Social Inequality, Environmental Justice and Water Policy in Buenos Aires

María Gabriela Merlinsky, Soledad Fernández Bouzo, Carolina Montera and Melina Tobías

ABSTRACT

Privatisation of potable water and sanitation services in the Metropolitan Area of Buenos Aires during the 1990s led to important consequences in terms of investment and equality in the provision of the services. A new period started in 2006 with the creation of the State-run company Agua y Saneamientos Argentinos SA, which became responsible for managing the provision of water and sewerage services in the region. Today, the company has to deal with the historical backwardness in terms of investment, the growing pressure from the population demanding access to the services, and the significant inequality of the covered area.

On the other hand, due to the public impact of the court case regarding the sanitation of Matanza-Riachuelo basin, different territorial collectives have reformulated their demands for infrastructure works by including environmental terms. Besides, the Supreme Court of Justice has required the joint coordination of the works by Agua y Saneamientos Argentinos SA and the Authority of the basin. This means that water and sanitation management must answer to a great variety of actors and be able to operate in highly conflictive areas while meeting, at the same time, the environmental goals.

This article describes the main actors involved in water and sanitation management in the Metro-politan Area of Buenos Aires and their approaches to the new plans of expansion of the services. The focus is to identify the opposing interests in terms of the distribution (which territories are the priority for the expansion of the water and sanitation networks); the implementation timetable (how to define the order of the works); and the emergence of different criteria of social and environmental justice. To this effect, we present an in-depth analysis of interviews to public officers, technicians and representatives of social organisations.

KEYWORDS:

Water, Sanitation, Environmental Justice, Social Justice, Metropolitan Area of Buenos Aires, Matanza-riachuelo Basin.

INTRODUCTION

Water governability issues are often analysed exclusively based on the resource management problems, and the multiple players involved in water politics remain unseen (by action or omission). In this article, we would like to make express reference to this last aspect, by locating the problem in context of the property systems that regulate the access to water and to basic sanitation.

In different Latin American metropolises, the existence of "hydropolitical privileges" has allowed an unequal appropriation of such resource. And it is precisely through this form of social relationships that the gaps in the access to potable water and sanitation can be explained. While economic actors have been able to benefit from the availability of water for their productive activities, the State actors have not been able to regulate in an integrated way the resource (Dourojeanni, 2003; Dourojeanni and Jouravlev, 2001). Thus, the upper basins have been tapped without regard to the impacts on the lower areas; quality problems have often been disregarded; groundwater has been exploited without worrying about the hydrologic linkages with surface waters (and vice versa); and the land-water interactions have been neglected (Molle, 2004). As a result not only the ecosystems have been damaged, but also the inequality in the access to water and sanitation has deepened.

Studies focused on hydrologic basin management policies usually address water shortage and contamination. But it is less than usual to find analysis of environmental degradation and basic sanitation based on the conflicts and discursive tensions between different social actors. In the city of Buenos Aires, the current deficit

María Gabriela Merlinsky is research fellow and Soledad Fernández Bouzo and Carolina Montera are Ph.D. fellows from CONICET - "Gino Germani"

Research Institute: and Melina Tobias is a Ph.D. fellow from the Buenos Aires University, Argentina F-mail (first author): merlinsk@retina ar

in water supply and sanitation services poses important questions regarding the way social, economic and environmental priorities are managed in the provision of these services. These priorities are exactly what a number of social actors have started to challenge.

On one side, the National State has developed, through the company *Agua y Saneamientos Argentinos S.A.* (AySA), the Master Plan of Works intended to universalise the coverage of the service, improve its quality, and protect the natural resources.

On the other side, in the last decades, a number of territorial collectives have been demanding works of sanitation but introducing the environmental aspect in their claims. This process has gained greater public meaning regarding the Matanza-Riachuelo Basin (MRB) due to the judicialisation of environmental politics, with a high-profile litigation suit- the "Beatriz Mendoza" case. In this case, the Supreme Court of Justice has required the jurisdictionally competent governments to set in motion a plan of environmental recovery of the basin. This has brought about tensions concerning water governability, because a number of actors are demanding measures of environmental remediation but disagree on the priorities set by the implementation strategies.

Different government actors, professionals, NGOs and territorial collectives concur on the necessity of a comprehensive approach to water and sanitation management. But a closer look at the priorities and implementation strategies proposed by each sector reveals the differing meanings they have built, which are nothing else than the expression of differential interests and positions regarding the access to the resource. A careful reflection on the core topics shows that the list of priority public issues not always include the fulfilment of the social investment goals in water and sanitation services.

