



## **The Impact of Clean Water**

### **Background**

Access to clean water is necessary to sustain life. Clean water is a basic human right and a requirement for the survival of human civilization. Therefore, every country has a responsibility to assist in the current water crisis. Everyday, people use water for drinking, cooking, sanitation, and hygiene, among other daily activities necessary to meet one's basic needs. Access to clean water, whether used for domestic needs, food production, or drinking is also necessary for public health. Good management of hygiene, proper sanitation, and safe water supplies can save the lives of 3.5 million people every year, of which 1.5 million are children. Statistics show that 1 out of every 9 people do not have access to clean water, and 1 in 3 do not have access to basic sanitation services ("Why Water," n.d.). Providing access to clean water ultimately results in eliminating global challenges such as hunger, poverty, inequality, and most importantly, improved health, education and economic growth for millions. The consequence of lacking access to clean water pervades people's daily lives. For instance, good hygienic habits resulting from access to clean water, like handwashing, can reduce water-related deaths by 35 percent. Overall, improving water supplies and sanitation will reduce water related deaths by 37 percent ("Why Water," n.d.).

### **The United Nations' Sustainable Development Goals and Water**

In July 2010, the United Nations General Assembly recognized the human right to water and sanitation for every human being around the globe. The Assembly emphasized the importance of the right of every human being to have access to enough water for personal and domestic uses, which must be safe, acceptable, affordable, and physically accessible. In addition to this recognition, access to safe and clean water are explicitly outlined in Goal 6 of the United Nations' Sustainable Development Goals to "Ensure availability and sustainable management of water and sanitation for all" ("Water," n.d.). The targets cover all aspects of both the water cycle and sanitation systems, and the achievement of Goal 6 is designed to contribute to progress across health, education, economics, and the environment.

### **Water and Health**

Contaminated water and poor sanitation are closely linked to preventative diseases. According to the World Health Organization, approximately 2.1 billion people in the world do not have access to clean water. In 2018, about 159 million people collected unsafe water from lakes and ponds, of which an estimated 842,000 people died from diarrhea alone. 361,000 of these deaths were children under the age of five ("Water," n.d.). In fact, waterborne diseases caused by contaminated water are a significant contributor to needless deaths globally. Currently, 3.4

million people die each year due to unsafe drinking water (“Water,” n.d.). Millions continue to suffer from preventable chronic diseases caused by contaminated water, such as schistosomiasis, which is caused by a parasitic worm living in untreated fresh water pools. Access to water can dramatically improve the quality of life for millions by improving health conditions.

### **Social and Economic Impact**

Certainly, providing access to clean water will reduce or eliminate the amount of time spent collecting water for the millions who currently lack a direct water source in their communities. Approximately 1.3 million people take daily trips lasting about one hour to obtain water (“Water, sanitation and hygiene...,” 2015). Since women and children are given the responsibility to collect water, they often face danger and extreme weather conditions. It is evident that by improving the availability of water sources, people can concentrate their efforts on more productive tasks, such as obtaining a higher education. An enormous impact that clean water would make is the improvement of public health. Safe water means that less people will get sick. The less people get sick, the more they can work, and the less the government spends on public health programs.

### **Challenges**

Climate change and population growth are the main causes for water scarcity. By 2025, half of the world’s population will be living in water-stressed areas (Lysaght, 2018). As a result of global warming, extreme drought, which challenges those who rely on agriculture as their main sources of income and survival, has caused the deaths of millions of people. The continuous population growth demands increased food production, which cannot be met due to water scarcity. In general, agriculture accounts for 70 percent of global water consumption (Lysaght, 2018). In most developing nations, fresh water is used for irrigation and food production, which puts tremendous pressure on water availability. Since conditions are expected to worsen, countries are urged to implement strategies that reuse and recover water after consumption. When reusing water, it is critical to process waste water effectively, because harmful bacteria can survive food production or pose other health problems. The developing world lacks the capabilities to treat waste, thus 90 percent of untreated water flows into lakes and rivers, (“Why Water,” n.d.). Most developing countries have the resources to treat wastewater, but current laws and regulations allow industries to continue dumping harmful waste in water sources every year. It is estimated that industrial waste accounts for 300-400 tons in fresh water supply every year (“Why Water,” n.d.).

