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# Governance for water and sanitation services in low-income settlements: experiences with partnership-based management in Moreno, Buenos Aires

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Gustavo Pandiella and Gastón Urquiza

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**SUMMARY:** Over the last 10–15 years, there has been a heated debate about the ability of private companies to provide adequate water and sanitation services to low-income households and their neighbourhoods. There have been a few successful examples of private provision to low-income areas but it has generally not proved possible to replicate these. This paper considers how sparsely populated, low-income and largely unserved urban settlements might obtain full coverage of formal water and sanitation networks under a private concession contract, drawing on the case study of Moreno municipality in Buenos Aires Metropolitan Area. The paper describes an initiative implemented by IIED–América Latina that seeks to address deficiencies in water and sanitation provision through partnership-based management, a participatory process whereby different types of actors collaborate with each other, bringing their own particular strengths. Through awareness-raising and a participatory assessment of water and sanitation provision in the municipality, a local partnership-based management unit was formed. It is hoped that this will be institutionalized into a local water authority. Given that extending conventional water and sewerage services to the many unserved settlements is unrealistic in the short term, the paper suggests that providing both water and sanitation services to the poorest areas like Moreno is likely to happen only if all the actors involved – the public sector, private company, regulator, NGOs and communities – are committed to working together towards a solution.

## I. INTRODUCTION

OVER THE LAST 10–15 years, there has been a heated debate, at both the international level and the national level in Argentina, on the ability of private companies to provide adequate water and sanitation services, in particular to the most deprived areas. The initial successes by some companies in the 1990s with provision to some low-income areas led to the idea that this type of solution, with concessions for private provision, could be replicated in other areas – for instance, in Buenos Aires, Aguas Argentinas developed some successful experiences of public–private–community partnerships. However, this belief was based on the assumption that all concession contracts had similar characteristics and would encounter similar problems, and this has not proved to be the case, at least in Argentina.

This paper will consider the prospects for sparsely populated, low-income and largely unserved peri-urban settlements obtaining full coverage of formal water and sanitation infrastructure networks and services

under a private concession contract. The paper draws on the case study of Moreno municipality in Buenos Aires Metropolitan Area,<sup>(1)</sup> which is characterized by a relatively low population density, a high proportion of its population being below the poverty line, and very low coverage of water and sanitation services. The paper suggests that providing water and sanitation services to the poorest settlements in areas like Moreno is only likely to happen if all the actors involved work together towards a solution – not only the local government, the community and the private company, but also, and especially, the regulatory body.

The paper begins by discussing the provision of water and sanitation services by the private sector in low- and middle-income nations, with specific reference to Argentina, paying particular attention to alternative forms of provision and the issue of monopoly control within the concession area. The next section outlines the background of the work of IIED–América Latina in low-income settlements in Buenos Aires, and the development of the project in Moreno. The following sections outline the general and institutional contexts in Moreno municipality, describe the partnership-based management process, and then focus on the experience of its implementation in Moreno and the prospects for the creation of a local water authority. The final section draws some conclusions.

## II. WATER PRIVATIZATION IN THE SOUTH AND IN ARGENTINA

THE KEY ARGUMENTS mobilized to promote private sector participation in the water and sanitation sector in low- and middle-income nations were state inefficiency in the management of services, the need to renovate old, poorly maintained and technologically obsolete infrastructure, private companies' ability to obtain finance through international loans, the size of state utilities (used as a justification for monopoly control based on economies of scale), as well as the prevalence of questionable deals, corruption, lack of transparency and overstaffing.

However, in practice, with the shift to privatization, service provision has generally been concentrated in central urban areas, excluding peri-urban and rural areas: "Only around 5 per cent of the world's population is currently served by the formal water sector."<sup>(2)</sup> Despite optimistic predictions, provision by the private sector has neither achieved the scale nor the benefits for those unserved or inadequately served that had been anticipated. The expected levels of finance have not been mobilized because both investors and operators realized that the water and sanitation business was more complex and less profitable than originally expected.<sup>(3)</sup> Neither public nor private water providers are prepared to serve large low-income areas, and for this reason it is unlikely that the traditional mode of provision will make a significant contribution towards achieving the Millennium Development Goals for water and sanitation.<sup>(4)</sup>

Many of the key problems that were originally used to justify bringing in the private sector, along with other factors that were not taken into consideration when concession contracts were drawn up, still persist, irrespective of whether the utility is publicly or privately operated. These include insecure land tenure, the politicization and corruption of service management, ineffective governance, the inability to incorporate other actors such as small-scale water providers, limited or no innovation, and a lack of will and capacity on the part of the public sector to regulate service

developing this paper. Thanks are also due to María del Carmen Bel and Walter Santucho, and the municipal authorities in Moreno, especially Alejandro Micieli, Daniel Navarro and Eduardo Suriani.

1. The Buenos Aires Metropolitan Area, located in the province of Buenos Aires, includes the city of Buenos Aires (Federal Capital) and 24 other municipalities surrounding the city towards the south, west and north. Since 1996, the Federal Capital has had its own autonomous elected government; prior to this, the city was governed by the national government, which also appointed a mayor. The municipalities within the Buenos Aires Metropolitan Area respond to three levels of government: municipal, provincial and national.

2. Budds, Jessica and Gordon McGranahan (2003), "Are the debates on water privatization missing the point? Experiences from Africa, Asia and Latin America", *Environment and Urbanization* Vol 15, No 2, October, pages 87–113.

3. See reference 2.

4. See reference 2.

5. Solo, Tova (1999), "Small-scale entrepreneurs in the urban water and sanitation market", *Environment and Urbanization* Vol 11, No 1, April, pages 117–131.

6. Brook Cowen, Penelope (1999), "Bail out: the global privatization of water supply", *Urban Age* Vol 6, No 3, pages 18–19.

7. Aguas Argentinas is the name of the consortium, led by the French multinational water company Ondeo (formerly Suez Lyonnaise des Eaux), that won the concession for the Federal Capital and 17 municipalities within Buenos Aires Metropolitan Area. Azurix, led by Enron, won the concession for the area of La Plata and 47 municipalities; and AGBA, led by Aguas de Bilbao (Spain), won the concession for 7 municipalities in the province of Buenos Aires. In 2002, Azurix withdrew from its concession contract, and ABSA (Aguas Bonaerenses, a provincial company) assumed responsibility for provision for that area.