This article analyses the visions of the different institutional and non-institutional actors involved in water and sanitation management in the Metropolitan Area of Buenos Aires in order to describe the main disputes that have emerged in the public scene since 2006¹. Our intention is to stress the different ways in which the actors address the problem of inequality in the access to the resource, and how this debate has become more complex due to the inclusion of the environmental issue into the institutional agenda.

Our working hypothesis is that, in recent years, the water-related metropolitan conflicts have intensified by virtue of the emergence of new social and institutional actors demanding to be involved in the decision-making concerning water and sanitation.

On one hand, the Court's decision that calls for the sanitation of the MRB has given rise to a new political scenario demanding the inclusion of the environmental aspects into the water and sanitation policies. On the other, and as result of the previous process, a new institutional actor has appeared: the Matanza-Riachuelo Basin Authority (ACUMAR), which has to include goals of expansion of the water and sewerage networks in its Comprehensive Plan of Environmental Sanitation. Lastly, the demands from territorial collectives have gained relevance in the public scene. Historically, these collectives have been claiming access to the service. Today they are demanding shorter terms and the promotion of local ways of implementation. These last actors are setting a cognitive framework that considers the lack of access to the service a form of environmental injustice.

THE METROPOLITAN SANITARY AREA AND ITS HISTORICAL DEFICIT

AySA's concession area covers the political-administrative division called, since 1939, "Metropolitan Sanitary Area". This area comprises the Autonomous City of Buenos Aires and 17 districts within the Buenos Aires conurbation². It covers 1,752 km2 and has almost 10 million inhabitants, turning the company in one of the biggest providers of water and sanitation services in the world.

¹ The year 2006, as we will see, is a turning point for the water policies in the region, since both the Matanza-Riachuelo Basin Authority (ACUMAR) and the State-run company Agua y Saneamientos Argentinos S.A. (AySA) were created during that year.

² San Fernando, San Martín, San Isidro, Tigre, and Vicente López are the districts in the Northern Region; Hurlingham, Ituzaingó, La Matanza, and Tres de Febrero belong to the Western Region; Lanús, Quilmes, and Avellaneda are in the South-Eastern Region; and Almirante Brown, Esteban Echeverría, Ezeiza, and Lomas de Zamora belong to the South-Western Region.

More than half the districts make up the MRB³. From an environmental point of view, there are critical zones due to the location of industrial companies on the riverbanks, the presence of settlements in polluted places, and the existence of open-air dumps.

Currently, the greatest challenge faced by AySA is the lack of coverage in wide areas, even though the deficit has decreased in the last few years (see Table I). The shortage of infrastructure mainly affects the sewage collection and treatment. In 2009, 16% of the population did not have access to potable water⁴ and more than 40% did no have sewage drain service⁵ (Agua y Saneamientos Argentinos S.A., 2010). In that same year, the average amount of daily liquid disposed per inhabitant was near 400 litres, one of the highest in the region⁶. This means a huge asymmetry between those who have access to the services and those deprived of it (GRTB, 2011).

Table I: Households with potable water and sewage services. Metropolitan Area of Buenos Aires*. 2001-2010

Service	Area	Covera	Variation 2001 - 2010		
		2001	2010	2001 2010	
Potable	City of Buenos Aires	98	97	-1	
Water	Greater Buenos Aires	62	67	+5	
	MABA*	73	76	+3	
	City of Buenos Aires	97	98	+1	
	Greater Buenos Aires	37	41	+4	
Sewer	MABA*	56	57	+1	

(*) Data correspond to the city of Buenos Aires and 24 districts of the Greater Buenos Aires (Almirante Brown, Avellaneda, Berazategui, Esteban Echeverría, Ezeiza, Florencio Varela, General San Martín, Hurlingham, Ituzaingó, José C. Paz, La Matanza, Lanús, Lomas de Zamora, Malvinas Argentinas, Merlo, Moreno, Morón, Quilmes, San Fernando, San Isidro, San Miguel, Tigre, Tres de Febrero, Vicente López), of which only 17 municipalities are served by AySA.

Source: INDEC. National Population, Homes and Housing Census, 2001 and 2010.

