
Water scarcity in Mexico
Peña Nieto’s reforms on water & indigenous experiences

Political Economy of Urban Utilities

ARTIGAS PEREIRA Alvaro

December 30th 2018
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peña Nieto’s reforms on water &amp; indigenous experiences</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Context: the risk of a water crisis in Mexico</td>
<td>4</td>
</tr>
<tr>
<td>Water access and ethnicity</td>
<td>5</td>
</tr>
<tr>
<td>Water governance in Mexico: a diversity of systems, actors and challenges</td>
<td>6</td>
</tr>
<tr>
<td>New Ley de Aguas 2018: what is at stake?</td>
<td>10</td>
</tr>
<tr>
<td>Indigenous resistance to reforms &amp; resistance to change</td>
<td>12</td>
</tr>
<tr>
<td>Conclusion</td>
<td>14</td>
</tr>
</tbody>
</table>
**Introduction**

In 2017, the Constellation brand, the manufacturer of the well-known beers Corona and Modelo, announced a new Brewery in Mexicali, in the north of Mexico. This brewery represents one of the most important investments plans for the region in the recent years, but in turn, they were offered water. Mexicali is sustained by the Colorado River, a busy River that feeds the cities of Denver, Salt-Lake-City, Las Vegas, Los Angeles and 6 million acres of farmland. When it arrives at Mexicali, it is almost dried-up. The estimation goes that this brewery will demand 20 millions cubic meters of water every year, while the local city of Ensenada demands only 9 millions of cubic meters of water every year (Matt 2018). Naturally, the access to such scarce resources such as water today represents a fierce competition with winners and losers. In June 2018, ten presidential decrees were dictated by Peña Nieto, granting easier access to water to mining and industrial companies. In July 2018, indigenous groups raised up a legal shelter, making a total of more than thirty legal shelters presented by indigenous groups in twelve different states.

It is such that the question arises as to why the indigenous groups are the most resistant to this called “ecological” reform? It must be bared in mind that Mexico is a country where it is estimated that the state controls no more than 50% of its territory, representing strong and vast governance problems combined with chronic symptoms of contrasts and ethnic-based inequalities. Becoming thus, both an example and a warning to the rest of the world for the future water crisis to come.

In the following lines, through a political-economy approach, we will try to understand firstly the relation of the indigenous groups with the state and the rights they have regarding access to water. Then, we will try to present what is at stake by these ten decrees in order to finally understand the fragility of indigenous groups before international organisations and the state itself when it comes to access to water.
Context: the risk of a water crisis in Mexico

Following the OECD report (2013), Mexico is faced with enormous challenges when it comes to water reforms because of the hydric stress it has. It is calculated that water availability has decreased by 75% since 1950 due to the urban sprawl of Mexican cities, exacerbating the existing problem of the unequal repartition of water. Today, 101 aquifers out of 653, present over-exploitation (OECD 2013).

Following the Mexican constitution of 1917, the State is the owner of every source of water, and it confers the responsibility for the provision of water to the local governments. However, throughout the XX century, there has been an evolution towards planning and decentralisation. Especially during the 1980s, the different economic crises involved an active intervention from both the World Bank and the IMF. In turn, they demanded a decentralisation process and the delegation of the resources’ management to the private sector (Aboites 1998). This new order became reality through the new Ley de Aguas Nacionales (1992 & 2004) - Law of National Waters - which set formal markets, prices, the rules for the private participation through concessions and the role of CONAGUA (Comisión Nacional del Agua).

These reforms, however, represented a breakage of what sustained the official party in power (PRI): the alliance between both the State and the peasantry. It all became palpable with the creation of new parties (PAN) and the new Constitution of 1992, where the distribution of water and land came to an end thanks to the 27th article. Authors such as Kloster (2007) consider that the metropolitan territory became thus divided and polarised, opening up new opportunities for social struggles for the access to water. This new social order created new unequal relations (natural and social relations) among the different actors. To exemplify, the new big hydraulic projects produced environmental impairments, ecological alterations, lost of fertility of soils and the exclusion and impoverishment of ancient inhabitants (Kloster 2007), notoriously, indigenous groups.
**Water access and ethnicity**

The question of why indigenous groups have an unequal access to water was firstly treated by Rivas (2012). Through data of 1990, 1994, 2000 and 2005, the author demonstrated that municipalities with a larger share of indigenous population not only tend to have less direct access to piped water on average but experience much slower improvements in water coverage. At the same time, she also discovered that the piped water coverage was directly correlated with the level of income per capita in the State.

