Water Scarcity

Institutional Affiliate

Date

**My environmental justice issue is the scarcity of water in Egypt.**

International groups warn that the country could run out of water in the next six years. The issue is important since the right to safe and clean water enshrines the right to food safety, right to health, and the protection of marine life and resources. The preservation of clean water guarantees safe drinking water, food safety, and improved health. Safeguarding different sources of water from pollution protects marine life, guaranteeing food safety. The right to access clean water is constantly violated. Studies show a rise in water pollution due to various factors like the disposal of home and agricultural sewage and industrial pollutants. The industries contribute majorly to the pollution of the Nile River. More than 300 facilities dump their waste directly into the river or through sewage networks.

**People impacted by the environmental issue.**

Even though access to water is universal and effective in urban areas, many households, especially those in low-income areas like urban slums and rural areas, do not have access to safe water. In rural areas, more than 10% of the population resides in dwellings that are not connected to the water system. This number drops to 4% for those not connected to the system in urban areas. Most of these people are found in poor settlements and urban slums since they do not have enough sources of income. In the slums, 13% of households do not have piped water connected to their homes, and for those that have, the connections are illegal. The lack of access to safe and clean water and appropriate sanitation amenities, coupled with poor hygiene, results in the spreading of infections that have negative, significant effects on children's nutrition and health. In Egypt, the second leading cause of high mortality among children under the age of 5 is diarrhea, which mostly affects low-income communities.

**Cumulative Burdens**

The country's water scarcity, especially among low-income communities, is cumulative and structural. The roots could be traced to years of instability. This trend has been aggravated by issues like the fuel, food, and economic crisis, and the avian influenza pandemic, all happening between 2006 and 2009. The economic decline witnessed from 2010 to 2012 resulted from various political events that made the price of water and other essential commodities rise. This increased the rate of hunger, with recent figures showing that 17 percent of the population, which translates to more than 13 million people, experienced water scarcity and food insecurity. Water scarcity and food insecurity are related to the lack of economic access. An increasing number of low-income Egyptians cannot afford to buy enough food or have their dwellings connected to clean, safe water. Increased poverty levels make those affected search for alternative means of finding water, resulting in health risks since some of the water sources contain elements like magnesium in high quantities.

**Research or data to explain the impacts of the pollution**.

The water pollution experienced in the country is affecting various industries that are dependent on the resources. Agriculture contributes 14.5% of the country's gross domestic product and is a source of employment for many people. Since water is important in agriculture and inflated food prices and increased unemployment are attributed to causing the 2011 uprising, water scarcity, particularly in agriculture, risks driving the state into another political crisis (Badran, 2014). Reducing water resources may complicate existing problems related to the lack of water infrastructures, little accountability and transparency in the sector, and unequal distribution, with low-income areas and slum settlements being the most affected. The last decade has seen many protests happening due to water shortages, water-intensive land reclamation initiatives, and increased water pollution. Such protests will increase if there is no solution to the increasing water scarcity. Even though the problem seems to affect the poor more than the rich, this could result in instability, affecting various economic activities spread across the country. The impacted communities provided information on the difficulties they are experiencing due to water scarcity and the alternatives they have to use to meet the water shortages.

**Stakeholders trying to raise awareness on the environmental justice issue.**

The World Bank, the Food and Agricultural Organization, the Ministry of Agriculture, and the European Bank for Reconstruction and Development highlighted various solutions to handle water scarcity. This involves treating groundwater and resuing it in agriculture. The irrigation system has been improved by implementing contemporary irrigation methods. The government and the affiliates are creating new water sources by desalinizing saltwater from the Mediterranean and the Red Sea (Tal, 2011). The country has invested in various energy sources like nuclear and hydropower to supply the energy needed in this process. Various water-collection facilities are being constructed around the country, with each having the capacity to contain 500 cubic meters of water. People in the Red Sea governorate are using water from the Red Sea instead of the pipelines that stretch to the Nile River. The solutions they are promoting are the desalination of seawater, rationalization of water consumption, and management of wastewater or rainwater.

**Recommended solutions.**

The recommended solution for solving the water scarcity grappling low-income communities in Egypt includes looking for other water sources like underground water. Even though it may seem expensive, the water can provide individuals a constant water supply for several years to come. Another step is using water-efficient agricultural innovations like drip irrigation. Most Egyptian farms use the flooding method, and this leads to a lot of waste. The government should find techniques that enabling water recycling of sewage waste. The drainage canals leading to the Nile River contain a lot of toxic agricultural and industrial waste.

References

Badran, S. Z. (2014). The contentious roots of the Egyptian revolution. *Globalizations*, *11*(2), 273-287.

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