

# **WATER MANAGEMENT IN CÓRDOBA (SPAIN): A PARTICIPATIVE, EFFICIENT AND EFFECTIVE PUBLIC MODEL**

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## **WATER MANAGEMENT IN SPAIN**

Spain is a highly politically-decentralised state and it is geographically organised into autonomous regions. The three existing government levels – state, regional, and local – are involved in water management. As far as the urban water cycle is concerned, the main responsibility is usually with local corporations, though there are some exceptions where responsibility depends upon regional public organisations, as in the case of Canal de Isabel II in the Madrid region.

In Spain there are more than 8,000 municipalities that vary considerably in size. Local responsibilities include drinking water supply, sewerage and sanitation services. In many cases, these services are supplied through multi-municipal associations or consortiums, which help improve scale economies.

Historically, there is an important tradition of public water management through basin organisations (Confederaciones Hidrográficas or Hydrographic Confederations) and public utilities, some of which, such as Canal de Isabel II, have been active for over 150 years. The 1985 Water Law establishes three basic principles: water is unique (included in the water cycle), water is public (through public hydraulic control by the state) and water is subject to hydrological planning (through Basin Hydrological Plans and the National Hydrological Plan). Nevertheless, some water is still in private hands, such as bottled drinking water, which is subject to mining legislation and, though relatively minor in volume (300 annual cubic hectometres in 1994), generates significant business worth around €500 million every year. Another exception is that of the Canary Islands, where the existence of different legislation has allowed the private ownership of underground water and the creation of a market for it.

Water privatisation in Spain can be addressed on several levels. On the one hand, public administrations are undertaking structural changes that favour the privatisation trend, such as the introduction of emerging water markets in the 1999 Water Law reform, the withdrawal of public law from hydrological constructions, or the externalisation of tasks usually performed by hydraulic administrations. On the other hand, the private sector oversees the construction and management of hydraulic infrastructures for irrigation. Besides, the water supply and sanitation services management in cities is privatised. Finally, business is expanding towards the management of large hydraulic infrastructures (regulatory and supply dams, piping and general pumping, etc).

Management of water supply and sanitation systems in cities has been the traditional target for privatisation. According to data from the last National Survey on Supply and Sanitation<sup>1</sup> (2002) conducted by AEAS, bodies operating in this sector were billing around €3,000 million. The following table shows their management regime and an increase in privatised management in 2002, compared with 1998, of around 8%.

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<sup>1</sup> Encuesta Nacional de Abastecimiento y Saneamiento.

<u>Management regime (percentages according to covered population)</u>			
	1998	2000	2002
Local organisation	7 %	7%	6%
Public company	49 %	45%	42%
Private company	32 %	36%	40%
Joint venture	11%	11%	11%
Other	1%	1%	1%

Joint ventures are business companies whose stocks are partly owned by a local organisation and partly by a private company. In most cases, the local organisation holds a majority, but not always. They are generally included in the field of private management since the theoretical control that the town council may have as part of the board of directors is useless because the private partner is usually responsible for the company management and the strategic decisions derived from the service operation.

The characteristics of the private sector involved in water management in Spain can be summed up as follows:

- The existence of two large multi-service groups, Aguas de Barcelona (Agbar) and Fomento de Construcciones y Contratas (FCC), with an aggressive expansionist trend and strong international projection, especially towards Latin America. These two groups control 80% of private water management business in Spain.
- Their strength and lobbying capacity determines the rules of free competition and this affects the neutrality and strict criteria for tenders.
- There are difficulties in exerting effective public control over service performance and quality, and compliance with contracts.
- There are significant increases in tariffs, since they not only have to include the private company's benefits, but also the gradual paying of millions of Euros-worth of taxes to town councils for concessions.
- Insufficient human resources. Difficulties in regulating working relationships within the sector (collective agreements, trade union representation, etc.).
- Impossible to articulate participation and citizen control channels in water management and difficulties for citizens to successfully channel individual complaints.

Agbar has become a multi-service multinational with the help of Suez-Lyonnaise, which has a 30% share of the company, and has diversified its activities to cover a wide range of services (water, environment, health insurances, automobile services, construction, etc). Its international business portfolio in the water sector is 50% higher than its Spanish portfolio. Within the water sector, there are more than 25 companies, among them: Agbar Internacional, Sorea (100% Agbar), Aquagest (100% Agbar), Asturagua (>50% Aquagest) and Canaragua (>50% Aquagest).

FCC has a 28% share in Veolia Water (previously Videndi) and it has diverse activities in water, environmental, cleaning, real estate and construction services. All its water supply and sanitation management companies have unified under the name of Aqualia: Seragua

(100% FCC), Sogesur (100% FCC), Sociedad Ibérica de Aguas (100% FCC), SMA (100% FCC), Tedesa (100% SMA).

