien investors and the government holding the remaining 54 percent.

The nature of the contract is such that SODECI's revenues come directly from tariff collections, so there is an incentive to add and serve new customers. In addition, there is provision for making funds available to the operator for the installation of subsidized 'social connections' for poor households that meet certain criteria. The operator has installed more than 300,000 new connections since the signing of the contract, of which about 90 percent are social connections.

SODECI controls investment but, as the company does not provide the financing, it does not bear any investment risk. The contract allows small investments such as new connections to be carried out without tendering, so these can be undertaken by SODECI itself, which provides another source of revenue for the company; there are concerns that this provides a perverse incentive for over-investment.

Box 4.2

The Gabon water and electricity concession

Gabon is a small country of just over one million people, and is highly urbanized with half of the population living in three major urban agglomerations. Production and distribution of water and electricity was the responsibility of Société d'Eau et d'Electricite du Gabon, which was formed in 1963, shortly after Gabon's independence. While overall performance of the utility was good, by 1996 it was practically bankrupt, and had ceased investment. Coverage rates had stagnated at 40 percent for water and 66 percent for electricity.

The government of Gabon decided to invite the private sector to operate the utility on a concession basis, with the objectives of increasing coverage, improving service quality, eliminating the need for public financing and maintaining affordable tariffs. IFC, chosen as transaction advisor, carried out strategic analysis, the development of a financial model, legal analysis, contract preparation and preparation of bidding documentation. The competitive bidding was based on a technical offer demonstrating the bidder's understanding of the situation and approach to developing the sector according to specified performance targets, and a financial offer consisting of a reduction in tariffs. In 1997 a 20 year concession was awarded to Générale des Eaux, a French company, part of the Vivendi Group, for their winning bid of a 17.25 percent reduction in tariffs.

The contract specified 5-year coverage targets broken down into five geographic areas, the development of 30 new isolated centers, and quality standards for both water supply and electricity (water quality, power supply characteristics, continuity of service etc.) with penalties for failure to achieve them. In the case of the coverage targets, the penalties were equal to 25 percent of any 'missing' investments in expansion, based on an independent survey undertaken every 5 years.

The basic tariff level proposed by the bidder was to be retained through the duration of the contract, with a quarterly revision mechanism based on the cost of inputs. The water tariff the operator is allowed to charge is subject to a 'productivity improvement coefficient', which means tariffs will not increase in direct proportion to costs, so the operator must improve efficiency to close the gap.

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The total investment for the duration of the contract is in the order of US$200 million for asset renewal and US$400 for expansion. As early as the second year after the concession was awarded, the utility was profitable, and financial results have continued to be positive. The customer base for water supply increased by 50 percent between 1996 and 2000, from 48,000 to 72,565 customers. Water quality has increased substantially, and tariffs are still lower than the pre-private sector participation levels.

Box 4.3

The Johannesburg management contract

In the late 1990s the city of Johannesburg, South Africa's largest city with a population of some 3.8 million, was facing serious financial difficulties. It had arrears of over two billion Rand and was struggling to maintain the delivery of existing services, let alone undertake the urgently needed expansion to previously marginalized communities.

The city responded to the situation with a bold plan which included the restructuring of the city by breaking out previously municipally-provided services into a range of utilities, agencies, corporatized entities and divestitures. The water and sanitation utility was the largest of the three utilities established under the reform program. It had a healthy cash flow and would, potentially, have been a candidate for a long term concession. Due to public opposition to private sector participation, the municipal government opted instead to introduce a management contract as a first step in the reform process.

The contract has two incentive components. The first is a bonus payable, annually, on achievement of defined performance goals. The bonus is measured against achievement in five areas identified as important for the improvement of the utility's overall performance. The performance achieved is graded against the improvement specified in the contract and a formula is used to determine what proportion of the sum allocated for the bonus is to be paid to the management contractor. The second is an incentive payment made as a percentage of the improvement in operating margin achieved by the management contractor in each year. In line with evolving international practice the payment of the incentives is made after an independent assessment of utility performance by a reputable international firm.

The percentage used to calculate the second incentive payment was the basis by which the winning bidder was selected. The bid process specified a fixed payment to be made to the operator. The amount was less than the costs expected to be incurred in performing their duties of the management contractor. In order to bridge the funding gap the bidders were expected to make an assessment of the extent by which they would improve the defined operating margin. They would then use this information to derive the percentage value they would bid. In theory the bidder that was expecting to make the largest increases in revenue and reductions in cost would be able to bid the lowest percentage value and thereby win the competition. In addition, it was expected that there would be a strong incentive for the bidder to continue to maximize improvements in operating margins (and hence their incentive payment) — to the joint benefit of both the utility and the management contractor.

It is not yet clear if the bidding approach developed for the contract will be successful. The winning bid offered a very low percentage, which, while looking good for the utility (because a greater proportion of the increased operating margin is passed to the utility rather than to the operator through the incentive payment), also reduces the incentive to the operator because there is less return to them on each unit of increased operating margin.

of autonomy given to the private sector operator. Table 4-2 provides a summary of the general allocation of responsibility for these three characteristics under different contract types (of course the exact nature of these responsibilities will depend on the underlying legal framework and the details of the contracts).

In almost all cases decisions regarding the tariff (both level and structure) are made by the state (which in most cases will be through a regulatory agency). The only exceptions to this are some specific cases in which the government sets an overall framework (such as an average tariff) and the operator may propose a structure within this.

While this table may seem to suggest that the state may 'lose control' over certain aspects of the service provision, in fact the contract instrument, which can impose any number of obligations on the operator, can always be designed to reflect government policy, including the government's intentions regarding the poor.

4.3 Incentives for service to the poor of different contract types

Having established a typology for the general allocation of responsibilities within different contract types, it is now possible to consider how low-income consumers are likely to fare under different contract types, given the incentives that private operators face and the way they are remunerated.

Management contracts: Normally no responsibility is given to the private sector operator for expansion, tariff setting or level of service. As the private operator is not necessarily rewarded for increased sales, there is no direct incentive for service expansion. Likewise, there is no direct incentive for making services for low-income households affordable since no benefit necessarily accrues to the private operator.

If the private operator has no incentive to reduce costs through efficiency savings, it becomes impossible to force prices down (or maintain already low prices) while remaining financially viable.

Table 4-2
Responsibility for service characteristics under various contract types

Contract type	*Price Who sets the tariffs?*	*Expansion Who makes the investment?*	*Service levels Who decides allowable service levels?*
Management	State	State	State and private sector
Lease/Affermage	State	State (decision and implementation); in some cases implementation is delegated to the private sector	Private sector (but link to state to ensure appropriate investment is allowed to meet the quality standards; usually regulated through the contract)
Concession	State (although tariff revisions may be proposed by the operator)	Private sector	Private sector regulation by independent regulator

Affermage/Lease: Normally only limited autonomy is given to the private sector for expansion under both affermages and leases — for example inputs to decisions about where investment is needed — but there is no obligation to fund investment. There may be an incentive for proposing an increase in the number of connections since the operator is usually rewarded by increased volume of water sold (except in a water-deficit situation, where all the available water will be sold to existing consumers). This incentive clearly depends on the way in which the affermage or lease fee is calculated.

Under an affermage, the rate paid to the operator is not differentiated by consumer class, but is based on volume of water sold. Thus there should be no disincentive to serve low tariff-paying customers, as the fee the operator receives is not directly connected to the water tariff. In cases in which there is a below-cost 'lifeline' tariff designed to subsidize poor households, any losses incurred by serving consumers in this tariff category are absorbed by the contracting authority (or state asset-holding company), not by the private operator. An issue may arise, however, if there is an expected revenue shortfall (relative to the affermage fee to be paid to the operator). If the operator is uncertain about the ability to recover the shortfall from the government, then there may be an incentive to minimize the shortfall by focusing service on high-revenue segments of the market (which may exclude the poor).

Under a lease, the operator retains the difference between the tariff revenue and the fee he pays to the state authority. There is thus little incentive to serve low tariff-paying customers, and a disincentive to serve below-cost tariff paying customers, unless coverage targets or a Universal Service Obligation obliges the operator to do so.

Under both contract types, the operator may be concerned that the government will not have sufficient funds for investment in network extension, and may lobby for a substantial connection fee, paid up-front by customers (which may in turn be subsidized for the poor by the government in order to ensure affordability).

Offering alternative service level options is likely to be a secondary issue for operators under both leases and affermages, as it is the government's responsibility to fund the investment. If flexible service levels could lead to more connections and so greater volume sold, then the operator would have an incentive to argue for offering them.

During the initial years of the contract, the cash flow can be negative and an operational subsidy needed from the contracting authority. The private operator may be invited to propose a new tariff structure within an overall government-determined framework to reduce negative cash flow resulting from serving below cost, particularly to the poor.

Concession: Unlike management contracts, leases or affermages, the private operator makes profits directly from revenues, and has responsibility for planning and funding new investment (within the bounds set by the government). There is thus a strong incentive for service expansion, provided additional revenue meets at least the cost of serving new consumers. This creates an incentive to develop innovative, affordable low-cost service levels for the poor, provided the contract and regulator allows it. This ties in with tariff issues: requirements to provide water at less than cost of supply removes incentive to expand service to low-income customers.

If a requirement exists to reach certain levels of coverage (targets or a 'USO), which obliges the operator to serve some number of unprofitable customers, the operator will have an incentive to develop levels of service specific to the requirements of those customers.

The government may choose, for wider social reasons, to provide connection subsidies for the poor. The operator will have an incentive to seek these and make use of them in order to add the poor to his customer base.

It should be noted that these incentives would change according to specific circumstances, for instance:

- if there is water scarcity then the incentives for a lessee or concessionaire to expand services to low-income households (or encourage low-income household consumption at cost or below-cost) change, as all the available water can usually be sold to existing customers[35]; and
- if there are contract, or government/regulator imposed expansion targets.

