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Haiti: Factor 9: Water and Sanitation

Haiti

Living in this fast, up passed, country of the United States we have what people call first world problems. Such as, I hate when my leather seats aren't heated, I hate it when my phone charger won't reach my bed, I hate it when my mint gum makes my ice water taste too cold, and I hate it when my house is too big. The problems of a first world country aren't really problems at all. People in the United States always want the newest coolest technology. Did you ever think of the people who are living in a third world country? These people struggle everyday just to live. Haiti is a very good example of this; ever since the 7.0 magnitude earthquake hit Haiti in 2010, it seems as though everything has gone wrong for them.

1. Haitian Living

Over eighty percent of the population of Haiti is below the poverty line. Two-thirds of Haitian people depend upon rural agriculture. Although this is the case there is a huge limiting factor; agriculture. Farms and agriculture facilities are frequently damaged by natural disasters. Haiti has gone back to the basics when it comes to employment. An example of this job is turning out t-shirts for American Companies. Workers get paid \$1.45 per dozen shirts. It would take two hundred shirts to reach \$7.25 an hour, our minimum wage. There are about 31,000 people employed here. The government of Haiti has signed an agreement to create an agricultural free zone to export organic fruits and vegetables. Agricultural here is much underfunded and is becoming unproductive. Only 25% of GDP rate comes from agriculture compared to the 55% it was in the 1980s. There is very little food available for Haitians because of many tropical storms that have devastated the harvests.

The average rural family in Haiti lives off of only two acres. Rural Haitians generally live off of what they grow. Food markets are often a very long distance away. Some of the common crops that are grown here are: corn, rice, sugar cane, and yams. They rarely sell what they grow because they need it to feed their own families. Since they don't sell their crops, they have no income. With no income, they normally have no money to use on anything. Haiti only has a handful of hospitals and disease and injuries often go untreated. Due to a lack of funds medical care is often neglected.

2. The Need for Clean Water

Water is what we need to survive yet these people are in dire need of some help. Eight million people have no sanitation for their water. This is a huge problem. This water could be and is carrying water borne diseases and is negatively affecting these people. Since 2010, there have been a whopping 658,563 people diagnosed with cholera. This is the first time in decades that cholera has been spotted. Since this outbreak, there have been over 8,000 deaths. The environment is defiantly getting hurt by this Also the water problem is bad on the environment because it will damage the animals, people, trees and other plants. The percent of the population with improved sanitation is 42% for urban and 25% for rural. This is devastatingly low.

Aqueducts coated with alluvium, deposits of sand and dirt, are used in the major cities and leave alluvium remnants in the water making it unclean. When someone drinks this water, they are very susceptible to these parasites having a lasting impact on their health ([Wampler. Web](#)). Many young children die from diarrhea and other similar illnesses. This contaminated water is one of the only resources Haitians have to keep them alive. The ocean water is too salty, milk from goats is used to keep its young healthy, and

purified water in the cities is too expensive (Shindelar). The purity of the water is not getting any better, and many people are still contracting pathogens.

Clean drinking water in Haiti would help solve many of their problems, because many of this country's problems revolve around poor water. Sanitation to water would improve the health of their people, this is needed greatly. This would make living here healthier and it would also increase the number of employed. Fewer kids would die or have to live with worms or other internal parasites. It would make the family able to stand on their own because the older children could go get jobs and earn a good amount of money. If more money is coming into the household, that means lives would get saved because families would not have to starve to death, they could just buy food, or get treated for a medical problem.

Even on the hottest days, Haitians don't have the luxury to find clean water. Finding clean water is such a challenge they will drink whatever is available. They have no choice but to drink it. They know the risk of unclean water, yet finding clean water is such a challenge that they just take the risk. The country is growing at 1.4%, this means the need for clean water is increasing every day. However, people in urban Haiti have more access to clean and sanitized water than in rural Haiti.

3. Solutions

Many of the things that would help Haiti are not affordable for them. There are many factors that play a role in Haiti. Some of these are: geological, ecological, sociological, and economical. All of these factors play a huge part in the solutions to Haiti's water problem. Many aquifers are contaminated by karst which comes from limestone. Deforestation is a huge problem in Haiti, trees and plants are the first line of defense against protecting our ground water. Religious attitudes play a huge role in the people's perception of water. The water in the mountains of Haiti is not sanitized and untreated so more pathogens and diseases are often found there. A very cheap and very efficient way to improve the quality of the water would be to use clay filters. Which can decrease microbial contamination by 98%; this would be a huge improvement for Haiti.

