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Haiti: Water and Sanitation in the Rural Areas

Life in one of Haiti's subsistence farm families is very different than that of the farm life in America. Many of their traditions are different than those of the United States. While Haiti is located in the "backyard" of the US, modern agricultural practices, technologies, and techniques have yet to be implemented in this third world country. From their land use and areas of population, natural resources, water supply, and wildlife, to their lifestyle, it is obvious that they have a much different lifestyle.

In Haiti, 20% of the land is classified to be arable, or suited for crops. Permanent crops make up 13% of the land along with 18% in permanent pastures. The forests and woodlands on the island make up 5% of the land with 44% of the landmass being used for other uses. 70-percent of the terrain in Haiti is considered to be mountainous. In the total area of 27,750 square kilometers, 27,560 square kilometers are land. Out of this land area, only 750 square kilometers are irrigated. Much of the land that is arable has been cleared of natural vegetation and replaced with agriculture, grazing, and lodging.

While many would think otherwise, agriculture on this small portion of land is still the largest component of the Haitian economy. It is directly responsible for employing two-thirds of the labor force in the country. Although one-fifth of the land is suitable for agriculture, more than twice as much is under cultivation. Farmers in the region face major problems such as soil erosion, recurrent drought, and the absence of irrigation. The people of Haiti concentrate on subsistence crops including cassava, plantains, bananas, corn, yams, sweet potatoes, and rice.

Although many are involved in agriculture, in 2010, 49.6% of the population lived in urban areas. This is the highest percentage ever! Across the country only 10% of the roads are in good condition with 80% of the road network in bad or very bad condition. Even though it is the poorest country in the Western Hemisphere, highways make up 20% of Haiti's road network.

With such a small land area one would think that there are not many water sources or variety in the natural resources and wildlife, however, scientists have found a variety of species. Haiti's forests support an incredibly diverse amount of endemic animals, however, only 3% of historical forests remain and are being lost at a rate of 10% every five years. These forests represent one of the most important places in the world for the conservation of threatened vertebrates. 42 globally threatened mammals, birds, reptiles, and amphibians occur there. Recently, scientists rediscovered six species of endemic frogs in the remote southern mountains. While there is an abundance of species, Haiti also provides many natural resources. Among their plentiful resources are bauxite, copper, calcium carbonate, gold, marble, and hydropower.

The life of the farm families is very different than the typical American farmer. 80-percent of Haitians live under the poverty line and 54% live in abject poverty. The average annual income in Haiti is \$350 a year compared to the average of \$33,550 in the United States. They make about \$2.75 a day and 70% of them do not have regular jobs. As crazy as it is to think of, 54% of the population lives on less than \$1.00 US money and 78% on less than \$2.00.

As the poorest nation in the Western Hemisphere, Haiti has to deal with issues of poverty and water security on a daily basis. Water-borne illnesses such as typhoid, cholera, and chronic diarrhea are the cause of more than half of the deaths in the country every year. 70-percent of the total population does not have access to potable; or drinkable, water.

Haiti is one of the least developed, yet most densely populated countries in the Western Hemisphere with 324 people per square mile. With so many people in such a small area, many farmers only own less than two acres and have difficulty providing for themselves.

As you can see, life in Haiti is very different than how we live in the United States. Their land uses, resources, and lifestyles do not compare to that of the U.S. American farmers are very fortunate that they have the many modern technologies and practices. Not only do these practices and technologies make farming and surviving off the land easier, but makes farming and agriculture a sustainable sector of the economy. The United States is blessed to have a plentiful supply of natural resources, however, that is not the case everywhere.

In the third world country of Haiti, water and sanitation issues are a huge problem for the health and well-being of the people. Most water sources are contaminated with human waste due to the absence of a sewage sanitation system ("Clean Water"). With the low amount of potable water and sanitation issues, accessing adequate nutrition is a problem. In this remote area, contaminated water is the leading cause of infant mortality and illness in children ("Clean Water"). Although many Americans take clean water for granted, in other countries it is a scarcity. Haiti's total available water resources per capita are 1,660 cubic meters. This number is not only less than the 1,700 cubic meter threshold, but only 1% of those resources are in use today ("Haiti").