8. President Kirchner was elected following the economic crisis, and took office in May 2003.

9. Decree No 878 (2003), for which the regulations are awaiting approval. (*El nuevo Marco Regulatorio preve la posibilidad de que el servicio público pueda ser prestado por el Estado como titular o bien mediante la concesión o delegación en actores particulares.*)

10. Azpiazu, Daniel and

provision effectively. For instance, with regard to independent water providers, many examples show that these can provide high quality services at a low cost.<sup>(5)</sup>

Argentina embarked on public service reforms in 1989, restructuring and privatizing those that were considered to be failing. When the first water contracts were put out to tender, Argentina had very little experience of the privatization process, as the only utility that had been privatized at that point was the telecommunications company. Water privatization therefore adhered to the structure that the state had always used, that is, monopoly control by a single provider, and a high and uniform standard of service.

Prior to privatization, water and sanitation services were provided by a single government utility, Obras Sanitarias de la Nación, which operated services throughout Argentina until service provision was decentralized to provincial utilities. The provincial utilities retained the same criteria for service quality standards, for the extent of the network and for the cost of the services, irrespective of the different physical characteristics of their service area, such as distance from water sources, topography, or population size and density.

Private sector participation is a general term that encompasses a wide variety of options, each with different levels of responsibility and risk assumed by the private sector operator.<sup>(6)</sup> For most of the province of Buenos Aires (including the city of Buenos Aires), the form of privatization chosen was the concession model for terms of up to 30 years. Three concession contracts were awarded to private companies for water supply and sanitation services. All three contracts stipulated that the concessionaires would be responsible for the operation and maintenance of the network, new investment to expand the network, and billing and collection of user charges. The three companies that won the bids for the concessions were Aguas Argentinas, Azurix (now Aguas Bonaerenses) and Aguas del Gran Buenos Aires (AGBA).<sup>(7)</sup>

Argentina's economic crisis in late 2001, and the political and social turmoil that it brought, had a very large impact on the country and led to sharp increases in poverty and inequality. The crisis, in particular the devaluation of the Argentine currency, also caused the water concessionaires in Buenos Aires to suspend their investment plans in infrastructure expansion. This situation forced the state to change its stance and intervene in the privatized public services. The new government, led by President Nestor Kirchner,<sup>(8)</sup> pledged to renegotiate all the private contracts as part of its election campaign, despite resistance from both the companies and international financial institutions. Following the withdrawal of Azurix in Buenos Aires province due to difficulties in reaching agreement on fulfilling the terms of the concession contract, the provincial government drew up a decree<sup>(9)</sup> to introduce a number of changes designed to release the state from some of the restrictions imposed by the concession contracts. This decree puts the public sector in a stronger position for the renegotiation of existing contracts.

The benefits of private sector participation depend on both the design and the content of the contract, and on the institutional mechanisms that the government has in place to ensure that the company complies with the contract. For many, the crux of the matter is precisely how the state exerts this control.

In Argentina, almost all the regulatory bodies for specific private companies or privatized sectors were created *after* the services had been transferred to the private operator. All the regulatory bodies generally suffer from the same problems, namely lack of precise responsibilities, little or no

real power, and co-option by the government and/or the private operator, all of which ultimately jeopardize the interests of the users.<sup>(10)</sup>

Some World Bank analysts have criticized the regulator for the Aguas Argentinas concession, Ente Tripartito de Obras y Servicios Sanitarios (ETOSS), for being very politicized, arguing that many of its decisions have been delayed due to the need to reach a consensus. However, when Aguas Argentinas' contract was renegotiated for the first time, the government finalized agreements without consulting ETOSS, thus demonstrating a lack of respect for the regulator. Indeed, a number of decisions made by ETOSS were subsequently overturned by the government, which has softened many of the terms of the contract.<sup>(11)</sup>

When privatization was proposed for Buenos Aires, alternative strategies were not considered. The only aspect that was discussed was whether the concession area should be sub-divided into separate areas according to the advice of the World Bank. The public was hardly kept informed about the renegotiations, which finally took place two years later than stipulated in the contract, and the first public hearing was only held seven years after the contract was awarded, when it was again being renegotiated.<sup>(12)</sup>

Furthermore, the unions did not act independently, and ended up being co-opted by the private companies. This occurred partly because the unions affiliated themselves with the alliance created by the former president, Carlos Menem, which established a programme through which the public utility workers would receive 10 per cent of the shares in the private companies.<sup>(13)</sup> The co-option was first evident when the unions failed to use their power of veto,<sup>(14)</sup> and later, in the public hearing mentioned above, when they defended the concessionaire against the protests of consumer groups.

### **III. IIED-AMÉRICA LATINA'S WORK IN LOW-INCOME SETTLEMENTS IN BUENOS AIRES**

IN 1990, WHEN IIED-América Latina began its programme for integrated community development in Barrio San Jorge in the municipality of San Fernando, one of the most pressing problems identified by the community was drinking water supply. The first actions that were taken were remedial solutions, such as the construction of water tanks that could be filled using a water tap that a nearby meat-packing plant allowed the community to use during the night. IIED-América Latina then began negotiations with the national government agency Obras Sanitarias de la Nación to extend the formal water network to the area, but without success. In 1993, just before this agency was privatized, the community and IIED-América Latina, supported by the municipal government of San Fernando, started laying its own water and sewerage network, using a 60-metre deep well for water supply, and shallow sewers.<sup>(15)</sup> When construction was completed, in 1995, Aguas Argentinas extended its network to Barrio San Jorge and three other adjacent neighbourhoods.<sup>(16)</sup>

Since its first intervention, IIED-América Latina has been committed to identifying solutions and implementing projects for water supply and sanitation to unserved low-income settlements. This work has been based on two parallel strategies. The first consists of raising awareness about the lack of services in low-income settlements, and acting as facilitator between the government, the water companies, low-income communities and other NGOs, in order to try to get these organizations to work in partnership to

Martín Schorr (2003), "Regulación de los servicios privatizados y gobernabilidad en Argentina. Principales desafíos para una nueva administración gubernamental" ("Regulation of privatized public services and governance in Argentina: key challenges for the new national government"), Paper presented at the Second Argentine Conference on Public Administration, University of Córdoba, Argentina, 27-29 November.