These two groups also hold joint shares, which gives them a monopoly in the market. Agbar and FCC have a 50% share in Searsa and Aguas Filtradas.

It is worth noting that the privatisation cases analysed by the Public Services Watch at the Complutense University in Madrid<sup>2</sup> did not respond to the lack of efficiency but to the political willingness to open the doors of water management to private business sectors and/or to get extra-budget financing through the taxes paid by concessionaires when getting a concession. There are examples of well-managed public utilities: Canal de Isabel II (Madrid), Zaragoza, Consorcio del Gran Bilbao, EMASESA (Sevilla), EMACSA (Córdoba), EMAYA (Palma de Mallorca), Aguas de Gijón, Aguas de Santa Cruz de Tenerife, etc. These utilities are amongst the most efficient and effective organisations in the sector and are approved of by citizens; nevertheless, in some cases they are the object of continuous pressure for privatisation. The mismanagement of other municipal companies or services is generally due to the lack of political will or to the incompetence of government officials unable to analyse problems affecting water services and find organisational and functional public solutions appropriate to each case.

In Spain there are some good examples of urban water cycle public management that are little known but could be extended to other places. This is the case of Córdoba, a town that has created a participative model for municipal public management in the Córdoba Municipal Water Utility (EMACSA).<sup>3</sup> Participation and political will have been decisive factors in establishing this high-quality, citizen-centred water service.

## **WATER MANAGEMENT IN CÓRDOBA: EMACSA IS BORN<sup>4</sup>**

Córdoba is the capital of a province with the same name and belongs to the autonomous region of Andalucía. It has a population of 316,528 inhabitants (2001), a surface of 1,253 square metres and a population density of 245 inhabitants per square metre. The Guadalquivir River crosses the town from east to west and divides it into two quasi-symmetrical zones. Its climate is characterised by sharp contrasts and could be classified as continental, with temperatures falling below zero in winter and rising to over 45° C in summer.

Córdoba has more than 2000 years of history. During the Roman Empire, it was the capital of the Betica region and in the 10<sup>th</sup> century it was the main town of the Córdoba *caliphate*, when it achieved its greatest splendour and its population reached nearly one million. Córdoba has been declared an historical and cultural World Heritage Site because of its impressive situation and the preservation of historical monuments. All this creates a unique place that requires all maintenance or repair work, as well as the development of new supply and sanitation systems, to be undertaken in a specific way, without altering the urban environment and with the utmost speed.

Even if Romans and Muslims created important hydraulic infrastructures to transport water from nearby mountains, for the purpose of this document the first significant event took place in 1891 with the foundation of the Córdoba Drinking Water company<sup>5</sup> and the design of the first water supply project for the town. In 1930, construction started on the

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<sup>2</sup> Observatorio de los Servicios Públicos, Escuela de Relaciones Laborales-Universidad Complutense de Madrid.

<sup>3</sup> Empresa Municipal de Aguas de Córdoba.

<sup>4</sup> A more detailed description of this case is available at [www.watertime.net](http://www.watertime.net)

<sup>5</sup> Aguas Potables de Córdoba.

Guadalmellato Dam, the main supply source for Córdoba. In 1938, the town council purchased the Córdoba Drinking Water company and the water supply thus became a municipal service. The new company was renamed Córdoba Drinking Water Municipal Service.<sup>6</sup> Nevertheless, the company's deficiencies became evident and they were considered to be a restrictive factor for urban development. The situation underwent a significant change in 1995 with the construction of the Villa Azul water treatment plant. It was then that Córdoba began benefiting from a better-quality water service. The Guadalmellato Dam enlargement took place shortly afterwards, in 1960, and it was connected to the Villa Azul plant in 1964.

The second significant event took place in 1969, when the water service was changed into a public utility, EMACSA. Thus Córdoba became one of the first Spanish municipalities to create an autonomous organisation for water management. The legal definition chosen, that of a public utility, was an important strategic decision, not only because it gave the organisation the ability to successfully face the challenges of service renovation and modernisation, but also because this kind of organisation would later allow for the development of mechanisms for participation and transparency.

In 1979, after the first democratic elections were won by Left-wing candidates (PCE, PSOE and PSA)<sup>7</sup>, the third and maybe most important event took place: the introduction of a participatory model in EMACSA that allowed civil society representatives, trade unions and opposition political parties to participate in the organisation's decision-making processes. This participation, consolidated in the following years, has been a key element in guaranteeing financially, socially and environmentally efficient management.

