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Articles

Neoliberal corporatization in water management in Mexico. Lessons from Leon, Guanajuato

Corporatización de tipo neoliberal en la gestión del agua en México. Lecciones de León, Guanajuato

Daniel Tagle-Zamora¹, <https://orcid.org/0000-0002-6203-7429>

Alex R. Caldera-Ortega², <https://orcid.org/0000-0002-7609-8724>

¹Departamento de Estudios Sociales, Universidad de Guanajuato, Guanajuato, México, datagle@yahoo.com.mx, datagle@ugto.mx

²Departamento de Gestión Pública, Universidad de Guanajuato, Guanajuato, México, arcaldera@ugto.mx

Corresponding author: Daniel Tagle-Zamora, datagle@yahoo.com.mx, datagle@ugto.mx

Abstract

Public drinking water and sanitation services providers at the Mexican municipal level have the legal basis to define the management scheme with which they will assume the provision. Since last century eighties, these models have been concentrated into public, private and mixed, the

latter influenced by the neoliberal wave. The purpose of this document is to explore the Mexican case form of corporatization, taking the Drinking Water and Sewerage System of Leon, Guanajuato as the unit of analysis. Under the approaches of water corporatization and market environmentalism and with a mixed methodology, an hemerographic review and a descriptive-relational exploration of the operating office physical-commercial information, a neoliberal corporatized water management is determined, a public company with private behavior. It is concluded that this modality has been deliberately constructed, focused on market expansion and capital accumulation despite the fact that its public nature links it to social priorities.

Keywords: Corporatization, water management, Leon city, political projects, neoliberalism.

Resumen

En México, los prestadores de los servicios públicos de agua potable y saneamiento municipal cuentan con el sustento legal para definir el esquema de gestión con el que asumirán la provisión. Desde la década de 1980, estos modelos se han concentrado en públicos, privados y mixtos; estos últimos influenciados por la ola neoliberal. El presente documento tiene por objetivo explorar el modelo de corporatización del agua para el caso mexicano, es decir, empresa pública con comportamiento privado; se toma como unidad de análisis el Sistema de Agua Potable y Alcantarillado de León (SAPAL), Guanajuato, México. Bajo los enfoques de corporatización del agua y ambientalismo de mercado, y con una metodología mixta; revisión hemerográfica, y una exploración descriptiva-relacional de la información físico-comercial del organismo

operador, se determina una gestión corporatizada del agua de tipo neoliberal por parte del SAPAL. Se concluye que esta modalidad ha sido deliberadamente construida, enfocada en la expansión del mercado y la acumulación de capital; esto, a pesar de que su carácter público la vincula con el bienestar social enmarcado por el derecho humano al agua.

Palabras clave: corporatización, neoliberal, gestión del agua, proyectos políticos, León.

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Introduction

This article has the objective to analyze the corporatization category for the Mexican case with the water management experience of the city of Leon, Guanajuato. Its relevance is to value the accomplishment of goals institutionally established in the water system to reach the objective of the materialization of the human right to water for all the population.

In this particular case, Drinking Water and Sewerage System of Leon (SAPAL, because of the Spanish name) is the paramunicipal official body in charge of providing drinking water public services to what is

considered the fourth most populated municipality in Mexico (INEGI, 2015). SAPAL has reached many recognitions (certifications) because of its high financial capacity, its organization and its planning capacity. Since last century eighties its institutional designers, and high local business management defined it as a public body managed as a private one, not related to political interests. Use of category language as “client” instead of “user” was naturalized in Leon society giving way to considering that providing service was determined by the obligation to pay instead of citizens payment capacity. With these ideas and a long term business vision for a public body, final and recent SAPAL result is its broad financial capacity, with more than 2 600 millions of Mexican pesos in banks accounts and the Crediting Calification as *Ficht Rating AAA*, given by financial markets recognizing it as one of the best country water providing body (Fitch Ratings, 2018). These economic and financial goals for a public body have given it public political and social regional recognition far from political, social and academic critic, although its aggressive commercial scheme for domestic user. Because of this argument, this paper determines that SAPAL presents a kind of water corporatization neoliberal management far from social priorities stated before, when analyzing organizational structure and main management strategies through last year management (2008-2018).

This paper is structured as follows. The first part presents analytic structure of analytic framework, which state drinking water services progressive and neoliberal modalities under the modality’s perspective of market environmentalism. The second refers to methodological framework. Third part describe SAPAL organizational structure. Forth part contains results of the selected study case and the fifth part discussion of

the kind of corporatization identified for Leon. Finally, you are able to find conclusions.

Theoretical frame

The orientations of water management under neoliberal perspective

Public drinking water and drain model in Mexico—based on the services provided by a state or municipal governmental body is based in 115 governmental article of the Constitution— has had an institutional development limited with big unsettled matters in terms of quality, efficiency and covering since last century eighties (since the constitutional reform which initialized the local decentralization process until our days (Pineda, 2002; Soares, 2007). Neoliberal reformers questioning to the “public” urban water management model were diverse during the two first decades after the beginning of the decentralization process; afterwards, among critics were included, for example, the bureaucratization of operating organisms, corruption in infrastructure works or contracts, and the client user price or small scale of corruption among users and

operating civil servants, inefficiency in what concerns service quality, high operating costs and high level of organisms indebtedness. In that sense, the most visible arguments to promote private participation and emulation plans of public water management were focused “on the lack of covering broad population sectors; the unsuitable quality provision quality; corruption; and/or lack of public inversions over expansion and infrastructure renewal” (Castro, 2012: 247).

International organisms, such as World Bank (BM) promoted government schemes towards a broader scheme and a bigger decentralization in the local field and more society participation (in many cases there was a confusion between civil society and management elite in order to resist governmental entities deficiencies (Guttman, 2004). This management Project denominated ‘*managerial*’ presented an special ‘tint’ during the period which Aboites (2009) identified as the market environmentalism period: presenting market mechanisms and its main agents as the key components to confront and diminishing the key elements to confront and diminish the ‘ineffective’ presence of the governmental agents. Under this view, decisions only validated by the higher governmental spheres are privileged, with the participation of private sector, limiting to some social traditional representation with an easy interlocution through its coincidences around its visions and objectives in what concerns the management model and the goals.

The main neoliberal political project is delineated in a search of urban water management controlled by these high political management spheres, searching to privileged an operation focused on efficiency which allows to obtain profits for providing services not only to users which are able to pay production costs (consolidating an enterprise-user relation)

but financing infrastructure works to the access to water and its draining works mainly in favor to productive use by main economic sectors of the city, industrial or commercial. Although this speech says to focus management efforts on the domestic users, thus human consumption, the compromise of an efficient and quality service is made with users who are able to pay for a compromise for an efficient and quality service and who are recognized beginning with the contractual relation with their residence's services.

Last 1990 decade was a period of a strong impulse by international organisms and governments to private sector for directly providing drinking water and sanitation. Nevertheless, in Latin America there was unequal advance and confronted several resistances and difficulties which included economic instability, cultural resistances including political actors' preferences to follow having water as a main money exchange in front of having private sector as the provider of drinking water and drain services. Nevertheless, there is an unequal advance in Latin America and there were several resistances and difficulties which included economic instability, cultural resistances including preferences to follow with the practice which considers water as the main change money in front of electoral clients. Nevertheless, these privatization ideas gave impulse to various processes which have turned unavoidable the advance of ideas which consider water as an economic good instead of a human right and have deepened inequality in the access in terms of quality and quantity of this resource and have deepened the impacts of environmental crisis in economic development (Castro, 2012).

In this sense, the lack of success in what concerns the public operator substitution by the private companies (McDonald, 2015c) gave

way to an “intermediate” water and drain management based on the maintenance of the operation from public-governmental, but with a broad management participation (high managers) under the figure of “corporatized enterprises” through an important participation in their managing councils; the structuration of these organisms under administrative forms coming from private sector and subcontract of enterprises for some precise processes of the service production. Speech to legitimize is that of the public administrative reforms which are framed in the so called new public management which has been parallel to the process of readjustment of the State in the economy of the neoliberal period (Sánchez, 2002: 122), (re)engineering of processes in the operating organisms, efficiency as a focus of the technical and commercial management, tariffs adjustment according to production costs and “reasonable benefit” for private investors, to divide the production processes into sections including three sections through contractors, giving orientation services to give “satisfaction” to the client-user who pays the service on time.

