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AFFORDABLE WATER SUPPLY AND SANITATION

# Institutional development, Brazil

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TO ENSURE THE safe provision of water and sanitation it is necessary to have effective and efficient institutions. This paper investigates the institutional changes in the urban water supply and sanitation sector in Latin American countries as different generations have sought to find the best approach.

The study focusses on Salvador in Brazil, covering the period 1853-1990. It is thought that with some differences due to local peculiarities, the pattern in other Latin America countries has followed a similar process.

# Institutional changes in urban Watsan in Salvador, Brazil

The urban water and sanitation services in Brazil have been subjected to major institutional changes since the middle of the nineteenth century when the large cities first acquired a public water supply for the improvement of public health.

#### **Private concessions**

At the beginning, the service was run by private companies, mainly British or Portuguese. In Salvador, Bahia, the service was run by a Portuguese private company that had a concession from the council. Initially the company did not have a monopoly and the majority of the population continued using water sold by water vendors from fountains. The concessionaire therefore managed to persuade the Council to grant them a monopoly.

The concession contract was similar to the ones already being used in France whereby the private company invests in plant and equipment and a distribution network and charges the customers directly. The tariff was negotiated with the Council rather than being set directly by the company.

The contract with that first company lasted 50 years but was not renewed as the service by then was not considered satisfactory and the company and the Council could not agree about the setting of tariffs. The Council therefore bought the assets of the 'Companhia do Queimado' and by putting the service out to tender a contract was agreed and signed. The investment for upgrading the system was financed by the council through a loan from 'Banque L'Union Banque Parisienne'. There was a change therefore from what we would now term a 'Build, Operate and Own' (BOO) concession to a management contract where the concessionaire is not responsible for capital improvements.

#### Government department

Twenty years on, the poor quality and worsening service gave the regional government an excuse to take the concession from the Council. They decided to run the service as a decentralised government department. The staff of the water department were civil servants and the department had no financial autonomy, its budget being part of state budget. The Regional Government attached the water department to the Health Secretary with the intention for it to be self supporting through customer tariffs.

There was an emphasis on constructing standposts for the low-income householders and increasing the number of household connections to provide a reliable service for those who were paying.

Subsequently the water department was moved to the Building Secretary in the early nineteen forties, showing a change in perspective. It was then that the services started to be seen as an economic good, that is as foundation for industrialization and economic growth.

#### Autonomous agency

In the early sixties, a new economic development cycle was growing, following the CEPAL (Executive Commission for Latin America) model of import substitution process promoted in many Latin America countries. The new model demanded an urgent provision of public services in urban areas as infrastructure was necessary to start up the plan. The acceleration of the urbanization process which occurred in that period reflected the new capital accumulation pattern where a massive investment in urban infrastructure was part of the strategy for encouraging productive activities.

The urban water supply and sanitation sector had not only to provide basic conditions of living for the labour force but also allow the expansion of many other industries related to the service, particularly construction.

Using the CEPAL model, international organizations like The World Bank and The Inter-American Bank gave loans as part of an agenda where the social problems were addressed and prioritised (Cardoso, 1982). The terms of the Inter-American Bank loan, meant a change in the national approach to urban Watsan. The bank demanded dynamic organizations, independent from political interference and pressures to ensure that the money would be used according to the initial stated purpose.

In addition, it was essential for the Bank to achieve a return on the investment. Tariffs were required to cover

investment costs as well as operation and maintenance. The institutional framework set up as a result of those conditions comprised organisations officially attached to the regional government but quite autonomous.

In Salvador, Brazil, the regional government stated that the water supply service would be managed as an industry, as concerned about revenues and profit as any other industry (Magalhaes, 1961). The physical network was mainly directed to the areas with greatest potential for revenue generation. The financing model played a key role in the mode of management. This official proposal, presenting the service as an economic good, represented a significant change from a political leadership who usually promised services to the poor knowing that they could not deliver.

#### **Centralised control**

From the 1970's, to the 1990's, the pattern of urban Watsan was established by the military central government as a consequence of the centralised managerial model practised during that time for public policies.

This model was market based (as opposed to welfare oriented) as described by Melo (1989), and Coing et al (1989). Coing explains how it aimed to have a self-financing and profitable Watsan sector. The policy was based on regional state companies using a tariff system based on financial transfers from high-income to low-income householders. The industrial management of the sector remained an important idea.

#### Discussion

So far the alternative institutional approaches have been seen to be the consequence of external influences or the consequence of failure in the sector. Nevertheless, it is important to analyse the constant dilemma faced by the authorities in low-income countries, where the companies face an endless deficit spiral.

Coing et al (1988) say that the management mode is a result of change in social relations amongst the users as well as in the use of water. In the case studied in this paper, and in many other Latin American countries, the dilemma faced by the public authorities is to balance the contradictions between the different demands from highincome and low-income householders in the same geographical area, a problem that has been constant throughout the 20th century.