The success of this initiative has probably been due to a number of factors: the past and current strength of associative movements in Córdoba; the relevance of the alternative Left in the town, first represented by the PCE and later by the IU Party<sup>8</sup>, whose policies have focused on safeguarding civil rights and citizens' participation; and the continuous support of successive municipal governments, all of them Leftist since 1979 until today, except for the period 1995-1999, when the PP<sup>9</sup> party was in office (see table below). Even in that period, when there were rumours of the possible privatisation of EMACSA, the Right did not dare to remove the existing participatory model.

<b>Municipal elections</b>	<b>Government team</b>	<b>Mayor</b>
1979	PCE-PSOE-PSA	Julio Anguita (PCE)
1983	PCE	Julio Anguita (PCE)
1987	IU	Herminio Trigo (IU)
1991	IU	Herminio Trigo (IU)
1995	PP	Rafael Merino (PP)
1999	IU-PSOE	Rosa Aguilar (IU)
2003	IU	Rosa Aguilar (IU)

<sup>6</sup> Servicio Municipal de Aguas Potables de Córdoba.

<sup>7</sup> PCE, Partido Comunista de España or Spanish Communist Party; PSOE, Partido Socialista Obrero Español or Spanish Socialist Workers Party; PSA, Partido Socialista de Andalucía or Andalucía Socialist Party.

<sup>8</sup> IU, Izquierda Unida or United Left.

<sup>9</sup> PP, Partido Popular or Popular Party.

## **PARTICIPATION MECHANISMS AT EMACSA**

It is worth pointing out that participatory mechanisms at EMACSA are similar to those existing in all public utilities of Córdoba's town council, since they all follow the basic principle of promoting citizens' participation in public management, a principle defended by successive governments. For this reason, a "Citizens Participation Regulation" was enacted in 1981 (one of the first in Spain) and a new department for citizens' participation was created within the municipal structure.

EMACSA's structure is that of a public limited company (general shareholders' meeting, board of directors, president and manager) completely owned by the town council. Participation takes place directly through its main management organ, the board of directors. The board has a plural membership, something that reflects the reluctance of the group or groups with a majority in the town council to transfer this majority to the board.

The current board is made up as follows:

\*) With rights to speak and vote: two counsellors nominated by each of the three political groups represented in the town council (IU, PP and PSOE), two counsellors nominated by each of the two main trade unions (CCOO and UGT)<sup>10</sup>, and one more counsellor nominated by civil society movements.

\*) With rights to speak but not to vote: EMACSA's manager, general secretary and the town council auditor.

This system provides for participation that guarantees a joint decision-taking process shared by the different actors on the board of directors. The board takes decisions related to the company's budget formulation, elaboration, implementation and control; that is, it participates in all decision-making processes relevant to the company. Information is fully available for all board members and it is also available to citizens through different channels (website, news bulletins, etc). Political groups' representation is on an equal basis and not according to election results. Representatives proposed by trade unions depend on provincial branches and not on the company's union sections, which helps to reflect the general interests of all workers in Córdoba. The civil society representative is chosen by neighbourhood associations and other civil organisations (ecologists, consumers, housewives, etc.). This kind of organisation has a long tradition and is well established in Córdoba, where neighbourhood associations have around 40,000 members (13% of total population).

The general secretary's and general auditor's presence on the board, with the right to speak but not to vote, provides the board with legal and accountancy assessors, thus ensuring compliance with current laws and the company's accountability.

Counsellors are appointed for four years and cannot be dismissed unless they resign, giving it stability and independence. They are paid less than €200 per session (as compensation for expenses), so that their decisions are not biased by economic interests.

As a result of this participation mechanism, the party or parties in local office do not hold a majority in the board so as to "impose" any kind of decision, which provides for genuine participation in decision-making processes.

Through interviews conducted in the framework of the Watertime project with past and current board members, we have confirmed that internal information is circulated to members well in advance of meetings. The board dynamics are based on a search for

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<sup>10</sup> CCOO, Comisiones Obreras or Workers Commissions; UGT, Unión General de Trabajadores or Workers General Union.

consensus in the decision-making process, especially with regard to strategic decisions. The board is also a forum to debate and look for solutions that take into account the interests of all those affected. It has also been a very useful instrument at times when it has been necessary to adopt measures affecting different groups with opposing interests by finding imaginative solutions that were consented to by all groups.

The manager's position as a key actor in the utility's management has systematically been assigned to a water sector professional, something that was prioritised over the ideological closeness to the group or groups with a majority in local government.

## **ADAPTING EMACSA TO NEW SOCIAL, LEGAL AND ENVIRONMENTAL DEMANDS**

In 1980, EMACSA started a modernisation process that improved the service quality and adapted to new social and environmental demands, thus becoming one of the most prestigious companies in the water sector. These improvements can be evaluated through several indicators.

