

Regulating Public and Private Partnerships for the Poor



REGULATING PRIVATE PROVIDERS: La Paz - El Alto

Water and sewerage services to the twin cities of La Paz-El Alto were privatised in 1997 with a 30-year concession awarded to the Lyonnaise des Eaux consortium, Aguas del Illimani (AISA). At this time around 93% and 83% of their respective populations had access to some form of piped water. Over the first five years, Aguas del Illimani committed to install 71,752 new household connections, 'equivalent to 100% coverage', in El Alto, the poorer of the cities. The most recent figures indicate that coverage has reached close to 99% in La Paz-El Alto.

In Bolivia the national water regulator, SISAB, has now awarded 29 concession contracts, though only one is to a private company, AISA, with the remainder going to municipal or cooperative companies.

In an environment of political turmoil, SISAB has struggled to convince a sceptical public that regulation is a tool that can facilitate a sustainable and improving water supply service. In spite of equalling or exceeding its contractual obligations (by one interpretation) Aguas del Illimani has recently (February 2005) been informed that its contract would be revoked and planning is underway for some form of municipal water company to be established to take over the management of the La Paz-El Alto water and sewerage services.

DFID

Knowledge and Research Contract R8320

Cranfield
UNIVERSITY

Case Study:

BOLIVIA

KEY FACTS

Population

8.6 million

Urban population

62.9 %

GDP per capita 2002

2,460 US\$

HDI rank

114/177

Population living < \$2/day

34.3 %

Exchange rate

\$1 = 7.9 Bolivianos

Urban household water connections

92%

Urban improved sanitation

58%

Water Poverty Index

62.7

Study city

La Paz – El Alto

Population

1,373,000

Regulator

Superintendencia de Saneamiento
Básico (SISAB)

Service Provider

Aguas del Illimani
(during study period)

Research Partners



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Research Summary

Incentive based, economic regulation of monopoly water and sanitation providers is a powerful tool for improving services. Regulators determine the maximum water price ('price cap') to finance a desired level of outputs. Prices in high-income countries have tended to increase faster than inflation as society demands higher standards. The total revenue requirement (from which the price cap is derived) is determined by adding anticipated operating expenditure to planned capital expenditure (for capital maintenance as well as for improvements in quality, security of supply, service standards and service extensions), plus an acceptable cost of capital. Both opex and capex plans include efficiency targets derived from comparisons between a number of providers. Water companies are allowed to retain any further efficiency savings achieved within the price cap for a period (five years for example), an incentive to achieve even higher efficiency, before the benefits are shared with customers in reduced prices for the future.

This model has been adapted around the world with varying degrees of success, usually in the context of a Public Private Partnership, but until recently it has tended to be reactive rather than proactive regarding early service to the poor. There is now a recognised need for adequate economic regulation of public providers, as well as private companies, in lower-income countries, to deliver similar mechanisms for financeability and efficiency and as a prerequisite for developing effective pro-poor urban services.

The purpose of this DFID research project is to give water regulators the necessary technical, social, financial, economic and legal tools to require the direct providers to work under a *Universal Service Obligation*, to ensure service to the poorest, even in informal, unplanned and illegal areas, acknowledging the techniques of service and pricing differentiation to meet demand.

Looking to achieve early universal service, the research also considers how the role of small scale, *alternative providers* can be recognised in the regulatory process. *Customer involvement*, at an appropriate level, is seen as the third key aspect. The research investigates mechanisms for poor customers, and most importantly potential poor customers, to achieve a valid input to regulatory decision-making to achieve better watsan services within the context of social empowerment and sustainable

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December 2005

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The Water Sector and Institutional Framework

In 1994 a regulatory framework, the System for Sector Regulation (SIRESE), was created to oversee the activities of the transport, telecommunication, electricity, hydrocarbons and water sectors. The creation of SIRESE was a consequence of a reform process to Bolivian infrastructure that included the granting of concession contracts and liberalisation of markets, which became known as “capitalisation”. However, it wasn’t until June 1997 that the Superintendencia de Aguas (water regulator) was established. The following month a concession contract was signed with the Lyonnaise des Eaux (55% stake) consortium, Aguas del Illimani (AISA), to operate water and sewerage services in La Paz – El Alto. Following a bidding process (in which a second anticipated bidder failed to bid at the last moment) the contract was awarded against anticipated service coverage to be achieved within four years rather than the more normal bidding against reduction in tariffs.