4. Clay Filters

The filters are made from a mixture of clays from the area and combustible material would be rice husks. The combustible material burns off when the clay is fired; this leaves tiny little pores that filter out the sediment and other pathogens as the water trickles through the pores. The filter is also further treated with colloidal silver nanoparticles; these have properties that kill viruses and bacteria. A half inch of charcoal is also added to the filter in increase the taste and enhances the color of the water. The water then runs into a bucket which has a spigot near the bottom. One filter can produce the daily water needs of a large family. These needs include washing, cooking, and drinking. (Potters for Peace. Web.)

It costs only fifteen American dollars to get this filter. About every three months it is encouraged that boil the filter so that all of the bacteria that has been collected in and on this filter can be removed. This type of water sanitation is fairly easy and requires little knowledge on the subject. Only about two square feet is taken up by this system. A family could easily use this type to improve the quality of life within their family. The water would still be brought from a well or a river by then you would put it through this system. Two thirds of the diarrheal diseases will be decreased which would improve the health of the Haitian people.

Once this out breaking finding is brought to Haiti everyone would want one so to keep up consumer demand. Setting up a factory in a major city such as Port-au-Prince, Carrefour, or Delmas 73 would help with the demand. The perfect place for a factory like this would be just outside the city limits. This would make it accessible to electricity and to the main roads. It would to be easy for the workers to access as

well. Setting up a factory in one of these locations would be a good improvement to Haiti because it will help increase the amount of healthy water that the people could have.

5. Other Alternatives

Increasing the number of trees and plants would help fight deforestation. By doing this, it would increase the amount of clean water for the rural Haitians. Also, digging more wells where it is possible, this will not increase the amounts of palatable water. However, it would increase the amount of water available.

To increase the amount of sanitary water Haiti will need lots of help. Setting up a factory to produce these filters is a start, but it is not a complete solution. They will need help with getting the materials that they would need to produce these items. Importing these items would be an easy fix, but because Haiti is the poorest country in the Western hemisphere. Haiti would need to use its own resources to make this operation possible.

These Haitians have no idea how to use the filter. They will need to be educated on them. This could open the door for more career opportunities for Haiti's residents. The materials are inadequate so regardless how much foreign aid that is poured into Haiti. The people of Haiti generally do not live near good water systems. Many of them receive very little to no water service. Several organizations and companies wanting to help Haiti have come forward with offers to help.

Many programs have been set in place to help improve the amount palatable water. Water.org is an organization that recommends practices that a country could use to improve the health of the water. With this program, 85% of urban residences and 51% of rural residences have access to improved water services. Only 24% of urban families and 10% of rural families have access to improved sanitized water. The need for sanitized water is huge. By using the clay filters it will help increase the amount of people that have access to clean and safe water.

6. Ways to increase money

The people of Haiti may not have enough money to buy a clay filter, even though every family deserves to have something that will improve their water. Many organizations follow an example so if one organization donates, many others will follow that example. By doing this, it will help Haiti become a healthier country. Filterpure is one such company. Filterpure is making an effort to help Haiti become more stable by installing a factory in the developing country. In addition, Filterpure is demonstrating and teaching Haitians how to maintain safe water. While organizations and other corporations are playing a key role, Haitians have to be willing to make this change. The use of clay filters will help prevent waterborne diseases. Some people may find the filters a waste of time and money. In the long run people not using the filters will pay a greater price due to poor health and increased expenses(Filterpure. Web).

Using these clay filters will have a defined benefit to the lives of Haitians. One of these filters is all one family needs to have healthy water, which in turn creates a healthier life. With clean water, it will insure that they are not taking in anymore diseases or contracting as many viruses. Less money would be spent on healthcare needs and more money could be spent on nutritious food.

With clean water would come an improved living. This would lead to a sustaining job with a paycheck. With that paycheck, families could buy clothing and food to help them survive. An increase in the workforce would lead to less poverty would help lead to a thriving country. Next time you take a drink of clean water think of our neighbors to the south.

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