The neoliberal corporatization is turning a key to understand the actual structure of the logic in the water management, because it determined that the outstanding thing is to take water from the public sector (granted or free as a citizen right) to the economic one (with profits purposes) playing down who is having the control or authority over water provision control, from the public or the private sector (Bakker, 2003; Bakker, 2005).

Corporatization: branching off between a progressive and neoliberal public drinking water service

In the new millennium and after almost four decades⁸ of neoliberal impulse, public agencies are no more the center for the neoliberal thinkers' critics (McDonald, 2015a). Nevertheless, this change of speech to one tinged is because they see the State as one vehicle that makes easier private capital accumulation and that is not an obstacle for it, because is the one who promotes an institutional and infrastructure framework for the growing of markets in such way that it could not be possible from the private initiative (Zurbriggen, 2007).

Besides, last decades there has been a neoliberal language and thought codification which has been normalized in the State practices. Public institutions such as universities, hospitals, municipalities, etc., have naturalized market behavior where efficiency and brand market value allow them to have a place in the competitive showcase and vanguard with the proposal to attract capital. That is to say, in the neoliberal era it has been a drastic change in the public service vocation and evaluation, thus making hard to remember how it was a less mercantile form of public services with the objective of questioning the present situation (Newman & Clarke, 2009). More, the confusion or the intended slant when stating under the veil of representative democracy (neoliberal), the society

participation but only incorporating exclusively the business elite for the configuration of the new market State (Tagle, Caldera, & Fuente, 2019).

Magdahl (2012), and Lobina and Hall (2015) state that the phenomenon mentioned before was marked with more emphasis speaking of drinking water public service provision, where the substitution of public operators by private companies have no success. Then neoliberal promoters follow making pression in order that public operators behave themselves as private companies, under the figure of corporatized enterprises. That is to say, an “endoprivatization,” which implies changing public management to put ideas, methodologies y techniques of the private sector (Guerrero, 2004; Yáñez, 2019).

Under this context, the “corporatization” according to Grossi, Marcou and Reichard (2010), cited in Lobina and Hall (2015: 250), is “the transformation of governmental entities into autonomous and semiautonomous corporations, the majority with legal personality and with liberty for management.” Nevertheless, Lobina y Hall argue that this category must be thought in dynamic and contextual terms, considering that the results depend from the organizational and institutional forms which must be defined in each place.

The objective of the corporatization for McDonald (2015a: 10) is “to create companies which are with full competence, with independent managers who only assumed responsibilities for the functioning of their own organization, and where expenses and incomes are taken into account as an autonomous company.” Lobina and Hall (2015: 251) add “the objective is to reach operative efficiency by means of creating a certain distance between governmental and the public managers.” Essentially, the corporatization is to manage a public enterprise under the

logic of a private efficiency derived from isolating management of the public organism from the interference of the different interests from the political field. In this case, a corporatized enterprise presents the characteristics of been autonomous with financial, administrative and legal independence, and it is also ruled under private right as a private property as an anonymous enterprise and a private one (Lobina & Hall, 2015; McDonald, 2015a; McDonald, 2015b; Yañez, 2019).

At present, corporatization it is presented at the crossroad in the sphere of the political discussion because it is situated on a thin line between a progressist or neoliberal corporatization (latter is considered as the antechamber of the water mercantilization) of what it is provision of drinking water and drain for public services (Lobina & Hall, 2015). For Bakker (Bakker, 2003; Bakker, 2005), this commercialization phase signifies the highest point of *market environmentalism*; that is to concrete the neoliberal plan to interchange water under Pareto principles of efficiency principles, as any other economic good.

- Privatization: it signifies a property change, or a transference of the resource management, from public sector to the private one.
- Commercialization: implies changes in the practices of the resource management incorporating principles (efficiency), methods (evaluation cost-benefice) and objectives (maximum profit) derived from market (Leys, 2001).
- Mercantilization: it is the creation of an economic good through appropriation and standardization mechanisms, goods or services, allowing to the latter to be interchanged with a determined price at the

market under the principles of economic efficiency (Bakker, 2005: 544, in Tagle, Caldera, & Fuente, 2019: 18).

Market environmentalism; nevertheless, it is not a linear process (privatization-commercialization-mercantilization); privatization can be done under a commercialization plan not completely under profit objectives, or water commercialization can be done before a privatization process, actually without privatization and from public power, but with profit objectives. Concrete “water supplying can be found in the business sphere and not in that of the public welfare always and when (though there is a public or a private property) the objective of management be the maximum economic efficiency instead of social equality)” (Bakker, 2003: 43). The public providing drinking water and drain organism’s corporatization is mainly taking place in commercialization and mercantilization spheres which were described before.

The empirical experience of this management model by McDonald (2015c) shows cases bifurcation as Table 1 summarizes, neoliberal and progressist, with results which depend directly of their own sociocultural and political contest from which they come. Nevertheless, this same author points out that the corporatization paradox is found in that by one side although it is representing a form of privatization and commercialization of public goods by economic means, for the other side, it eliminates the politic instability which implies private sector direct participation in the resources management. The neoliberal corporatization, according to the present proposal, has involvements identified by McDonald (2015a) which will be relevant for the selected case.

Table 1. Drinking water and drain public services corporatization typology. Source: authors elaboration with McDonald information (McDonald, 2015a; McDonald, 2015b).

Progresist	Neoliberal
Public property Public or social objectives Resistance to mercantile forms of public goods Platform to give impulse to an equitable and efficient service Differentiated tariffs based on subsidies with equality emphasis Citizen is treated as a user The citizen, in large terms, has institutional means to secure, at last instance, political and social public benefits	Public property Gives little attention to equality and accessibility questions (crossed subsidies and cutting of service absence) Highly commercial orientation (tariffs higher than private sector) Capital accumulation objectives New moral codes based on "Service payment culture" Finance-focused management criteria. Reinforce the value of the brand Market expansion to support economic growth Clients instead of citizens

The alternative proposal to a corporatization "progressist" is stated by McDonald (McDonald, 2015a; McDonald, 2015b) as an alternative to the capture of the operating drinking water and drain service organisms, thus securing social benefits results through an effective citizen control of extended participative actions (only from managers seeking particular benefits) tariffs scheme differentiated in favor of the most needed social sectors and with the possibility of crossed subsidies to secure human right

to water, distribution ways to avoid inequality and hydric resource commercialization with accumulation objectives.

Methodological boarding

From the defined research objective at the beginning of the investigation, the selected methodology begins with the boarding of a case study (that of Leon, Guanajuato, Mexico), boarded from an analytical model descriptive to the light of analytical categories such as corporatization (McDonald, 2015c) and market environmentalism (Bakker 2003; Bakker, 2005). It is a qualitative statement which incorporated the technique denominated speech analysis with the support of tools such as Atlas.ti to codify the information obtained from a detailed documental checking, mainly official documentation and from other sources such as reviews, which recovered actors speech and gave way to the ideas that actually form and operate the system in the organism which operates water in León, Guanajuato; and for the other, its opposite , its contrast with a focus with a descriptive- related.

Figure 1 points out subcategories of analysis for the codification in Atlas.ti, they were of institutional and organizational design of the operator organism speeches reinforcing the market environmentalism scheme and the corporatization; and the management results in terms of

physical and financial efficiency in the drinking water and drain management in Leon.