This situation is the outcome of a long tradition within the national sanitary policies, which have always prioritised the expansion of the potable water network. But the expansion of the sewerage network has always come second, whether because of social demands, political times and/or economic profit⁷. The independent arrival of water without appropriate evacuation services entails serious environmental consequences. The increase in the volume of water in the hydrological basin (underground aquifers) causes a raise in the level of the water table, flooding the houses with contaminated water⁸. The raise of the water tables increases the sanitary risk for the population without sewerage services. They have to face the frequent failures of the dry wells, which overflow and contaminate the water tables from which they take water for their consumption. The more affected areas are located in the districts of Lomas de Zamora, Lanús, Tres de Febrero, San Martín and Almirante Brown (Clichevsky, 2002; Merlinsky, 2011). According to a respondent:

"Typically, water is prioritised against the sewers. It is an important social criterion. We'd rather provide people with water, instead of providing those who already have water with sewerage services. But from a sanitary point of view, it isn't right. From a sanitary point of view, the right thing to do is to provide people with both water and sewerage services at the same time. We already know that with the water service alone, the only thing that will increase is the sewage-related contamination. This way the water-related contamination is going to be eliminated; we can agree on that. But there is going to be an excess of water that has to be disposed. And since there is no sewerage network, that disposal entails the contamination of the underground water tables and the surface water. Or the contamination of the front of the house in many

³ The metropolitan sanitary area and the MRB operate in the same territory in the Autonomous City of Buenos Aires, La Matanza, Morón, Lanús, Avellaneda, Almirante Brown, Esteban Echeverría, Ezeiza, and Lomas de Zamora.

⁴ It amounts to 1,561,565 people.

 $^{^{\}scriptscriptstyle 5}$ It amounts to 4,015,826 people.

The regional average is 189.81 litre/inhabitant/day, according to data provided by Argentina, Mexico, Uruguay, Brazil, Honduras, Ecuador, Costa Rica, Panama, Colombia and Peru. Chile, El Salvador, Venezuela, Nicaragua, Paraguay, Bolivia and Dominican Republic haven't participated (ADDIN).

⁷ This situation was especially pressing during the private-run management of the service, under the company Aguas Argentinas S.A.

Another important factor in the raise of the water table is rooted in the reduction of the industrial activity in the area during the 1990s. In this context, many industrial plants closed their water-pumping wells, thus contributing to increase the water balance. (INA, 2002).

cases. In the Greater Buenos Aires, there are sewerage networks in form of small ditches that pass by in front of the houses and end up in the watercourses." (Interview to a member of the Argentine Association of Sanitary Engineering and Environmental Sciences / AIDIS.)

As it can be seen, the deficit of the sanitary infrastructure and the contamination of the resource threat the population with the risk of contracting the so-called "waterborne diseases" such as diarrhoea, hepatitis, cholera, malnutrition and poisoning. A few years ago the Argentine Society of Paediatrics warned about a possible hepatitis A outbreak, especially in the municipalities of the conurbation "... due to the sanitary conditions in which many children live, particularly caused by the poor quality of the sewage drains and water for consumption. The effective solution to the causes of the infection implies ensuring the provision of an appropriate water and sewerage system." (ACIJ et al, 2009: 18). Meanwhile, 53% of the people of the MRB are exposed to high levels of sanitary risk. And 14% deserve special attention because they live in areas with high population density (Aguas y Saneamientos Argentinos S.A, 2009).

Table II: Coverage of water and sewerage services per income quintile. Districts of the Greater Buenos Aires. 2003

Water					Sewerage							
	Q1	Q2	Q3	Q4	Q5	Р	Q1	Q2	Q3	Q4	Q5	Р
GBA 1	1	1	1	1	1	1	0.87	0.93	1	1	1	0.96
GBA 2	1	1	1	1	1	1	0.23	0.58	0.56	0.67	0.67	0.60
GBA 3	0.97	1	1	1	1	1	0.18	0.38	0.30	0.51	0.56	0.41
GBA 4	0.98	0.98	0.99	0.99	1	0.99	0.07	0.07	0.20	0.17	0.30	0.18

Source: Fernández and Herrero, 2008: 50

However, not all the inhabitants are affected in the same way, since the levels of coverage are not even throughout the concession area. In the Western Districts - Hurlingham, Ituzaingó, La Matanza, Morón and Tres de Febrero - area the most affected by the lack of running water, 33% of the population lacks the service, compared to 1% of the people living in the city of Buenos Aires. Southern populations - Almirante Brown, Avellaneda, Esteban Echeverría, Ezeiza, Lanús, Lomas de Zamora, Quilmes - are the most affected by the lack of sewerage networks. Sixty-four percent of people have no coverage, whereas only 1% of the population of Buenos Aires city is in that same condition.

The deficit of sanitary infrastructure is strongly linked to social vulnerability patterns, which leads to associations between poverty, contamination and exclusion. In fact, the distribution of services in the Metropolitan Area of Buenos Aires shows a discriminatory pattern of inequality against the low-income sectors. The areas without access to potable water and without sanitation services tend to correspond with the areas of lowest-income populations, where problems get worse because access to groundwater is not a safe option, whether because of the physical impossibility of getting it or because of its poor quality (Fernández and Herrero, 2008).

