Samuel Schmidt Nedvedovich*

Water, Power, and Society

Introduction

People often say that water is scarce as an argument to privatize it, at the same time that they recognize its importance by classifying it as a human right. Mexico has taken this concern on board, which is why it simultaneously reformed the Constitution and began privatizing it. Since legislation usually has a symbolic use, in practice, the understanding of water and its uses has not been reformulated. As a result, the decisions made have not been sufficiently sweeping and complex. The General Water Law has not been touched, but, although the legal obligation exists to review it and prevent conflicts, in 2015 there was an attempt to privatize water that met with strong resistance. It was rumored in 2018 that a bill had been drafted eliminating government control over water nationwide, but no such bill was ever introduced.

Recognizing water's great value implies rethinking the principles of social, economic, and political justice, and, of course, rethinking the country itself.

The neoliberal paradigm took Mexico by storm, marginalizing the political-electoral debate. What we have is practically a fait accompli: a country with privatized resources benefitting an alliance of the oligarchy and corrupt politicians, who maintain an economic, social, and political model rooted religiously in the belief that everything should be privatized —and water is no exception—, thus deepening economic and social differences and reinforcing repression. Water privatization experiences in different countries have been ruinous for their societies and Mexico is one more example of that.

The Political-economic Context

When the neoliberals came to power in 1982, a slow, systematic process of privatization and economic reform began that impoverished the majority of the population. The multi-million-peso programs against poverty not only did not resolve the problem, but prompted more corruption. Parallel to this, wealth became so much more concentrated that 33 families now dominate the national economy.¹

^{*} Political scientist at the Teresa Lozano Long Institute of Latin American Studies, University of Texas in Austin; shmil50@hot mail.com.

The neoliberals have maintained that the period of reforms would cause temporary instability, after which there would be progress. However, while society suffers, the bonanza has still not come. After signing NAFTA, a key piece in the process, the migration of 11 million people, migrated mostly to the United States, with the corresponding abandonment of the countryside. This prompted an important drop in agricultural production and a deficit in the agricultural trade balance. Therefore, today Mexico is the world's largest importer of grain, and 70 percent of the national diet is purchased abroad. In addition, agricultural products began to be sub-contracted out to benefit Mexico's trade partners, while exploitative conditions are maintained using the old formula of low-paying jobs.² The free trade agreements spurred the dismantling of light industry and reinforced the dependence of the domestic market on cheap foreign production, such as low-quality items imported from China, although many of them come into the country as contraband thanks to corruption.³

Donald Trump's election ended NAFTA, causing panic among Mexican neoliberals; they do not know what to do without the model they were following unquestioningly, nor do they have the capacity to repair the economy due to its dependence on the rules of origin for NAFTA products that attracted industry. It remains to be seen what kind of arrangement will actually be put into place with the new Mexico-U.S.-Canada agreement, which has not even been signed yet and seems to be influenced by the coming 2019 Canadian and 2020 U.S. elections

The country requires national reconstruction: 60 percent of the population lives outside the market, which is an economic problem and implies a profound humanitarian question involving educational and health issues due to the availability of sub-standard services and degraded individual options for people at the end of their lives. Authors like Yehezkel Dror point out that the future will include higher unemployment due to automation and a longer lifespan due to improvements in medicine.4 The latter will benefit the richest strata of society, while the poorest will see a drop in their job opportunities and will die younger, a possible incentive for greater demographic growth in these social strata and therefore a potential source for increased social and political tensions. Added to this will be the pension crisis, because administrations have used these funds for running expenses. This means that retirees will have fewer resources —or Recognizing water's great value implies rethinking the principles of social, economic, and political justice, and, of course, rethinking the country itself.

none at all in some cases— and there are no funds to alleviate the poverty of those who were once employed with a "decent" income. The poorest of the poor will have an impoverished old age.

One element that will be affected by these technological changes and their social impact is water, whether because companies move into areas where it is abundant or because they set up where it is scarce, pressuring communities. An example of this is the beer plant planned for Tecate, Baja California, which will impact water availability and spur conflicts among the population, conflicts that will usually be repressed.

This remits us to the fact that neither the Mexican government nor society has thought seriously about how central water is to dealing with these challenges. The country's neoliberal model has led us to a form of unequal technological development; this is why policies will only benefit the well-to-do. It remains to be seen whether Mexico's new government will develop policies to stop benefitting the richer sectors of society who take away wealth from the poorer sectors, or if it will be able to change the decision-making framework to situate water at center stage.

The Water Paradigm

When I re-wrote Los grandes problemas nacionales (The Great National Problems), ⁵ I found, as Andrés Molina Enríquez correctly recognized in 1909, ⁶ that water management was one of the great national problems because it was linked to grain production. By the twenty-first century, its importance has grown as we try to meet the needs of thirsty cities.