11. Loftus, Alexander and David McDonald (2001), "Of liquid dreams: a political ecology of water privatization in Buenos Aires", *Environment and Urbanization* Vol 13, No 2, October, pages 179-199.

12. See reference 11.

13. This was the Share Ownership Programme (Programa de Propiedad Participada).

14. All the decisions were taken after having reached a consensus, even the dismissal of 36,001 workers. See reference 11.

15. The alternative water and sewerage network was initially funded by the International Development Research Center in Canada, and then by the German Catholic NGO, Misereor. For more details, see Schusterman, Ricardo and Ana Hardoy (1991), "Building community organization: the history of a squatter settlement and its own organizations in Buenos Aires", *Environment and Urbanization* Vol 3, No 2, October, pages 104-120; also Schusterman, Ricardo and Ana Hardoy (1997), "Reconstructing social capital in a poor urban settlement: the Integrated Improvement Programme, Barrio San Jorge", *Environment and Urbanization* Vol 9, No 1, April, pages 99-119.

16. See Schusterman,

Ricardo, Florencia Almansí, Ana Hardoy, Gordon McGranahan, Iris Oliverio, Ruth Rozensztein and Gastón Urquiza (2002), "Experiences with water provision in four low-income barrios in Buenos Aires", IIED and IIED-América Latina for WEDC, Loughborough University, UK.

17. Projects carried out by IIED-América Latina have brought provision of water and sewerage to 252 families in Barrio Jorge Hardoy, in partnership with Aguas Argentinas, and provision of water supply to 400 families in Villa Zelmira, in partnership with Azurix.

18. Hardoy, Ana and Ricardo Schusterman (2000), "New models for the privatization of water and sanitation for the urban poor", *Environment and Urbanization* Vol 12, No 2, October, pages 63-75.

19. See reference 18.

20. See reference 2.

21. Mazzucchelli, Sergio, Martín Rodríguez and Margarita González (2001), "Private sector participation in water supply and sanitation: realizing social and environmental objectives in Buenos Aires" in Johnstone, Nick and Libby Wood (editors), *Private Firms and Public Water: Realizing Social and Environmental Objectives in Developing Countries*, Edward Elgar, London, pages 55-62.

secure service provision. The second strategy entails implementing projects to develop and test tools for service provision to low-income communities.<sup>(17)</sup>

In recent years, IIED-América Latina has been active in the debate over how to secure provision of water and sanitation services to low-income settlements, by presenting its work at workshops, seminars and conferences and documenting its experiences in both Spanish and English. For this paper, it is appropriate to revisit some of the suggestions put forward by Hardoy and Schusterman,<sup>(18)</sup> drawing on interviews with World Bank staff to whom they had presented four organizational models of public-private partnership to serve the poor. With the first two models, the definition of solutions for low-income areas (if any) was restricted to the concessionaire alone, while the other two models proposed alternative solutions and systems for low-income areas with representation and participation of the four key actors in the concession (government, company, regulator and community). The fourth model was the most controversial because it challenged the monopoly control of provision in the concession area.

The interviews showed that World Bank staff were not ready to accept that solutions could be found outside the structure of the concession. Furthermore, some of the arguments that they put forward were the same as those which, at the time, were still being used to justify water privatization. Only a few saw positive aspects in the two models based on the participation of all four actors, which they attributed to the need to create a specific fund necessary to finance longer-term processes to serve low-income groups. For instance, Vincent Gouarne suggested that a concession could be neither economically nor socially sustainable if it stipulated the same level of service for the whole concession area, if that area included low-income areas. He asserted that a pro-poor concession, by its very nature, should offer different levels of service at different prices, and that the contract should contain provision for cross-subsidies for low-income groups.<sup>(19)</sup> In contrast, Budds and McGranahan state that it would be a serious mistake to assume that privatization will attract sufficient private finance to play a significant role in the provision of water and sanitation services to low-income areas.<sup>(20)</sup>

As noted above, before privatization, a single government water utility was responsible for providing services to areas which greatly differed in terms of size, population density, nature of water resources and socioeconomic status. However, in the concession contracts, these areas were considered as homogenous, especially in relation to population density and socioeconomic characteristics. For example, in 1997, the Buenos Aires concession (Aguas Argentinas) had an average of 3,262 water service clients per square kilometre, while in Córdoba (Argentina's second largest city) the concession (Aguas Cordobesas) had only 1,296 clients per square kilometre.<sup>(21)</sup> Moreover, the differences in population density between the Federal Capital (14,800 inhabitants/square kilometre) and some of the municipalities in Buenos Aires Metropolitan Area (e.g. Moreno, with 2,040 inhabitants/square kilometre) are even greater.

The fact that the concession model has largely failed to deliver the benefits originally anticipated, particularly in terms of mobilizing the necessary financial resources and serving low-income groups, suggests the need to look at alternative solutions for extending services to low-income areas. At the same time, IIED-América Latina recognized that differences within the concession area imply the need for different levels of service (Box 1), and that small-scale independent water systems already operate in low-income areas in Buenos Aires. In 2001, IIED-América Latina received support for a

**Box 1: Independent water systems in Moreno**

The sustainability of independent systems depends on whether the concessionaire incorporates them into the formal network, or refuses to acknowledge them. If it is the latter, the concession area must be opened up to include service providers interested in operating independent systems, for which it is necessary to establish “mixed” zones in which the concessionaire relinquishes monopoly control over provision and shares it with independent providers.

Service providers with an interest in operating independent networks can originate from community organizations (this is, in fact, desirable). If these organizations have a clearly defined objective (improvement of water and sanitation), as well as the necessary formal status and technical and legal assistance from the municipal and provincial governments, they can establish an autonomous administration that can either provide services itself or sub-contract them.