This shortage of services has different impacts on the quality of life of most impoverished sectors. Those with more economic resources can make up for this lack without affecting the satisfaction of their other basic rights. Whereas, those with fewer resources are forced to increase their livelihood costs in a disproportionate and unequal way, buying bottled water or drinking water from wells of - at least - doubtful quality. This causes a serious risk for their health, particularly in the case of children, pregnant women, sick people and old people (ACIJ et al, 2009: 1-2).

GOALS AND EXPANSION ACTIONS OF THE 2006 - 2020 MASTER PLAN

Based on the aforesaid, we can see that currently AySA must face important challenges: historical investment backwardness; the demands from a growing population wanting access to the services; and an important inequality in the coverage. While the high-income sectors have the service ensured, the inhabitants of poor areas, exposed to high environmental risk, can only be connected to the network if an ambitious investment plan is implemented. That is why the company has designed the 2006-2020 Master Plan foreseeing the expansion of the potable water network and the sewerage network to almost 100 percent of the population. This means connecting near 1.5 million inhabitants to the water network and including 3.5 million into the

sewerage network in the next ten years. By 2013, the plan is expected to provide 100 percent of the population with potable water and 80 percent with sewage drains. This represents the inclusion of 1,750,000 inhabitants into the sewage network. The project's total investment amounts to 17.64 billion pesos, which will be funded with the company's own resources (52%); national funds (38%); provincial and municipal funds (5%); and funds from the city of Buenos Aires (5%). (Agua y Saneamientos Argentinos SA, 2006).

Actions in the Master Plan include developing basic infrastructure, expanding the existing facilities and renovating and/or restoring the networks. With regard to potable water, the "Paraná de las Palmas" treatment plant, in Tigre, and the "Virrey del Pino" reverse osmosis plant, in La Matanza, will be built. Regarding the sewerage network, the Plan foresees the creation of a new effluent treatment plant in Berazategui - called "Planta del Bicentenario" -and the projects related to the Matanza Riachuelo System. These include the creation of the Left Bank Collector, the Bajo Costanera Collector bypass, a sewage pre-treatment plant in Dock Sud and a sub-fluvial outfall in Riachuelo Plant, which will allow discharging the previously treated effluents into the waters of the Río de la Plata.

It is interesting to note that, in order to achieve the extension of the sewerage network, AySA plans to modify the current layout of the network. To that end, they have to build a big underground collector - Left Bank Collector - that will run in a parallel direction to the Riachuelo and will intercept most of the effluents that the Berazategui basin receives today through the main sewers. The intention is to split the current basin called Capital Wilde in two different basins - Capital and Berazategui - in order to take advantage of the Río de la Plata assimilation ability.

The new collector will allow reducing the volume of flow to the Berazategui basin, which has exceeded its full capacity and, by doing this, will be able to receive new effluents from the areas being incorporated to the network. So, this project is crucial for the company to be able to expand the coverage in the Southern area.

Table III: Infrastructure Works, 2006-2020 Master Plan

Project	Estimate Amount of Beneficiaries	Estimate Investment
"Paraná de las Palmas" water treatment plant - Tigre District	2 million people	\$2.8 billion
En casillero separado de "Del Bicentenario"	400 thousand people	\$50 billion
"Del Bicentenario" effluent treatment plant - Berazategui District	4 million people	\$500 million
Matanza Riachuelo System (1)	w/d	w/d

(1) It includes the construction of the left bank collector, the Bajo Costanera collector bypass, the sewage pre-treatment plant in Dock Sud and the Riachuelo Plant sub-fluvial outfall.

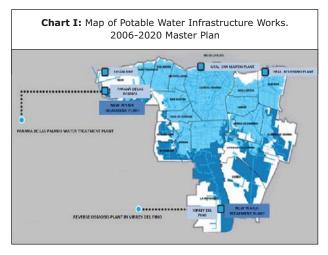
Source: AySA S.A web site (Search: September 2011)

In the short and medium terms, the Master Plan foresees other smaller-scale projects, also intended to improve and expand the sewerage services. These projects include expanding the Jagüel and Sudoeste treatment plants, and building two new treatment plants: Laferrere Plant, in La Matanza, and Fiorito Plant, in Lomas de Zamora.

The problem of this proposal - which continues, out of inertia, with a centralized model developed in the last century - is that the range of coverage in the municipalities of the region is heavily dependent on the realization of the major projects (Merlinsky, 2011). In this situation, social demands for "local and prompt" answers to water and sanitation issues challenge AySA's plan, opening a debate on the way and the time to solve the problem. This is where the territorial collectives use different strategies in order to speed up the service provider's response times.