The Law of Water and Sewerage Services #2029, passed in October 1999, redefined the terms of reference of the water regulator and led to the creation of the Superintendencia de Saneamiento Básico (regulator for basic [water and] sanitation), generally referred to as SISAB from its Spanish acronym. SISAB is an autonomous state entity that is associated with the Ministry of Services and Public Works from which policy, standards and strategies for the sector are taken. The Vice-Ministry for Basic Sanitation serves as the formal link between SISAB and the Ministry of Services and Public Works. SISAB operates within an institutional framework that includes government ministries, municipalities, service providers, civil society, development agencies and international development banks.

At present there are 29 concession contracts which consist of 19 cooperatives, 7 municipal companies, one public company, one *mancomunidad* (a collective of two or more service providers) and, until final contract recision, one private company. The maximum concession period is 40 years. Currently there are



Aguas del Illimani Head Office



SISAB office on one floor of building

contracts of between two and 40 years’ duration, though mostly contracts of between 15 and 25 years have been awarded.

Concession contracts are only issued to service providers that operate in an urban environment and serve populations above 10,000. As part of the long-term strategy, SISAB will grant Licenses and Registers. Licenses will certify that service providers or municipal governments serving populations less than 10,000 agree to follow requirements for tariffs, and are eligible to access government funding. Registers will confirm that a service provider supplies water and sanitation to a community or association, and is eligible for government funding.

SISAB is entirely funded by the service providers who pay 2% of their income (after taxation) to SISAB. In addition to this core funding SISAB has received support for its own institutional strengthening from the European Union, SIDA, GTZ, World Bank, IDB, and the Andean Development Corporation (CAF).

The mission statement of SISAB states that it is to exercise the regulatory function for the provision of water and sewerage services within the current legal framework, protect the equilibrium of interests between users, service providers and the State, with a view to improve the population’s quality of life. The principal functions of SISAB are to:

- Award or renew concessions, licenses and registers
- Monitor the correct service provision
- Review and approve prices and tariffs
- Record, and act upon the complaints and demands of both users and service providers
- Promote a better relationship with civil society in order to improve customer service
- Comply and ensure compliance with standards and laws
- Promote the management capacity of service providers
- Control the management of quality and coverage of service

Service to the Poor and USO

As demonstrated by the bidding process, the government's key objective in privatising water and sewerage services in La Paz- El Alto was to increase coverage in poor areas. A requirement of the tender was for companies to state how many connections they would provide in El Alto, the poorest of the twin cities, by the end of 2001. The winning company, AISA, committed to providing 71,752 new in-house connections in El Alto. This number was estimated to equate to a 100% service provision in El Alto. The concession requires that AISA must then keep pace with population growth over the 30-year life time of the concession. The most recent figures (2003) show that overall potable water coverage in the contract area has reached nearly 99% in La Paz-El Alto, and the company claims it has reached 100% coverage in El Alto itself. There has also been a big demand for sewerage connections in all income-areas, and coverage has reached around 90% in La Paz and 61% in El Alto – this exceeded the contractual target of 53%. This demand is partly explained by property values which may not rise as quickly without a sewerage connection. This is reported to be an important concern for the population.