SOURCE: Daniel Navarro, Secretary of Public Works and Urban Services, Moreno municipality, mimeo, August 2004.

proposal to set up a partnership-based management unit in Moreno municipality.<sup>(22)</sup> Partnership-based management is a participatory model that involves all key actors in the water and sanitation arena, and combines each of their strengths to work together towards solutions.

**IV. GENERAL CHARACTERISTICS OF MORENO MUNICIPALITY**

MORENO MUNICIPALITY IS located in the west of Buenos Aires Metropolitan Area, 37 kilometres from the city of Buenos Aires (the Federal Capital) (Map 1). It is divided into six areas, with a total of approximately 156 neighbourhoods and 380,530 inhabitants.<sup>(23)</sup> The municipality is one of the poorest in the metropolitan area, with 64.8 per cent of its population below the poverty line,<sup>(24)</sup> compared with 32 per cent in the Buenos Aires Metropolitan Area as a whole, and approximately 47.3 per cent of its population relying exclusively on benefits from social welfare programmes.

A combination of demographic growth<sup>(25)</sup> and a lack of investment in public infrastructure has meant that Moreno is one of the municipalities with the largest deficiencies in water and sanitation services in Buenos Aires province. The coverage of water and sewerage provided by Aguas del Gran Buenos Aires (AGBA) is very low, at only 18.3 per cent and 10.7 per cent of the inhabitants, respectively. The unserved population relies on alternative provision of water supply and sewage disposal, both of which are often unsafe. A survey of neighbourhoods in Moreno carried out by IIED–América Latina in 2001 showed that the majority of unserved households use groundwater – characterized by high levels of contamination – for drinking water, and for sewage disposal they use unlined cesspits with no septic tanks, which overflow (because it is very expensive to have them emptied), thus contaminating the soil and groundwater with human waste.

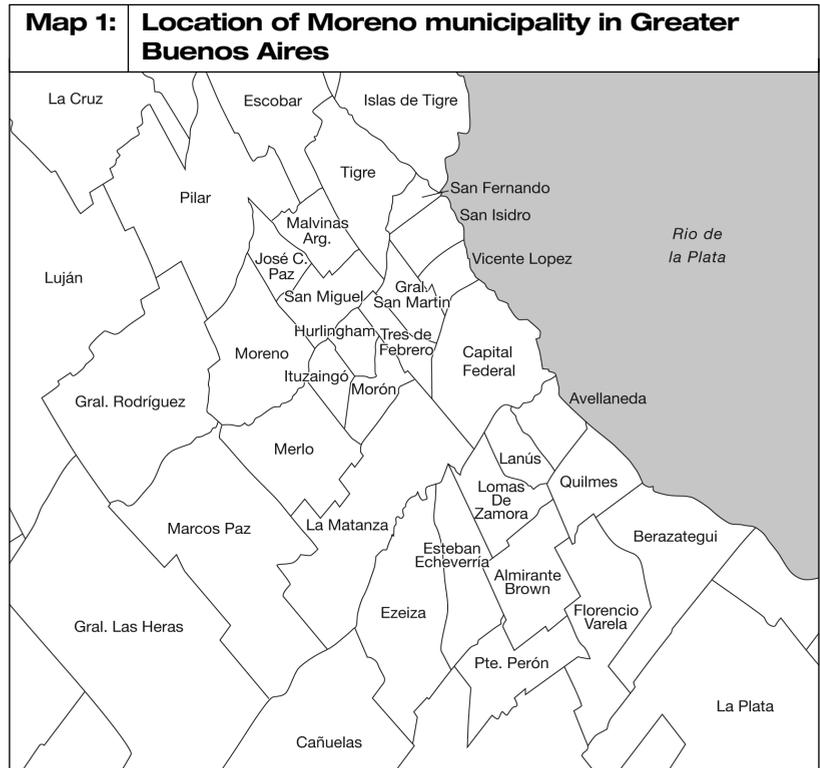
There are 21 independent water and sanitation systems in Moreno, serving around 7 per cent of the municipality’s population, which are very heterogeneous in terms of the number of people served (from 100 to 1,000

22. This was supported by the Public–Private Partnerships for the Urban Environment (PPPUE) initiative of the United Nations Development Programme (UNDP).

23. Provisional data from the 2001 census (Argentine National Institute for Statistics and Censuses).

24. The poverty line is an indicator used by the Argentine National Institute for Statistics and Censuses that assesses whether households have consumption levels above a defined minimum level. A price is given for a “basic needs basket” (*canasta básica total*) that combines essential foods, health, clothing, education, etc. Households fall below the poverty line when their income is insufficient to cover these essential needs.

25. The population of Moreno was 59,338 in 1960, 114,041 in 1970, 194,440 in 1980, 287,715 in 1991 and 380,530 in 2001 (Argentine National Institute for Statistics and Censuses).



people) and their income level. They include systems serving high-income groups, social housing programmes and *barrios*, developed with the help of an NGO or a cooperative. Only three *barrios* have a sewage plant, and one of these is out of service.

## V. INSTITUTIONAL CONTEXT OF MORENO MUNICIPALITY

MORENO MUNICIPALITY IS governed by an executive office and a deliberative council. The executive office was restructured in 2001 into four secretariats (state and treasury, social development, public works and a coordinating secretariat). The executive office is headed by a mayor, who is elected for a term of four years, and who, in turn, appoints the four secretaries.

In addition to the secretariats, at the same level there are two decentralized municipal agencies that were created by a municipal by-law in 2000. The Institute for Urban, Environmental and Regional Development (IDUAR) was established to promote, plan and implement initiatives aimed at urban, environmental and regional development within the municipality. The Municipal Institute for Local Economic Development (IMDEL) aims to create opportunities and conditions that foster local economic development, in particular the creation of new jobs.