53

The Berazategui basin includes, in the North, San Isidro and Vicente López districts; in the West, Tres de Febrero, San Martín, Morón and a part of La Matanza; the city of Buenos Aires; and in the South, Avellaneda, Lanús, Lomas de Zamora, Almirante Brown, Esteban Echeverría and Quilmes. Besides, it receives effluents from Florencio Varela and Berazategui districts.



Source: Presentation of the Master Plan by AySA (2010)

ACTORS INVOLVED IN WATER AND SANITATION POLITICS

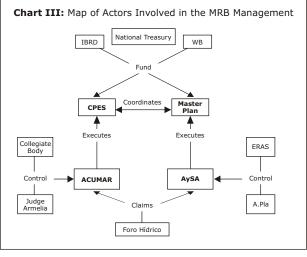
During the last decade, the map of actors with impact and responsibility on water and sanitation policies for the Metropolitan Area of Buenos Aires has been modified by two important institutional processes. We are referring to the creation of AySA and to the political impact of the "Beatriz Mendoza" case, which has resulted in the preparation of a Comprehensive Plan of Environmental Sanitation (CPES) of the MRB. This new scenario involves multiple and diverse actors, which through their roles and resources have an impact on the service management.

National Supreme Court of Justice

Chart II: Map of Sewage Drains Infrastructure Works.
2006-2020 Master Plan

NEW TRAINENT
PLANT
PROJECTS OF MATANZA BIACHUELD SYSTEM
The system schedule the Inflorming projects
Legis Consultation Collector
Legis Consultation Consultation
Legis Consultation Collector
Legis Consultation Collector
Legis Consultation Consultation
Legis Consul

Source: Presentation of the Master Plan by AySA (2010)



Source: Compiled by authors

The Supreme Court of Justice became involved in the MRB in 2006, when it declared its original jurisdiction on the claim filed by a group of neighbours led by Beatriz Mendoza. They were suing the National State, the Province of Buenos Aires, the Government of the Autonomous City of Buenos Aires and 44 companies for damages due to the contamination of the Matanza-Riachuelo River*. Since then, the Court has assumed an active role in the case, requiring that the defendants present a basin sanitation plan. It has also created a system of social monitoring of the case through the incorporation of the Nation Ombudsman's Office and environmental NGOs as "friends of the court" (amicus curiae).

The legal dispute regarding the sanitation of the Riachuelo challenges the very meaning of the productive expansion in the region. And it draws attention to the fact that the environmental issue should in no way be the adjustment variable for the individual economic scheme of the companies. Thus, the Supreme Court of Justice has become a crucial actor for the inclusion of the Riachuelo sanitation issue into the public agenda. And today its role is to actively promote the implementation of environmental policies.

In their class action, they held the National State responsible, since the reported situation corresponds to an inter-jurisdictional waterway under the National State regulation and control. They also held the Province of Buenos Aires responsible because it has the original control on the natural resources present within its territory. Besides, they also held the Autonomous City of Buenos Aires responsible because it is located on one of the banks of the Riachuelo, which in its jurisdiction is a public domain asset. Finally, this group also sued the neighbouring companies for having dumped their dangerous waste directly into the river, for not having built treatment plants, for not having adopted new technology and for not having minimized the risks of their productive activity. (CSJN. Causa M. 1569. XL, 2006).

Matanza Riachuelo Basin Authority

ACUMAR is responsible for the implementation of the CPES. In order to do so, it has powers of regulation, control and promotion of the industrial activities, the public services and any other activity with impact on the basin. Thus, it is able to administratively act in terms of prevention, sanitation, re-composition and rational use of the natural resources. Its jurisdiction covers the Autonomous City of Buenos Aires and the fourteen municipalities of the province of Buenos Aires which make up the basin¹¹.

The Authority's faculties, powers and competences in environmental matters prevail over any other concurrent one within the territory. However, it is necessary to note that, in the case of water and sanitation, ACUMAR has not the necessary faculties to carry the project implementation through. In this regard, an important challenge faced today by the basin sanitation policy has to do with the difficulty the Authority has in reaching agreements with other actors with concurrent competences within the territory and/or with direct bearing on water management, as in the case of AySA.

Agua y Saneamientos Argentinos S.A.

In 2006, after the great problems following the breach of the concession contracts, Aguas Argentinas S.A.¹² abandoned the provision of the service. In order to replace it, the government created the company AySA¹³, granting 90% of the capital stock to the National State, under the control of the Ministry of Federal Planning, Public Investment and Services, and 10% to the former workers of *Obras Sanitarias de la Nación* adherent to the stock ownership program.