The tariff charged to all residential category users is US\$ 0.2214 per cubic metre for the first 30m³, then \$0.4428/m³ from 31 to 150m³. The tariff is a combined water and sewerage tariff. It was intended that in the sixth year of the concession the tariff should increase to cover the cost of extending sewerage and developing wastewater treatment but socio-economic pressures prevented this from happening. Thus, customers without a sewerage connection pay the same tariff as those who do. The substantial first block in the residential tariff means there is little cross subsidy from wealthy to poor residential customers. Furthermore, there is also a high subsidy from commerce and industry to residential users. The commercial sector pays \$0.6642/m³ for the first 20m³ and \$1.1862/m³ for 21m³ and above, while industrial customers pay \$1.1862/m³ for all water consumption. It is reported that vendor-supplied water in El Alto costs around \$3.50/m³.

The number of standpipes has been reduced to 60 from 240 during the AISA concession, and the contractual responsibility is to eliminate them altogether. However, they are still being provided outside of the network area in El Alto as a temporary measure because of social pressure. Consumption from standpipes is low, typically around 25m³ per month, because of the lack of sanitary facilities. Households using standpipes pay approximately \$1 per month for a consumption of 1.5m³.

Since privatisation, the process of connecting to the

“Within weeks of taking over, Aguas del Illimani had moved all officials who had to sign off on applications into one room. Applicants then knew exactly where to go to apply for a new connection and could watch paperwork move from

water and sewerage network has become simpler and less bureaucratic. The connection process is less time consuming, less costly and offers flexible payment options. For example, AISA itself requests permission from the municipality to open trenches on behalf of groups of applicants (Komives, K. (2001) Designing pro-poor water and sewer concessions: early lessons from Bolivia. Water Policy, 3, 61-79) as opposed to the common practice in some countries of expecting applicants to apply themselves.

Condominial sewerage connections are available as an alternative to conventional sewerage connections and cost about 25% less.

Condominial sewerage, also known as simplified or backyard or in-block sewerage, achieves reduced costs by constructing shallow sewers, sometimes with rodding eyes rather than manholes, through the rear of plots where there is no likelihood of vehicular damage.



Ondeo Photo

There is also the possibility for households to contribute their labour in order to reduce both water and sewerage the connection costs. The standard charges are \$196 for water and \$249 for sewerage. Through contributing labour and certain materials, households can reduce these costs to \$90 and \$10 respectively. Furthermore, connection charges can be paid over a 30-month period at favourable interest rates.

In addition, the utility used a development approach in the poorest areas, including micro-credit facilities for household sanitary facilities, technical assistance and 'community organisation and training' to allow 'community members to reflect on their reality and how to solve their problems.'

Considering all these elements together, the partnership between society as mediated by government

USO and Legal Issues

There are clear and unambiguous statements in the legislation that point to the duty of the regulator and service providers to work towards universal access to services. For example, Law #1600 that created SIRESE states under Article #1 that the objective of the regulatory system is to regulate, control and supervise sector activities such that they operate efficiently, contribute to the development of the national economy and enable all citizens to have access to said services. Under Law #2066, modifying Law #2029 governing water and sewerage services, Article #5 declares that the principles governing the provision of services are universal access to services. However, that aim of achieving USO is not reflected in any of the principal functions of SISAB, or in the mission statement.

The 1992 National Regulations for Water and Sewerage Services in Urban Areas recognise only in-house service connections and sewers as acceptable long-term solutions. Thus, standpipes, tanker truck delivery and latrines are by definition unacceptable for service provision in urban areas. However, AISA feels pressured into providing standpipes and tanker truck supplies to un-served areas of the city. The Regulations imply a requirement for water and sewerage service provision to a very high standard and therefore of a high cost. In recognition of this problem SISAB approved a



pilot project to test condominal sewerage, which has since become an accepted technology, a good example of the role of the regulator mediating between the long-term goal of society - highest standards for all - and present affordability.