Despite the constant official line that the changes would provide efficacy and sustainability, political considerations have never allowed organisations to charge the real cost of water to the customers. Even in the two last changes in the 1960's and 1970's, dictated by important external actors (Inter American Bank and the Central Government), the authorities did not succeed in charging the real costs. The vast majority of public water companies in Brazil and more than half in Latin America are run with large deficits. The political aspects of setting a tariff according to the real cost is immense in an environment where the poor do not have access to many of their basic needs, and there are large inequalities in society. The price of water is part of the welfare role played by the public authorities. At the same time they play the game set by the technocrats, opting for global technical solutions but not taking into consideration the subsequent feasibility for customers who are unable to pay properly for the service. "Poor households cannot afford the design standard of industrial countries, but such standards are not necessary on health grounds" (World Bank, 1993:46).

In practice, there is a lack of political will among the authorities, making it difficult to charge the population. It is then said that there is no willingness to pay which encourages the utilization of a large number of subsidies that, in fact, will only provide cheap services, sometimes at a high standard, for the rich minority of the population.

Jacobi (1989) studied the difficulties faced by lowincome householders in poor areas of Sao Paulo, Brazil in obtaining water connections. Carteado (1993) quantified the number of complaints by customers lacking water in high-income and low-income areas of Salavador, Brazil during the period 1976-1986 which demonstrated discrimination in water delivery.

The changing policy role played by the public authorities causes the management of the sector to progress in a pendular fashion. Sometimes, the leading conception is that the provision of services is more closely related to economic growth; at other times, it is believed that the service is a right for every citizen, as water is basic for survival. However, even when one of the views is leading, the other still has a role.

This is the dilemma faced by the authorities. When the efficacy thesis for economic development predominates, the institutional approach is defined by self-sustainability and an entrepreneurial managerial. It is said that the service ought to be run as any other industry. Measures should be taken in order to make the activity attractive to the private sector, the market demand is prioritized, the tariffs tend to be set taking into consideration not only the operational and maintenance costs, but also the cost of investment. The project engineering during those periods is tempted to emulate industrialised country solutions, prioritizing the water production and transmission, rather than the distribution network.

When the opposite view is predominant, in which the provision of water is seen as a basic right for every citizen not related to his/her income, government actions lead to extending the physical network towards the peripheral areas. The technological approach then, where possible, produces local and cheaper solutions. There is also a closeness between the activity and public health activities. Within this perspective, the tariff must be related to the presumed 'ability to pay' of the customer, not directly to the cost or quality of service.

Figure 1. Institutional models for urban Watsan

But even then Coing (1992) explains that the possibility of exploiting Watsan services did not work properly because countries did not have the capacity to provide a consumption market that allowed the largest part of the population to become part of the market. Thus, a large part of the population has no access to the service, making it difficult for the country to reinvest within the Watsan sector. In Salvador, even after a large investment in a sewerage system during the 1970's only 18 per cent of the population had proper sanitation services in 1990 (Carteado, 1993).

## The future

Whilst the pendulum of institutional change keeps swinging it remains a fact that the poorest do not receive from the public service the water they need for basic needs health. Similarly industry often does not receive the water it needs for economic growth. The poorest end up purchasing water from vendors at many times the cost per cubic metre that they would pay through the official system (in some cases over one hundred times as much) and industry ends up paying more by contructing its own facilities to ensure a reliable supply, but thereby forfeiting the desired economies of scale. It can be argued that the main beneficiaries of the present system are the high and middle-income domestic consumers with household connections and household storage tanks.

Alternative means of managing watsan services are now being considered again with the emphasis on private sector involvement. An example of the 'wheel coming full circle' again for Bahia? The main options appear to be either a leasing contract or complete divestiture through sale of the equity. Adapting Coyaud (1988), the table lists the options now seen as available for Watsan provision. The table additionally makes the distinction between the wholesale provider and the retail provider. Quite different skills are required for bulk abstraction, treatment and transmission of water (wholesaling) as opposed to distribution, tariff collection and consumer service (retailing). UNICEF (1992) have been involved in an example of a retailer approach in Tegucigalpa, Honduras where 45,000 people in 25 low-income neighbourhoods have received water at less cost than they used to pay to vendors through sale of water from the public network to community tanks.

In considering all the options and choices available to ensure a viable institutional framework for watsan services for the whole range of consumers to achieve public health and economic growth it is now necessary to accept that there will be a network of 'actors', involved in both providing and purchasing.

No decisions have yet been taken as to which is the most suitable combination of 'actors' for Bahia. The conclusion is that although the institutional framework plays a key role in the style of managing, the most important idea that will allow countries to overcome the constant deficit crisis in urban Watsan in Latin America will be the political willingness to make the sector feasible not only in speeches but more importantly in practice.

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