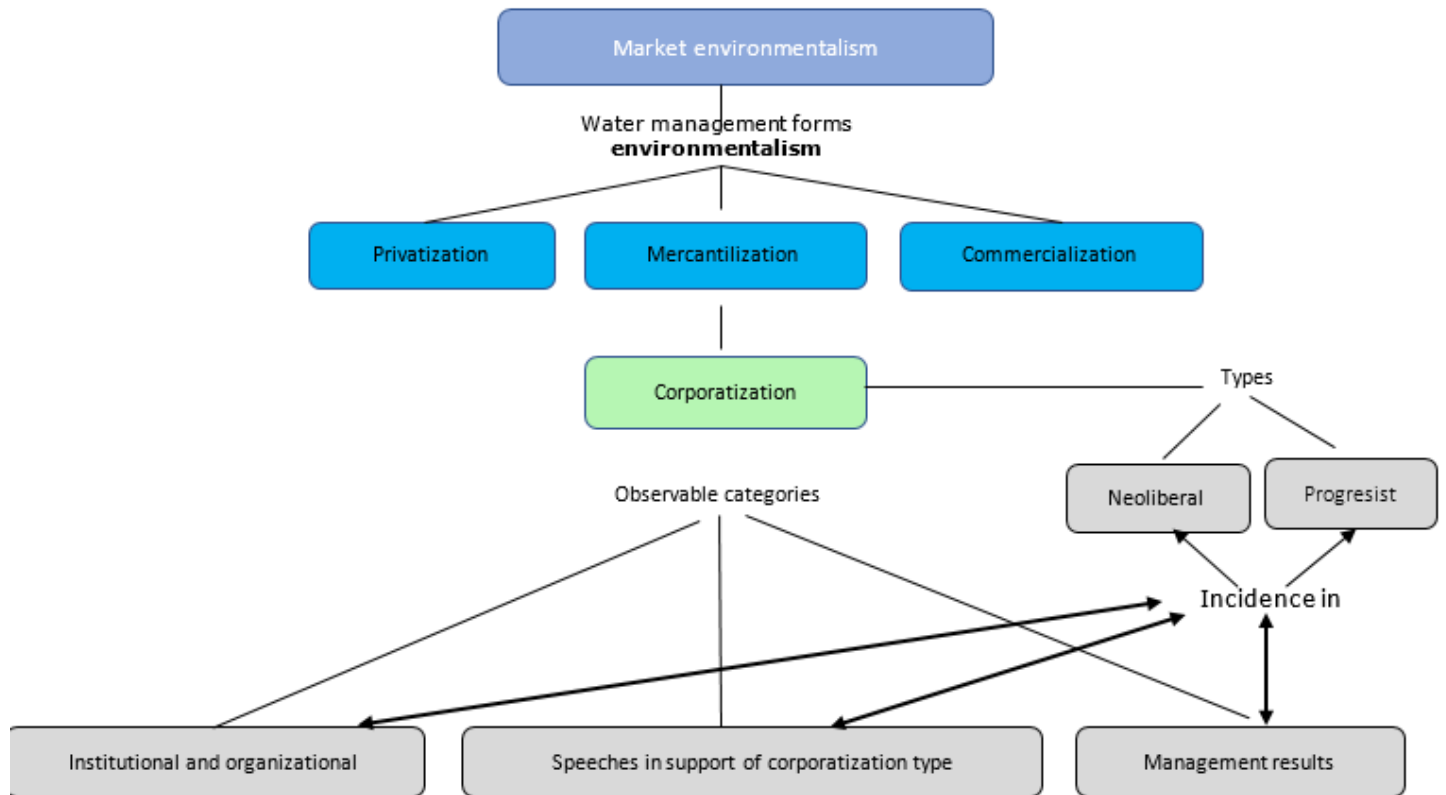


Figure 1. Analysis categories and its observables. Authors elaboration with Cmap Tools.

In what concerns to the descriptive-relational of the management results it was considered the analysis of the physical and economic SAPAL's information. Among the indicators as centers of interest for the analysis were considered the physical and commercial ones: extracted volume, invoiced volume, domestic invoiced volume, physical efficiency, total water taps, total domestic water taps, commercial efficiency, total

income, drinking water services income, total expenses, profits (utilities), average tariffs, water blocks tariffs, among others. The information sources which feedback the database were concentrated in the drinking water and drain sectorial diagnosis of the State Water Commission of Guanajuato (CEAG), and in the Drinking Water Tariffs Information System of the Mexican Institute of Water Technology (IMTA).

All the data base corresponds to official information that SAPAL reports to the CEAG, the only generated indicator was the series of the operator organism benefits. The selected cut of the information (2008-2018) had two determining, the availability of the information and the maturity of the water operator organism in Leon, this organism is mature after more than 30 years established as a paramunicipal enterprise. The information was useful to realize the contrast of the organism physical-commercial behavior and placed it within the typing of the selected analysis categories.

Background and description of the institutional bases of the Drinking Water and Drain System in Leon

Study zone description

Leon de los Aldama is one of the 46 municipalities which form the State of Guanajuato in Mexico as shows Figure 2. It counts with a territorial extension of 1 283.88 km², from these 16.89 % correspond to the area occupied by the urban area (INEGI, 2015). Leon City is over the Valley of Leon aquifer which belongs to the Lerma-Salamanca River and Laja River, on the Hydrologic Region XII, knowns as Lerma-Santiago basin. According to the last Census of Population and Housing (INEGI 2015), León had 26.96 % of the total population of the Guanajuato state. Number of municipal houses was 386 mil 977 with 96.1 % with drinking water access and 98 % with drain.



Figure 2. León Guanajuato. Source: Navarro (2010: 15).

The unity of analysis is the Drinking Water and Sewerage System of Leon (SAPAL, by name in Spanish) a public decentralized organism of the municipality public administration. It has technical, legal and financial autonomy and its own heritage. It was created in March 1982 by means of a governmental decree under a provisional Commission that began works to formalize SAPAL. But it was since 1985 that the Managing Council created SAPAL in a formal way, and it is known the First Internal Rule under which the paramunicipal enterprise is going to be ruled. Among its regulatory objectives are to provide household public services

of drinking water, sanitary sewerage and use of treated wastewater. In what concerns to its extended objectives it is considered revision of hydraulics projects, rain sewage, brook cleaning and custody, and environmental protection (SAPAL, 2012). SAPAL counts with a planning system, financial backing, operation, commercialization, information technologies structured in managers offices, and departments to attend the numerous objectives that confront.

Actually, it has a cover of a little more than 1 million 744 thousand inhabitants in Leon municipality with a continuous drinking water service, which represents 442 mil properties. The service is given in 1 339 thousand city areas and 22 rural communities. In what concerns to drinking water covering is 96.9 %, and the drain service reached 98.75 % of the population (CEAG, 2018).

The system management profile

Leon is characterized by a deep management culture established on the tannery and shoemaking activities since XVIII century. Such idiosyncrasy shows the deep relation between government and management as something naturalized and so little questionable by the common citizen. In what concerns water management in the local field, since SAPAL creation it is showed the presence and influence of the local businessmen, it is showed management high representants in the design and

development of the organizing structure and development. Chambers of tannery and shoe making dominated SAPAL presidency preponderantly since the beginning, some of the most outstanding names are: Public accountant Mauricio Battaglia, shoe manager (1986-1987); Bachelor Mario Plascencia, shoe manager (1988-1992); Sergio Nava Reynaud, tanner manager (1995-2000); Engineer Francisco Obregón Navarro, tanner manager (2001-2006), Pedro González García, leader in the shoe industry (2013-2018) (Redacción Correo de Guanajuato, 2007; Zona Franca, 2013).

In 1992, Vicente Guerrero Reynoso, has been General Director in the first year of the organism (1984-1985), he was in charge of SAPAL Managing Council presidency when General Manager was in charge of the public accountant Felipe Polo Hernández, linked to Carlos Medina Plascencia, first municipal president from National Action Party in Leon, Guanajuato. The first two personages stand out because of their significant role in the following years, the first one in what concerns to the design of the state water policy in the first case as in the particular case of León for the second. The arrival of them to SAPAL was in a significant moment during the search of new supplying sources for the city; the demand of the representatives of the Managing Council and the experience of both in the private sector impulse both to consider that to reassure water provision for a medium and large period it was necessary SAPAL modernization and to professionalize it (Caldera, 2011; Caldera, 2014; Tagle & Caldera, 2013).

The ideas to structure this sector of the local policy are specifically in a vision eminently of a type management-business. It is stated "to see the matter as a business", to move away the organism from political field,

where the key for its operation was not seen it as a municipal dependency but that “it was of the people but managed by management” (Caldera, 2009: 199).

For this, and because of the view from where was intended to begin at that moment implied a planning of 25 years, what —according to Felipe Polo Hernández— came to change him the history of the city, because from year 92 it begins to project all the action of the operator to a long term. The business vision in the water management to Leon is clearly identified in the water priority projects stated to front the challenges for the water crisis in the city at the end of last century.

Since its beginning, SAPAL not only pressed for service decentralization, but also pushed to get real autonomy with respect to the municipal and state political interests of the moment and to resist them with a strengthening of local management who had a privileged position to take decisions over the water use and management (Caldera, 2012). In what concerns to the drinking water who really have the control are local managers at the SAPAL Directive (Caldera, 2014). Such autonomy represents the main valor which has guided the institutional design of water in the case of Leon.

In Leon, the achievement of this value has been linked to an autonomous management of the system, led by businessmen, who also assume the legitimate representation of society, together with that of the aligned unions and the two majority parties.

The following section identifies SAPAL managerial profile through its organizational configuration, structural base for corporatization.