Despite this, society is not aware of water's strategic value, as described in a Delphi study carried out in border cities.^{7 8} The government does not have a water policy for food production as a factor for national security or for urban industrial use as part of socio-economic develop-

ment. Neither has it developed one for border areas, among which the North is one of the country's fastest growing. Society does not mobilize to satisfy its water needs because of a culture of paternalistic handouts and the patronage system: people know that the water will come, even if sometimes at a high price. It has been shown that the poor pay more for water than the rich, whether because they have to order tanker trucks to fill their containers or because they have to boil tap water to ensure its safety.

The law makes redefining public and private priorities regarding the use and re-use of water difficult; immobility fosters its being handled for partisan interests and control of consumers. Neoliberal ideology has brought about the neglect of broad national interests in favor of promoting private interests; the lack of attention to the problem has gotten to the point that transboundary waters are not even on the political map.

However, bad management has existed since the colonial period. I wrote in reference to what Molina Enríquez put forward,

Control of water, in contrast with land, did not generate income, and this resource was handled by the states with a tendency to centralize it. [Molina] makes a distinction between the kinds of water control: the commons, which cannot totally and definitively appropriate it; public control, dominated by public officials; and private appropriation, which civil law puts under the aegis of private citizens. Water ownership must also pass into private hands and be revocable; public water must be distributed between the federation and the states, and between the states and municipalities. He also warns about lakes drying up.⁹

This neglect means that we do not know how many wells exist in Mexico, the amount of water pumped, or its quality. The 1917 Constitution ceded control of water to the state, but it has been privatized through concessions for private use, and now it is being given to companies for generating drinking water and sanitation for entire cities. The neoliberals launched a trial balloon to see if they could completely privatize it using the cover of the focus on the 2018 election campaign, but they did not have enough time. Their overwhelming defeat in July 2018 took that proposal off the table for the time-being; what is needed

When the neoliberals came to power in 1982, a slow, systematic process of privatization and economic reform began that impoverished the majority of the population.

now is to address the matter of private use of water and a new law to guarantee the supply of good quality water for agricultural, industrial, and urban use, paying strict attention to environmental issues. In this effort, groundwater must be a central topic.

The scarce water discourse, mixed with ineffective governmental management, seeks to turn it into a commodity. Water is bottled and sold at outrageous prices: in the United States alone, this market comes to US\$4 billion a year and the profit rates are in the thousands of percent. Companies sell mineral-free water, which is bad for the body, creating environmental problems, particularly due to the disposal of plastic bottles. It is calculated that 18 liters of water are needed to produce a one-liter PET bottle. Many other companies bottle tap water, for the deal of a lifetime; and several firms have stolen native peoples' water supplies to bottle it.

Groundwater, the world's main source, is inefficiently managed. A plethora of examples exist of corrupt politicians appropriating it or concessions being granted for private projects. In Mexico, the governor of Sonora's private dam has been publically denounced, as has the Independencia Aqueduct that dispossessed the Yaqui people of their water to divert it to the state capital, Hermosillo, although it seems that part of it was also diverted to a ranch owned by a former governor. We also know of a housing development in Tecámac, State of Mexico, that affected an aquifer; a series of dams built in Chihuahua seemingly to irrigate the ranches of a former governor; and the list goes on and on. Dispossessing communities far away from Mexico City of their water has facilitated a building boom with terrible consequences, as demonstrated by the September 2017 earthquake. We don't know what the impact of drilling at 2 000 meters to pump water for Mexico City will be.

The big urban centers like Monterrey, Toluca, Mexico City, and Puebla have exerted enormous pressure on nearby and far-off water sources, producing serious environmental impacts, affecting nearby agricultural production,

and seriously questioning the viability of this kind of overcrowding. In addition, most of the country's 100 most important cities lack water treatment plants, and the country has no culture of saving, using, or re-using water. ¹⁰

The future will demand more foodstuffs that will have to be produced on irrigated land, but farmers cannot compete with foreign producers due to the high cost of access to water: it costs too much to extract it, both because of the price of diesel and the electricity needed to operate wells and because of government refusal to subsidize this, in accordance with the neoliberal model, and ignoring that the agricultural trade balance could be improved as a matter of financial security and in the national interest. It also does not stimulate research on water production or incorporate water-saving technologies in high consumption activities. The broad issues like the use, re-use, and exploitation of reserves have been neglected; this, combined with deforestation, has worsened the droughts that have plagued agricultural production.

