

Fernando Flores

Clarksville High School

Clarksville, Arkansas

United States, Water Scarcity

Water Scarcity in Mexico

Mexico is a thriving country, yet it has distressing problems like most other countries. Problems everyone knows about, but do not know how to begin to fix. Many people probably think of the drug cartels as being the main problem in Mexico, but an even bigger problem regarding the most precious of resources exists. Mexico City has a water problem. Water scarcity is not a new problem, however, it is an ongoing problem. Mexico lacks access to safe drinking water (“Mexico, water.org”). This paper will reveal the struggles and possible solutions to Mexico’s dire problem. The three states Zacatecas, Hidalgo, and the state of Mexico, including a brief mention of Mexico City’s own problems with water quality and equity.

To begin we will talk about policy and state water access in the state of Zacatecas. In this state there are villages where water is scarce and some cities where water is abundant creating an unequal distribution of the water supply. Still, government officials neglect water sanitation and water quality policies, which in turn effects sanitation levels. The answer to the issue is not complicated. Local governments need to act in the best interest of all their constituents. To improve water quality and water accessibility, Mexican citizens need to appeal to their elected officials to care about accessibility and quality. Then the necessary infrastructure needs to be put in place, so it allows water to be provided by the government to every citizen in the city, then state, and eventually the country. An example of these steps is providing citizens with filtration devices and funding centralized chlorination plants. “Chlorination of drinking water within the drinking water network or at the point-of-use (POU chlorination) is widespread practice in many Sub-Saharan African countries” (Water Purification Africa) Following the lead of African countries by using available information to clean and disinfect water could improve water conditions in Mexico astronomically. These are a just a couple of steps to produce a real change in the quality of life of Mexican citizens. One con of these water supplies is that they utilize ground water, but they are not completely sanitary. Implementing water sanitation plants or some safe chlorination system would have a positive effect on Mexico’s water scarcity and water quality problems. To conclude this paragraph this states’ main solution is to appeal to their government for improvement.

The state of Hidalgo is lucky to have an abundance of natural springs that feeds into its rivers and lakes. There are even many water attractions and bathhouses, which are supplied by the natural springs. One drawback to the use of the natural springs is their high levels of pollution. People dump trash and random sewage in these rivers making them useless without water sanitation facilities. These polluted rivers cause disease epidemics, which are transmitted by infected water, such as Hepatitis A. (The World Factbook – Mexico) With Hidalgo’s scattered

springs the country could use the water for its own state and surrounding states if not for the pollution due to lack of sanitation facilities. The pumps only cost a few hundred dollars, the cost of labor is low, and the profits of selling the water to surrounding states would help replace funds used. While the luxury of water abundance blesses the state of Hidalgo, there are portions of water shortages in the state of Mexico. Water scarcity in Mexico begins with government and it is not in the government's best interest to go against their own people's wellbeing because that goes against themselves. Water security is vital for our society to function properly. With the prevalence of disease outbreaks, water access is vital. In the next paragraph more information of disease and water access will be explained.

In the state of Mexico, especially near Mexico City, there are water shortages. Being the most populated portion of the country, water access will be the most critical. Currently, during the Coronavirus pandemic, it is especially important to have safe water for sanitary purposes. Some might be familiar with the 'Wash your hands consistently' during the pandemic. Residents in the outskirts of the city say, "We don't have running water and because of that we suffer. (Rivers and Gallon, 2020)" The CNN reporter adds "Most of these residents don't have running water and yet you see government campaigns saying, "Wash your hands constantly (Rivers and Gallon, 2020)." Most of Mexico's diseases are directly transmitted due to the quality and safety of the water. Implementing a water sanitation process and educating people about water safety are huge steps toward water sustainability. Even if some diseases in Mexico are not transmitted via water, clean water, and soap help to kill bacteria spread by hand-hand contact and hand-face contact. Take the COVID-19 pandemic for instance, there are multiple protests and complaints all around the country about water for hand sanitation purposes. Meanwhile, Hepatitis A and Bacterial Diarrhea are both transmitted via feces and infected water and food. (The World Factbook – Mexico) It is of the utmost importance to provide safe water for hand sanitation and consumption to prevent present and deadly disease.

Economic disparity is the main cause of water inconsistency in Mexico City. How can the countries citizens abide by government mandates when there is no access to water? Income has everything to do with the availability of water to the Mexican people.

For example, in January of 2017, huge protests broke out in Mexico. Protesters blocked highways, closed state-owned gas stations, and marched all around the country. (Argen, David, 2017) Water shortages from the protests occurred in the outskirts of Mexico City. Because most of the water in the outskirts of the city is transported by trucks, the road blockages and the inaccessibility to gas played the biggest roles in the shortage. This is just one of few occurrences where the infrastructure necessary to provide people with water failed. Failed because the infrastructure wasn't available.

Mexicans are resourceful, but education on how to store and use water efficiently needs to be implemented. "CONAGUA has said that 57 percent of the water resources consumed in Mexico are lost in the evaporation process" (Bello, 2020). If someone visits Mexico and sees the manner of which Mexican people collect their water, it will affirm that this is true. Many in the state of Mexico store water in outdoor tanks made of concrete. This water evaporates on hot days making water collection impractical. These concrete water tanks are also not usually sanitary, with most

of them having algae growing in them. The Mexican people cannot drink directly from this tank without risking sickness, but people wash their hands, face, dishes and articles of clothing, as well as showering with it. This can be a major health risk. To mitigate evaporation, an alternative possibility is to use airtight and non-corrosive tanks. In addition to evaporation and replacement of the inefficient tanks, these types of tanks are a breeding ground for mosquitos. One of the diseases transmitted by mosquitos is Dengue Fever, which is a disease that is transmitted by vectors, which is an organism that transmits diseases. (The World Factbook – Mexico)

It is no secret that Mexico lacks the infrastructure to provide safe drinking water. It would be better if residents were provided with personal filtration systems and personal water purification techniques. This might be excessive; however, it is an entirely appropriate solution. Mexico could implement water purification technology and water filtration techniques similar to the ones in African countries. “One in every three homes in Mexico does not receive water daily” (Bello, 2020). Water access in some states is less than twenty percent (Bello, 2020). Mexico has water to provide to his citizens, but their government does not seem to feel the urgency of the situation.

Across the country of Mexico there are water problems, whether it is water scarcity or poor water quality. There are increasing water pipeline connections in Mexico which are slowly improving water situations. Water scarcity is also a global issue. Water is a precious resource many people do not have safe access to. Water is essential for life. Water makes up seventy percent of body mass. Mexico’s cities and municipalities have many options to develop the infrastructure for safe water accessibility. Yet, they still need to achieve certain goals to bring Mexico closer to water sustainability.

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