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Yemen, Water Scarcity

Yemen: Addressing the Issue of Water Scarcity

According to the Office for the Coordination of Humanitarian Affairs (OCHA), Yemen remains the world's worst humanitarian crisis, and the situation for the millions of affected people is deteriorating. The humanitarian crisis in Yemen, specifically of the Yemeni people, is being ignored and overlooked due to the conflicts between local powers in the region. The war that has plagued the country only serves to worsen the lack of basic resources available to the Yemeni people, to the point where over 80% of the population requires humanitarian assistance (WHO). Major issues in Yemen today such as the lack of food and diseases stem from the problem of water scarcity, especially a lack of clean water, which is vital for supporting any healthy population or community.

Today, Yemen's population is 29.16 million (Data Commons) and the war we see now in Yemen has resulted in over 233,000 deaths, over 131,000 reported to be from the lack of basic resources and health services (UN News). Consequently, Yemen is now considered the poorest country in the Middle East (UNDP) and continues to face challenges as the conflict within the region persists.

The long-standing cold war between Saudi Arabia and Iran has now made its way to Yemen. At first, the Yemeni government was forced to replace former President Ali Abdullah Saleh with his vice president, Abdrabbuh Mansur Hadi, in hopes of change and progress for Yemen. However, this transition of power led to unforeseen problems such as open war and widespread deprivation. After Hadi took power, food insecurity and poverty became more prevalent due to unemployment. Many people felt that he was no longer the right choice as leader. The rebels who favored President Saleh, known as the Houthi rebels, began to riot which caused Hadi to flee to Saudi Arabia. This led to a massive rift within the country with Saudi bombing the rebels and Iran discreetly supporting the Houthis, leaving the citizens of Yemen to become caught in between the violence. Basic resources were becoming scarce as rebels needed to use them for fighting and Saudi Arabia began intentionally targeting areas of food and water in order to starve them, conditions that can introduce sickness as well. As a result, the Yemeni people and families are now struggling to survive each day.

Even humanitarian aid is becoming restricted and difficult to send to Yemen. Saudi Arabia and the Houthi forces have both contributed to the restrictions placed on the imports and exports of

Yemen. While the Houthis confiscated the foreign aid that was provided to the Yemeni people, Saudi Arabia enforced a naval and air blockade on the entire nation. (Al Jazeera) This put the Yemeni citizens in a difficult position as they must survive the fighting and the Saudi bombing without food or water. In addition to the ethical concerns of interfering with the resources meant for the Yemeni citizens, the Houthi group and Saudi Arabia are also violating the International Humanitarian law which requires those involved in the war to allow impartial aid to the civilians who live in the areas of conflict (Human Rights Watch).

Most families in Yemen, on average each household consisting of 6.7 people (Ministry of Public Health & Population Central Statistical Organization), are dependent on bread and tea for breakfast and dinner, with the possibility of some rice for lunch. Bashir al-Sofi, a Yemeni citizen, has a family of nine who each eat about 500 calories per day. This amount is approximately one-fourth of what they should be eating based on a standard balanced diet (NHS). The lack of food has led to the escalation of child death from undernutrition and famine. The amount of children whose skeletons can be seen protruding from their bodies and the number of parents who are barely managing to find food for their families continues to grow with the maintained conflict (Middle East Eye).

We can observe the reason why families are struggling with low amounts of food and constantly acquiring diseases by taking a deeper look at the issue of water scarcity in Yemen. Although it is an indirect relationship, the availability of water is necessary to create a foundation for agricultural success. In Yemen, around 90% of total water is utilized for food crops and agriculture (New Agriculturist) which means that water insecurity can threaten the quantity of water given to the people. It presents an especially difficult decision for farmers from using the limited water to either maintain a lifestyle centered around tending to crops or providing the water for their families directly who immediately need both food and water. The average size of every farm in Yemen is about 1.1 Ha (2.7 acres), and with that land most Yemeni farmers focus their resources on growing qat as it is the most profitable (FAO/WFP Crop and Food Security Assessment Mission). However, this becomes an issue when there is limited water and over 30% of the water is going to grow qat, a crop known to contain mildly narcotic leaves (New Agriculturist). This increases the chances of famine and starvation because there isn't enough water to provide for crops that can be used as a reliable source for food, and this is especially a problem considering a majority of foreign aid packages are already being intercepted before it reaches the Yemeni people.

While the supply of water is crucial in battling food shortages, it's also an essential part of successfully being able to reduce disease in Yemen. Cholera and acute watery diarrhea (AWD), common diseases in Yemen, are spreading fast throughout the war-torn country and causing death rates to increase at a drastic rate. WHO reports a total of 1,371,819 cholera cases from January 2018 to May 2020 (Global Alliance Against Cholera And other Water Borne Diseases).