The new body is in charge of managing and expanding the provision of water and sanitation services in the concession area. To that end, it is responsible for tasks concerning the construction, expansion and exploitation of the works for water provision and urban sanitation; tasks aimed at renovating and restoring; and tasks related to the exploitation and use of underground and surface waters. Another responsibility is to control, directly or indirectly, the industrial effluents being discharged into the collector, in order to verify if they are meeting the standards.

Multilateral Credit Agencies

The execution of the Master Plan projects is subject to the contributions of the national treasury and to the achievement of external credits, which entails the involvement of other actors in the water and sanitation management. During 2009, an agreement was signed with the International Bank of Re-construction and Development (IBRD) for a loan intended to fund most of the sewerage works which make up the goals of the Comprehensive Plan of Environmental Sanitation (CPES).

The international credit agencies are known to have played a central role in funding programs intended to achieve the sanitation and recuperation of the Matanza Riachuelo basin. However, it has not necessarily ensured the execution of the works. For example, in 1998 Argentina signed a 250-million dollars loan with the Inter-American Development Bank (IDB). For years, this loan had been under-executed, generating higher costs due to punitive interests, and mostly used to purposes not related at all to the issues of the basin (Nápoli and García Espil, 2010: 19). Today, funding is crucial when thinking of the environmental recuperation of the MRB and the realization of basic sanitation works.

¹¹ The municipalities that make up the basin are: Almirante Brown, Avellaneda, Cañuelas, Esteban Echeverría, Ezeiza, La Matanza, Lanús, Lomas de Zamora, General Las Heras, Marcos Paz, Merlo, Morón, Presidente Perón and San Vicente.

The company Aguas Argentinas was created in 1993, based on the concession contract signed by a consortium led by the French company Suez for the provision of water and sanitation services in the Metropolitan Area of Buenos Aires.

Decree PEN 304/06, ratified by Law 26.100

Territorial Organisations Focused on Water: The Case of Foro Hídrico de Lomas de Zamora

We must not forget the presence of other relevant actors-the social organizations, which for years have been demanding sanitary and environmental policies. This is the case of *Foro Hídrico de Lomas de Zamora*, a group of citizens demanding the realization of sanitary infrastructure works in the South of the Metropolitan Area of Buenos Aires.

What is special about the Foro Hídrico is that, over the years, it has become a network of organisations based on the coordination and collaboration of different action groups in the area. The logic has been an aggregation of claims through flexible grouping mechanisms, which has allowed them to achieve a comprehensive approach to the hydrologic issues of the district. Thus, the fact that the problems of the region are interconnected is being acknowledged. And at the same time, there have been proposals of long-term interventions that take into account the preservation of resources, the sanitation and the environmental impact assessment of the works being performed in the area.

These proposals have been built based on the knowledge and tools the organisation has acquired through the interaction with other social actors, bearers of "expert knowledge", such as universities, research centres and even international organisations such as *Médicos del Mundo*. With all these skills, the *Foro* has been able to build expertise in hydrological issues, becoming the social organisation with the greatest knowledge base on the subject of the district. This expertise and the comprehensive approach to the hydrological issue have allowed the *Foro* to prepare their own arguments challenging the way in which the authorities in charge of the service (the municipalities and the company AySA) conceive the water and sanitation problems, and even their possible solutions. The arguments presented by the organisation are not only limited to a critical stand against the decisions and plans developed by those in charge of policies. They are also proactive, since they offer alternative answers based on the expert knowledge they have been able to build over the years.

SOCIAL DEMAND TIMES & THE TERRITORIAL CONFLICTS OVER THE SERVICE EXPANSION

All the actors agree that the works in AySA's Master Plan are a part of a planning model that goes back to the 1970s. In part, it coincides with the plan of works once developed by Aguas Argentinas S.A. In this regard, the crucial problem is the lack of long-term funding for the works and the sustaining of the plans. In this respect, during the last three decades, history has sadly showed that there have been no significant investments in sanitation and that, even in the short term (five-year plans), there have been no effective planning and management tools. The actors representing AySA's approach affirm that it is necessary to advance the construction of the primary collectors because it would allow solving, subsequently, the problem of sewerage networks in the South.

There is a tension between the company's vision based on a technical rationality (first the collectors and then the secondary networks) and the demands from the territorial organisations, who believe that rationale does not solve their problems, neither in the short nor in the middle term. From the *Foro Hídrico's* point of view, the investments must not be determined by a cost-benefit calculation. Instead, it is necessary to clearly identify the priorities in terms of the population's needs and living conditions. Thus, these organisations, and other territorial collectives, take action and fight to change the terms set by the Master Plan.