It should also be noted that mandating and funding investment from the public sector under a management or lease-based contract is dependent on the government having access to sufficient funds for the investment. Likewise, any connection subsidies must be backed up with resources, whether external or through a cross-subsidy between different categories of user.

Some examples of incentives and the ways operators have responded to them are outlined in Box 4.4.

Box 4.4

Examples of the ways in which contracts have impacted the poor

Manila, Philippines concession: In Manila, the two concessionaires are encouraged to use innovative technology and third-party provision by contracts which do not contain strict standards for what constitutes a connection, do not disallow third-party provision and allow the concessionaire to add households served through means other than conventional utility connections to be added to the 'covered' population for the calculation of compliance with coverage targets. Responding to the need for alternatives for reaching the poor, one of the concessionaires has developed a system known as Bayan Tubig ('Water for the Community'), for water delivery in densely-populated, hard-to-reach slum areas. An underground water line carries water service to the perimeter of a slum neighborhood, and is then extended above ground — partially covered, attached to a wall, or lying on the surface. The line connects to a battery of meters from where each homeowner makes their own plastic connection, using small diameter pipes running from the main to households on the surface or along walls. Maintenance responsibility for the plastic pipes lies with the customers. Community-based organizations and NGOs play a role in intermediation and mapping of the network. Estimates suggest that the Bayan-Tubig connections have reduced water connection costs for poor families by up to 25 percent. As even these reduced costs are sometimes a challenge, the concessionaire has also introduced interest-free repayment schemes over 6 to 24 month periods. Introduced in early 1999, the program had provided water connections to 19,000 poor households by the end of that year, and as of 2001 the figure had risen to over 50,000. The other concessionaire was equally unconventional in serving the poor, arranging to sell bulk water to a steel tank manufacturing company which then installed small networks to serve poor communities[36].

Côte d'Ivoire and Senegal affermages: The contract between the government of Côte d'Ivoire and the private company SODECI contains several specific provisions aimed at providing benefits

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35 Consider, for example, the impact of El Nino on the Manila concessionaires, where water scarcity led to rationing and forced the operators to sell less water in the higher blocks of the tariff, reducing the revenues available to finance the cross-subsidy to users in the lower blocks (source: author discussions with concessionaires).

36 see Rosenthal, S, The Manila Concession: the Private Sector Serving the Poor (draft), Water and Sanitation Program.

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to the poor. The central mechanism for serving the poor is a social tariff, coupled with the 'social connection', which is a fully subsidized connection provided to households that meet certain criteria set by the relevant government ministry. The criteria are that the connection is small diameter (less than 15mm), that there are less than 4 water delivery points in the dwelling, and that the connection is not to be used for commercial purposes, nor is part of a commercial housing estate. Under these criteria, about 90 percent of the 300,000 connections installed since 1988 were social connections.

The social connections are financed by a charge, in addition to the water tariff, which the operator is obliged by the contract to collect from water customers. The amounts collected are deposited in a separate bank account, and five-year plans are prepared by the operator for disbursement of the funds. Approximately 10 million CFA has been collected and spent on social connections through this mechanism.

An amount is assigned that the operator can charge as his remuneration for each new connection; this amount allows the operator a profit, and thus there is an incentive to install new connections. There is no disincentive to serve customers with social connections as, due to the way the contract is structured, the operator is paid the same amount regardless of the type of connection.

The shortcoming of this system is the fact that the operator can only install connections in legal settlements. As an estimated 70 percent of the unserved population is non-Ivoirien, and living in illegal settlements, they cannot benefit from the social connection policy. Another obstacle to serving the poor was the institution of quarterly billing by the operator. The poor could not meet the requirements of such infrequent billing, and many were disconnected. Since this, time billing centers and schemes to pay off arrears have been established, and the situation has improved.

A similar program of social connections was used in the Senegal affermage contract, signed in 1996 between a state holding company and Senegalaise des Eaux. In this case, the requirement to collect the funds for the social connections was not in the contract, as they were funded by donors, but the incentives were similar (the operator was allowed a certain fee for a new installation and there was no disincentive to serve households with social connections).

Tucuman, Argentina concession: Aggressive investment targets were set in the contract. These had an impact on prices, which had to rise. Low income households then found affordability to be an issue.

Buenos Aires, Argentina concession: In May 1993, a 30-year concession contract was awarded to a private company to operate the water and sewerage services in Buenos Aires. Those consumers who were already connected to the system initially benefited from a significant drop in tariffs and an improvement in the quality and reliability of service. Expansion targets set by geographical area, with poor areas prioritized, resulted in large numbers of new households being connected. However, an unpopular decision to pass the cost of system expansion on to new consumers in the form of a hefty 'infrastructure charge' was one of the issues leading to public unrest and early contract renegotiation. This very high connection charge, unaffordable for the poor, was replaced by a bimonthly 'Universal Service and Environmental Improvement' fee (SUMA), which was levied on all customers regardless of when they connected to the network. Connection charges were reduced to US$ 120 for water or sanitation; repayable over five-years in interest-free installments averaging US$ 4 per month. Despite the fact that the changes resulted in a decrease in average bills in poor areas of 74 percent, from US$61 to US$16, it is debatable whether even at this level the rates are affordable for the poor. In addition, the renegotiation saw the reduction in some of the targets for expansion, which is detrimental to the poor who are the primary residents of the unserved areas[37].

37 see Zerah, M.H, Graham-Harrison, K. and Brocklehurst, C, The Buenos Aires Concession: the Private Sector Serving the Poor, WSP, January 2001.

4.4 Issues in choosing the type of contract

It can be seen that there are some types of contracts (management and some affermage/lease arrangements) which provide little autonomy to the operator and require that obligations (such as to serve the poor) be explicitly spelled out in contract clauses, and that financial resources be provided to the operator. Other types of contracts (principally concessions) which allow the operator high autonomy and require him to use his own resources have incentives which are heavily dependent on policy and regulatory issues, such as tariff structure.

Traditional management contracts have, in the past, resulted in the maintenance of the status quo with respect to expansion and prices; this is in part because operators were not required to make any investments, and partly because they saw no direct gain from adding customers. As the operator saw no benefit from reduced costs, it was difficult to improve efficiency and therefore bring prices down. More recently, performance-based management contracts have been implemented in many places, which address these issues and improve the nature of incentives for the operator, including those related to service to the poor.

Lease and affermage contracts can have pro-poor elements as the nature of the operator's fee is calculated such that increased water sales will result in higher profits. This encourages the operator to add new customers. Moreover, under an affermage, there is no *disincentive* to serve the poor as the affermage rate paid to the operator is based on volume of water and thus 'blind' to the class of user served. However, the main obstacle to making these contracts even more pro-poor is that of access to finance; the operator is not usually expected to bring investment and so any expansion of the network must be financed by government.

Concession-type contracts, in which the operator has a high level of autonomy and an incentive to add new consumers if it is possible to increase revenues by serving them, will result in service to the poor if the policy environment, including tariff structure, is right. If the operator does not have to provide subsidized service to the poor, and is not bound by rigid service standards, he will try to maximize the number of people connected to the network by offering a range of affordable services. It can be argued that this approach is more likely to result in efficient, sustainable and widespread service to the poor. It also negates the need for cumbersome and hard-to-enforce coverage targets and service obligations, which are often used in cases in which the poor are not attractive customers due to a requirement to subsidize tariffs. There is, however, a risk that in the short term the operator will not prioritize the poor, but focus initially on more mainstream customers and improvements to the existing system.

The reality is, however, that many governments are not in a position to award high autonomy contracts, or to implement suitable policy; many sector stakeholders are also uncomfortable with a pure market approach under which service to the poor may be slow to emerge. This chapter now turns to the question of how to use specific contract clauses, in the context of other external levers such as regulation, to ensure that contracts are as pro-poor as possible in both the short and long term.

4.5 Specific contract design issues

4.5.1 Contracting for expansion

Whether the poor benefit from network services depends on the extent, location and timing of expansion of the network, including adding both new pipes and new connections. As discussed in the previous sections, transactions involving high autonomy contracts are also those which attract private investment and therefore, if the

government itself lacks resources, have the potential to reach greater numbers — though any contract can be made to include expansion if sufficient resources are available for financing it[38]. If the goal is to ensure the poor are beneficiaries, contracts must include specific measures that guide expansion accordingly.

Despite their limited potential for attracting investment, low-autonomy contracts such as service agreements and management contracts are also often used to commit the private sector to lay pipes and make connections. If the government wants this kind of activity in low-income areas, it must identify these and direct efforts and funds accordingly. This requires financial resources, information about the whereabouts of the poor, and an ability on the part of the operator to work in poor neighborhoods. The role of the private sector operator is limited to completion of the work as prescribed. It is not responsible for selecting neighborhoods, setting service-level standards or for ensuring cost recovery; this is still the role of government.

High-autonomy contracts give these responsibilities to the operator. The operator makes its profits from revenues collected, and will therefore base its decisions on the location and sequencing of investments on how it can maximize profit. This would naturally lead it to expand in neighborhoods where costs are low and revenues are high — starting with the most profitable first. Poor neighborhoods tend to be perceived as less profitable since demand, at least in volumetric terms, is lower and the cost of expansion is often higher. A requirement to offer a certain minimum amount of water to network customers at a price below the cost of supply will make low-volume, low-tariff-paying poor households even less attractive; in fact they are often the source of losses by the operator.