Probably the most unsatisfactory issue with the concession granted to AISA has been the confusion over the agreed service area. In the contract itself, there is ambiguity over the concession area of the contract. In one clause the contract stipulates that the company provide water and sewerage services to all houses in the municipal areas of La Paz and El Alto. In another clause there is reference to the *area servida* which is the existing served area requiring further provision of connections.

The then Deputy Regulator illustrates this challenge in the photo (above), showing how it is the poorest in the hillside houses surrounding La Paz, areas not accepted by the Municipality as being within their municipal boundaries, who might not be counted within the universal coverage target. This ambiguity has caused difficulties in agreeing expansion targets and is likely to have provided ammunition to the anti-privatisation and anti-regulator lobby to strengthen their case that



La Paz



El Alto

Alternative Service Providers

Given the already high coverage of water supply in La Paz-El Alto there is limited need for alternative service providers.

In areas of the city where the population density does not meet the criteria of 50 inhabitants or 15 buildings per *manzana* (approx 0.7 hectares), AISA is not obliged to provide connections.

In some areas of El Alto that are not served by the pipe network, the municipality provides a tanker truck service. In 1998 Aguas del Illimani also provided a water tanker service.

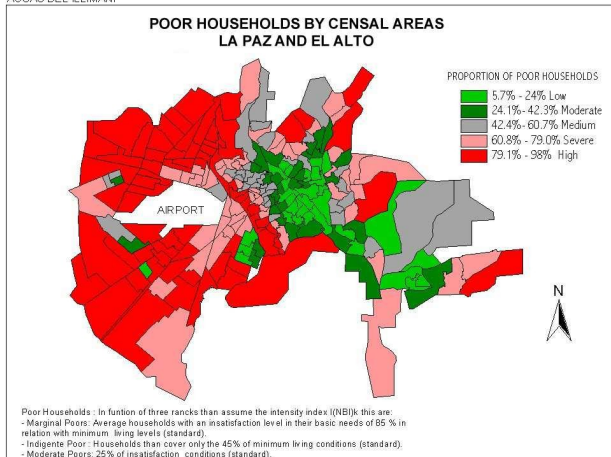
It is reported that vendor-supplied water in El Alto costs around \$3.50/m³ (as opposed to the \$0.22/m³ domestic piped).

By law, the 1992 National Regulations for Water and Sanitation Service in Urban Areas, state that individuals or entities that wish to exploit a private water source must obtain permission from the water utility holding the concession. In effect the utility has authority over water rights in the concession area.

Where the criteria do not yet require the utility to provide piped water it is permitted that an individual household or group of households can install a pipeline and connect to the main. In such cases the household(s) retain the right to charge other households a connection fee to access that main. After a period of five years, ownership of the pipeline transfers to AISA who have a responsibility to approve the technical standards and construction quality.



AGUAS DEL ILLIMANI



Deputy Minister of basic services and public works, José Barragán

(in photo with visiting Gerald Osuagwu, Federal Ministry of Water Resources, Nigeria): "Aguas del Illimani has completed its contract perfectly - that is what the regulator says - but if you accomplish something that is insufficient, it continues to be insufficient"). "The concession contract focuses on a limited service area, not allowing the company to satisfy the population's needs", according to Barragán. "The contract underestimated the areas of service in El Alto," he said. "There are many problems associated with coverage and access to services in El Alto that depend on the original contract that had terms that were not enough to provide for the needs of the population." (Randy Woods, BNamericas, 31/12/04)