The tension between the aforementioned positions is clearly reflected in two fragments extracted from interviews carried out during our research project:

"... You need water, you need sewers... In the South of the conurbation, you need sewers. But, since there is no building capacity, it doesn't matter if there is a strong social demand, it doesn't matter if we are in a state of emergency. Until the left bank collector is built, as I was telling you earlier, we can't build the sewers... For the great expansion of the sewerage network of the Southern conurbation - that is, Lomas de Zamora, Lanús, Avellaneda, Almirante Brown, Quilmes - first, we need planning, and getting the resources (what we have already done with the most important environmental credit granted by the World Bank, the credit for

Argentina's Environmental Care) for the construction of the left bank collector. When left bank collector is almost completed, a year before that, we will be able to start the secondary sewerage networks in that area of the Greater Buenos Aires, which is very wide and populated and has many demands." (A.Pla's official)

"Is the Dock Sud sewage treatment plant the solution? Time will tell. This is a mega-plant for thousands of people planned, mainly, for the city of Buenos Aires and the Northern region of the conurbation, where the effluents go... The fact is that if we stop it there, if we let it arrive only at that point, then all that capacity goes to the Southern area. This is a project with the long-term in mind. And it will depend not only on this government political action, but also on the future governments. We are talking about works that will be completed 15 years from now. I really don't know if when this is expected to be finished, in 15 years, another government will come and say: 'Wait, there is a better project. We are going to build a space plant.' And then they'll change the project and move it to the year 2045." (A neighbour member of the Foro Hídrico de Lomas de Zamora)

Therefore, operating on the territory not only means being technically able to perform works, it also requires a political decision that is not ensured in the long term.

FINAL THOUGHTS

Inequality refers to a differential relation in terms of access to and enjoyment of goods, experiences, positions, social status, and living conditions valued by the society (Berard, 2006). Since water and sanitation provision is a result of an investment flow that must be sustained over time, the gap in access increases as the execution of the works is delayed. This process worsens because population growth rates are higher where the investments deficits are higher. It is complex because it is possible to develop distributive measures in the short term, but the long-term perspective calls for stable and sustained political and economic horizons.

When analysing the conflicts concerning the access to potable water and sanitation in the Metropolitan Area of Buenos Aires, it is possible to identify a new political and institutional scenario. This new setting entails the nationalisation of the service and the emergence of institutional demands regarding the fulfilment of environmental goals. Correspondingly, there is an incipient public debate regarding the social and environmental consequences of the water management model.

The lines of analysis here outlined allow raising far reaching questions, paving the way for posing the following issues: How does the poor access to water and sanitation contribute to generate unequal living conditions in the city? How does this inequality recur as the investment deficit increases and the population grow? And lastly, in which way are the lack of availability of water and sanitation defined in terms of a legitimization of inequality?

It has been our intention to emphasize the main tensions existing between the positions expressed, at a discursive level, by a wide range of social actors involved in the water politics in the metropolis of Buenos Aires.

We have seen that, in principle, the different actors agree on the need to reverse a gap which, in terms of investments in water and sanitation, has been growing in the last decades. In order to be able to understand how the actors set the priorities, we have examined the different points of view regarding water and sanitation. An in-depth analysis of the actors' discourses shows that the desirable scenario for the different social groups implies the elaboration of diverging meanings responding to opposite interests concerning the access to water and sanitation.

The crisis resulting in the creation of AySA and the emergence of the legal case "Beatriz Mendoza" regarding the Riachuelo contamination have dramatically modified the map of actors with influence in the basin, as well as the strategies aimed at implementing solutions. The creation of a Basin Authority, the CPES and the efforts aiming at coordinating it with AySA's Master Plan are the most significant landmarks in this process.

- (a) The State's technical suitability for operating in the territory, but also its political ability to ensure the realization of the water and sanitation works in the short and middle terms. A key point is that the company AySA has more financial and technical power than the other actors and is who sets the investment policy for the territory. The position presented by the company's spokespersons poses an inertial approach, since it consolidates a plan of works that was developed several decades ago.
- (b) The tension between AySA's sectorial approach and the comprehensive approach suggested in the CPES. What is new here is the call for advancing the sewage sanitation as a central step towards the recuperation of the Riachuelo. Thus, there is an actor with institutional relevance, the Supreme Court of Justice, willing to control the progress of these works and to demand for guaranteed funding, in an attempt to tilt the scales in favour of sewage sanitation.
- (c) The questioning in terms of the existing "social gap." A "dominant argument" for not moving forward with the works is that the population living in slums and settlements occupy lands that are "not suitable" for large infrastructure works. The emergence of organisations like the Foro Hídrico has made it possible to open this debate and, especially, to re-think the order of the works with respect to technological alternatives that would enable the provision of services in the short term.