Coverage targets

In practice, lease and concession contracts often do not rely solely on incentives linked to profit from revenues to ensure expansion to poor areas, and coverage targets that require the operator to extend service to a minimum proportion of the population are often added. These targets are usually set out as the percentage of households or population to be served by a network connection (though in some cases are expressed as the number of new connections to be made) and are backed up by penalties for non-compliance. In order to further target the poor, instead of specifying an overall proportion of the city to be connected, targets can be geographically disaggregated (e.g. by neighborhood) and phased over time to prioritize areas with high numbers of poor households. This approach was adopted in the lease in Dakar, and in the concessions in Buenos Aires and Manila, where there are large peri-urban poor areas. It is ineffective in cities where the poor are distributed in very small pockets among the better-off, or where the targets are set too low so that an operator can avoid unprofitable customers and still achieve the prescribed coverage. Another approach, used in Jakarta, is to categorize dwellings to reflect household size and wealth, and require targets to be met for each category. Of course, clear policies on how coverage is determined, carefully calculated penalties and rigid enforcement are required to make coverage clauses work.

It is not unusual for the same contracts to require the construction of specific infrastructure, such as tertiary networks or new house connections; this provides another way of guiding expansion.

Bonus payments for new connections

Another way to ensure that the contract creates the right incentives for the operator to connect

38 The reality is that governments may have to provide these resources, as recent experience in Africa has shown that bidders may simply reject an arrangement which requires them to provide a great deal of investment.

Box 4.5

How much coverage? How quickly?

At the Paris meeting in December 2000, the following suggestions were made regarding coverage goals:

***Long term*:** One hundred percent coverage by the network is an appropriate long-term goal. Other solutions are needed in the meantime, particularly since in most developing countries physical characteristics of settlements make traditional engineering approaches very expensive or impossible.

***Medium term*:** Aim towards 100 percent coverage over time with 5 – 10 year interim targets.

***Short term*:** Enhance delivery through alternative means, both network and off-network. The operator should provide septage treatment facilities through localized disposal points, and should be required to extend the sewerage network where house connections are within reach and density warrants it.

poor households is to build in a bonus payment for each new customer in certain designated areas, or who meet certain criteria. This bonus must be calculated so that the amount adequately compensates the operator for the cost of the connection, the additional administrative costs of billing and collection and the losses the operator incurs if the customer's consumption is to be subsidized. This method can also be used to provide subsidized connections by specifying that households in the designated areas, or who meet the criteria, pay no (or a reduced) connection fee. It must be borne in mind that complicated eligibility criteria for such connection subsidies will make the system cumbersome and are unlikely in any case to protect against misuse. So simple criteria, such as, living in a prioritized area, or connecting within a certain period after the contract takes effect, are preferable. Some customers benefiting from the subsidy will inevitably be non-poor: it is better to have a simple system that is more, rather than less, inclusive.

Flexible definitions of coverage

Poor areas can be made more attractive by defining coverage in a flexible manner. Allowing the operator to use multiple types of service to achieve targets will reduce costs and offer customers more choice. In Manila, for example, the concessionaires can offer standposts in designated low-income areas instead of private connections. For the purposes of calculating coverage, the contracts equate each standpost with service to 475 people, or about 100 households.

Contracts can also promote network expansion in poor neighborhoods by incentivizing the operator to allow alternative providers to install secondary and tertiary networks. The concessions in Manila define coverage so that people are considered 'served' no matter who supplies service, and this has resulted in the installation of small private piped networks in some areas. These networks supply water purchased in bulk from the main operator, so the operator benefits in two ways: firstly because coverage targets are met in the area, and secondly because it is being paid for the water being supplied. (Of course, such networks may be less attractive to the operator if they are supplied from water from non-network sources, such as private tubewells, thus reducing the operator's customer base.)

Financing for connection fees

A consideration in extending network service is one of financing of connection costs for poor households. The high initial cost of a connection, which may have many components (official fees, cost of laying pipes from the mains to the house, cost of interior plumbing) may be a constraint for poor households, even if some elements are subsidized. Under low-autonomy contracts, it may be necessary to contract the operator to provide low-cost financing, or for the government itself to provide it, but under high-autonomy contracts poor customers must be made attractive enough that operators will either

extend credit themselves, or partner with other institutions that will.

Pro-poor administrative services

In the case of low-autonomy contracts, it is necessary to use specific contract clauses to ensure that the operator's administrative services are pro-poor (for instance, that the forms that must be filled out to apply for a connection are simple, that offices which respond to customers are in accessible locations and open at hours when the poor are available and that complaint response time is both rapid and the same in rich and poor neighborhoods) will be the necessary through specific contract clauses in the case of low-powered contracts. In the case of high-autonomy contracts, if poor customers are of sufficient interest that the operator wishes to attract them, he will have an incentive to make sure it is easier for them to connect, get good service and pay. However, lack of understanding of the realities of the lives of the poor and the nature of the water market may hamper operators' attempts to provide customer-oriented services.

Principles for contract design:

- ***Network expansion can be encouraged by all contract types, though high-autonomy ones such as concessions have an advantage in attracting private investment.***
- ***Coverage targets can be designed to require the operator to target the poor, but their efficacy is limited by the overall extent of expansion and the ability to identify and delineate poor areas.***
- ***Making poor households profitable customers through good tariff policy and specific bonus payments will negate the need for coverage targets and result in the operator finding ways to attract them, such as providing credit.***

4.5.2 Contracting for multiple providers

As discussed in Chapter 3, exclusivity can stifle competition and innovation, and is better avoided or limited in contracts. If granted and strictly enforced, exclusivity will prevent alternative providers from offering services in areas which will either never be connected to the network, due to their location, land tenure status or terrain, or where network expansion is not scheduled for many years to come. Box 4.6 includes example of exclusivity clauses.

It is often argued that exclusivity is required to protect the main operator from alternative providers who may 'cherry pick' their most profitable customers; customers they may rely on to offset the costs of serving less profitable ones. This is particularly true when coverage requirements are coupled with subsidized consumption for some users, for instance through an increasing block tariff structure with a below-cost first block, as operators depend on profitable customers to offset losses from unprofitable ones.

Since networked services require large investments in infrastructure, there is, however, already a significant barrier to new entrants who wish to offer the same level of service as the main operator. Providers of off-network services must compete against prices made low by the network operator's large economies of scale, so once an operator expands the conventional network into a given area, it is unlikely to have to worry about competition for customers. If alternative providers can offer a cheaper and more appropriate service they should not be prevented from doing so (unless they are, for instance, depleting groundwater resources in the process). Exclusivity is thus seldom necessary or justifiable.

If it is imperative to provide some measure of exclusivity, one step that can reduce the impact on the poor is to restrict its application to network services, since this will enable off-network providers to continue serving their clientele.

Even if exclusivity is granted, if coverage targets are defined in such a way that they can be

Box 4.6

Examples of exclusivity

Flexible exclusivity (operator allowed to delegate right to provide service)

Manila (East and West):
Subject to (i) and (ii) below, the Concessionaire shall have the exclusive right to provide water and sewerage services in the Service Area: (i) Any license granted by the NWRB with the consent of MWSS to a third-party provider of water and sewerage services in effect on the Commencement Date shall remain in effect in accordance with its terms. (ii) In the event of any application to the NWRB for which MWSS consent is sought by a third party for a license to provide water and sewerage services to a new development after the Commencement Date (a 'New Third Party License'), MWSS shall consent to the grant by the NWRB to the Concessionaire of the right to provide such services to such new development if the Concessionaire agrees to provide such services on (a) substantially similar terms as set forth in the proposed New Third Party License and (b) at the Standard Rates then in effect for such services. If the conditions set out in the previous sentence are not met, or if the Concessionaire voluntarily declines to provide the services to such new development, MWSS may consent to the grant of a license to the third-party service provider for a term not longer than 10 years, subject to revocation upon not less than 60 days' notice to such third-party provider in the Concessionaire notifies MWSS and the NWRB in writing that the Concessionaire is in a position to provide such services in accordance with the conditions of this clause (ii). [Section 5.3: Exclusivity]

Côte d'Ivoire:
Pendant la duree de la concession, l'Autorite Concedante… accorde au Concessionnaire le droit exclisif d'assurer l'ensemble des missions objet de la concession… Le Concessionnaire fera son affaire du respect par les tiers de son droit exclusif et des obligations incombant, a ce titre, auxdits tiers. [Article 6.1: Definition des Service Concedes]

Translation: During the duration of the concession, the Conceding Authority grants to the Concessionaire the exclusive right to carry out the tasks which are the subject of the concession… The Concessionaire holder will be responsible for ensuring that third parties abide by its exclusivity rights and that they respect their obligations in this area. [Article 6.1: Definition of the Delegated Services]

Absolute exclusivity (operator not allowed to delegate service provision)

Jakarta West:
The First Party will not, during the Term, produce or distribute Clean Water and/or Potable Water within or for the Cooperation Region (other than for the purposes of distribution downstream of any Customer's meter) nor will, during the Term, the First Party appoint or permit any third party to do so other than the Second Party. [Section 2.1: Grant of Right of Exclusivity]

Gabon:
Les Service Concedes a titre exclusif comprennent: (a) la production, le transport at la distribution de l'eau potable…[Section 1.11: Services a titre exclusif]

Translation: Services that have been delegated on an exclusive basis include: (a) production, transport and distribution of drinking water [Section 1.11: Services on an exclusive basis]

met with the services of small independent providers (as in the case of Manila), the operator may in fact find himself with an incentive to encourage the involvement of low-cost providers, and may choose to allow on-selling of water past the metered point in order to facilitate the operation of kiosks or other small-scale vending.

The involvement of alternative providers usually raises concerns about quality and efficiency. While there are exceptions, most providers operate outside regulatory frameworks, and are in no way committed to the official tariffs — except as purchasers. This frees them not just from quality and environmental standards, but also from the pricing constraint that often makes low-income neighbourhoods unattractive for the operator[39]. While alternative providers may be more flexible and able to respond to the particular characteristics of the market among the poor, this does not necessarily mean they are the most efficient providers from an overall economic point of view. In fact, if the constraint of minimum tariff caps is removed, the main operator may well be in a position to offer less expensive and higher quality services than alternative providers.