### **Well-Building in Haiti**

In January 2010, a massive earthquake killed 230,000 people and injured 300,000, causing the Haitian government to shift focus to clean water. Providing clean water and sanitation facilities proved challenging as only 17 percent of people had access to proper sanitation and 69 percent to a clean water supply (Patrick et al., 2013). An outbreak of cholera spread through camps across the country due to unsafe water treatment and poor sanitary conditions. This contributed to a

health crisis of 658,563 cases of cholera and 8,111 deaths, (Patrick et al., 2013). Foreign intervention and humanitarian aid were provided to Haiti, where well building was the top priority. The problem for many outside organizations' expanding well capacity was that the Haitian government was unable to sustain them. Institutions and government agencies lacked health protocols, and limited human capital made well maintenance difficult.

### **The Impact on Education**

In most African countries, roughly 90 percent of women and girls fetch water daily. According to the World Health Organization, about 6 hours a day are dedicated for water collection. An estimated 40 billion hours are spent annually on water procurement, ("Water, sanitation and hygiene..." 2015). Customarily, girls drop out of school to perform this errand. Most of the time, girls are forced to stay home caring for family and relatives. Even if girls attend school, their attendance and academic performance suffer. On an average day, African girls walk 4 miles to fetch water, which decreases their academic motivation, diverting them from academic success. In addition, women continue to miss out on education and work opportunities, widening the gender gap. The solution to improving education lies in the establishment of water wells close to cities and villages. In Africa, reducing walking distances between 15 to 30 minutes improves school attendance and productivity by 12 percent ("Why Water," n.d.). Limiting the time spent on water collection would not only close the gender gap, but also lift people in the community out of poverty. In other words, women can focus on cultivating their land, participate at work, or provide higher quality of care for their families.

### **Embrace Relief's Current Progress and Vision for the Future**

Embrace Relief believes in clean water as a fundamental human right. Thus, the organization built hundreds of water wells around the globe, providing safe and clean water for many. Our clean water campaign includes building wells in Haiti and Africa. Due to growing global populations, climate change and increased number of impoverished communities, Embrace Relief strategically addresses arid regions. Well building means giving communities a second chance for healthy lifestyles, as well as hope for prosperity in the future. Our organization understands that lack of water is equal to lack of equality. By shortening the time it takes to fetch water, Embrace Relief puts young girls and women back in school.

With the support of local partners and agencies, Embrace Relief is committed to providing expertise and education regarding maintenance of our wells. The wells are built in vulnerable locations around the world, thus Embrace Relief will continue to offer beneficial solutions to advance water production and well sustainability. Providing clean water, sanitation and good hygiene are our priority.

Embrace Relief, in alignment with UN's 17 Sustainable Development Goals, has made increasing access to clean water a top priority, because humanity depends on water. According to the United Nations, "Water scarcity, flooding and lack of proper wastewater management also

hinder social and economic development” (“Sustainable Development Goals Knowledge Platform”).

By building hundreds of water wells, Embrace Relief fosters community development. Before it received a water well, one village, located in Chad, was home to nothing more than a handful of people and buildings. With barren desert stretching for miles in every direction, the only roads - little more than dirt tracks - led out of town. The settlement bled resources and repelled wayfarers.

Using donations, Embrace Relief constructed a well, establishing a source of clean water for the community members, who no longer had to devote countless hours abroad. Instead, the village began drawing people from miles around, allowing the villagers to spend their time building new homes, investing resources in agricultural production and setting up a burgeoning marketplace, the last of which is particularly important to the community’s long-term growth. Thus, starting with water, commerce can bloom, which in turn promotes sustainable development.

Supported by donors, Embrace Relief can continue to provide settlements with the water needed to blossom.

#### Works Cited

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