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Ghana, Factor 9: Water and Sanitation

Ghana: Water and Sanitation

Here in America, the average person showers almost everyday (*The Atlantic*). People shower to make themselves clean again without really thinking about it. Along with showering, going to the bathroom and washing your hands have become part of our daily routine. None of these things has ever crossed your mind as being a privilege, because we haven't known anything else. You were raised to use the toilet when you needed to, to wash your hands afterwards, and to shower everyday to maintain a clean and healthy lifestyle for yourself. All of these things are normal, because they've always been part of your life. Since we were old enough to understand all of this, our parents made sure that we were doing these kinds of things everyday. Our parents raised us this way to prevent germs and sickness from spreading from person to person. Even at school when we were little, teachers made sure that we were washing our hands after using the bathroom or when we got done playing outside at recess. Our teachers made sure that we knew these things were important, just like our parents, because washing our hands can prevent many diseases and illnesses. After starting my research on Ghana, Africa about water and sanitation, my outlook on all of these things changed. You don't ever think that other countries around the world are struggling until you actually pay attention to what's going on in the world around you. Approximately 86% of Ghanaian people don't have the luxury of being able to shower everyday or wash their hands with clean water due to not having access to any kind of improved sanitation (*WaterAid UK - Where We Work - Ghana*). This is a very big problem, because the people that are drinking water that is not safe are causing other people to get deadly diseases. These diseases, for example diarrhea, are transported through water that is not actually safe to drink. By not having enough clean water, it causes a lot of issues throughout this country. One out of every ten kids in Ghana dies before their fifth birthday, which is about 3000 children every year (*WaterAid UK - Where We Work - Ghana*). The younger a child is the weaker their immune system is. Due to children's immune systems being so weak, it's very easy for diseases to get into these children's systems. So many children are dying before their fifth birthday, because they are not getting enough nutrients and their systems cannot handle the unsanitary water they are forced to drink. If a child is not getting enough nutrients, it can cause the child to stunt, which affects their growth. People in this country do not have a choice but to drink this unsanitary water. Ghana is a developing country, but water availability combined with poor water sanitation is standing in their way.

All children like to play outside, hang out with their friends, and join extra curricular activities at school. In Ghana, the climate is tropical and very hot and can easily reach over one hundred degrees. Imagine you are a child in Ghana and you are playing outside with your friends for a few hours after school. The day that you decide to play outside with your friends, it is very hot. After playing with your friends for a while you decide to come inside, because you are hot and tired. When you get hot you tend to need something to drink afterwards, but this child in Ghana doesn't have access to clean water. Any person in Ghana will drink any kind of water they can find, whether it's sanitary or not; these people will risk the outcome. An average teenager here in America has a daily routine that they follow. They wake up, fulfill their needs in order to get ready for school, go to school for seven hours, and go home or some of them even have jobs that they go to after school. Ghanaian teenagers are very similar. Many of these kids go to school everyday to further their education so they can hopefully get a good job in the future so they can provide for their families. These kids also like to just be kids. They like to play outside and hang out with their friends (*AFS-USA Hosting*). However, this isn't the case for a typical Ghanaian teenager's daily routine, when the unsanitary water issue starts to come into play and messes everything up. The majority of the kids that are trying to go to school get sick, someone in their family starts to get sick, or the teacher gets sick because they don't have many options but to drink any type of water they can find whether it's

sanitary or not. If a member of their family were to get sick, like one of their parents, the child would stop going to school until that family member got better. That child would stay home to try to get their family member better. The child would spend his/her day trying to find clean water to take back to their home. If their parent(s) end up dying from the sicknesses that are being transported through unsanitary water, the oldest child of the family is in charge of taking care of the family and providing them with the things they need. The oldest child that is now in charge of taking care of his/her family now has to drop out of school to try to find any kind of job that he/she can to provide for the family he/she is now in charge of. Many children are forced to drop out of school everyday for many reasons. If the teacher ends up getting sick, no one else is available to teach the kids so they can't go to school until the teacher is better. A lot of the time, these children end up not going back to school because of unsanitary water, unsanitary restrooms, and lack of food. If you are a girl, once you hit puberty you end up dropping out of school due to the lack of clean bathrooms. It's hard for girls to deal with bodily functions when there is a lack of sanitation facilities around. With all these children dropping out of school, there will be a higher demand for jobs like doctors for example. The more children that drop out of school at a young age, leads to more children not furthering their education to get better jobs. The less schooling that these children have the more in debt and in poverty this country will go. Once these children get older they won't be able to get the higher paying jobs, which means they will have a harder time trying to support their families. Not only are diseases affecting whether or not these Ghanaian children can go to school, but it is also affecting their performance in school. Children have a hard time trying to focus on school when they are getting sick from dirty water and unsanitary facilities.