Principles for contract design:

- ***Exclusivity provisions that create barriers to alternative providers whose services are oriented toward the poor should be avoided. If some type of exclusivity is necessary, it should be restricted to network services.***
- ***Coverage should be defined in a way that encourages operators to collaborate with alternative providers where they are able to provide similar services at lower cost.***

4.5.3 Contracting for multiple-service levels

As a group, the poor use a wider range of services than the non-poor, particularly for water. Some residents purchase water in plastic containers that are hauled by pushcart. Others buy from their neighbors or landlord via a shared connection or yard tap. Many cities have a long-standing strategy of serving low-income areas with public standposts.

Each of these service types provides consumers with a distinct level of service, which can be further defined in terms of water quality

Box 4.7

Exclusivity and third-party provision in Manila

The two concession contracts in Manila allow for third party provision, and effectively encourage it in certain cases. In the section that deals with exclusivity, the contracts state that a concessionaire may consent to the granting of a license to a third-party to operate in its service area. While this provision has not been used to engage third parties in service provision, bulk water sales *have*. Numerous housing associations, community groups, and at least one local company specializing in water distribution, are buying water in bulk — and in some cases are serving significant numbers of customers in low-income neighborhoods.

Furthermore, these on-sellers are contributing to the achievement of the concessionaires' coverage targets. This is because coverage requirements are partially fulfilled when any party serves new customers with a legal connection. The text of the contracts specifies that, '…the Concessionaire shall make at least sufficient connections… to meet coverage target percentages… (excluding users who obtain water from a legal source other than the MWSS system)…' A footnote to the schedule of coverage targets refers to the excluded users in a slightly different way, as those 'who are connected to a *piped source* of water other than from the MWSS system' (emphasis added). Whatever interpretation is made, the important point is that these users are dropped from the denominator that helps determine the proportion of the population that is connected.

39 This is particularly the case if alternative providers are not paying the full economic costs, such as resource costs of groundwater, or the treatment costs of wastewater. Because of this, using alternative providers may not maximize welfare benefits to society as a whole.

and pressure, frequency of billing, legal eligibility, distance from the home and other factors. These affect how far one must carry water, whether it is available around the clock, whether it is potable at the source, whether legal title for ones dwelling must be obtained, and how often one pays — all are of great importance to poor consumers.

Some service attributes considered unacceptable by high-income consumers tend to be *preferred* by low-income consumers, or vise versa. For example, daily bill collection is considered an inconvenience to richer households, while poorer ones prefer it since they earn daily wages and lack the same access to savings mechanisms. Similarly, low-income consumers place a high premium on reliability, while higher income households with on-site storage may be more concerned with water quality.

There is increasing recognition that operators must be equipped to respond to the particular needs of low-income areas, and that more flexible service-level standards are in many cases required to ensure affordability (see Box 4.8).

This is not to say that standards have no place in contracts. Most specify goals for water quality, continuity and pressure. Since these deal with the quality of the end-product or service, they can be thought of as *output standards*. Contracts are usually specific about these, though in some cases they are found in the laws and regulations that govern the operator's activities. Standards can also cover technical specifications for engineering works, such as the minimum diameter and depth of pipes. Use of *input standards* like these are important in low-powered contracts, where commercial risk is not passed on to the operator, or where the term of the contract is short.

The downside of input standards is that they offer the operator little scope in making decisions about how to achieve its other obligations, and in this way they stifle innovation. In most cases, output standards are a preferable way of regulating service qualities, since they can accurately describe desired outcomes while leaving decisions about methods and means to the operator. Many output standards also have the advantage of being monitorable by consumers, at least in broad terms.

Flexible standards allow the development of schemes that are beneficial for the poor. A prime example of this is the El Alto project in Bolivia, where 'condominial' water and sewerage systems, which use small diameter pipes laid at shallow depths within pavements and yards rather than down streets, were used to serve a large poor population in an affordable manner. These systems were used at the initiative of the concessionaire, with the permission of the regulator, and were so successful and cost-effective that in 2001 the Bolivian Institute for Technical Norms and Standards officially

Box 4.8

Minimum standards for continuity, pressure and quality

Participants at the Paris workshop in December 2000 debated minimum standards at length, with some suggesting that certain service characteristics are simply not negotiable for health reasons. Other participants maintained the need for flexibility, arguing that contracts must be designed to make poor customers sufficiently attractive that the operator seeks suitable ways to connect, serve, and bill them.

The following suggestions were made for minimum standards, whether set at policy level or stipulated in the contract:

- Pressure should be a minimum of 1.5 bar to avoid contamination
- Availability should be a minimum of 20 lpcd
- Continuity should be 24 hours/day
- Water quality should meet World Health Organization guidelines

incorporated condominial sewerage into the country's technical standards[40].

While exacting technical standards are often used to ensure public health goals are met, they can be burdensome for the poor. Higher levels of service quality are associated with higher costs, which are inevitably passed on to consumers through tariffs. At some point these become unaffordable, especially for the poorest, who will be among the first to turn to cheaper services that go unregulated for quality. High standards, particularly those governing inputs, also make the extension of services in the poorest neighborhoods difficult. Whether in high or in low-powered contracts, the cost of using conventional methods to extend network services in low-income neighborhoods can be prohibitive.

There are other limitations to the application of standards. In many cities, network water is sold through intermediaries such as tankers, street vendors and small independent networks. What, if any, responsibility operators should have for the quality of these services is unclear since control over distribution is typically lost beyond the initial point of sale. In principle, operators could refuse to sell water where certain standards are not met. A contract could require an operator to monitor the condition of tanker trucks at filling centers, or of tertiary network distribution where provided by a community or small firm. The danger, however, is that operators may have a conflict of interest if they are competing with these alternative providers. This is something the contract should avoid.

Operators are put in a similar situation with respect to quality at standposts. In some cities these are operated as private businesses, while

Box 4.9

Examples of minimum standards

Manila:

The Concessionaire shall ensure at all times that the water supplied to Customers in the Service Area complies with Philippine National Drinking Water Standards… provided, however, that the Regulatory Office… shall have the discretion to consent to a phase-in of compliance with these standards over a period of not more than 12 months… [Section 5.1.4: Drinking Water Quality Standards]

As soon as practicable, but in any event not later than June 30, 2000, the Concessionaire shall ensure the availability of an uninterrupted 24 hour supply of water to all connected Customers in the Service Area… [Section 5.1.2: Continuity of Supply]

Buenos Aires:

Water supplied by the concessionaire must meet the technical requirements stated in the Regulatory Framework and reproduced in Annex II, in the manner and by the dates indicated therein. [Section 4.4.2: Potable Water]

Potable water supply must be conducted with maintenance of an available pressure of ten meters water gauge (10m WG) measured at the connection to premises served from floor level at the pressure tapping point. [Section 4.5: Water Pressure]

Senegal:

Les recommandations de l'Organisaton Mondiale de la Sante (O.M.S.) s'appliquent en materiere de potabilite bacteriologique et physico-chimique et servent de reference en materiere de potabilite. Des derogations a ces recommandations peuvent etre proposes par le Fermier a la SONES en fonction des conditions particulieres de captage… [Article 36: Water quality]

L'eau doit etre fournie aux abonnes avec une pression minimale compete au-dessues du terrain naturel du lieu de branchement en principe egale a 1 bar.

Translation: WHO recommendations apply for drinking water quality. Exceptions to these recommendations can be proposed by the Lease-holder to the Asset-holding company on the basis of particular abstraction conditions. [Article 36: Water quality

Water must be supplied to customers with minimum pressure in principle equal to 1 bar.

40 For more information on condominial water supply and sewerage in Bolivia, see Foster, Vivien, Condominial Water and Sewerage Systems: Costs of Implementation of the Model, WSP, 2001 and Komives, Kristin, Designing Pro-poor Water and Sewer Concessions: Early Lessons from the Aguas del Illiami Concession in Bolivia, World Bank, Washington DC, 1999. Issues related to flexible standards are described in more detail in Regulation of Quality of Infrastructure Services in Developing Countries, Baker and Tremolet, 2000 presented at the conference "Infrastructure for Development: Private Solutions and the Poor" in London in May 2000 and available on the website http://www.ppiaf.org/conference/.

in others they are controlled and managed by communities or local cooperatives. Many lack management at all and access is completely open. While pressure, water quality and availability are in principle within the control of the operator, in reality water quality at the standpost may have little to do with what reaches the household. Conditions at many public standposts are unsanitary and lead to contamination.

Principles for contract design:

- ***Standards are often an effective mechanism for bringing about improved service quality, but if badly designed can hinder network and off-network provision in poor areas.***
- ***Input standards are warranted under certain contractual forms, but they stifle innovation; where possible, use output standards and leave to the operator decisions about means, materials and methods.***
- ***While making standards as flexible as possible, it may be advisable to respect certain minimum standards regarding water quality, quantity, and, in piped systems, pressure and continuity.***

4.6 Conclusions

Governments have options when they contract with the private sector. They are in a position to select a contractual form that is compatible with their overall constraints and objectives, and to ensure agreements are written in ways that reflect specific goals relating to the poor. These are all-important decisions, whose eventual impact depends not just on contractual details but also on a range of supportive policies and regulatory arrangements.