SAPAL Organizational configuration

The idea organizational configuration (Table 2) was proposed by Mintzberg (1999), and it has the intention to identify types of organizations from the interrelation between design structural parameters (flow chart parts), communication flows, coordination mechanisms, including context situations. Without the intention of deepening in the ideal types proposed by Mintzberg (1999: 341) (simple or management, bureaucracy machinery, professional and missionary bureaucracy), and only concentrated on the SAPAL configuration, it can be said, that this is of business management type, because the burden is on the strategic field, which in this case is represented in the Operator Managing Council, and takes the principal decisions, and it orchestrates them through the General Director, who becomes a *Chief Executive Officer* (CEO) of the organization, as the organization management responsible.

Table 2. SAPAL Organizational configuration. Source: Authors elaboration.

Dimension	Characteristics
Structure	The key piece of operation is the strategic apex embodied in the Managing Council, which implements its design through the General Director, who exercises direct supervision over

	the middle line (technical and commercial) and their respective operational nuclei.
Context	Dynamic, with autonomy from political sphere, but dependent on the economic sphere. Regulation from external entities is diffuse and weak.
Strategy	Market consolidation almost as a monopoly and in constant expansion.

Although the power to appoint the SAPAL Managing Council each three years correspond to the Leon City Council, since its transition in 1982 the business chambers have influenced the appointment of its members proposing shortlists to the mayor and the City Council.

In the last versions of the Internal SAPAL Regulations, the Managing Council is integrated by a president, a secretary, a treasurer and a established number of vocals (in 2009 passed from 11 to 17 members), determined for the following instruction of Leon City Council for its designation (Table 3):

1. Eight advisers proposed by The Mayor of Leon city from proposals sent by business chambers and syndical organizations (it was changed from 6 to 8 with the 2009 reform)
 - a) Industry of the Transformation National Chamber
 - b) National Chamber of Shoe making
 - c) National Chamber of Tanner
 - d) Chamber of Commerce
 - e) Chamber of Construction;

- f) Employee Center of Leon (COPARMEX);
 - g) Providing Industrial Association of Mexico, A.C; and
 - h) Syndical representation.
2. Three counsellors proposed by the Municipality President from the three proposed by professional colleges, Research institutions or from superior education institutions (these are the ones extended by the 2009 regulations).
3. Three more counsellors proposed the same by the Municipality President from the three presented by other chambers or associations which represent economic activities in the Municipality (besides of the mentioned in point one); Institutions or organizations of the civil society whose objective be protection of the human right to water; and civil society organizations which represent women (the two last type of organizations were integrated in the reform to 2017 regulation).
4. Besides, three Municipality representants are added as vocals (trustees and aldermen).

The Managing Council renewal is each three years, but 50 % of its members can be ratified for one more period. Its operation is honorific, without monetary retribution.

Table 3. Members of the Managing Council 2013-2022. Source: Author elaboration from SAPAL
(2019c)

2013-2016	Representation	2016-2019	Representation	2019-2022	Representation
Roberto González Martínez	National Chamber of the Industry of transformation (CANACINTRA)	Roberto González Martínez	CANACINTRA	José de Jesús Hernández Fuentes	CANACINTRA
Sergio Castro Enríquez*	Chamber of the Tannery Industry of the Guanajuato state (CICUR)	Luis Gerardo González Navarro	CICUR	Luis Gerardo González Navarro	CICUR
Pedro González García**	Chamber of Shoe Industry of the Guanajuato state (CICEG)	Pedro González García**	CICEG	José David González Flores	CICEG

Luis Ernesto Collazo Rosales	National Association of Shoe Providers (ANPIC/API MEX)	Luis Ernesto Collazo Rosales	APIMEX/API MEX	Juan Carlos Cashat Padilla	APIMEX/APIMEX
Óscar Garza Romo*	Confederation of National Commerce, Services and Tourism Chambers (CANACO SERVYTUR)	Juan Carlos Moreno Rodríguez	CANACO SERVYTUR	Juan Carlos Moreno Rodríguez	CANACO SERVYTUR
Manuel Ernesto Vázquez Muñoz*	Mexican Chamber of the Construction Industry (CMIC)	Santiago Villanueva Martínez	CMIC	Santiago Villanueva Martínez	CMIC
Jorge Ramírez Hernández *	Patronal Confederation of the Mexican Republic (COPARMEX)	José Antonio Morfín Villalpando	COPARMEX	Juan Antonio Morfín Villalpando	COPARMEX
Héctor Hugo Varela Flores	National Workers National Confederation (CTM)	Héctor Hugo Varela Torres	CTM	Héctor Hugo Varela Torres	CTM

Alejandro Arenas Ferrer	College of Civil Engineers of León (CICL)	Alejandro Arenas Ferrer	CICL	Martín Bessonart Arena	CICL
Héctor Rodríguez Aparicio*	College of Scientific and Technological Studies of the Guanajuato State (CECYTEG)	Jesús Aguilera Rodríguez	National Camera of Development and Housing Promotion Industry (CANADEVI)	Jesús Aguilera Rodríguez	CANADEVI
Jazmín Paola López Vázquez	Technological Institute of Superior Studies of Monterrey (ITESM)	Vicente Lahúd Martínez	ITSEM	Jorge Ramírez Hernández **	ITESM
Luz Graciela Rodríguez Martínez*	AMMJE	Claudia Ivonne Hieber Sánchez	AMMJE	Claudia Ivonne Hiebert Sánchez	AMMJE
Alejandro Zermeño Padilla	Mexican Association of Managing Women (ANTAAC)	Alejandro Zermeño Padilla	ANTAAC	Vicente Lahúd Martínez	Americana de Cueros

Leonardo Lino Briones*	Mexican Institute of Financial Managers (IMEF)	Luis María Lozano Ontiveros	IMEF	Luz María Lozano Ontiveros	IMEF
Luis Ernesto Ayala	Síndico	Luis Ernesto Ayala	Síndico	Christian Javier Cruz Villegas	Síndico
José Luis Manrique Hernández	Regidor	José Luis Manrique Hernández	Regidor	Gabriel Durán Ortiz	Regidor
Jesús Vázquez García	Regidor	Jesús Vázquez García	Regidor	Gilberto López Jiménez	Regidor

* Members who have repetition in the Managing Council (2010-2013). ** They are functioning as Presidents of the Managing Council during the period.

The Managing Council integration from certain representatives of managing chambers, professionals and even academic institutions, as may be seen in Table 3, follows what is established in the regulation, although it can be identified that named not academic but well known managers of the region, such as Vicente Lahúd Martínez and Jorge Ramírez Hernández, who is the president of the last Managing Council.

The SAPAL Managing Council role is deciding to understand the organization functioning, but the president role is the key, because he develops a leadership relevant for public and which influence on the style during the three years cycles of the charge.

President and General Director are equally important because of the synergy that must be between decisions from the Managing Council and the execution of strategies and necessary operations in the execution of strategies where the direct supervision of the General Director is needed.

General Director is designated by the Managing Council and executes, as we said before, what have been determined by the Managing Council, coordinates and supervises the administrative unities, among other attributions stablished in the 93 article of SAPAL's Internal Regulation.

During the history of the organism, general directors have had a managing profile: Table 4. By one side they have a professional formation in enterprises management, finances and Project planning (particularly in the hydric sector), including some of them with previous experience in SAPAL (between 15 and 25 years when they were named general directors), or in other organisms operating water in the country.

Table 4. General Directors in SAPAL 1992-2018. Source: Author elaboration with a hemerographic revision.

Name	Period in the direction	Previous Experience	Formation
Felipe Polo Hernández	1992-2007	Banking manager	Public accountant, finance expert in finances
Emiliano Rodríguez Briseño	2007-2012	Director of water operator organisms in Querétaro and Guadalajara	Civil Engineer, expert in hydric planning

José Enrique Torres López	2012-2016	SAPAL Planning and Project Director (16 years)	Civil engineer, expert in hydric planning
Leonardo Lino Briones	2016-2018	Treasurer of the Managing Council of SAPAL	Manager, finance line
Enrique Haro Maldonado	2018-	SAPAL Technical Subdirector (25 years)	Civil, planning and managing expert in hydric matters

For the case of Leon, Cabrero (1995) and Téllez (2014) gave an account of a process started in the second half of eighty years of XX “technocrat” century of municipal public administration by means of a parallel way of instrumentation of techniques coming from private enterprises (strategic planning, reengineering of processes and organizational development) carried into government by managers who have dabbled in the political life, and an impulse of the citizen participation fundamentally of managers in citizen advisory councils or directives, in the principal offices of local government.