Women in Ghana are the ones who are in charge of taking care of their family and in charge of providing their families with the cleanest water they can find (*Project Humanity RSS*). An average family in Ghana consists of about five people. Since all of these villages and families don't have any close source of clean water, women are forced to spend their day searching for sanitary water. Many women end up walking about 20 or more miles a day just to gather decent water to provide to their families with. Walking 20 plus miles a day means that these women don't have any time to get an actual job. If women can't get jobs because they are too busy trying to find sanitary water, then that means that the oldest male in the family is supporting them financially. A woman name Athea, age 45, lives in the Aurigo Village in Ghana. She has a family that consists of her husband and her son. Her village is a big farming community, but the farming community has no access to a safe water source. In her village, the only sources of water that they have are muddy dugouts that they share with animals. Athea says, "I come here 4-5 times a day to collect water. It is very heavy" (*WaterAid UK - Where We Work - Ghana*). Athea walks 20 minutes downhill to gather water for her family and then walks 20 minutes back up the hill with the water. Many women have to go above and beyond to find any kind of clean water for their families.

Not only do farm communities like Athea's lack a place to get sanitary water from, farm and wild animals are lacking places to get clean water to drink. The livestock is affected because of badly polluted shallow wells and mud-holes are often the only water source for animals in Ghana, which can cause diseases and/or death, in not only people but in animals as well. Another big concern with poor water sanitation in Ghana, is Ghana's livestock. Ghana's livestock production consists of cows, sheep, goats, and poultry. Approximately 83% of Ghanaian livestock goes towards their meat production (*Aviana 2015*). But how do they keep the animals healthy if they don't even have clean drinking water for themselves? The answer is they don't. They don't have clean water for themselves or for their livestock; this is a huge problem. Ghanaian people are starting to find out that their livestock are starting to get diseases just like their people are. The more animals that get these diseases, the more animals that die, and the more that die equals the less food they will have. If the number of livestock decreases by death, the number of Ghanaian people will also decrease by not having two of the most important necessities of life. Not only is the lack of clean water a big problem here, the lack of food is also becoming a big issue as the number of livestock decreases. Both food and water are a basic need to survive. When it comes down to a life or death situation, you take care of yourself before you take care of anyone else. You find water for yourself

before you find water for your livestock. By finding water for yourself first, you are keeping yourself alive, but where does the food source come from? Your livestock will start dying from not having any water at all, let alone having unsanitary water. The people of Ghana need a big enough clean water source to care for themselves and for their livestock. If they don't care for their livestock like they care for their people, they aren't going to have much of a food supply left from all the animals dying from diseases.

When people say that water sanitation not only affects how people feel but how they act, they're telling the truth. Water sanitation affects education and poverty greatly. When students are thirsty or hungry at school it's very hard to concentrate on schoolwork because of stomach pangs or sicknesses like diarrhea and stunting. Even the smartest kid in the class could have one of the worst grades, because he/she could be sick or just plain thirsty due to unsanitary water and not having enough water for everyone. If these children can't focus in school that means they won't get the grades that they need to get a good job or even a job at all in their near future. The more children that don't qualify for jobs because of their grades, the farther they are going to go into debt and they will end up being very poor. The less schooling kids have the less jobs like doctors or engineers the country has, and the less good paying jobs these people have the more in debt or poverty they go into. The more they let themselves go into debt and poverty, the harder it's going to be for them to provide for themselves and for their families. This has been noticed more and more in other developing countries. It's a never-ending circle that has to finally be broken.

Improving this factor would forever change this country. If every single person had clean water and a sanitary to use the restroom and shower, then the number of diseases and the death rate per year would greatly decrease. The animals would be able to live longer and provide healthy food for the people who live in Ghana. They would get the nutrients that they need, be happier and healthier, and not be as hungry anymore. Nobody would have to drink water from the streams because there would be enough clean water to go around. This would cause the streams to become less polluted because Ghanaian people wouldn't have to bathe or defecate in them anymore. With the streams and rivers becoming less polluted that means that Ghana will see a rapid decrease in any diseases that were getting transported through any water sources in the past. Ghana's population would increase even more, because the people would have a less risk of getting diseases like diarrhea and stunting.