Whereas low-autonomy contracts may improve service to the poor by paying a firm to provide administrative services or undertake specified civil works, higher-autonomy contracts use a more complex set of incentives to motivate the operator to serve the poor. Where they are an option, leases, affermages and concessions usually have advantages in that they can improve efficiency, foster innovation, and, in the case of concessions, attract investment. When the incentives are right, these contract forms can be powerful in driving improved service to the poor. Overall, however, in those cases where the private operator does not directly benefit, it is difficult to find realistic policy, regulatory or contract design solutions that will yield sustainable, large-scale service to the poor in the long term. The carrot works better than the stick; it is better to make low-income households an attractive segment of the market and then allow the private operator to find ways in which to serve them.

However, in cases where this is not feasible, there are ways in which careful contract design and policy formulation can be used to achieve pro-poor results. Examples of this include coverage targets which require operator to serve poor areas, flexible standards that encourage innovation and policies which allow alternate providers to enter the market.

The task of designing a 'pro-poor' transaction is far from simple. A number of principles are nevertheless emerging, and are summarized in Table 4-3. Constraints associated with various contract types are further described in Table 4-4, together with ways of overcoming these and maximizing the potential of every transaction. It is important to note that even well-crafted contracts cannot always offset incentives created when other policies make poor neighborhoods unattractive to operators, or prevent residents from connecting. An example of this is tariff structures designed to lower prices for the poor which send a message to private operators that is inconsistent with the goal of extending service to low-income areas. Until these issues are addressed, pro-poor contract design will in many cases remain an exercise in compensating for more basic shortcomings.

Issues of tariffs and subsidies are further discussed in Chapter 5.

Table 4-3

Checklist for designing pro-poor contracts

Objective and implications for the poor	*Issues*	*Guiding principles*
Expansion: the poor are often unconnected and have a high interest in network expansion	Governments often lack resources to finance network expansion to poor neighborhoods. Profitability of poor neighborhoods is lower than in non-poor areas, and often made more so by consumption subsidies, so operators may be reluctant to invest there	1. Network expansion can be encouraged by all contract types, though high-autonomy ones such as concessions have an advantage in attracting large-scale private investment 2. Coverage targets can be designed to target the poor, but their efficacy in doing so is limited by the overall extent of expansion and the ability to identify and delineate poor areas 3. Making poor households profitable customers through good tariff policy and specific bonus payments will negate the need for coverage targets and result in the operator finding ways to attract them, such as providing credit
Multiple providers: alternative providers may be able to provide a more appropriate level of service to poor consumers or provide service until such time as network expansion occurs	Exclusivity can prevent alternative providers from working in an operator's service area, or from serving certain categories of customers	4. Exclusivity provisions that create barriers to alternative providers whose services are oriented toward the poor should be avoided. If some type of exclusivity is necessary, it should be restricted to network services 5. Coverage should be defined in a way that encourages operators to collaborate with alternative providers where they are able to provide similar services at lower cost
Multiple service levels: technological innovations can reduce costs and hence the price of service to all consumers including the poor. Conventional service may not be possible at all in some poor neighborhoods	Rigid standards limit the choice of technology, and reduce incentives for the development of innovative solutions	6. Standards are often an effective mechanism for bringing about improved service quality, but if badly designed can hinder network and off-network provision in poor areas 7. Input standards are warranted under certain contractual forms, but they stifle innovation; where possible, use output standards and leave to the operator decisions about means, materials and methods 8. While making standards as flexible as possible, it may be advisable to respect certain minimum standards regarding water quality, quantity, and, in piped systems, pressure and continuity

Table 4-4

Summary of pro-poor potential of different contract types

Contract type	*Incentives to be pro-poor*	*Potential to improve pro-poor aspects*	*Public sector changes and policy needed*	*Contract redesign needed*
Management	No incentives unless specific tasks related to serving the poor assigned and paid for	Low: Difficult to create positive incentives for service provision to low-income households. Pro-poor obligations must be specified in contract clauses and are usually confined to installing networks in areas prescribed by the government, and providing administrative services such as billing and collection in a poor-friendly manner	Focus on tariff system and policy for setting connection charges — make these affordable and equitable for the poor	Make expansion one of the performance indicators to which incentive payments for the private operator are linked. (Since the operator is not involved in either design or financing expansion, it will be dependent on both public sector financial resources and know-how in designing it properly). Require any administrative services such as billing and collection to have poor-friendly features (accessible offices, simple forms, rapid response to service calls in all neighborhoods, frequent billing). (Again dependent on public sector know-how in designing these services)
Affermage	Incentives exist if the operator will benefit from increased sales, and is certain that sufficient revenue available to pay the affermage fee. Operator will want to propose innovative ways to reach the poor, and will implement expansion if investment funded by government	Medium: Opportunities exist to structure the affermage fee to provide incentives, either through changes to the affermage fee rate used to calculate the fee, or by adding bonuses/penalties. The main problem is likely to be that of investment. Unless the government has access to sufficient funds, will be difficult to expand the system to connect low-income households, as the operator has no obligation to fund expansion	Tariff policy and connection charges should make service affordable. Policies should allow non-conventional technology. Policies should clearly allow for service provision by alternative providers in order to facilitate service to the poor where the main operator either cannot provide it at all, or cannot make it affordable. Make funds available to operator for expansion, clearly ring-fenced so they are used only for the purpose intended	When designing the fee, design the volumetric affermage rate (flat rate or a formula) in a way that incentivizes the operator to expand service. Link bonus and incentive payments to the achievements of targets related to the provision of services to the poor

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Contract type	*Incentives to be pro-poor*	*Potential to improve pro-poor aspects*	*Public sector changes and policy needed*	*Contract redesign needed*
Lease	Incentives exist if the operator will benefit from increased sales. Operator will want to propose innovative ways to reach the poor, and will implement expansion if investment funded by government	Medium/High: Incentives exist if new poor customers are profitable	Tariff policy and connection charges should make service affordable. Policies should allow non-conventional technology. Policies should clearly allow for service provision by alternative providers in order to facilitate service to the poor where the main operator either cannot provide it at all, or cannot make it affordable, Make funds available to operator for expansion, clearly ring-fenced so they are used only for the purpose intended	Allow operator to design tariff structure (within an overall government framework) which allows him to charge customers a tariff related to the cost of service, thus removing disincentive to serve high-cost, low return users. Link bonus and incentive payments to the achievements of targets related to the provision of services to the poor
Concession	Strong incentives to serve the poor, especially when a tariff structure and regulatory framework exist that make service to low-income users commercially viable, rather than a 'public service'. Service-level decisions and expansion are both responsibilities of the private operator. The profit motive from increased sales means that the private operator is likely to find ways to maximize service to low-income households	High: If well-designed tariff subsidy policy is in place (not IBT with first block below the cost of supply). Well designed and enforced USO or coverage targets can help prioritize expansion, but these negative incentives are less powerful than positive ones	Tariff policy should make poor customers profitable when served in an efficient way utilizing appropriate technology. Policy on connection charges should be equitable but related to both operator's costs and availability of resources. Policies should clearly allow for service provision by alternative providers in order to facilitate service to the poor where the main operator either cannot provide it at all, or cannot make it affordable	Incorporation of a tariff structure that incentivizes the operator to connect more poor households would provide greatest benefit. Use of coverage targets or USO can provide a basis for expansion of service but is second best (or a transitional device) when compared to creating positive incentives through making poor consumers potentially profitable ones for the operator. Question of exclusivity needs to be considered carefully in the contract, particularly where it could interfere with service provision to low-income households by alternative providers

5 Tariffs and Subsidies[41]

5.1 Tariff reform and the principles of tariff setting and subsidy delivery

Tariffs, connection fees, and subsidies are often at the heart of the debates surrounding private sector involvement in the water and sanitation sector. Consumers worry that private sector participation will lead to higher prices. Operators worry that tariffs will be too low to allow for cost recovery and a reasonable return on investment. Government officials find themselves in the middle — trying to balance consumers' concerns with the reality that existing prices are often below cost.

When existing tariffs are below operating and maintenance costs, tariff reform will be a prerequisite to making the utility financially self-sustaining, and may be necessary to make the utility attractive to a private sector partner. With management contracts, the government must compensate the operator for the true costs of operation. If tariffs are below costs, the government will be committing itself to an operating subsidy. Concession arrangements, in which the operator makes his income from the difference between tariff revenue and costs, will be infeasible from the point of view of potential bidders if tariffs are not at cost-recovery levels.

A fundamental concern during the tariff reform process is the welfare of poor consumers. Will higher prices make service unaffordable and drive the poorest to unsafe drinking water sources or sanitation solutions? Is it fair to make unconnected consumers (many of whom are poor) pay the true cost of their connections and their service, while existing customers (many of whom are not poor) benefited from connection and consumption subsidies for years? Will private operators be willing to serve consumers from whom they might collect little revenue? The answers to these questions will differ from one location to another. Even in one location, what is considered 'unaffordable' and 'fair' will be subject to debate.

Although there is no universal answer to the question of how social equity concerns should be incorporated in the tariff reform process, participants at the Paris seminar articulated five principles that can serve as guides. The key lesson of the Paris seminar was that bringing in the private sector forces governments to take an extra hard look at tariffs and subsidies, how they are set and administered and how they will affect the poor. But private sector participation does not change the fundamentals of pricing and subsidizing services for poor consumers.

The five principles of tariff setting and subsidy delivery are:

1. Getting the tariff level and the tariff structure right helps all consumers, including the poor;
2. Subsidize access, not consumption;
3. Subsidy delivery mechanisms should be targeted, transparent and triggered by household indication of demand;
4. New information is often required to evaluate whether a proposed tariff or subsidy will hurt or help poor households; and,
5. Because tariffs and subsidies require modifications over time, decisions must be made about how social equity concerns will be incorporated in the tariff and subsidy revision process.