Legislation passed since the 1990s mandates that cities must build water treatment plants. The government had hoped that by 2005, at least 81 cities (48.1 percent of all of them) would achieve a municipal wastewater discharge quality goal. In 2016, Mexico had 2289 water treatment plants distributed unequally throughout the country and with differences in water quality. An Inter-American Development Bank (IDB) study revealed that Aguascalientes, Baja California, and Nuevo León were the most effective in treating wastewater (covering 100 percent), followed by Guerrero (82 percent), Nayarit (79 percent), and Chihuahua and Sinaloa (about 74 percent). The lowest coverage was observed in Yucatán and Campeche (3 and 7 percent of wastewater, respectively), while in Central Mexico, Hidalgo and Mexico City only achieved about 15-percent coverage. 11 Only 11 more states have surpassed 60-percent coverage, although the government goal is to treat 100 percent of wastewater by 2020. In the current conditions of chronic economic difficulties, it is very possible that this goal will not be reached, and that no legal re-

Mexico is a country with privatized resources benefitting an alliance of the oligarchy and corrupt politicians.

percussions will result from that failure due to a fear of political tensions and conflicts that could be prompted by enforcing the law.

Final Thoughts

We usually pay attention to surface water, and we are shocked to see lakes dry up and rivers and lakes become highly contaminated. The reality is that Mexico depends on groundwater, which is invisible, particularly for politicians. One-third of the world's population depends on groundwater. In Mexico, 70 percent of all the water that goes to cities comes from under ground, supplying approximately 75 million people. As a result, the number of overexploited aquifers went from 36 in 1981 to 96 in 2000, with the resulting saline intrusion in 17 aquifers in Baja California, Baja California Sur, Sonora, Veracruz, and Colima. 12

The National Water Commission (Conagua) uses an obsolete methodology that allows it to conclude that these overexploited aquifers exist and to issue protection orders for them, despite the fact that its management is so bad that no official in Mexico knows for sure how many wells exist in the country. Nevertheless, huge industrial projects are authorized and fostered in areas recognized as suffering from water scarcity (Hermosillo, Ciudad Juárez, Tijuana, and Tecate), and authorization is given for the construction of housing projects that affect the aquifers (Mexico City and Tecamac, among others), or water sources are irresponsibly used up.

Officials continue to use an obsolete methodology for political reasons, following the logic of controlling consumers. In that sense, the basin is a political concept and is dysfunctional if we aim to formulate good water policy, because it ignores geology and hydro-geology.

In contrast with what is said as part of the water scarcity discourse, the wars of the future will not be fought to control this resource. Common problems can be an incentive for innovative forms of collaboration, just as has existed between Israel and Jordan. That is why we need to be more creative in our relationship with the United States. The border, a desert area, is growing fast with important industrial zones, making transboundary groundwater even more important. However, this is complicated by the fact that transboundary aquifer management lacks a legal, political, and technical framework. A differ-

ent vision of water when planning how we build the future can provide a space for generating a new bi-national relationship, in which we protect both water and the environment.

Notes

- 1 Samuel Schmidt and Rubí Rivera, "La doctrina del shock en México: los neopols en el poder/I," Forbes México, September 14, 2015, https://www.forbes.com.mx/la-doctrina-del-shock-en-mexico-los-neopols-en-el-poder-i/.
- 2 One example is the San Quintín Valley, which produces celery, squash, chili peppers, beets, cucumber, tomatoes, strawberries, blueberries, and raspberries for California, producing an outbreak of labor conflicts. See Scott Campbell, "The San Quintín Rebellion," IGD, 2016, https://itsgoingdown.org/san-quintin-rebellion/, accessed October 2, 2017.
- 3 Twenty-two treaties and agreements have been signed that hypothetically give Mexico access to a market representing 60 percent of world gdp, but the reality is that with almost all these countries, Mexico has a trade deficit.

- **4** Yehezkel Dror, Avant-garde politician. Leaders for a new epoch (Washington D.C.: Westphalia Press, 2014).
- **5** Samuel Schmidt, Los grandes problemas nacionales (Mexico City: Aguilar, 2003).
- 6 Andrés Molina Enríquez, Los grandes problemas nacionales (Mexico City: A. Carranza e Hijos, 1909), available at the Biblioteca Virtual Miguel de Cervantes Saavedra, Universidad de Alicante, http://www.cervantesvirtual.com/obra/los-grandes-problemas-nacionales--0/. [Editor's Note.]
- **7** Broadly speaking, the Delphi method is a strategic planning method combining a qualitative selection of experts with a quantitative analysis of responses through repeated rounds of questions. [Editor's Note.]
- **8** Samuel Schmidt, Jorge Gil, and Jorge Castro, "El desarrollo urbano en la frontera México-Estados Unidos: estudio Delphi en ocho ciudades fronterizas," *Frontera norte* vol. 7, no. 13 (January-June 1995).
- 9 Schmidt, Los grandes...op. cit.
- **10** Ibid.
- 11 María Eugenia de la Peña, Jorge Ducci, and Viridiana Zamora Plascencia, "Tratamiento de aguas residuales en México," Banco Interamericano de Desarrollo, 2013, http://www.siagua.org/sites/de fault/files/documentos/documentos/tratamiento_de_aguas_residuales_en_mexico.pdf, accessed October 20, 2017.
- 12 Schmidt, Los grandes. . . op. cit.