The principal interests of these managers, according to Téllez (2014: 215), to participate in such councils of offices of local government has to see with strategic areas of the public municipal management: “The expedition of authorizations [of buildings], licenses and permissions of soil use; formulation, approval and administration of urban development plans, urban development and territory order; territory order; government accounting office; concessioned public services; to guarantee the access to public information; to attract inversions (...)”.

The idea of citizen participation which prevails in the city of Leon seems to sum up in a double notion of instrumentation: "1) to participate in order to have influence and transform the city towards a better environment for the inhabitants; 2) the institutional instrumentation of the social participation to legitimize the local government actions" (Téllez, 2014: 218).

Results

The actual section analyses physical and commercial SAPAL 's information in order to show characteristics relating to a neoliberal water corporatization model as indicates the revised literature, but also as a result of the ideas which configured the actual form of the organism. The axis detailed are the physical, commercial, finance and social aspects. For the first will be tackled questions related to quantity, quality, covert, continuity, losses and treatment. For the second one, it will be bordered a tariffs analysis and its comparison with private and mixed enterprises. The financial field incorporates incomes, expenditures and benefits. The social component includes access, attainability and tolerance to slowness; all these axes according to the type of the selected analysis. In the methodological section it is mentioned the source of data of this section.

Physical efficiency

In the physical aspect, Leon depends on underground water sources from the aquifer of Leon Valley, la Muralla and Rio Turbio, which constitute 99.8 % of the SAPAL supplying water source, the 0.2 % comes from water capture by El Palote dam (CEAG, 2018; Municipio de León, 2013). The volume extracted with respect to the volume concessioned by Conagua is 74.7 % from the 115 millions of cubic meters (mm^3). From this extracted volume the coverage of macro and micro measurement has been 100 % for the 11 years of analysis (CEAG, 2012; CEAG, 2014; CEAG, 2018). Table 5 summarizes part of the revised information of this section.

Table 5. Physical Indicators of SAPAL from 2008 to 2018. Source: authors elaboration with CEAG information (CEAG, 2012; CEAG, 2014; CEAG, 2018).

Year	Total extracted volume (mm^3)	Total invoiced volume (mm^3)	Physical efficiency (%)	Treated water (%)	Total of water taps (miles)	Total domestic water invoiced (mm^3)
2008	81.1	47.3	58	Nd	337	42.7
2009	80	48.0	60	Nd	348	43.1
2010	78.5	46.8	60	Nd	358	42.1

2011	81.4	52.0	64	Nd	369	41.9
2012	80.1	51.2	64	Nd	383	40.5
2013	80.2	53.5	67	Nd	392	40.7
2014	79.7	51.4	64	Nd	402	39.8
2015	80.7	52.4	65	95.3	416	40.3
2016	82.9	54.2	65	95.2	428	41.5
2017	86.9	55.9	64	95.1	440	42.9
2018	86.0	55.9	65	94.8	451	42.8

With a population increasement of 36 % between 2008 and 2018, going from 1 278 087 inhabitants to 1 744 013, drinking water coverture has been from 91 % for 2012, 96.1 % in 2015 and of 96.93 % in 2018 (CEAG, 2018; INEGI, 2005). The increasement of the total water taps, domestic, commercial, industrials and publics, have been of 33.85 % from 2008 to 2018. For the same period, domestic taps increased 22 % while the ones with economic objectives increased 24 %. The increase of drinking water domestic use volume was 0.16 %, and the economic ones registered an increase of 168 %. In the case of the taps with continuous service have diminished from 98 % in 2011 to 93 % in 2018, and the endowed liters/person/day has also showed a diminishing from 139 to 129 between 2008 and 2018, a similar situation for the medium consumption from 73 to 70 liters/person/day in the same period (CEAG, 2012; CEAG, 2014; CEAG, 2018).

With respect to the physical efficiency this continues to be a pending subject, because the escape volume of SAPAL situated in 2018 with losses for 30.11 mm³. The medium physical efficiency of the period (2008-2018)

was of 63.27 %, with a medium losses by year of 29.8 mm³ and accumulated losses of water 328.5 mm³ for such period (CEAG, 2012, CEAG, 2014; CEAG, 2018).

In what concerns to the subject of water quality, there is no registration of subterranean water problems from aquifers; in fact it presents an adequate quality (Leon Municipality, 2013); nevertheless, there is not availability of public information to indicate if there are some problem with the subterranean sources because of the exploitation problem, especially because of the concentrations of fluoride and arsenic. The problem of the quality of water in Leon is identified essentially with the superficial sources bounded to the Turbio river; this situation does not correspond to the Palote dam because its situation down river of the city (Municipio de León, 2013). In the case of the indicator of volume disinfected, this had been of almost 100 % in all the years analyzed, the same with making water drinkable which is near to 100 %, because SAPAL points out to obey the norm NOM-127-SSA-1997 related to making water drinkable microbiologically (CEAG, 2014; CEAG, 2018).

For sewage water SAPAL in 2018 used 19 treatment plants, which had a coerture of 94.8 % of all sewage water, that is to say, 52.9 mm³ were treated (IMPLAN, 2018). From the treated volume, 37 mm³ were unloaded in federal flows in order to reduce environmental impact (IMPLAN, 2019).

Commercial praxis: tariffs

With respect to the drinking water commercial sphere, SAPAL strategy has been focused on the offensive, if physical components are compared with the economic ones. Considering the domestic consumption, you can see that actually invoiced volume of domestic water has been stable between 42.7 and 42.8 mm³ for 2009-2018, on the contrary, the amount invoiced has had a spectacular increase of 127 % for the same period, from 496 millions to 1,127 millions of pesos, this as a result of the sustained yearly increase of the drinking water sustained tariffs.

In the case of this last variable, it is necessary to mention that its evolution has been an important factor to SAPAL which accomplish two tasks: a) to fortify the organism financial capacity; and b), to hold the increase of user's water demand. Table 6 considers three consumption blocks for domestic use, 0-10 m³, 0-20 m³ and 0-30 m³, the tariffs increase for such consumption blocks between 2008 and 2018 has been of 162 % for the first, 166 % for the second and 168 % for the third. These tariffs, according to SAPAL, consider drinking water, drain and sewage provision, and sanitization of grey waters. The average tariff for m³ has gone from \$17.4 in 2011, available data, to \$29.4 in 2018, that is to say, it has been increased 69 % in eight years.

Table 6. SAPAL tariffs evolution in consumptions of 10, 20 y 30 m³.

Source: Authors elaboration with IMTA (2019) information.

YEAR	0-10 m ³	0-20 m ³	0-30 m ³
2008	\$72.7	\$197.9	\$326.6
2009	\$78.1	\$212.7	\$351
2010	\$83.9	\$228.5	\$377.1
2011	\$103.2	\$281.3	\$464.1
2012	\$112.3	\$305.8	\$504.7
2013	\$122.1	\$332.5	\$548.7
2014	\$132.8	\$361.6	\$596.6
2015	\$150.7	\$414.2	\$688.7
2016	\$163.1	\$449.7	\$748.1
2017	\$176.1	\$485.6	\$807.8
2018	\$191.1	\$526.9	\$876.6

The attention on the tariff structure which presents the paramunicipal enterprise stands out when these are compared with other tariff schemes from other water enterprises, like paramunicipals, mixed or totally private participation in the water sector. Comparing SAPAL tariffs with private participation models like Aguascalientes (ProActiva Medio Ambiente: ICA, FCC and VEOLIA), or mixed like Cancun (Aguakan: Bal-Ondeo, Grupo Peñoles and Suez) and Saltillo (Aguas de Saltillo: Aguas de Barcelona and Aguas de Saltillo), it can be identified that the tariff scheme from SAPAL results more aggressive from the socio economical point of view than that of private ones.

For a section of consumption from 0-10 m³ (Figure 3) considering the period of time 2006-2018, Aguascalientes presented the highest tariff of the four cases with \$94.81 in 2006, followed by Leon with \$57.40. This tendency was maintained until 2015, when both operator organisms offered the same tariff of \$150 pesos; but from 2016 SAPAL took off from the operators concessioned offering in 2018 a tariff of \$191.13, which represents a service 16 % more expensive than Aguascalientes, 94.8 % more than Cancun and 426 % more than Saltillo.