41 Primary Contributors: Kristen Komives and Dale Whittington.

5.2 Getting the tariff level and the tariff structure right helps all consumers, including the poor

Many households in developing countries have no access to water or sewer networks, or have access only to poor quality or unreliable service. These deficiencies are often related to the fact that the utility has been chronically under-funded, and government-operating subsidies are unreliable. Consumers can also lose when tariffs fail to reflect the opportunity cost of resource use. City water systems run dry when scarce water resources are allocated to competing uses (e.g. agriculture) at highly subsidized prices. A well-funded utility with a sound tariff structure is much more likely to be able to meet demand for service and for service quality. Consumers therefore have much to gain from getting tariffs right — even if the price of water increases.

In many cases poor consumers have the most to gain from tariff reform. The unconnected poor often spend much more than the cost of in-house water or sewer service for their second-best solutions (e.g., water vendors, on-site sanitation). Having access to a water connection could actually save them money, even at unsubsidized prices.

What does it mean to 'get the tariff right'? Tariff-setting involves balancing a number of competing objectives.

One objective of tariff-setting is to recover the full average costs of water provision. When tariffs are sufficient to recover average costs, the private utility has an incentive to continue to expand service. Tariffs that recover full average costs are critical for the public sector as well; they eliminate the need for operating subsidies from general government revenue. Many countries are unable to sustain operating subsidies over time. Service in general (and the private-public partnership in particular) is more likely to be sustainable if tariffs cover at least average costs.

Economic efficiency is also an important objective for tariff-setting. From an economic efficiency perspective, the volumetric portion of a water tariff should ideally reflect the short-run marginal costs of using an additional unit of water[42]. When this is true, consumers will only use additional water if the value they obtain from an additional unit of water is greater than the cost of providing it to them.

The variable operation and maintenance costs of providing that unit of water are just one element of the short-run marginal cost. Water also has a resource cost or an opportunity cost — the value of that water to other competing users (e.g. agriculture, nature and industry). Charging this opportunity cost to households is important if water resources are to be optimally allocated between competing uses. In arid areas, each unit of water can be quite valuable, so getting the volumetric portion of the tariff to reflect opportunity costs is especially important.

An additional component of the short-run marginal cost is the discharge cost — the damage caused by discharging wastewater into water bodies. This discharge cost decreases as the level of wastewater treatment increases (operating and maintenance costs increase as wastewater treatment increases). If there is no wastewater treatment and water tariffs do not include the discharge cost, households will not consider the costs they are imposing on downstream users (or even their own community) when they use and discharge water. Few places in the world set

42 Economists define the term "marginal cost" as the change in the cost of providing a good or service if one more unit of output is produced. The term "short-run marginal cost" means the incremental change in the cost of providing a good over a "short time horizon" for an incremental change in output. Over a short time period some costs are not escapable; such costs are thus not part of the "short run marginal costs" over this planning horizon. From an economic perspective, the only costs that are relevant to decisions are those that are escapable.

tariffs that reflect all three components of short-run marginal costs[43].

When marginal costs are rising over time, as is often the case, a policy of setting the volumetric portion of a water tariff equal to short-run marginal costs would result in high prices before the completion of a water supply augmentation project (in order for prices to signal the high opportunity cost of water that is then in short supply), followed by lower prices after the water project is finished (because the investment costs have now become 'sunk costs' and are not part of the relevant, forward-looking marginal costs). Both policymakers and economists have often concluded that such a fluctuation in the volumetric portion of a water tariff is impractical, preferring instead to recover some portion of the capital costs in the fixed portion of the tariff. In practice, however, in many developing countries water tariffs are very low both before and after water supply augmentation projects, reflecting an unwillingness to have customers pay for the capital costs in either the volumetric or fixed-cost portion of a water tariff. In such cases the capital costs must still be paid by someone, typically the taxpayers who ultimately provide the central government with its revenues.

'Getting the tariff right' does not stop with determining the tariff level. The tariff structure is also important. A tariff structure is a set of rules and procedures that determines how to charge different categories of consumers. When household connections are metered, it becomes possible to charge households for the volume of water they use. The simplest tariff structure is a constant volumetric charge — where all households pay the same amount for every unit of water they use.

More common in developing countries is an Increasing Block Tariff (IBT) structure. With an IBT, the price per unit of water increases from one block of consumption to the next. It is a common characteristic of IBTs that the price in the first block is kept low for residential customers (a 'lifeline' tariff). Industrial and commercial customers usually pay significantly more than residential customers in all blocks. The result is a cross-subsidy from industrial and commercial users to residential users, and from high-volume residential users to low-volume residential users.

It is commonly assumed that poor households use the smallest quantity of water, and thus benefit the most from IBT structures. Even if this were the case, Boland and Whittington (2000) point out that the maximum subsidy available to poor households through an IBT is usually quite small[44]. Moreover, a household must use the entire first block of water to receive the full subsidy. In practice, the first block is often large. Households using small quantities of water are not receiving the full subsidy; the magnitude of the subsidy to households using more than the first block of water is higher.

The participants in the Paris seminar cited a number of disadvantages of using increasing block tariffs rather than a uniform volumetric charge. (See Table 5-1) The first is that with IBTs many households are not facing the true economic cost of the service they receive. IBTs do not, therefore, promote economically efficient water use[45]. A second problem with IBTs in developing countries comes from the practice of sharing household connections. When multiple

43 In countries that do manage to set tariffs closer to short-run marginal cost (including the opportunity cost and discharge cost), it is important to remember that the operator need only receive the revenue related to operating and maintenance costs. Revenue related to opportunity cost and discharge cost should be returned to the owner of the resource, which will often be the public sector.

44 See Boland, John and Whittington, Dale "The Political Economy of Increasing Block Water Tariffs in Developing Countries" ed. Dinar, Ariel. The Political Economy of Water Pricing, Oxford: Oxford University Press, 2000.

45 See also Boland and Whittington (2000).

Table 5-1
Advantages and disadvantages of IBTs and uniform volumetric tariffs

	Increasing block tariff	*Uniform volumetric charge*
Disadvantages	Households with shared connections pay higher rates because total consumption extends into upper blocks. Sends the wrong signals to households about the cost of the water service they are using. Disincentive for private operator to provide house connections to low consumption consumers	Often not politically acceptable (i.e., does not appear to help poor households)
Advantages	Politically acceptable	Transparent. Can send the correct signal to households; could promote economically efficient water use. Does not subsidize rich households with low consumption

families share a water connection, their total water use is likely to exceed the lowest blocks of the IBT structure. These households pay a higher average cost for each unit of water consumed than households that do not share connections[46]. Third, the group noted that a below-cost price for the first units of consumption may provide a disincentive for private operators to connect households with low water consumption[47]. The principle advantage of IBTs is that they are politically acceptable because they are *perceived* to be fair (even when they are not).

If an increasing block tariff structure is selected for political reasons, it is preferable to design an IBT structure with only two blocks. The first block should be small (4-6 cubic meters per month), and the tariff in the first block should at least cover operation and maintenance costs. The tariff in the second block should reflect the short-run marginal cost of additional water use.

5.3 Subsidize access not consumption

If governments decide that it is important to subsidize some aspects of water and/or sanitation service, they must then decide who, what and how to subsidize. The Paris seminar group offered some guidelines that could be applied across most cases.

The first conclusion was that it is usually preferable to subsidize access to service rather than consumption. When consumption is subsidized, households do not face the true ongoing cost of the service. This undermines economically efficient water-use. An alternative is to subsidize access to the service — household connections, standposts, etc. These are one-time subsidies that do not affect household

46 See Whittington, Dale "Possible adverse effects of increasing block water tariffs in developing countries", Economic Development and Cultural Change. October 1992. pp. 75-87.

47 See Komives, Kristin. "Designing Pro-Poor Water and Sewer Connections: Early Lessons From Bolivia", Policy Research Working Paper No. 2243, The World Bank, Private Sector Development Department, Private Participation in Infrastructure, November 1999.

consumption if in the long run they do not alter households' choice of service levels.

The second conclusion was that 100 percent subsidies are inappropriate. This principle is necessary to retain some measure of demand responsiveness in order to ensure that systems are not built that people will not want to use.

Some participants believed that access subsidies should be made available for all levels of service offered by all service providers (household connections, standposts, latrines, etc), so that households make an 'undistorted choice' between service levels and service providers. If only one level of service or one provider (e.g. the utility) were subsidized, it would be impossible to tell whether households would have otherwise preferred a different service level or an alternative provider.

It was also noted that subsidizing alternative or smaller-scale providers of water and sanitation services creates some new challenges for the government. For example, are all providers eligible, or must they be registered or regulated in some way? Such questions must be considered when the subsidy delivery mechanism is designed.

5.4 Subsidy delivery mechanisms should be targeted, transparent, and triggered by household indication of demand

Even after the decision has been made as to what type of households will be eligible for subsidies, reaching those households and only those households, can still be a challenge. Nonetheless, failure to target subsidies to those most in need would dramatically increase the magnitude of the subsidies required. There are many ways to target subsidies (e.g. means testing, geographical targeting, indicator targeting). Weighing the costs and benefits of different targeting strategies is important. In general, the simpler the targeting mechanism, the lower the administrative cost, but the higher the likelihood of subsidizing households outside the target group (and missing households inside the target group). Geographic targeting is a one such example. It is very simple to charge a different connection fee to households living in poorer neighborhoods, but it is likely that some higher income households also live in those neighborhoods.

How a subsidy will be administered requires careful thought when a private operator is involved in system management and operation. The public sector cannot expect private operators to subsidize service to poor households out of their own revenues; either some other customer class or the government must pay for any subsidy. But subsidies in the volumetric portion of a tariff structure (from high volume to low volume consumers, or from industrial to residential water users) distort water consumption decisions because the users are not facing the true marginal cost of their consumption. This can have serious financial consequences for private utilities. Yepes offers one example of this problem[48]: industrial consumers who are charged prices for water above the average costs of supply can opt out of the distribution system and seek their own water sources, which may dramatically reduce utility revenues.