The lack of access to clean water and sanitation in Haiti continues to be a problem. Haiti's poor water and sanitation services are one of the main reasons for the spread of cholera in epidemic waves within the country (McDonald). Statistics show that 22% of the people who contract cholera die. To date, over 600,000 cases have been reported in Haiti with more than 7,600 attributable deaths. After only one year, this was the worst cholera outbreak in recent history as well as the best documented public outbreak in modern public health. In order to try to collect safe water, many children of the rural, poor farmers are sent to collect water for their families; denying them an education and contributing to the cycle of poverty ("Water and Sanitation").

While many government agencies have initiated help programs, the trend of poor water and sanitation is staying the same. The Rural Water and Sanitation Project in Haiti is designed to increase access to a clean water supply and sanitation services in the participating rural communities ("HT Rural Water and Sanitation"). This is a greatly needed project, however the water regulatory agencies claim to have no responsibility for sanitation. As a result there are no sewage systems and individual families are responsible for making their own arrangements for sanitation according to their needs ("Haiti One Year On"). Of all the Haitians living in rural areas, only a small 51% have any type of sanitation coverage and an estimated 49% of these rural Haitians rely on open defecation. To put this into smaller terms, one in five Haitians have access to a sanitary toilet and there is no piped sewage system anywhere in the country. Although these statistics are serious enough, in the population of nine million residents, four million lack safe water and seven million have no sanitation services ("Haiti"). Without these basic services in the communities of Haiti, public health stability cannot be achieved.

By improving this factor, the quality of life, food, and income possible for families to earn will rise. With clean water, there would be less danger of sickness to keep tourists and the people of Haiti from eating the produce grown on the farms. This would result in more cash flow into the economy of not only the upper-class residents, but to those living in poverty. The income that could be earned by improving the water and sanitation practices would be used to strengthen Haiti's economy and to better educate children as to the importance of a healthy environment. One major environmental issue is deforestation. It has been one of the contributing factors to the periodic flooding, destroyed fertile farmland soils, and desertification; a

type of land degradation in which dry land becomes increasingly arid. With only about two-percent of the original forest cover still standing, the rate of erosion has been severe especially in the mountainous areas.

As the cliché goes, water is life. It is the basis of economic development, environmental sustainability, and reducing poverty. Clean water allows a more efficient production of agricultural crops and a healthier population. Without access to clean water, there is little to no hope of ever truly overcoming poverty in third world countries. By improving water and sanitation, the women of rural regions would not have to walk to find clean water every day. More time could be spent learning and being involved in the household and economy.

The water and sanitation systems in Haiti have long been a problem. Other major issues such as pollution can and will affect the availability of clean water and healthy air. Only 10% of the waste in Port-au-Prince is discharged into a controlled dumping site with 30% being burned. The shockingly low percentage of residents with access to those facilities makes it easy to see how large of a problem pollution is. The rest of the waste not entering a dumping site or being burned is only contributing to the high water pollution.

Why is water and sanitation such an important issue now in Haiti? In recent years no one has heard of these large scale outbreaks of illnesses. As of 2010, for at least one hundred years there had never been any cholera in Haiti. It was reintroduced into the country when United Nations troops from South Asia arrived in Haiti in October of 2010 and unknowingly dumped human waste into a tributary of the country's main water supply (Weisbrot). This rash act spurred the cholera outbreak that has made hundreds of thousands sick and resulted in the deaths of thousands more. In any other nation, this outbreak could be easily corrected. All you would have to do is create an infrastructure where people have clean drinking water and sanitation. Both of which is a scarcity in Haiti. If pollution and a lack of involvement of the surrounding countries continues, cholera will continue to be a very real and devastating part of Haitians' lives for decades to come.

In order to effectively address the water and sanitation issues in Haiti, countries will have to take an interest in developing a sanitary system and clean water. Nothing is impossible, it just all costs money. After the earthquake, many countries went to the rescue, trying to help in any way possible. By introducing alternative methods of sanitation, the number of cholera outbreaks can and will greatly reduce. With safer water, there will not be as many water-borne illnesses. Food insecurity; the United States Department of Agriculture's measure of the lack of access to enough food for an active, healthy life for all members of the household, or the uncertain availability of nutritionally adequate foods, will reduce with the proper sanitary and water treatment systems.

In order to effectively combat this disaster, the government needs to focus on setting up sanitation and water treatment systems throughout the country of Haiti. The Medical Corps, World Health Organization (WHO), and United Nations International Children's Emergency Fund (UNICEF), as well as many other organizations have begun to initiate the construction of treatment facilities. By 2015, National Directorate for Water Supply and Sanitation in the Ministry of Public Works (DINEPA) plans to have seven excreta treatment facilities set up in the country. By educating all residents on the importance of proper hygiene and how to use the new treatment facilities, the rate of disease will decrease dramatically.