In this set of tension points, it is possible to identify the emergence of a discursive coalition that refers to the need of executing the Master Plan, in order to alleviate the historical investment backwardness. At this point, if through these controversies the actors are describing different future scenarios (five years, twenty years, and so on), it is important to highlight that this discussion is triggered by the territorial groups. We have considered for this analysis only one actor (the *Foro Hídrico*) but there are many others (for instance, *Espacio Intercuencas*, neighbour associations and local assemblies) who are proposing a new grammar of demands that refer to the right to a healthy environment. As these claims are presented in terms of environmental justice, they spark public discussion about more global devices that organise the distribution and the legitimisation of the difference. In Buenos Aires, water has gained visibility as an environmental problem and as a social issue.

We have not discussed a point that is entering into the debate (although it has less weight because no actor is supporting this discussion): the financial issue with respect to the sustainability of the works in the long term. This implies challenging the rate schedule and the protection of the hydrological resource. This includes a debate on the rational allocation of the resource, the implementation of micro-measurement mechanisms and/or a new schedule of differential subsidies.

ACIJ, CELS & COHRE. 2009. El acceso a agua segura en el Área Metropolitana de Buenos Aires. Una obligación impostergable.

Available in: http://www.cels.org.ar/common/documentos/agua_INFORME_COMPLETO.pdf. (Search: August 2011).

Agua y Saneamientos Argentinos S.A. 2006: Folleto puntual: Plan de Saneamiento 2007-2020. http://www.aysa.com.ar/index.php?id_seccion=244. (Search: August 2010).

Agua y Saneamientos Argentinos S.A. 2009. Estudio Socioeconómico y Ambiental en la Cuenca Matanza Riachuelo, Vol. I, II, III and IV. Buenos Aires.

Agua y Saneamientos Argentinos S.A. 2010. Informe al usuario. Datos a diciembre de 2009. Available in: http://www.aysa.com.ar/index.php?id_seccion=510. (Search: August 2010).

AySA. Agua y Saneamientos Argentinos S.A. Available in: http://www.aysa.com.ar/. (Search: September 2011).

Berard, T. J. 2006. "From Concepts to Methods. On the Observability of Inequality", Journal of Contemporary Ethnography 35 (3).

Clichevsky, N. 2002. Pobreza y políticas urbano-ambientales en la Argentina. Santiago de Chile; CEPAL-ECLAC. División de Medio Ambiente y Asentamientos Humanos. Documento n.49.

Dourojeanni, A. 2003. "Conflictos y conciliaciones para la gestión sustentable de las cuencas: aspectos políticos e institucionales" Lecture at III Congreso Latinoamericano de Manejo de Cuencas. Arequipa, Peru. June 8th, 2003.

Dourojeanni, A. y Jouravlev, A. 2001. Crisis de gobernabilidad en la gestión del agua. Desafíos que enfrenta la implementación de las recomendaciones contenidas en el capítulo 18 del Programa 21. Santiago, Chile: CEPAL, Serie Recursos Naturales e Infraestructura LC/L.1660-P N 35.

Fernández, L. y Herrero, A. C. 2008. "Demanda sanitaria en la Región Metropolitana de Buenos Aires." In L. Fernández y A. C. Herrero (editors); De los ríos no me río. Diagnóstico y reflexiones sobre las cuencas metropolitanas de Buenos Aires (pp. 45-78). Buenos Aires: Temas Grupo Editorial.

GRTB. 2011. Informe anual de benchmarking 2010. Datos año 2009. Asociación de Entes Reguladores de Agua Potable y Saneamiento de las Américas.

Available in: http://www.aderasa.org/docs_bench/Informe_Anual_GRTB-ADERASA_2010.pdf. (Search: August 2010).

Merlinsky, G. 2011. "El plan integral de saneamiento ambiental de la cuenca Matanza_Riachuelo: desafíos para la gestión integrada del agua en la Región Metropolitana de Buenos Aires". In: Isuani, F (editor); Política pública y gestión del agua. Buenos Aires: Coedición UNGS - PrometeoLibros.

Molle, F. 2004. "Defining water rights: By prescription or negotiation?", Water Policy, 6, pp. 207-227.

Nápoli, A. y García Espil, J. 2010. "Recomposición ambiental de la cuenca Matanza - Riachuelo". In Informe Ambiental Anual 2010. Buenos Aires: FARN, pp. 197-240.

59