The root of the water scarcity problem is the unregulated agricultural process in Yemen as well as the high prices of water that follow. Another Yemeni citizen, “Abdel-Wahab al-Hashedi, the driver of a water tanker, said the price of 3,000-litre of water increased from 2,500 to 5,000 Yemeni riyals” (Asharq Al-Awsat) due to the insufficient amount of drinking water in Yemen. The people of Yemen cannot afford to pay for clean water, and continue to struggle with the polluted water that flows through the public water taps. Kids are sent out through neighborhoods to search for these water taps with the biggest buckets they can carry, some children even being killed due to the dangers of the journey in a conflict zone (Al-Kamali). This has led to the outbreak of cholera in Yemen since the disease can be caused by drinking water that is contaminated with cholera bacteria (CDC) and as long as the people are dependent on this unsanitary water, it can cause deaths by cholera to add to the millions of people who are already dying from the conflict and food insecurity.

As the difficulty that Yemeni people are facing due to the scarcity of clean, affordable water intensifies, organizations such as the United Nations International Children’s Emergency Fund (UNICEF) are working to reduce the water crisis by providing as much humanitarian aid as possible. UNICEF implemented a program that goes by the name of WASH (Water, Sanitation and Hygiene) which has given assistance to the Yemeni people with water trucking, building water points, communal water tanks, constructing latrines for sewage regulation, and distributing hygiene kits that contain household water treatment tablets (UNICEF).

The regulation of clean water and sewage that UNICEF is providing can create tremendous progress towards addressing the shortages of food and water insecurity. In addition to the water systems, iodine water tablets are provided to households which work to purify water since iodine “kills the bacteria in water by disrupting the ionic balance within the pathogenic cells” and “replaces the chemicals necessary for the bacteria or virus to thrive with iodide ions”(Crouse). Both of these solutions that UNICEF provides allow citizens to receive clean drinking water immediately while implementing long-term solutions with the construction of sanitary water systems and pipes.

It is crucial to recognize the effort and aid that UNICEF has granted the Yemeni people, in order for them to receive any help that they can to survive this war. However, with clean water becoming increasingly scarce due to the continuing farmers’ irresponsible practice of growing qat over food crops, severe drought, and war, it seems that the only permanent and realistic solutions would be either for the conflict to end or for more regulation on the way water is distributed throughout Yemen. Both of these solutions would require extreme and radical measures (Al-Jazeera). At this point in time, the Yemeni people should not have to wait for a relentless political struggle that has persisted for many years as their own families struggle with famine and disease.

As previously mentioned, Yemen's water supply is primarily focused on supporting agriculture rather than pure drinking water for the people. This unequal distribution of water can change if Yemen takes advantage of the weather throughout the year. Yemen frequently experiences extreme drought and rainfall annually, which may seem like a problem but if it can be harnessed, can lead to significant improvement to Yemen's domestic water supply and irrigation (Al Jazeera). However, the Yemeni government cannot afford to supply or construct effective dams or water storage facilities, ultimately causing water shortages (ReliefWeb). This is where foreign aid could substantially turn the situation around and create a reliable system for water by using its natural resources such as rainfall.

In cities such as Sanaa and Taiz, extreme rainfall and flooding is common (ReliefWeb). If the people were given heat-resistant water storage containers, it could be used in every household to preserve great amounts of water from the rainfall, and take pressure off of the amount of water that is needed for agriculture. On the other hand, this would allow the Yemeni people to receive more water for drinking. Once every building or residence can take action to store rainwater, the continuing shortages would decrease tremendously. The next step would be deciding on a specific material that doesn't absorb too much heat in case of evaporation that can be a concern during times of harsh drought. Typically, plastic is used as a common material, but it may not be able to withstand the radiation of the sun and heat that Yemen has on a regular basis. If organizations were to design the container to be made of a reflective metal, it could repel the heat of the sun and keep the water's temperature relatively lower than the external temperature (hunker).

Regardless of the difficulties and circumstances, the UN and the entire world cannot ignore this humanitarian crisis. The innocent Yemeni people who have been exploited and robbed of their lives have become human sacrifices in between political tension and a proxy war for power. They can die painful deaths if we continue to let the crisis extend any longer than it already has. Countries around the world should provide funding for clean water and support organizations like UNICEF in order to avert a large and unjust amount of casualties. With a greater amount of support, it can also be easier to ensure that the citizens are truly receiving the foreign aid that is being provided. It would allow organizations to have the actual funds to guarantee to meet necessities of the people without being drained by the rebels who confiscate it from the people. Taking steps towards eliminating water insecurity can be the start of creating foundational change for the drained food and water supply that Yemen is facing due to the blockade of foreign aid and internal problems with division of the food and supplies provided.

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