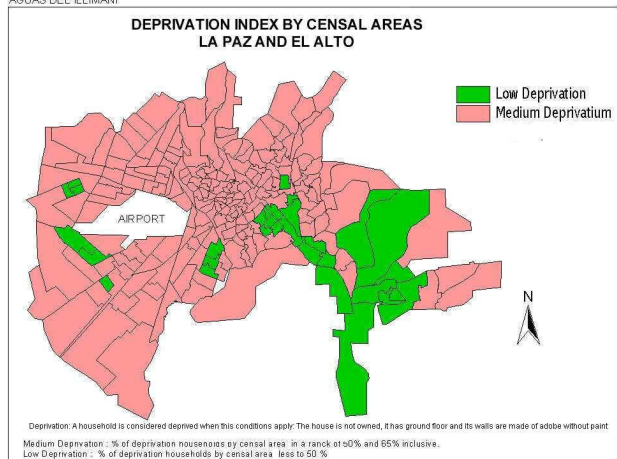


Social Mapping

In preparation for extending service coverage the incoming utility undertook a social mapping exercise (illustrated below) as well as an anthropological study. This aimed to understand the challenges of serving the fast growing (from 90,060 in 1976 to 405,492 in 1992) largely indigenous population of El Alto whose main language is Aymara in order to understand their perceptions of water and how they might wish to be served (Ramiro, personal communication, 1999). One of the subsequent challenges for the water utility is the remarkably low water consumption of newly connected

Left Peri-urban housing, Le Paz Below Social Mapping, AISA

AGUAS DEL ILLIMANI



Customer Involvement

Since 1998 SISAB has required that all the regulated service providers must provide a consumer office, known as an ODECO, with the broad aim of improving the customer-utility relationship. The specific functions of the ODECO include:

- To attend and resolve customer complaints concerning water and sewerage service
- Provide information with respect to the regulated services
- Answer queries and be a focal point for emergency calls

There are stipulated time periods within which the service provider must respond to customer complaints. These time periods vary according to service provider. For example, AISA must respond to an emergency situation such as serious leakage within 24 hours. In the case of an unusually high bill, AISA has 15 days to investigate and a further 20 days to take corrective action (if necessary). SISAB undertakes an annual audit of customer attention performance of each of the concessionaires. This visit is announced only one day prior to the audit. Where customers are unhappy with the response to their complaint they may appeal to SISAB to further investigate and there is a freephone number to call SISAB. However, customers must fill out a complaint form which is logged by SISAB who in turn present each case to AISA in a weekly meeting.

SISAB and AISA are also cooperating with the Federation of Neighbourhood Committees (FEJUVE) to promote better customer-utility relationship. There are around 450 individual neighbourhood committees in El Alto and 580 in La Paz. The FEJUVE have legal recognition and are viewed as representatives of civil society. Each week the representatives of the La Paz and



Peri-urban housing

El Alto FEJUVE meet with AISA to discuss problems or explain procedures to individual neighbourhood committees. The FEJUVE representatives, now well versed in service procedures, act as intermediaries between AISA and individual member committees in a manner similar to a trade union.

Some national FEJUVE committee members were interested in the idea of becoming part of a customer committee which might assist in adjudicating customer complaints in addition to lobbying for better services.

The cooperation between SISAB and FEJUVE has focused largely on awareness raising of the FEJUVE members, of which there are 7,200 neighbourhood committees in Bolivia. SISAB has been carrying out training workshops to explain the rights and obligations of customers in the context of water and sewerage services. The training workshops have so far been carried out in several of the main cities and will continue until all regions of the country have been reached.



Ongoing street protests during the study visit to Bolivia, illustrating the longstanding political challenges within which water became enmeshed.

"The relationship between the [concession groups] and the government is going in a very wrong direction as the concessions are not only supposed to be business contracts," Deputy Minister of basic services and public works Barragan said.

"I cannot continue working with the regulatory troubles that we are having that promote situations like Aguas del Illimani. We did not need to have the riot in order to fix some issues in the contract," Barragan said.

"Barragan was an apolitical appointment and worked without political affiliation, but has become increasingly disenchanted with the government's political machinations that he says use the water sector to gain political capital." "If we do not take the correct steps we are going to be sued very hard and are going to lose everything, and I do not want to be a part of that," he said.