An alternative form of cross-subsidization is from existing users to new users. This system has been adopted in Buenos Aires, Argentina. Existing users pay an extra fee each month that is used to help fund expansion of the distribution system. As a result, all new users pay subsidized connection fees (and in many situations new users will be disproportionately poor households). Cross-subsidies like these should be transparent. Water bills should state what part of the bill is dedicated to cross-subsidizing other consumers.

An alternative subsidy delivery mechanism is an allocation of funds by the government to directly

48 See Yepes, Guillermo, "Do Cross-Subsidies Help the Poor Benefit from Water and Wastewater Services?" TWU Infrastructure Note, The World Bank, Washington, D.C., 1999.

subsidize access for poor consumers. Direct subsidies like these are best triggered by household demand for the subsidized service. This can be accomplished in two ways. One option is for the household to pay full cost for a connection (or the neighborhood to pay full cost for a standpost) and then receive a cash subsidy from the government, upon presenting proof of connection. Another alternative is for the private operator to charge a subsidized connection fee to eligible households. The operator would then be reimbursed by the government for each subsidized connection that he made. The latter approach would generally have a lower administrative cost. In either case, direct subsidies should only be considered when government funds are certain to be available for this purpose over the long term[49].

5.5 New information is often required to evaluate whether a proposed tariff or subsidy will hurt or help poor households

Debates about the magnitude of tariffs required to recover costs, or about what type of subsidy is most likely to reach poor households, often cannot be resolved without new information about costs, customers, water-use and government financial resources. One would like to be able to understand the probable impact of different tariff and subsidy structures on poor consumers, government budgets and operator revenues. Answers to the following types of questions would be especially valuable in the pre-transaction period:

Costs:

What are the operating and maintenance costs of the water and sanitation services?

What is the opportunity cost of water-use for municipal purposes (if, for example, water is reallocated from irrigated agriculture, in-stream flow or other competing uses)?

What are the predicted investment requirements over different planning horizons?

Customers:

How many existing and potential customers are in the service area?

Who are they, where do they live and how many are 'poor'?

To what extent are tariffs and/or connection fees currently a barrier to poor households connecting to the water and/or sewer systems and to increasing water use? Or are other factors more of a constraint (e.g., poor quality of service, frequency of billing or lack of access to a network)?

What are households willing to pay for the improved or expanded service that the private operator will provide?

How many potential customers are likely to use the service when it becomes available to them?

Water use:

How much water are existing customers using?

How will price changes affect consumption?

Will newly connected households have the same water consumption patterns as existing customers?

Government financial resources:

How much money (if any) is the government prepared to commit to subsidizing service or connections for low-income households?

Are these commitments sustainable?

5.6 Tariffs and subsidies require modifications over time. Decisions must be made about how social equity concerns will be incorporated in the tariff and subsidy revision process

When management of a utility is in strictly public hands, it is relatively easy for government officials to intervene and change tariffs to attempt to

49 It should be noted that direct subsidies are much easier to administer if there is an established system of social welfare.

address equity concerns. Indeed, this is one of the principle arguments for private sector participation — to separate efficient management of the utility from political interests. Once a contract with a private operator or concessionaire is signed, government intervention becomes much more difficult. The government's role is usually transformed into that of an independent regulator. When it is time for tariff revisions, it is the regulator — not the government — that negotiates the tariff changes.

Who then is responsible for considering the fate of the poor in the tariff revision process? How did the poor fare under the previous tariff (did the previous tariff perform as expected?), and how will any changes affect low-income households in the future? If the regulator is to be responsible for representing the interests of the poor, then either government legislation or the privatization contract should provide the necessary guidelines. What are the social goals that the regulator should try to achieve? How much financial support is available from the government for subsidies? What role will consumers and consumer advocates have in the revision process? The regulator will need a well-designed financial model that incorporates poor customers as a customer category in order to understand how well-proposed tariff or subsidy changes will meet these policy objectives. Public hearings and/or a complaint office can supplement financial models with information about customer concerns and priorities.

Elected officials who are accountable to consumers should provide oversight of the regulator's decisions about how to revise the tariffs or subsidies. This direction could come in the form of guidelines to the regulator, rather than direct intervention by elected officials. Most participants in the Paris workshop felt strongly that direct intervention by elected officials in tariff setting should be discouraged because it greatly increases the political risk that private operators face when entering into a public-private partnership.

6 Timing It All Right: Information Collection, Consultation and Stakeholder Engagement[50]

As we have seen, designing transactions is a complex task; the many stages need careful planning and the varied roles need clear definition. The process of collecting information, planning and carrying out effective consultation were the subject of extensive discussion at the Paris seminar, and a detailed timeline for these tasks was developed.

Targets for service to the poor, as well as the roles of all the actors involved in promoting, financing, regulating and delivering service to the poor should be defined in advance of the transaction. Ideally a pro-poor policy should be adopted when the decision to pursue a transaction is made — then the preparation of pro-poor arrangements can be integrated into and coordinated with the other transaction preparation activities. Information about the poor, their needs and attitudes should be collected and the poor and their representatives should be consulted prior to the adoption of policies regarding service levels, tariffs, subsidies and the design of the institutional arrangements. This chapter outlines the key steps to be taken during the preparation process and the tasks that should be specified in terms of reference for those supporting it.

6.1 Information to be collected and analyzed

In order to fully understand the situation of the poor with respect to water supply and sanitation services, information needs to be collected, analyzed and made available to planners, policy makers, advocates for the poor and bidders. It is necessary to:

- collect detailed information on the number of poor households and their location;
- identify sources and practices for water supply and sanitation and assess quality of service (quantity, reliability, drinking water quality, impact on public health and environmental quality, etc.) and acceptable alternatives;
- evaluate existing alternative providers, their costs, prices, viability, markets, competition;
- evaluate poor consumers' access to and understanding of key information (hygiene, cost and availability of services, eligibility for subsidies or other financial assistance);
- identify barriers to access to services and evaluate their importance, including geographic, technical, financial, etc.
- identify any technical, service or environmental standards that create barriers to the provision of basic services to the poor;
- evaluate willingness and ability of poor to pay for services and the levels and quality of services they want;
- identify opportunities for supporting, strengthening, improving service to the poor that would result in a better match between demand and supply; and,
- identify groups which work with or represent the poor and which could potentially contribute to the design and/or implementation of the pro-poor activities.

50 Primary Contributor: Thelma Triche.

In situations where resources are constrained, it will be necessary to carefully prioritize the types of data to be collected, ensuring that certain key data required for system design, such as water demand and willingness-to-pay, are available.

6.2 Consultation and stakeholder engagement

The purpose of consultation and stakeholder engagement is three-fold:

(i) to collect additional information, validate and refine the findings of studies and generate an understanding of the concerns of the poor among all decision-makers;

(ii) to generate proposals for improving service to poor within the context of the proposed transaction, and allow stakeholders to have input; and,

(iii) to educate and gain support for water sector reform, including private sector participation.

Those undertaking consultation should identify existing community organizations and leaders that may be appropriate partners and facilitators. They should consult with: *ad hoc* focus groups of poor, representatives of NGOs that serve the poor, alternative providers, government officials (both local and central), civil society, the bidders and the incumbent service provider/s. Potential links should be identified between existing institutions (alternative providers, NGOs, community organizations) and interventions to be carried out by the regulator and/or the private operator.

6.3 Definition of objectives and design of interventions

Realistic objectives, obligations and targets for improving service to the poor would be defined in light of the finding of the studies and consultations. These may take the form of such things as extensions of the network and numbers of connections in order to increase coverage, an increase in the number of hours of service per day, a more equitable distribution of water when there is a shortfall in supply, or bulk sales to alternative providers. The operator's obligations in this regard should be clearly specified in advance of the bidding process and any relevant information made available to the bidders.

The key actors that will play a role in promoting service to the poor, including the private operator, NGOs, investment finance agencies, subsidy-granting bodies, special offices dedicated to promoting service to the poor, the regulator and local governments, should be identified and their roles should be clearly defined. Mechanisms need to be designed and interfaces between the private operator and other actors need to be worked out. The bidders may be asked to propose the mechanisms or comment on those that have been proposed. It is usually preferable for the bidders to design interventions for which they alone will be responsible. These might be subject to approval by the regulator or another authority responsible for promoting service to the poor.

Any other mechanisms and institutional arrangements for promoting service to the poor that are not the sole responsibility of the private service provider, should be in place by the time the contract with the private operator becomes effective.

Finally, the methodology for measuring the operator's performance in meeting its obligations and reaching targets must be defined. Outcomes, reporting requirements and enforcement methods should be specified either in the final contract or in regulations to which the operator is subject.

6.4 Timing

The issue of improving service for the poor should be addressed in the initial deliberations on a possible transaction with a private operator, i.e., *before* any major decisions have been made. In fact, the timing of studies and appropriate sequence of decisions are among the major

challenges in the preparation of private sector participation arrangements. Occasionally there is a tendency to push private sector participation through too quickly, to take advantage of a political window of opportunity, because of donors' own internal agendas or in response to an unsolicited proposal from a private operator. While it is important to build and maintain momentum, experience has shown that a timetable that does not allow adequate time for preparatory studies and consensus building on the key topics often does not come to a successful and lasting conclusion.

Like other important topics, the needs of the poor should be addressed early in the preparation process. This will make it possible to identify issues and introduce any required changes in policies, laws or standards in advance of the transaction. It will make it more likely that pro-poor solutions will be incorporated into the transaction/s in a manner that is consistent with other design components, and will ensure that bidders have access to key information that will affect their operations and costs prior to bidding.