When IIED–América Latina's Moreno project began in October 2002, the municipality was governed by an interim mayor, because the elected mayor had assumed the role of acting Social Development Minister for the Buenos Aires provincial government. The elected mayor, Mariano West, had served

two consecutive terms, and had placed social and technical issues high on the municipal agenda. For instance, he implemented two large-scale interventions to facilitate access to legal land tenure for low-income households: one that strengthened the internal organization and built the capacity of neighbourhood land committees, and another for plots and housing units, into which the municipality channelled municipal, provincial, national and international funds for social housing. It also created a Land and Social Housing Fund that centred on the regeneration of abandoned areas. Midway through the project, there were general elections (national, provincial and municipal). The interim mayor of Moreno, Andres Arregui, was formally elected mayor and continued the work of his predecessor, so the project received almost uninterrupted support.

## VI. THE PROJECT IN MORENO

IN JULY 1999, a concession for water and sanitation services in Moreno and another six municipalities located in the western zone of Buenos Aires Metropolitan Area was awarded to the consortium Aguas del Gran Buenos Aires (AGBA). To date, the company has not extended provision to any low-income neighbourhoods. The reasons for this include the absence of specific pro-poor clauses in the concession contract, ambiguity in the contract that requires the company to serve the whole population but exempts it from operating in areas without legal land tenure (which excludes the majority of low-income settlements because they are informal), the assumption that low-income groups either cannot or will not pay for services, and unfamiliarity with working in low-income communities.

The main problem facing residents in Moreno is the contamination of groundwater from both industrial effluent and untreated human waste. Given the low coverage of water and sewerage networks in the municipality, many residents use shallow groundwater as a source of drinking water and, at the same time, they also use unlined cesspits for the disposal of sewage, which seeps into the aquifer and makes the groundwater unfit for human consumption.

The IIED-América Latina project in Moreno proposes building the capacity of relevant actors (AGBA, the local municipal government and community organizations) to allow them to work together in the framework of a partnership-based management model to provide water and sanitation services to informal settlements. The desired outcomes are:

- that the partnership-based management model will become institutionalized, whereby each actor will demonstrate its commitment by allocating a staff that understands and caters to the particular needs of service provision to low-income groups, and all actors will enter into a formal agreement to coordinate service provision;
- that the level of service set out in the concession contract will be more flexible, because service provision in informal settlements requires greater flexibility in order to incorporate appropriate technologies, financial arrangements and organizational structures adapted to the contexts of informal settlements; and
- that the pro-poor model will be replicated in other municipalities within the AGBA concession area, assisted by the production of a manual and guidelines, which are necessary tools for implementing training modules (Box 2).

When this project was developed, an agreement already existed between

**Box 2: Dialogue and collaboration with communities; a comment by a community leader**

*“Having a space where all the different actors can sit down together, as we have never been able to do before unless it has been in their offices or customer service points, is something basic and fundamental. Before, they all used to organize and get together, but they never included the users. So, the possibility of creating this space is something that is really worthwhile, because there is a huge gap that we need to fill. But there is still a long way to go.*

*“The dialogue space or forum generated within the partnership-based management unit must have continuity; this is something that is absolutely necessary. When you build a house, you don’t just build the walls, you have to put up the roof and insert the windows; and I think it’s the same with the partnership-based management unit: we need to keep on building it, getting more people to join, approaching other communities, getting more residents involved, turning to our own neighbours for help, and turning it into reality, so it isn’t just an idea that never materializes.*

*“Consolidating the space will also help to strengthen the community, which wants to do the right thing but lacks motivation. From the administrative and technical point of view, we have to find a way of taking responsibility for the management and administration of the water supply network.*

*“In all sincerity, I would like this to continue, and for it to be able to make the leap from interaction of the group around water issues to a real partnership-based management unit that is in operation.”*

SOURCE: Walter Santucho, resident and community leader, Barrio el Milenio, Moreno, personal communication, July 2004.

IIED–América Latina, Moreno municipal government and AGBA. All three were committed to involving community representatives as soon as possible, in order to start the process of forming a partnership-based management unit. In this way, the intention was to establish a tri-sector alliance which, drawing on the experience of all the partners in water supply and sanitation, would be able to start establishing the conditions that would enable service provision to the poorest areas. This could build on previous collaboration, as between 1998 and 2001, IIED–América Latina, Moreno municipal government and various community organizations had worked in partnership on poverty reduction projects within the framework of the Programme of Support to Vulnerable Groups.<sup>26</sup>