According to the 2005 economic survey of the OECD, the federal government contributes up to 45% of the investment required for water infrastructure in municipalities. Moreover, since the direct transfers from the federal government represent the majority of resources, it means that municipalities across the country must (are required to) improve infrastructure and other public goods (Rivas 2012). Naturally, urban areas receive in average more funds (in total and on a per capita basis) than rural areas with indigenous populations. These factors show well the federal governments’ decisional power and its outcomes when it comes to priorities and location of resources.

However, these explanations ignore the certain possibility that these populations are discriminated. Such discrimination and exclusion of indigenous groups from full access to water and sanitation is explained by their historical & colonialist struggles as well as their lack of rights and power to exercise their citizenship (Castro 2004).
Water governance in Mexico: a diversity of systems, actors and challenges

A DIVERSITY OF SYSTEMS FOR WATER MANAGEMENT

In order to understand the challenges of the water governance in Mexico, it is important to remember that the State does not control the totality of its territory. It should rather be considered as one of the many power spheres in Mexico. These spheres are detached and independent one from each other. On the other hand, these spheres are at some extent equal, which makes any implementation processes much harder, giving birth to different territorial disparities. In the case of water, these disparities give birth to important water disparities in terms of quality, quantity and coverage.

Cada Minuto muere un niño por falta de agua potable, Notimérica (2015)
Jointly with these spheres of power, Informalities, concessionaires and communities are at stake when it comes to water management in Mexico. Cities in Mexico with more than 50 thousand inhabitants have in average 95% of water coverage, but the informal sector is largely unrepresented in this percentage. In the case of concessionaires, authors such as Miguel (2014) argue that it is not rare to find out about authorised concessions that offer much more than what an aquifer can give. The reasons for this abuse of resources attributes to the rest of governance challenges, explained further in this section. Finally, it comes as such that indigenous groups tend to claim power on their territories and especially a call for control over the natural resources in the areas, creating communal systems for the water management (Rivas 2012) and thus, creating a direct tacit conflict with the State.

**MAPPING THE MAIN ACTORS IN WATER GOVERNANCE**

CONAGUA has the first responsibilities in the water sector in Mexico. The *Comisión Nacional del Agua* (CONAGUA) is the administrator of the rights of water use (REPDA¹), the sectoral planning, the economic instruments and the fees’ collection (OECD 2016). Among these responsibilities stand the prospects to authorise aquifers exploitation, to grant concessions and to transfer federal funds for water infrastructure to municipalities.

Regarding the rest of the federal government, the Ministry of the Environment and Natural Resources (SEMARNAT) is the CONAGUA’s supervisor. At the same time, States and Municipalities grant concessions under PPPs schemes too. And it is the state congresses that approve the water tariffs in every state (OECD 2016). It is important to remember that these states’ congresses are very influenced or even directly governed by the closest power sphere in the region.

¹ Registro Público de Derechos del Agua
Moreover, in Mexico, there are 13 Basin Organisations (Organismos de Cuenca - OC). They are in charge of the regional water policy making. They are also responsible for the planning construction, operation, conservation and maintenance of the federal water infrastructures directly or indirectly (through concessions). And they are in charge of the vigilance of the water uses as well as the aquifers themselves.

At last, the Comisión Nacional para el Desarrollo de los Pueblos Indígenas (CDI), finances programs that aim the provision of basic services (water and sewage, electricity and roads) in regions with a concentration of indigenous population higher to 40% or highly marginalised population.

GOVERNANCE CHALLENGES AND CORRUPTION

Regarding the concession granting process, a problem with CONAGUA is that any request can take months or years, even if the promised maximum delay is 60 days. These delays are suspected not only to affect users and the system functionality but to create a window for corruption. For example, nowadays it is sufficient to present proof that the process of a concession request has been commenced in order to start the exploitation of an aquifer. These delays are due to the fact that the REPDA registers are treated through a centralised system, despite a law that mandates that they should be decentralised through the Basin Organisations (OC).