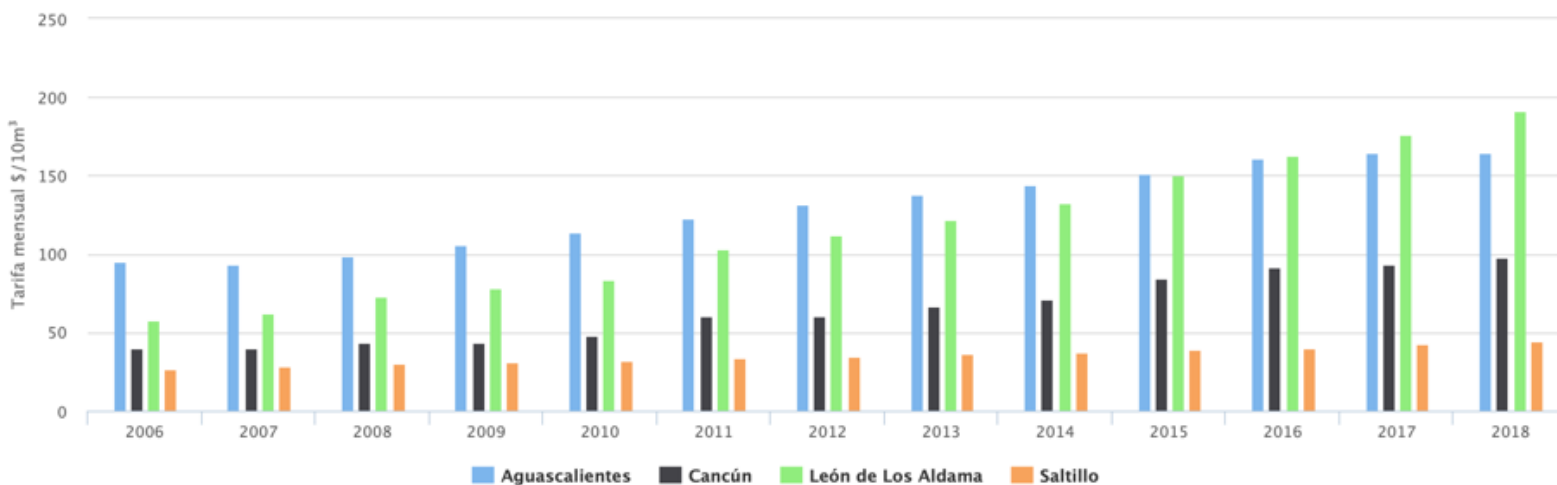


Figure 3. Historic comparison 2006-2018 of drinking water tariffs of Leon, Aguascalientes, Cancun and Saltillo for a block of 0-10 m³.

Source: elaborated with IMTA (2019).

For the consumption rank 0-20 m³, Figure 4 shows that SAPAL since 2006 has offered the most expensive service in comparison with the private or mixed organisms; nevertheless, it stands out that the tariff proportion has increased perceptibly in SAPAL with respect to privates. When in 2006 SAPAL offered a service more expensive than

Aguascalientes in 14.56 %, 214 % more than Cancun and 223 % more than Saltillo, for 2018 these proportions were expanded considerably with a difference of 192 % higher than Aguascalientes, 224 % than Cancun and 316 % than Saltillo.

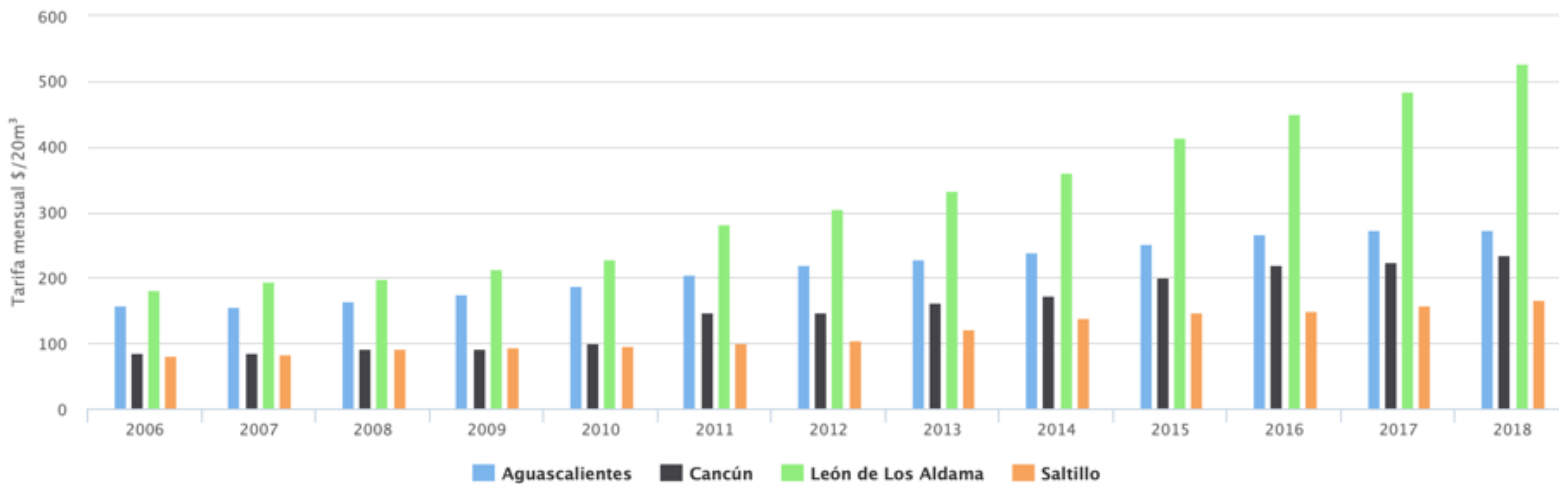


Figure 4. Historic comparison 2006-2018 from Leon drinking water tariffs, Aguascalientes, Cancun y Saltillo for a stretch of 0-20 m³.

Source: elaborated with IMTA (2019).

Within this same logic, comparing SAPAL tariffs with other 81 water enterprises to a national level the IMTA 's Information System of Drinking Water Tariffs points out that in 2018 SAPAL had the third more expensive tariff for the consumption block 0-10 m³ with \$191.13, only under Naucalpan with \$195.80 and Nogales \$203.75. In the cases of consumption blocks of 0-20 m³ and 0-30 m³ SAPAL has the highest tariffs of the 82 organisms from which IMTA has information (IMTA, 2019).

Financial aspects and economic benefits

The dynamic of the SAPAL tariff structure, besides its high commercial efficiency, 92 % average between 2008 and 2018 (CEAG, 2012; CEAG, 2014; CEAG, 2018), have had a considerable impact on the paramunicipal enterprise income. Reflect of this sensible increase is the outstanding increase of the total income for m³ extracted, which increased 98 % from 2009 to 2018, although physical efficiency continues stagnates in an 62 % average for the same period, that is to say the physical offer of the product have maintained constant but tariffs have adjusted considerably to rise. Because of this, it is relevant to analysis the variable utilities for the paramunicipal enterprise, which results from resting total expenditure from total incomes as are shown in Table 7.

Table 7. Commercial Indicators of SAPAL from 2008 to 2018. Source: Authors elaboration with CEAG information (CEAG, 2012; CEAG, 2014; CEAG, 2018).

Year	Amount domestic invoice (millions of pesos)	Commercial Efficiency (%)	Total income (pesos)	Income for drinking water services	Total expenditures	Utilities (millions of pesos)

				(millions of pesos)	(millions of pesos)	
2008	nd	96	959	564	720	239
2009	496	96	952	614	804	147
2010	nd	96	1 018	648	916	102
2011	628	88	1 139	797	1,005	133
2012	676	91	1 252	887	1 141	111
2013	726	93	2 075	963	1 163	911
2014	789	91	1 452	1 047	1 265	186
2015	867	91	1 619	1 143	1 354	264
2016	968	91	1 793	1 282	1 445	347
2017	1 058	90	1 881	1 399	1 700	181
2018	1 127	89	2 021	1 467	2 005	16

As it may be seen the paramunicipal enterprise registers black numbers in its accountant book for all the selected period of analysis 2008-2018. The annual utilities average for this block is situated in 240 millions of pesos, as the utilities total amount during these eleven years is more than 2,637 millions of pesos, the same data that SAPAL points out in its web site (SAPAL, 2016).

This financial strength showed by SAPAL has allowed it to have in the financial and credit markets a Credit Qualification Ficht Rating AAA, which represents the maximum certification for water enterprise in the country. The qualifier Fich Ratings guarantees SAPAL incomes legitimacy

as the principal paramunicipal enterprise attribute because its financial solidity, strong management and efficient planning (SAPAL, 2019b):

“In the last five years operative invoiced incomes register a good dynamism with an annual growth rate of increased (TMAC) of 10.3 %. In 2018, operative invoiced incomes went up to 2 thousand 597 millions of pesos.