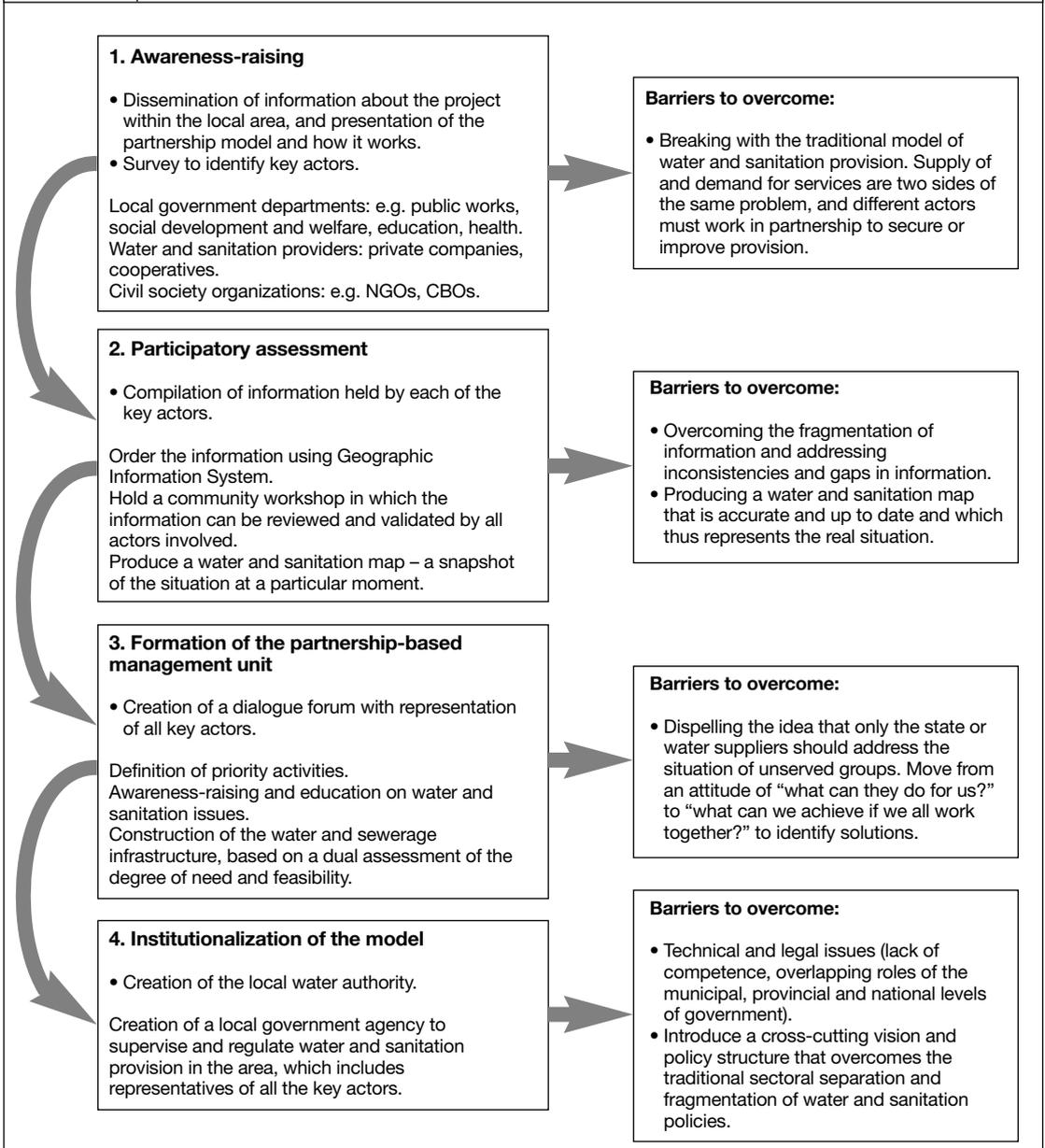
26. This programme was managed and financed by the government of Argentina, with additional funding from the Inter-American Development Bank.

## VII. STAGES OF THE PARTNERSHIP-BASED MANAGEMENT MODEL

THE VARIOUS STAGES of the process for setting up the partnership-based management model are shown in Figure 1.

From the outset of the project, work began on two activities: the preparation of a detailed assessment of the water and sanitation situation in Moreno (that was used to produce a water and sanitation map, see section (b) below); and the identification of relevant actors, who were invited and encouraged to join the partnership. In carrying out the assessment, many

**Figure 1: Implementation process for a partnership-based management model for local water and sanitation**



problems were encountered in relation to the lack of information, or inconsistencies between different sources, or inaccuracies, especially those revealed by observations on the ground.

Although the project consists of four consecutive stages, as represented in Figure 1, these stages should not be regarded as entirely separate, as in practice the implementation of the different phases always overlaps. Therefore, in the sections that follow on each stage, it is worth bearing in mind that these often occur simultaneously, and that activities carried out often address objectives in more than one stage.

**Box 3: El Puelche newsletter**

*“El Puelche helped to make people aware of water and sanitation issues and the importance of making sure that we are using safe methods of water supply and sewage disposal. It also made people realize that social organizations don’t just do things off the tops of their heads, but because we are part of a wider structure ... people also saw that our activities are being carried out as part of a project, which made them more open to our ideas.*

*“The newsletter also helped to voice the needs of groups with independent water and sanitation networks because, as we were providing our own services, we didn’t have contact with the other actors until now. It was useful in getting others to listen to us, especially the public works people, and also all the other actors in the alliance.”*

SOURCE: María del Carmen Bel, resident and community leader, Barrio Alem, Moreno, personal communication, June 2004.

**a. Awareness-raising**

27. The La Tradición cooperative was created in 1957 in Francisco Alvarez settlement, Moreno. It provides water to some 400 households and, since 2001, has been selling water in bulk to a closed neighbourhood of 300 families. They plan to expand in the future and install sewerage networks.

The first stage focused on disseminating details about the project, and trying to involve more actors in addition to those who had initially supported the project. This meant involving other secretariats and areas of the municipality besides IDUAR; also securing AGBA’s support and involving community leaders and other independent water providers such as the La Tradición cooperative.<sup>(27)</sup>

Regular meetings were held with representatives from communities with independent water supply and/or sewerage networks (unconnected to the formal network), to encourage them to establish collective solutions to their situation. One of the initiatives carried out by these communities was the launch of a newsletter (Box 3), which they distributed in neighbourhoods with this type of system. The newsletter contained information that was aimed at raising awareness among residents of the use of independent systems, and of the risks associated with water-source contamination and inadequate sewage disposal. Members of the La Tradición cooperative participated in all the workshops.

Throughout the project, the team worked closely with IDUAR to define strategies and actions and to work with local data. With the involvement of IDUAR, all the information collected in the municipal area was organized and triangulated with data from the 2001 census and the project survey. The information was then collated to produce a detailed assessment of the water and sanitation situation in each neighbourhood, and was used to produce a municipal-wide water and sanitation map.

The team also held regular meetings with the Secretariat of Public Works and Urban Services, in order to exchange information and ideas, particularly in response to the recent renegotiations of the AGBA concession contract, and to integrate the initiatives of the different groups. Meetings were also held with the Secretariat of Social Development, with which IIED–América Latina was also collaborating on a national government project,<sup>(28)</sup> to undertake a survey of the quality and extent of provision for water and sanitation in the municipality’s soup kitchens, health centres and public schools. Questionnaires for the survey were designed together with the schools council, and the data were incorporated into the water and sanitation assessment.

To raise awareness, workshops were carried out with different types of

28. Families for Social Inclusion is a national programme that subsidizes low-income families with children and youth under the age of 18. For the family to receive a subsidy, the children must attend school and go to regular health check-ups.

actors. For example, workshops were held with the different municipal government agencies that are connected, directly or indirectly, with water and sanitation issues, and in which directors and/or coordinators participated. Similarly, awareness-raising and capacity-building workshops were carried out with community-based organizations, principally residents' associations, especially those operating in neighbourhoods unserved by AGBA. The activities focused on participation in the partnership-based management model, and on health and environmental issues related to water and sanitation. In the neighbourhoods that have community-managed water and/or sewerage systems, the focus of the workshops was extended to two further aspects: maintenance of the network infrastructure (e.g. efficient use of groundwater pumps, water quality control, establishing links with other independent networks); and optimizing community administration of the system (e.g. water resources protection, costs, tariffs and billing, and cooperative work).