Conclusions

The water and sewerage regulator in Bolivia, SISAB, has since its creation had to function in an extremely volatile political situation. The regulatory system was established in Bolivia at a time of increasing privatisation and structural adjustment policies. The trades unions and indigenous movements ousted President Gonzalo Sanchez de Lozada in 2003 after bloody protests left more than 80 people dead. Since then the country has undergone a period of economic paralysis with more than 700 strikes, road blocks and marches. Amidst this turmoil SISAB has struggled to demonstrate to the wider public that it is working for sustainable, improved water and sewerage services.

SISAB has been trying to establish itself as a credible institution and has found support among international agencies such as the World Bank and European Union to develop its own capacity to be an effective regulator. On examination of its publicly stated aims and objectives there is no indication that SISAB is striving for increased access to water for the urban poor. There is however a clear statement that addressing service quality is one of the principal aims of SISAB.

SISAB must walk something of a tightrope in deciding how hard to push water utilities to improve service coverage and quality. It is recognised that many of the municipal and cooperative companies have very limited resources for investment in their water systems. SISAB does impose fines but is clearly aware that to exert its full authority on the smaller companies would lead them to collapse. Even in La Paz a substantial increase in tariffs is not thought to be socially acceptable.

This means that the situation of a complete lack of wastewater treatment in La Paz (presently discharging to rivers as pictured below), and only minimal capacity in El Alto will remain unchanged.



Wastewater discharge into rivers

AISA has made it clear that such an investment is impossible without a significant increase in tariffs.

According to SISAB, service coverage and quality has improved in La Paz-El Alto.

Representatives of

FEJUVE also accept that certain aspects of service quality had improved under the AISA concession.

However, because of political pressure, in January 2005 the Bolivian Government announced that it would cancel the concession contract. This move was intended to appease the Neighbourhood Committees (Juntas Vecinales) who threatened a city-wide protest over the water privatisation. The claim against the company was that it had not fulfilled the contract obligations to provide water and sewerage services to around '200,000 people' in El Alto. This claim is disputed by the utility who argue they have met their contract obligations, a view that appears to be supported by SISAB's records. The company claims that 'the number of people living outside the service area is closer to 30,000 'and that it is not required to extend service to them.' They were also in the process of obtaining donor funds to extend services to nearby unserved areas, beyond their understanding of the service boundary, as part of corporate social responsibility.

The effectiveness of the protest against the privatisation was strengthened through the Neighbourhood Committees' ability to link it with a series of ongoing national strikes in protest at the increase in prices of oil and the intended privatisation of gas.

The Government's initial announcement to cancel the concession, perhaps a sacrificial pawn, was rejected by the Committees who claimed that it too ambiguous and set no date for the company's departure.

The mounting pressure had already led to the resignation of SISAB's regulator, Johnny Cuéllar, in December 2004 who complained that the protests prevented SISAB carrying out its duty. An interim Regulator, Erico Navarro, was appointed by the Government but he too resigned in March 2005 because of pressure from the FEJUVE. A further interim Regulator, Franz Rojas, lasted just a few days in the post. The most recent Regulator, Alvaro Camacho Garnica, has been tasked with terminating the contract with Aguas del Illimani. While the Government wants to negotiate over a period of months to try and avoid a legal battle (and subsequent costs), the Neighbourhood Committees continue to press for the immediate removal of the company. A government decree has re-established the La Paz-El Alto municipal water company to resume the management of water services.

SISAB has to take some responsibility for this seemingly backward step for failing to convince people of the necessary costs of providing a high quality water

and sewerage service.

This document is an output from a project funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. The boundaries, colours and other information shown on any map in this report do not imply any judgement on the legal status of any territory. Any part of this public domain document may be copied, reproduced or adapted to meet local needs in the furtherance of development goals (except items taken from other publications where the authors do not hold copyright). Permission is not required to be obtained from the authors though due acknowledgment of the source is requested. Key Facts References: Human Development Report, UNDP; World Development Report, World Bank and Mid-term Assessment, WHO/UNICEF. 300906