SAPAL counts with a strong financial profile considering its high financial margins, and also its low indebtedness position and strong liquidity profile. The organism does not present banking debts and the only long-term settlement that it has is with a low payment of 38.9 millions to the end of 2018 (‘SAPAL recognized as an organism financially solid and stable’, SAPAL, October 8, 2019)”.

The financial distinction which possesses defines it as a model for other municipalities to a national level (SAPAL, 2019b), as a result of its wide organization capacity of the financial aspect sustained by the payment culture of Leon citizen.

Social aspects: access and attainability

The economic fortress that SAPAL presents has its roots in the payment culture which it has succeeded to prime to its consumers, especially to the domestic one, which takes to situate SAPAL tariffs in terms of the minimum salary to determine how much attainable they are for the Leon families. Previous to this analysis, it is identified that the SAPAL tariff scheme does not have differentiated tariffs or some scheme of crossed subsidy, that its tariff system is uniform without differentiate between socioeconomic population profile of the population it is attending.

The Program of the United Nations for Development points out that the water costs do not be upper than 3 % of home income. Table 8 shows economic accessibility of SAPAL tariffs to domestic users in the city of Leon.

Table 8. Affordability of SAPAL ´s tariffs (\$). SOURCE: Authors elaboration with CEAG information (CEAG, 2012; CEAG, 2014, CEAG, 2018) and Commission of Minimum Wage (Comisión de Salarios Mínimos, 2019).

Year	Tariff consumption 0-10 m³	3 % of 1 one Minimum Wage	3 % of 2 Minimum Wage	3 % de 3 Minimum Wage
2008	\$72.7	\$45.8	\$91.7	\$137
2009	\$78.1	\$47.9	\$95.8	\$143
2010	\$83.9	\$50.2	\$100	\$150
2011	\$103.2	\$52.3	\$104.6	\$156
2012	\$112.3	\$53.1	\$106.3	\$159
2013	\$122.1	\$55.2	\$110.4	\$165
2014	\$132.8	\$57.3	\$114.7	\$171
2015	\$150.7	\$63	\$126.1	\$189
2016	\$163.1	\$65.7	\$131.4	\$197
2017	\$176.1	\$72	\$144	\$216
2018	\$191.1	\$79.5	\$159	\$238

Considering a block of 0-10 m³ consumption the paramunicipal enterprise's tariff is over 3 % of one minimum wage for period 2008-2018. If it is considered 3 % of two minimum wages from 2008 to 2011 tariffs were attainable; nevertheless, they were not attainable between 2012 and 2018. Only with 3 % of three minimum wages SAPAL tariffs are attainable. This information reflects the absence of SAPAL compromise to guarantee that its tariffs be attainable for domestic users in Leon.

This subject of affordability is directly bound with the number of cancelled domestic taps per year by SAPAL. The organism points out that in the case of incise in dilatoriness the cut of drinking water service is executed after the sixth month, cancelling physically the tap. According

to the paramunicipal transparency information office it is pointed out that from 2010 to 2018 the domestic taps proportion of domestic taps cancelled because of six consecutive months dilatoriness with respect to total domestic taps has increases noticeable. The obtained information points out that as in 2010 the proportion was of 18.7 %, in 2018 reached 33.9 %, which represents in expired portfolio for SAPAL 539 millions of pesos (CEAG, 2012; CEAG, 2014; CEAG, 2018).

Discussion

Discussion during last decades in order to determine between a social or an economic model of water management has been constant, especially because the socio-political sensibility implicit in the liquid before the social representation “water as life.” In a global level it has been generated a series of social movements of resistance to market approaches in water sector. Concrete, it is appealed the human right to water and to the liquid sustainability as a priority to reject emphatically the possibility that the water management is situated in the business sphere and not in the public well-being.

In spite of that, neoliberalism promoters have succeeded in introducing the market way of thinking as the third way in the management of public entities. Under the corporatization scheme, public

property with private behavior, they have given steps to structure the environmental market in the water sector.

The analysis of the physical and commercial water information in the city of Leon (2008-2018) reflects a series of characteristics which frame SAPAL model as a neoliberal corporatized one. Table 9 connects characteristic features of such corporatization type revised in the theoretical section with the behavior of the operator organism.

Table 9. Characteristic features of SAPAL water management model.

Source: Authors elaboration.

Corporatization of neoliberal type	SAPAL Water Management model
Public Property	SAPAL is a public decentralized organism of the municipal public administration, with legal personality and with its own inheritance. It has technical, legal and financial autonomy Its Managing Council is integrated mainly by business man
Gives little attention to equality and accessibility questions (crossed subsidies and cutting of service absence)	Differentiated tariffs are not taken into account There is not crossed subsidy scheme Affordability is not guaranteed for the consumption block 0-10 m ³ considering 3 % of a minimum salary for 2008-2018
Highly commercial orientation (tariffs higher than the privates ones)	SAPAL has higher tariffs than those management models of private participation such as Aguascalientes (ProActiva Medio Ambiente: ICA, FCC y VEOLIA), or mixed like Cancun (Aguakan: Bal-ondeo, Grupo Peñoles y Suez) and Saltillo (Aguas de Saltillo: Aguas de Barcelona y Aguas de Saltillo)

	<p>With a \$ 191.13 tariff in 2018, for a consumption block of 0 to 10 m³, SAPAL has a service 16 % higher than Aguascalientes, 94.8 % more than Cancun and 426 % than Saltillo</p> <p>With the consumption block from 0 a 20 m³, SAPAL had a tariff of \$526 pesos, which represented a superior difference of 192 % with respect to Aguascalientes, 224 % with Cancun and 316 % with Saltillo</p>
Capital accumulation objectives	<p>SAPAL annual utility average, between 2008 and 2018, is 240 millions de pesos</p> <p>SAPAL accumulates in its banking accounts 2,637 millions pesos in 11 years</p> <p>In 2016 SAPAL indicated to have in its banking accounts a little more than 2 thousand millions pesos (SAPAL, 2016)</p>
New moral codes based on "Service payment culture"	<p>Water commercialization process, besides SAPAL tariffs, it is visualizing with the increase of "users" payment responsibility to maintain drinking water service in their houses. The proportion of cancelled taps in relation to total domestic usage taps is reflecting this, because it has gone from 18 % to 33 % between 2010 and 2018</p> <p>The user's absence of payment involves service cancellation the same as in the service provision by the private sector</p>
Management criterion centered in finances	<p>SAPAL counts with the Credit Qualification <i>Ficht Rating</i> AAA, which represents the maximum certification for water operator organisms in the country</p> <p>The qualifier <i>Fich Ratings</i> certifies SAPAL incomes legitimacy as the paramunicipal principal attribute because of its financial solidity, strong management and efficient planning (SAPAL 2019b)</p>
Reinforce value of its mark	<p>From 2011 to 2019 SAPAL has inverted 78.6 millions pesos in publicity involving the organism image, according to SAPAL</p>

	Unity of Transparency and Access to Information (SAPAL, 2020a)
Market expansion to support economic increase	Market expansion is in three components of the water urban cycle: (1) to guarantee water provision needed by the domestic use associated to the population increase, and to be a support to increasement of industrial and commercial sectors located into León urban spot; (2) to build a water market for water treated to be reused among industrial users, mainly tannery because it is expected to have each time more volume, the same as the agriculture users of the region; (3) if the project of Zapotillo, in the Altos of Jalisco, water increase offer for local users and those in the Leon Metropolitan, which besides includes San Francisco del Rincon municipality, Purísima del Rincon and Silao, with more than two millions inhabitants
Clients instead of citizens	The category "client" is normal to refer to the water user in the city of Leon. Thus, it is referred to in SAPAL web (SAPAL, 2020b)

As Table 10 refers to, SAPAL is characterized as a *neoliberal model corporatized*, which has showed a greater interest in economic variables than in the social component to respond to the Human Right to Water, that is to say it has been focused in a water system that gives priority to responsibility for the payment as the main axis of the organism financial, administrative and organizational. Since its origin, it was stated its public character, but with a logic management by managers and not public employees in their Management Council. The paramunicipal enterprise has been to have an operator organism far from political influence, not seen it as a traditional municipal dependency, but as a water enterprise

“of the people but administrated by managers” (Felipe Polo Hernández in Caldera, 2009: 329) so far from its essential social functions.