It is important to note that citizens have a good opinion of EMACSA, as reflected in several interviews and from opinion polls organised by the Watertime project amongst all relevant sectors (businessmen, trade unions, neighbourhood associations, consumers' and users' organisations, ecologists, etc.). We should also stress the low number of complaints submitted by users (0,009 complaints per connection per year).

The improvement in the company's performance has been seen especially in the guarantee of a drinking water supply, the service quality, the environmental improvements achieved and the receptiveness to citizens' demands.

In order to avoid problems traditionally arising during drought periods, collection and storage infrastructures were improved and enlarged. That is why during the serious drought in 1995, Córdoba was the only town in the southern Andalucía region without water restrictions. Additionally, policies for consumption reduction have been launched through awareness campaigns, meter installations (they are currently installed in a 100% of connections) and leakage reduction measures in the supply network through a multi-annual plan that provides for its renovation at an annual rate of 3-4%. All these activities have helped to reduce leakages in the system by 15% and to reduce the daily supply of drinking water to the current 250 litres per person/day.

The excellent quality in drinking water today has been achieved using the best technologies available and adopting strict quality control systems. In 1999, EMACSA established a quality management system based in the ISO 9000 standard, and in 2004, an environmental management system based in the ISO 140001 standard. In 2000, a new laboratory for quality control was constructed where all analysis and controls required by European regulations are done.

The water environment improvement has been an essential component in EMACSA's performance. Amongst its greatest achievement, the following can be highlighted:

- In 1991, La Golondrina sewage treatment plant started operating and its effluents comply with the limits established by European Directive 91/271/CE on wastewater treatment. Water sanitation and treatment services currently cover 100% of the population.
- New correcting policies against pollution caused by industrial effluent dumped into the sewerage system or the Guadalquivir River. In 1996, EMACSA decided to integrate the treatment for wastewaters coming from a large yeast factory in the La

Golondrina treatment plant. This decision involved the construction of a specific anaerobic treatment unit financed by the factory. The measure prevented the factory from closing and guaranteed 200 direct jobs and another 200 indirect jobs.

- Together with the Hydrographic Confederation, there has been the environmental recovery of the Guadalquivir River in the town area, improving its banks with river vegetation and rehabilitating historical hydraulic bridges and mills.

In the social field, the following are notable: reasonable water tariffs (€0,84 /cubic metre on average) covering all water service-related costs; 100% supply coverage; the establishment of a Users' Rights Charter; commitment by the town council to guarantee a minimum supply in case of non-payment if the user can prove his/her insolvency; sufficient and qualified staff with 214 workers and one of the best collective agreements in the Córdoba province; and collaboration with the university by financing water-related projects. Importantly, there have been educative programmes in the town's schools on saving water and the urban water cycle.

## CONCLUSIONS

The example of urban water cycle management in the town of Córdoba, through a public utility with citizens' participation, shows that there are public mechanisms to supply a quality service more efficiently than through private companies. It also shows that a good service is compatible with reasonable tariffs and good working conditions for the company's workers.

This model has proved its operational capacity throughout the whole period of democratic government (nearly 30 years) by combining a technically and financially sustainable approach with social and environmental criteria. Situations where there are conflicting interests, as in the case of the yeast factory, are better managed through a public utility able to evaluate costs and social benefits because of its participatory mechanisms.

Spain's incorporation in the European Community was another factor that enhanced municipalities' capacity to get funds to finance urban water cycle-related infrastructures, which became an essential element. Quality management was an advantage when competing for those funds.

The development of this model has encountered some obstacles. The most important of them is probably the expansion of privatisation processes and the companies' pressure to foster these processes in diverse forms.

Some favourable elements for this model, already mentioned, can be highlighted:

- The important associative tradition in the town of Córdoba, even under General Francisco Franco's dictatorship. (This tradition was further entrenched when the first democratic town councils were established.
- The well-established tradition of Left-wing parties, widely supported by Córdoba's citizens since 1979. Within the Left, the PCE (1979-1986) and IU party (1987-2005)

hegemony has been crucial because these two political groups have always focused their political activities on defending civil rights and citizens' participation.

- Another important point is the relevance of Julio Anguita, the first democratic mayor in Córdoba, in giving the initiative a strong initial push. From the beginning, Anguita and his excellent team in municipal government had a strong belief in the transformative potential of popular participation in public management.

Finally, we would like to highlight some exemplary characteristics of this management model that could be very useful in other towns. The discussion and diffusion of good management practices in the field of water public services must be a priority objective if we wish to strengthen the public sector. With this aim, we should establish an international network to develop public-public partnership mechanisms favouring the exchange of knowledge, management standards, mechanisms for transparency and participation, as well as to defend the public sector in a world where private business groups are acting as lobby groups at an international level.<sup>11</sup>

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<sup>11</sup> International Private Water Association (IPWA).