To apply these shocking facts to a real life situation, Alphonsine and her three children walk over ten hours a week in order to meet their basic need of drinking water. Waking up early every single morning so the walk is not as unbearable due to heat, she tries her best to care for her family. She has been making this journey throughout her entire life and will continue to make this long trek for years to come. The water errands that happen daily take a heavy toll on the community. Women waste time that could be used for household or economic activities and their kids arrive at school exhausted, if they go to school at all. In some cases, the water that was so dear to the families is not always potable. Even after taking a

long walk to get it, it may not be safe to drink. These sanitation and water systems that various agencies are striving to implement will be a benefit to all.

The life of a subsistence farm family is very different from that of a farm family in the United States. Sometimes, it is not realized how good life is in the United States until it is known what others have to go through. For many, it seems extreme to walk hours in order to collect water for daily needs, however in many third world countries, this is a reality. While Haiti is the poorest country in the Western Hemisphere, that does not mean that it is the only country experiencing similar situations. Throughout the world, there are many areas that are fighting for survival.

With so many different struggling areas of the world it may be hard to help every one of them. Many governments and organizations have set up agencies that work for the well-being of several countries. Although these groups do their best and work hard to help others, they cannot do it without the support of all.

Personally, the best way to counter this tragedy is to take an interest in the lives and health of those who are affected because of their economic status. It is amazing to see what improvements can be made in a short time if everyone is dedicated to the betterment of third world countries. In order for the full healing process to end, each country must be back on its own feet. The sooner we involve our communities and national government, as well as various organizations, the sooner Haiti and other third world countries will be able to recover their economy. This would allow them to make their own decisions and be independent.

A local project that has been successful is entitled "Dresses For Haiti." In this project, pillowcase dresses are sewn to send to the people of Haiti. This summer from May 26 to May 31, a group of 33 people will have the opportunity to personally travel to Haiti to deliver some of these pillowcase dresses to orphanages. So far, 171 dresses have been completed with the help of the community and church. This group will be battling food insecurity by hosting a dry rice feed in the small town of Dumay, Haiti. To help in this, \$891.50 have been raised in donations. This project just goes to show that no matter how small of a town people come from, how old they are, or how far from poverty they live, it is still possible to make a huge difference in numerous lives.

Many believe that in order to be of significance, it requires a lot of money to help others in different countries. The typical family in the United States can become involved in implementing these recommendations by making contact with a local charity such as the Orphan Grain Train. Helping others is not out of reach, no matter what age. There is help needed everywhere if communities and citizens only have the initiative and compassion to reach out and lend a helping hand.

Bibliography

"Clean Water: A Health Essential." International Action. International Action, n.d. Web. 7 May 2013. <<http://haitiwater.org/why/why-clean-water>>.

McDonald, Michael. "Increasing Pressure for Addressing Water and Sanitation Issues in Haiti." Haiti Medical and Public Health Information Sharing Environment. Haiti Medical and Public Health Information Sharing Environment, 14 Sept 2011. Web. 7 May 2013. <<http://www.haiti.mphise.info/ru/increasing-pressure-addressing-water-and-sanitation-issues-haiti>>.

"Haiti One Year On: Water and Sanitation." reliefweb. British Red Cross, 11 Jan 2011. Web. 7 May 2013. <<http://reliefweb.int/report/haiti/haiti-one-year-water-and-sanitation>>.

"Haiti." water.org. water.org, n.d. Web. 8 May 2013. <<http://water.org/country/haiti/>>.

"Water and Sanitation." Concern Worldwide. Concern Worldwide, n.d. Web. 8 May 2013. <<http://www.concernusa.org/Public/Program.aspx?pid=123&gclid=CIubqfzThrcCFfFDMgodEyEA2g>>.

"HT Rural Water and Sanitation Project." The World Bank. The World Bank, n.d. Web. 9 May 2013. <<http://www.worldbank.org/projects/P089839/haiti-rural-water-sanitation-project?lang=en>>.

Weisbrot, Mark. "The United Nations must cure Haiti of the cholera epidemic it caused." the guardian. the guardian, 12 Nov 2012. Web. 14 May 2013. <<http://www.guardian.co.uk/commentisfree/2012/nov/12/united-nations-haiti-cholera-epidemic>>.