At present, economic achievements are clear which were stated since its starting days. Nevertheless, this logic organization which gives priority to commercial-finance does not have had the best results in the physical component. In fact, what is evident is a strong difference in SAPAL physical indicators. There is index which stand out a better organism functioning such as drinking water and drain coerture; the micro and macro measurement; making water drinkable and its disinfection; and, sewage coerture and treatment, all these indicators with a better performance than the national media (Conagua, 2019). But, there are, high important unsettled matters as effective and physical problems with significant losses in water volumes by 29 mm³ yearly average; there is a used low level of treated water, in 2018 it only used 28 % from 53 mm³ de treated water, and less than a million cubic meters are used by the industrial sector; in what refers to the aquifer environmental condition there is a very alarming state of overexploitation (47.7 mm³); this information gives an account of SAPAL inefficiency in water use and management problems, in spite of being under a corporatized neoliberal which appealed for water efficiency.

SAPAL does not attend local water management unsettled matters, with the wide financial and technical resources at its disposal, instead it has chosen megaprojects subsidized by the federal government, like El Zapotillo dam, to face up Leon water supply problem, and to realize local infrastructure development projects which give priority to the economic water uses. Actually, there is not development of a strategy to attend basin superficial and underground water environmental management

which involucre de its aquifers as supplying sources, and subjects relates with the human right to water, especially for the most vulnerable sectors in Leon.

But what is controversial with Leon water management it is the wide SAPAL capacity to establish among León citizens a payment culture, who do not question water commercial logic behind service lending, neither the intentions to commodify for which the paramunicipal enterprise is pressing on; essentially thanks to its public character, which shields it from public questioning that link it with the neoliberal water logic, or as it has been managed in this paper, market environment.

Conclusions

The category selection in this paper of corporatization of basic services (McDonald, 2015c) and its frame in market environmentalism (Bakker, 2003; Bakker, 2005) helps to identify analytically a specific kind of urban water management in Mexico, different to the traditional direct provision of the local public centralized management and the privatization (or concession). To typify varieties of models for water use and management contribute to identify the subsector forms institutionally raised by the drinking water and sewerage subsector, specially to reach the materialization objective of the human right to water for all population.

To characterized physical-commercial-social-environmental orientation of essential services represents a good opportunity to know the distance of each particular case in Mexico in front of such objective.

The corporatization, understood as the incursion of economic efficiency logic in public institutions and an effective exercise of autonomy in what refers to taking decisions (McDonald: 2015a), makes evident that although an state management is conserved, this is not a guarantee of a “public management” of basic services, like drinking water and drain services. As it can be seen with all the case study, a neoliberal corporatization may present a wide financial-commercial turn which seeks to culminate in commodification of services (Bakker, 2005). This may generate as results a lack of equity and attainability in the access, benefits concentration in few social sectors including affectations to the environment.

This breaks down the traditional orientation of public-private axis in which common schemes of analysis are moving. Governmental basic services operation can be conserved, but the results may obey to a logic advancing towards capital accumulation.

In this sense, drinking water and drain corporatization in a context of market environmentalism turns into a structural condition which many times, by means of a speech centered on efficiency, becomes a structural condition, which may hide results in the public services management contrary to the general welfare.

The corporatization has advanced in many parts of the world when it raises objectives like the creation of public competent entities in their matters, functioning independence and independence of political actors’

compromises. The promise of the so called government opportunism detachment (Spiller & Savedoff, 2000), which maintains public organisms ineffective operations in order to maintain political clientele, took during the eighties and ninety years international organisms of financial cooperation and the governments of the global south to try to first substitute those political-traditional schemes through a privatization process or responsibility transference to private sector, to develop essential processes by means of concession mechanisms. Nevertheless, the estimates of no inversion's recuperation -because of the region economic and political instability- do not obtain a major advance of these privatization schemes. But there was major acceptance of corporatization schemes where it is maintaining a public operation of basic services, but with strategic and work near business logic and with autonomy of other decision areas, mainly far from government political agenda (McDonald, 2015a).

For the case of Leon city, the neoliberal corporatization does not arrived as a result of a previous intention of advance in an scheme of water and sewerage providing service by private operators, but by the eighty years political reforms, which during those years included key society actors to governmental decision organisms, in the local order, this was the origin of an idea each time more accepted through the years that economic and managerial elite is the one which better represents a general society interests. A new political group arrived to municipal government towards the end of that decade, coming precisely from managerial class, it was the touch stone not only to essay administrative practices and techniques from the private sector, but the consolidation of the idea that it was the opportunity of breaking with the idea that it was

the opportunity to break with the corporative and client tradition of PRI political system through an incorporation formula of Leon society in different participation schemes, mainly through consultative and directive councils of the principal governmental agencies. The PAN and its adherents, before the principal opposition to the regime, arrive to municipal government with the slogan "so much society as possible and only as possible government as would be necessary" (Téllez, 2014: 226). Nevertheless, the citizenship conception, from that moment since nowadays, it is limited to a very specific segment of such society: the managerial one.

It is clear that in Leon managers have become the protagonists in what refers to the construction of public affairs. Speech of searching general welfare, through its participation "impartial" framed in efficiency semantics succeeds in hiding to common citizen a structure which reproduces inequity in the results of the access to basic services and irreparable environmental damages and in the providing of drinking water and drain services under the modality of neoliberal corporatization.

The benefits of one's own to which we make reference with capture of the principal decision spaces of the city do not refer to a blatant appropriation of rents generated from the commercialized of the public basic services. Better we say that participation favor direct or indirect to maintenance or increasement of the accumulation scheme of dominant sectors which are seen strongly represented in such instance of the public entities corporative government.

Although it has been possible for drinking water and drain services tariffs policy maintain stables the patrons of drinking water demand, as we have seen with the results analysis presented in this paper, collection

and investments expenses results have as a priority both market expansion when feeding that growing demand, mainly of housing demand, to maintain supplied market expansion when feeding that basically growing housing demand, maintain local industry, before assuring completely equity, attainability and quality access to the hydric resource to the most vulnerable population.

Taking into account the theoretical frame we have said that drinking water and sewerage supply by public organisms under neoliberal corporatization modality constitutes the commercialization basis of an actual process which pretends to orientate towards commodification of such resources (without arriving necessarily and properly to privatization) (Bakker, 2005). In SAPAL case expansion and consolidation of this process has been done in three dimensions linked to the water urban cycle:

Provision. SAPAL bets that El Zapotillo dam project, in the neighbor Jalisco state, would give sustainability to prospection demand increasement in the immediate future. It was expected to bring water in volumes which were going to increase water availability in 3 thousand liters by second in a horizon of 25 years. The construction of 140 kilometers aqueduct from Altos de Jalisco to the urban area of Leon city is still detained because of the dispute around the highness of retained wall dam and the rights to road, in particular in the Jalisco state. SAPAL financial gain is placed in the future rights and distribution payment that the aqueduct license holder enterprise (before Abengoa) grants in counter lending when it would be taking water to Leon.

Distribution and consumption. 95 % of SAPAL accounts are domestic ones, nevertheless 5 % is industrial and service sectors, and

organism bets to enlarge its coverture in these two sectors. The consolidation of El Zapotillo dam and its aqueduct offer the possibility of enlarging market in all its usages and that also considers Leon metropolitan zone.

Wastewater, treatment and reuse. Main drain challenge continues to be tanner sector discharges, mainly small tanners in the city center who continue buying water pipes to avoid drain quotas. Market opportunity is to offer this sector double use water according to requirements and standards its industry. Another expansion opportunity is in agricultural sector which has a growing need for treated water.

The corporatization case of Leon, which we have cataloged as “neoliberal” because basically it is fed by a speech encouraging an efficiency logic which centers its attention to encourage corporative accumulation in favor of the expansion of almost a monopoly market instead of assuring the human right to water, or searching the basin sustainable equilibrium for future generations. To study corporatization processes demands measure them in what concerns are the results in favor of equity and affordability in the access to basic services. Label “neoliberal” which we have done to the corporatization type of Leon Drinking Water and Sewerage Service is a consequence of an evident cultural triumph that this meaning of the economic model gives to the observed dominant agents, because speech focus on a competitive city in the global market, conducted by the enterprising spirit of its society, mainly represented by the managerial elite, to the population service, converted in client with the right to demand a service only in the sphere of quality, because of their punctual payment , thus converting the city in a big corporation governed by its directive council.

To advance in an agenda which transform corporatization into one of a “progressist” type demands strengthening account mechanisms, transparency of these mechanism, and other social sectors expanded participation. It is clear that “public” of essential services, like drinking water and sewerage services, are fortify over with institutions of democratic policy, and not only with market instruments.

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