The rule of law is another factor to take into consideration because not only there is a lack of a precise legal framework for the water services and sewage at the federal level (Miguel 2014), but authorities lack the capacity to apply the legal framework. For example, the basin organisation in Río Balsas can only realise 120 inspections per year, while it has 5000 entities under its jurisdiction (OECD 2013).
Another governance problem is the delimitation of responsibilities among institutions due to legal voids or incomplete legal frameworks. In February 2012, the human right to access to water was included in the constitution, but the federal government is only in charge of the right. Anyhow, the provision of the service is still in the hands of municipalities. However, when it comes to social conflicts, there are no clear roles assigned. For example, there are no “water tribunals” specialised in the question, making any dispute to take years. Or for example, it is unclear who is in charge for providing water services (service administration and risks/costs of infrastructure) to irregular settlements, even after the changes in the constitution (Kloster 2007).

Naturally, corruption and accountability gaps are the final outcomes of the last challenges. In 2010, the Auditoría Superior de la Federación (ASF), published a study which revealed irregularities and illegal practices in the management of financial resources and public investments in the water sector². This study highlighted the impossibility of CONAGUA to present reliable documents to prove their resource management as well as enough information to realise an exhaustive audit (OECD 2013).

“Es ingenuo pensar que la Conagua ahora sí va a respetar las reservas, cuando ha otorgado concesiones en violación de las vedas a lo largo de su existencia”³.

---

²“Informe del resultado de la revisión de la cuenta pública 2010”

**New Ley de Aguas 2018: what is at stake?**

**TEN “GREEN” DECREES (WWF)**

The 5th of June 2018, the former Mexican president Enrique Peña Nieto signs ten presidential decrees. These decrees were to lift the restriction from the exploitation of more than 300 basins, the equivalent of 55% of lakes and rivers of Mexico (El Universal 2018). Most of these lakes are rivers were under vedas. Now, they are categorised as “zones of water reservoir for domestic, urban and environmental protection,” meaning that the water extraction is no longer prohibited. Every decree assigns a percentage of water that can be used through concessions and they essentially dictate the same thing, but for ten different basins.

Interestingly enough, the World Wide Fund for Nature (WWF) has published on its website that these decrees represent a “historic decision” that aims to protect half of the superficial water of the country. Beyond that, it defends that it will benefit 48 million people, 82 new protected areas and 64 wetlands⁴. However, the WWF has been accused in a book titled *PandaLeaks*, of selling its band to powerful companies that destroy the environment in order to “greenwash” their operations. Wilfried Huismann, the author of *PandaLeaks*, accuses the WWF of receiving millions of dollars from different governments and global groups such as Shell, Monsanto, Coca-Cola, and HSBC (to name a few), which all are present in Mexico. “WWF helps sell the idea of voluntary resettlement to indigenous peoples,” writes Huismann (Vidal 2014).

---

WATER FOR EVERYBODY BUT ACCESS TO WHOM?

Following the ONG Agua Para Tod@s\(^5\), these decrees give to CONAGUA the possibility to warrantee considerable amounts of water asked by big groups in sectors such as mining, petroleum and water distributors to the detriment of indigenous rights, agrarian units, rural communities and popular urban sectors\(^6\).

The lift of the later prohibitions on the Basins directly benefits the interested enterprises primarily because they needed concessions with “legal certainty.” And, even if it is presented as a mostly environmental measure, the urban use and energy production are promoted. However, because it is a group of 50-years decrees, it means that there is enough time for any State (and/or any power sphere behind) to ask the required water volumes to later privatise or to concession the water and sewage services. Thus, Agua Para Tod@s conclude that these decrees are an open window for water privatisation and exclusion. Moreover, these decrees do not take into consideration de indigenous rights, their consult rights, their auto determination rights nor their local governance system of the water on their territories.

ENVIRONMENTAL AND HEALTH THREATS: WATER POLLUTION

Despite the fact that the water decrees are presented as a model to preserve the water sources in order to have enough water in the years to come, they propose the following:

\(^{5}\) Created in February 2018, it is a movement that transformed into an ONG. It is integrated by scientific and academic researchers, civil organisations such as Greenpeace and rural and urban communities delegates.