All the neighbourhoods participated by contributing their knowledge to producing and validating the assessment. In each neighbourhood, a questionnaire was designed to collect quantitative water and sanitation data in the district. The degree of participation of the organizations transformed the assessment into a real participatory exercise.

### **b. Participatory assessment**

Obviously, it is important for Moreno municipality to have a detailed and up to date assessment of the water and sanitation situation for each household and area, as this is an essential tool for developing any public policy within the municipal area. The need to have such information seems obvious, but is not something that is easily found in municipalities in Argentina. IDUAR took a special interest in the production of the assessment, which led to the final version being much more detailed than originally anticipated. IDUAR and IIED-América Latina staff gathered information from different sources, and produced a water and sanitation map that included rates of coverage, condition of the infrastructure, water quality, and health and environmental implications, that was as complete as possible.

The project initially envisaged producing an assessment of the state of the water and sewerage network based on projections made from data from the 1991 census. However, it actually produced a very complete appraisal based on data from the 2001 census, which was validated by information collected during fieldwork and participatory workshops. The final assessment contained the real extent of coverage of the water and sewerage networks managed by AGBA, and of the independent water and/or sewerage networks managed by cooperatives or communities. A photographic archive of all the independent systems was also incorporated. Furthermore, the assessment also covered the water and sanitation situation of all the municipality's unserved neighbourhoods, public schools, municipal soup kitchens and health clinics.

The assessment is an important tool that allows the partnership-based management unit to prioritize the most urgent interventions (based on a dual evaluation of degree of need and feasibility). Furthermore, all the information collected during the assessment was incorporated into the municipality's Geographic Information System database, which hopefully will be circulated among different areas of the municipality and at provincial and national levels.

**Box 4: Partnership-based management**

Approaching and developing the project in association with different partners meant that each actor had to widen their vision in order to start considering water and sanitation in a more integrated and tangible way. The actors begin to address the situation, first, when they move from seeing the problem as the responsibility of others to thinking in collective terms, and, second, when the solution passes from being a collection of contributions (an increase in quantity) to an integration of these contributions (which, in addition, leads to an increase in quality).

Partnership-based management will enable the proposed local water authority to develop and implement new long-term municipal government policies that are based on consensus among all the actors, and which aim to improve the quality of water and sanitation services in the municipality. In such a dynamic process, it is important to have an actor present whose principal role is to promote and supervise the design and implementation of strategies for intervention that are adapted to each actor involved. This actor guarantees the sustainability of the partnership-based association. In Moreno, this role was played by an NGO, IIED – América Latina.

SOURCE: Eduardo Suriani, General Manager of Urban Management, IDUAR, mimeo, July 2004.

### c. Formation of the partnership-based management unit

The number of different actors and the fact that they operate at different levels, especially when they are not aware of each other's identity or actions, not only results in a lack of interaction between them, but can also be a source of conflict. This then obscures a more comprehensive or integrated vision of the wider problem and impedes actors working towards solutions that build on local knowledge and resources, both of which are essential components of sustainable services management.

A series of meetings was held to establish a dialogue among different actors connected with water and sanitation. The project has recently managed to increase the number of actors who participate, and also achieve a degree of regularity for these meetings. Participants, alongside IIED–América Latina, include IDUAR, the Secretariat of Public Works and Urban Services, the Consumer Rights Association, AGBA, the provincial government's utility regulator, and other institutions such as the University of General Sarmiento (Box 4).

As the project developed, the relationship with the private utility AGBA changed as its participation became increasingly limited, and reached a point where it hardly participated at all. Although AGBA had been a partner since the beginning of the project, its participation had always been sporadic and, following the mid-term project evaluation, it practically withdrew its support. This lack of commitment was due partly to the difficult economic situation in Argentina and to the imminent renegotiation of its concession contract. In addition, the company had also undergone a process of major internal restructuring in which the management staff had been replaced.

IIED–América Latina was also in contact with representatives of the Consumer Rights Association, in order to be aware of the problems of users served by AGBA, although these meetings have not been as frequent as they should have been. Furthermore, meetings with the regulator have also

**Box 5: Evaluation of the Moreno project**

The experience of the project in Moreno highlights the relevance of a number of important issues for partnerships, including:

- a clear understanding of the local context, and the opportunities and challenges that it presents;
- the crucial role played by a partnership broker in bringing partners together and maintaining the momentum of the work; and
- the importance of flexibility and capacity in order to accommodate changes as the partnership develops, and to deal with the need for continuous revision, supervision and evaluation of both the project and the partnership itself.

Above all, the partnership demonstrates that the project activities should include and work with the groups traditionally considered as beneficiaries at each stage of the project. The communities must be included from the outset, so that they can participate in the process of the formation of the partnership and play an active role in making positive and lasting changes to their lives and, to borrow their words, to be able to give their children a better future. In the words of one of the community representatives: 'when there is will, anything can be achieved'. The greatest achievement of the partnership in Moreno has been opening a window of opportunity to the communities, while its biggest challenge is to ensure that the partnership is not short-lived.

SOURCE: Stott, Leda and Tracy Keatman (2004), *Challenges and Prospects: Capacity Building for the Development of Public – Private – Community Partnerships for the Provision of Water and Sanitation Services in informal settlements, Moreno, Argentina*. Internal Report, BPD Water and Sanitation, June 2004.

been unsuccessful. The regulator initially promised to participate, and attended various meetings, but has since withdrawn due to distance (its offices are more than 50 kilometres away) and other priorities in its agenda.

The next stage is to incorporate the remaining actors who are participating in the Moreno project (and new ones) into the partnership-based management unit. These include neighbourhoods with independent water and/or sewerage networks, neighbourhoods that are completely unserved, public schools, municipal soup kitchens that assist the poorest households, and health clinics. IIED–América Latina has maintained regular meetings with these new groups, but they have not yet participated in the regular meetings of the partnership-based management unit, except in an evaluation workshop.