The studies and consultations aimed at promoting improved service to the poor should be integrated into the preparation process, not introduced as a parallel activity. For example, the legal review should include an examination of the legal constraints to providing service to informal and illegal settlements, landlord obligations, etc. This means that the extra funding for these activities must be confirmed early. It also means that they will be less costly because they may be combined in a cost-effective manner with other preparatory activities. In addition, they are not likely to prolong the process. In fact it is likely that preparatory activities aimed at the poor will complement and enhance the validity of other preparatory activities, and contribute to a more coherent and viable solution, one that will withstand political and economic changes.

The following comprehensive table of preparatory activities indicates when the key activities aimed at service for the poor should be carried out. It is worth noting that the time required for preparation of private sector participation arrangements varies widely from country to country and depends on local factors such as political stability, leadership and commitment, the potential for building consensus, prior experience with private sector participation in public services, and the availability of key information prior to the process — not to mention external factors. For this reason, the following timetable indicates the minimum time required to carry out the studies and discuss the results with key stakeholders. It does not include additional time required to obtain funding or hire consultants, nor does it allow for government delays in making decisions and adopting legislation. Note that this timetable is comprehensive, a reflection of the need to incorporate the studies aimed at the poor into the overall preparatory activities. The activities specifically aimed at promoting service to the poor are in italics.

Government decision
General statement of government intention to prepare for private sector participation including, among others, a commitment to promote service to the poor

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Phase I: Analysis of existing conditions (6 months)

- Review legal, institutional and regulatory framework and identify gaps, barriers and potentially required changes
  - *Identify legal barriers to serving the poor, especially those without land tenure*
- Evaluate demand, access to service, willingness-to-pay
  - *Identify and map poor, types of services currently used, current expenditures for these services, willingness-to-pay, financial, geographic and technical barriers, ownership and tenure issues, etc.*
- Initiate consultation with key stakeholders
  - *Form partnerships between interested and active stakeholders*
  - *Consult with ad hoc focus groups, advocates for the poor, NGOs, etc.*
- Examine existing service quality and environmental standards: their clarity, financial and technical feasibility, enforceability, criteria for relaxing or gradually phasing in standards, etc.
  - *Determine whether ambitious or unrealistic service quality and environmental standards create barriers to serving the poor*
- Evaluate tariffs and the financial viability of services
  - *Evaluate the effectiveness of the current tariff structure and subsidies and determine whether they benefit the poor*
  - *Evaluate the impact of current and proposed tariff structures on the financial viability of services and the incentives of a private operator to serve the poor*
- Evaluate baseline condition of assets and performance of service providers as a basis for setting targets and defining rehabilitation and investment programs
  - *Distinguish discrepancies in conditions and performance in poor neighborhoods*

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Phase II: Proposal and analysis of options (4 months)

- Examine various options for private sector participation; propose favored option/s
  - *Propose mechanisms for promoting service to the poor*
  - *Identify the features of each option which could adversely affect the poor*
- Outline legal and institutional changes required to implement the favored option/s
  - *Outline legal and institutional changes specific to promoting service to the poor*
- Prepare a schedule of potential performance targets
  - *Prepare targets for expanding and improving service to the poor*
- Identify rehabilitation and investment programs required to achieve targets
  - *Specify those required to achieve targets for service to the poor*
- Identify sources of finance
  - *Identify sources of finance to promote service to the poor*
- Develop financial model and evaluate financial feasibility, impacts on tariffs, etc. of the proposed option/s
  - *Evaluate cost and benefits of service to the poor; identify need for subsidies*
  - *Examine the effectiveness of connection subsidies vs consumption subsidies*
- Hold workshops with key actors to discuss proposals and develop consensus
  - *Include representatives of the poor, or hold separate meetings*
  - *Provide training in advance to representatives of the poor who are new to the debate so as to create a level playing field*
- Revise proposals as appropriate
  - *Communicate with stakeholders as to how their concerns have been incorporated into the revisions*

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Government decision to adopt proposals and proceed with transaction

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Phase III: Design and execution (12 months)

- Define the responsibilities of each actor
  - *Define the roles of the actors involved in promoting/providing services to the poor and clarify the interfaces among them, flow of funds, etc.*
- Design tariff setting rules and formulas for the remuneration of the operator
  - *Ensure that tariffs and remuneration create incentives for service to the poor or provide separate financial incentives*
- Design regulatory arrangements
  - *Specify how targets for service to the poor and other obligations will be measured and enforced*
  - *Specify any special arrangements for protecting poor consumers, resolving conflicts and consultation with representatives of poor*
  - *Specify regulation of alternative providers if relevant*
  - *Specify how the regulator will consult with or be advised by advocates of the poor*
- Draft legal changes and documents
  - *Include clauses aimed specifically at the poor where relevant*
- Establish new or restructured agencies
  - *Establish any special offices that will promote service to the poor*
- Create data room
  - *Include data and studies on the poor*
  - *Include contact details of organizations that can provide information on the poor*
- Prepare bid documents
  - *Incorporate special provisions regarding service to the poor, and avoid provisions which will adversely affect the poor (e.g., exclusivity)*
- Bidders prepare and submit bids
  - *Require bidders to comment on or design mechanisms for serving the poor, and include all costs of service to the poor in their overall financial bid*
- Evaluate bids and award contract
  - *Evaluate and/or negotiate provisions regarding the poor*
  - *Reaffirm commitment to serving the poor and avoid negotiating out pro-poor provisions*

Annex 1

Other Research Initiatives

Many other researchers are working on the issue of making urban sector reform and private sector participation benefit the poor. Some of the other initiatives which have come to the authors' attention are listed below. This is not meant to be an exhaustive list, and there may be many others working on related issues which have, inadvertently, not been mentioned here.

- Asian Development Bank (ADB): *Public-Private-Community Partnerships in Urban Services for the Poor (Regional Technical Assistance Project)*. For details of a November 2002 conference relating to this initiative see http://www.adb.org/Documents/Events/2001/Extending_Beyond

  The ADB recently developed a Terms of Reference for a Regional Technical Assistance Project which is scheduled to start in April 2002. This Technical Assistance, entitled "Water in Cities" is part of ADB's contribution to the WWF and it will involve two studies. One them is a survey of small scale private water providers to the urban poor. The study proposes undertaking research in nine cities (Manila, Cebu, Delhi, Dhaka, Shanghai, Kathmandu, Ho Chi Min, Ulan Bataar and Jakarta). The case studies are expected to be complete by September 2002.

- Globalization Challenge Initiative see http://www.challengeglobalization.org

- Public Services International (PSI) see http://www.world-psi.org

- Stone and Webster/W.S. Atkins, supported by DFID: *Investigation of ways to integrate pro-poor provisions into the lease documents for private sector participation in Ghana*

- Water Engineering in Developing Countries (WEDC), Loughborough University: *Public Private Partnerships and the Poor in Water and Sanitation*
  See http://www.lboro.ac.uk/departments/cv/wedc/projects/ppp-poor/index.htm

- WaterAid: *Research, Learning and Advocacy Project on Private Sector Participation (PSP) in Water and Sanitation*
  See http://www.wateraid.org.uk/research/index.html

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Annex 3

Participants at the Paris seminar 18 to 20, December 2000

Transaction advisors, legal advisors and economic advisors	
Sophie Tremolet	NERA
Jean-Pierre Florentin	Management System Consultants, Caracas/Paris
Thelma Triche	Independent Consultant, US
Heather Skilling	Stone and Webster
Ian Alexander	Frontier Economics, London
Bernard Portier	IFC, Washington
Jerome Esmay	IFC, Washington
Daniel Tapin	HSD Ernst and Young, Paris
Regulators	
Claudia Vargas	Office of the Regulator, Bolivia
Mamadou Adana Sakhou	Directeur, Ministere Des Infrastructures Direction De L'Hydralulique Abidjan
Government	
Mark Dumol	Dept of Public Works & Highways, Govt of Philippines
Private sector operators	
Maggie Bourbigot	Vivendi
Jean-Paul Minette	Lyonnaise-des-Eau
Malika Ghendouri	Head of International Legal Dept, Vivendi Water/LGE, Paris
12 representatives of private operators attended the last half-day session at the invitation of the BPD	
Donors	
Marc Jaudoin	AFD
Ian Curtis	DFID
The World Bank	
Jan G Janssens	South Asian Infrastructure, World Bank, Washington
Penelope Brook	Private Sector Development, World Bank, Washington
Business Partners for Development	
David Jones	Business Partners for Development
Ken Caplan	Coordinator, Water and Sanitation Cluster
Academe	
Dale Whittington	Department of Env. Sciences & Engineering University of North Carolina at Chapel Hill
Shane Rosenthal	Yale University

Kristin Komives	University of North Carolina at Chapel Hill
Water and Sanitation Program	
Barbara Evans	WSP South Asia
Clarissa Brocklehurst	WSP South Asia
Mukami Kariuki	WSP Africa, Nairobi
Annie Savina	WSP Africa, Abidjan
Pete Kolsky	WSP Africa, Abidjan
Caroline Van den Berg	WSP East Asia and the Pacific, Jakarta
Gabriela Prunier	WSP South Asia
Agnieska Grudzinska	WSP Washington

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Task Manager: Barbara Evans
Editor: Clarissa Brocklehurst
Contributors: Ian Alexander, Clarissa Brocklehurst, Barbara Evans, Mukami Kariuki, Kristin Komives, Shane Rosenthal, Sophie Tremolet, Thelma Triche, Dale Whittington

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PPIAF
1818 H Street, N. W.
Washington, D.C. 20433
Phone: +1(202) 458-5588
Fax: +1(202) 522-7466
Email: info@ppiaf.org
Website: http://www.ppiaf.org

Water and Sanitation Program
1818 H Street, N. W.
Washington, D.C. 20433
Phone: +1(202) 473-9785
Fax: +1(202) 522-3313, 522-3228
Email: info@wsp.org
Website: http://www.wsp.org