\(^{6}\) Animal Político - “verificado.mx: ¿Los decretos firmados por EPN privatizan el agua? Esto dicen especialistas, ONG y el gobierno”
It allows the pollution of rivers with chemicals as far as their “assimilation capacity?” is not exceeded. Even if the concept could be considered as interesting, these decrees propose that the volumes of pollution will be checked on voluntary audits. This represents a problem because due to many facts. Firstly, the audits are not mandatory, giving room to impunity. Secondly, it means that the polluting companies will have the possibility to regulate themselves. And thirdly, even if a third-party audit comes into place, these companies would still have the possibility to do their own studies, creating confusion among the judges and the public opinion. Thus, it concedes time and avoids paying the maximum fine of 3.5 million USD. This happened in the case of the Río Sonora, where the involved companies avoided a USD 3,5 million fine, while the estimations dictate losses of 20 thousand million USD in the Río Sonora (OECD 2013). However, not even the third-parties are allowed because independent and scientific research are criminalised. And at the same time, it inhibits the social or academic monitoring in order to know the level of different components in the water.

Finally, the 8th article of the new Ley de Aguas dictates the water transfers and its infrastructure as “public utility” regardless of its uses. Among the many political/environmental opinion websites, most of them agree with the fact that evidence already shows that transferring water from one basin to another has great environmental and social consequences. However, from now on, to transfer water for industrial purposes will be viable and justified as a “public utility.”

Indigenous resistance to reforms & resistance to change

FORMS OF INDIGENOUS RESISTANCE

The assimilation capacity is the quantity of pollution that a water corpse can receive and still be purified, without altering the quality patterns for the uses it was purposed.

¿Qué pasa con la nueva ley de aguas en México? - Ecoosfera
https://ecoosfera.com/2015/03/que-pasa-con-la-ley-de-aguas-en-mexico/
During the last decade, in the Metropolitan Zone of Mexico City, the indigenous demands of water have evolved, privileging confrontation and pressure. This leads to thinking about the rise in the intensity of these contestations as the expression of a rupture or non-existence of channels for conflict resolutions (Kloster 2007). Most of the indigenous contestations and resistance are concentrated on verbalised and written demands, physical and moral force (including the body), blocking and torsion. These actions are understandable if we look at these decrees as a violation of their very rights. For example, following the agreement Nº 169 of the Organización Internacional del Trabajo (OIT), in order to execute any territorial change regarding natural assets, the government is supposed to be forced to realise a previous, free, informed, well-intentioned and culturally adequate consultation.

Another factor to take into consideration is that indigenous groups in Mexico have the right to decide how they want to manage the water on their territories. This comes from the fact that, beyond the geographical dimensions, territories have social, historical, cultural and spiritual qualities. For example, rivers are considered as living beings with a soul.

**A NEW PRESIDENT, A NEW PROJECT?**

During his presidential inauguration, the new president Manuel López Obrador received the totem which made him the leader of the indigenous communities of United States of Mexico. This gesture represents the hope the indigenous groups have on López Obrador, the same hope the entire country had while taking the PRI out of the federal government. However, this gesture of trust can also lead to the possibility of the very cycle of abuse of trust to continue during Lopez Obrador Presidential mandate. This is because, in previous interviews, Obrador has shown little interest in putting forward substantial changes for the indigenous populations in general. For example, the 27th article of the Constitution will remain the same, giving preference to oil and mining
companies over the agrarian communities. But most importantly, he told he will not reform the new Ley de Aguas Nacionales because it aims a concessionary management system.

On the other hand, the totem Obrador received, does not represent the integrity of indigenous groups. And, looking at his list of 25 priority projects, it seems more an open declaration of war in detriment of the indigenous groups, leaving clear his intention to work with the entrepreneurship that seeks to work on indigenous territories. The clearer example is the Tren Maya: Obrador is more open to asking the earth itself rather than consulting the indigenous populations, as the law dictates.

**Conclusion**

The new Ley de Aguas Nacionales reformed through ten presidential decrees does not represent a water privatisation per se. However, the water passes from being a common good to a commercial good that can be sold, changed, transferred and polluted. Indigenous groups suffer from historic discrimination since colonisation, which has been reinforced through the legal, social and economic system. However, during the last 50 years, their rights and their position in society have worsened to the point that they are treated as second-class citizens (if citizens at all), denying them their promised autonomy, infrastructure and budget.

Even if Mexico does not have the legal framework and the physical capacities to govern its territory, these decrees become a warning to the world because of the fact that it is the legal system which, in effect, declares its own population as its enemy. Finally, these decrees do not give an optimistic landscape for the Mexican indigenous communities, because they will have to enter into direct conflict with the powers in the place, just as it was the case 200 and 100 years ago.
References


EL UNIVERSAL (2018), Verificado 2018: ¿Los decretos firmados por Peña Nieto privatizan el Agua? - Consulted on 14th Nov 2018