This initiative has also received considerable publicity – for instance, it is well known in various municipal agencies and in the neighbourhoods of Moreno, and its participants are now recognized as “the water team”. Also, it is now widely accepted that addressing the problem of water supply and sanitation requires the participation of all actors involved, and this includes building consensus to design policies for the equitable and sustainable maintenance and expansion of the services (Box 5).

**d. Institutionalizing the model: the creation of the local water authority**

In Moreno, this stage has been designed but has not yet been implemented. It is envisaged as a second phase of the project process, rather than a fourth stage. It is hoped that the institutionalization of the present partnership-based management unit into a local water authority will form

**Box 6: The proposed local water authority**

It would be impossible to consider land-use planning without making provision for infrastructure and services. In the same way, the water cycle (abstraction, distribution, consumption and disposal) is a fundamental process that determines all the strategic decisions in spatial development, at both the local and regional levels. This is especially the case in areas like Moreno, where poverty indicators are so high and infrastructure coverage so low.

The partnership-based approach is a proactive management style that employs integrated and parallel strategies to address the situation on the ground, and which draws on the synergy of the actors to maximize its potential. In Moreno, this approach has not only increased the channels of participation between communities, NGOs, universities, the private sector and different levels of government, but has also brought this interaction into the realm of the local administration, in order to maximize the prospects of achieving goals and objectives.

The partnership-based management model should be institutionalized into a local body that takes a systematic and strategic approach to addressing all the stages of the water cycle. This body should prioritize interventions with rational and sustainable criteria, plan its finance, and mitigate the social, environmental and economic impacts of demographic growth and unplanned local development, especially for the lowest-income groups. These planned interventions should also be integrated with the set of actions contained within the municipal plan for strategic local and regional development.

SOURCE: Alejandro Micieli, General Administrator, IDUAR, mimeo, July 2004.

the basis of improvements for deficient water and sewerage services, because it proposes a management model in which responsibility is shared between the municipal government, civil society and the private sector (Box 6).

Some of the project results and outputs will be essential for the creation of the local water authority:

- a participatory evaluation of how the partnership-based management unit works in practice, by way of a report that outlines its roles and functions, its strengths and weaknesses, and the extent to which it serves as a tool to overcome water and sanitation deficiencies on the ground;
- a demonstrable increase in awareness, knowledge and capacity among the local population of the equitable and sustainable management of water resources;
- regulations for the formal operation of the local water authority;
- guidelines for a local environmental agenda; and
- the creation of a model that can be used for interventions in neighbourhoods with different water and sanitation situations, such as those within the concession area, those outside the concession area, and those with independent systems.

An analysis of the different types of independent water and/or sewerage system will enable a comparison and evaluation of their effectiveness and efficiency, in terms of alternative technologies as well as maintenance requirements and the level of community organization needed for this. The analysis will also evaluate the possibility of transferring and integrating these systems into the formal utility network or of maintaining them as independent systems.

## VIII. CONCLUSIONS

GIVEN THE LOW levels of coverage for water and sanitation in Moreno, and the problems with the private concession, extending formal water and sewerage services to the large number of unserved settlements is an unrealistic solution in the short term. However, the results of the Moreno project show that the problems identified are not just limited to being unconnected to the public water and/or sewerage supply. In many cases, individual households or institutions connected to the formal network still have to deal with water-pressure problems, incorrect billing, poor water quality and dubious sewage treatment. Even if the service is extended to all households in the municipality, other problems will persist, which can only be resolved through education and coordination, not only of municipal government agencies but also of local actors and, in particular, communities themselves. Communities need to be organized and committed if they want to be able to exert enough pressure to achieve the necessary level of governance to extend water and sanitation services to all residents, and receive a good-quality service. On this subject, María del Carmen Bel, resident and community leader of Barrio Alem, states:

*"We have to get organized and make sure we know our rights and obligations so that we can compel other actors to fulfil theirs; when they fail to do so, we're here to make sure that everybody meets their obligations."*

The groups of residents who lack adequate water and sanitation provision can be divided into three main groups:

- those who are completely unserved and who should be prioritized in terms of need due to the levels of contamination of the groundwater they use and the inadequate technology used to extract groundwater;
- those who have a basic level of supply based on alternative or informal services that are operated independently of the formal network, but who generally still experience management problems and whose service needs to be regulated; and
- those who are connected to the formal utility (AGBA) but who complain about the quality of the service and the inadequate disposal of untreated sewage (that contaminates groundwater).

The principal barriers that must be overcome are:

- legal and administrative barriers, such as the renegotiation of AGBA's concession contract and approval of the regulations for the new provincial government decree that facilitates the participation of the municipal government in water and sanitation services. In the words of Daniel Navarro, Secretary of Public Works and Urban Services:

*"The present situation of the water and sewerage concession and imminent renegotiations finally brings the municipal government to the discussion table, a place where it always should have been as a representative of the local people and municipal planner. The municipal government was quite clearly and purposefully excluded from the process of designing and awarding the contract, which has now become the source of the current social conflicts within the municipality."*

- organizational barriers, such as the organization of and articulation between different types of actor, as well as between actors and their own institutions;
- physical and technical barriers, related to the size and semi-rural/peri-urban nature of the municipality; and
- socioeconomic barriers, related to the strong correlation between low coverage of water and sanitation services and high levels of poverty,

and a lack of investment for the expansion of the infrastructure.

It is important to stress that none of these barriers can be overcome by the sole actions of any one of the actors involved, hence the proposed institutionalization of the local water authority, based on the results obtained to date.

At first sight, it would appear that the prospects for forming a local water authority in Moreno are low, given the current socioeconomic situation in Argentina with its high levels of poverty and absence of an appropriate legal framework that guarantees the expansion of urban services to the most vulnerable groups. However, paradoxically, this context provides an ideal moment to implement partnership-based initiatives like the one described in this paper, because solutions will never be achieved without strong commitment and collaboration among the actors involved.