In the United States, there are companies all over that take donations to help fund causes like dirty water and unsanitary facilities in developing countries similar to Ghana. Some examples of these companies would be WaterAid, Project Humanity, and UNICEF. The U.S. is a place where people are able to and willing to help when a problem occurs. You also have people who are willing to donate huge sums of money to these organizations to help fix a problem. There are so many technology advances happening everyday that it wouldn't be hard for the United States to help aid another country that is facing a serious problem like poor water sanitation. It's hard for a country like Ghana and other developing countries to help each other out, because they are so deep in poverty and they are very uneducated. Countries that are similar to Ghana are not educated like the United States. When it comes to technology, an economy, and a strong government system, the United States is ranked fourteenth in the world for education (*The Top 10 (And Counting) Education Systems In The World*). The United States and many other well-educated countries are working hard to come up with facilities and tools that will help make collecting sanitary water an easier process. When you look at countries like Ghana, Africa, you can see that people are unable to help themselves because they are too busy trying to get safer water for their family. Usually when people are faced with a problem similar to the one in Ghana, they don't have the time, money, or the technology to even start helping themselves, let alone change the whole country.

Tesla is a company that is well known for its way to power things. Tesla is known for many different things that they power, for example the Tesla Motor. The Tesla Motor is a motor that is powered by solar panels that are placed all around a vehicle to make the vehicle work. A new product that has recently come out is called the Tesla Power Wall. The Power Wall is a home battery that charges from electricity from solar panels that power the battery day and night. Tesla's Power Wall can be used to power parts of your home or just a set of simple appliances depending on how many Power Wall batteries you choose to put in one area. Multiple batteries can be installed at the same time in the same location. There are two different types of models; a 10 kWh that is used for backup applications and a 7 kWh that is used for everyday applications. The 10 kWh is \$3,500 per battery and the 7 kWh is \$3,000 per battery (*Tesla*). The Tesla Power Wall has a ten year warranty so if anything were to happen to it, the battery would be covered for a good chunk of time. One of Tesla's goals is to make it easier for people around the world to power their appliances in a cheaper and more efficient way. The Tesla Power Wall can not just power things in your home, but can power other things. It can be placed on things that you would keep outside like a camper, or in this case a water filtration system.

A company that goes by the name WaterAid helps countries all over the world figure out ways to maintain a sanitary water source. The goal of this company is to get everyone all around the world safe water, sanitation, and hygiene by the year 2030. WaterAid helps developing countries build a strong government, a sustainable economy, and they teach them how to care for equipment used to maintain sanitary water. The biggest strategy that WaterAid tries to promote is the harvesting of rainwater method. Harvesting rainwater is when containers and machines are out in the open to collect as much water as possible when it rains. The harvesting of rainwater method is the most efficient, because there is close to no hard work involved; you just have to wait for it to rain. Harvesting rainwater is used when ground water is too deep to reach, inaccessible due to hard ground conditions, or is just unfit to drink (*WaterAid UK - Where We Work - Ghana*). A major plus to the collection of rainwater is the most water is gathered before evaporation happens and before the water becomes contaminated by natural means. The climate of Ghana is tropical. In the north the rainy season begins in April and lasts through September, averaging about 43 inches of rain and about 83 inches in the southeast (*Ghana: Geography, Location, Weather Etc.*). The harvesting of rainwater would be very efficient to Ghana, because it has low maintenance costs and low requirements. Harvesting rainwater is the best thing that's going to provide safe water close to home. This is where the company Tesla starts to come into the picture. After rainwater is harvested, that water needs to filter through a water filtration system to make sure the water is safe to drink. The most common question that is asked is how will the filtration systems be powered? The answer is the Tesla Power Wall. Many Tesla Power Walls will power water filtration systems to supply clean water to people all over the country of Ghana. WaterAid also works very hard to come up with different types of techniques and equipment to help increase safe water, sanitation, and hygiene. Installing hand pumps and hand-dug wells are other techniques that are used to help increase sources for safe water. Hand pumps and hand-dug wells, along with the harvest of rainwater, are some of the most common ways to provide communities with safe water. In order to increase sanitation and hygiene, community-managed latrines and household sanitation are tools that are needed in developing countries.

Every single day people are faced with some sort of problem that they have to overcome or find a solution for. The people of Ghana, Africa are faced with not having enough water, having very dirty water, and not having any sanitary facilities to use. But what are they doing to find any kind of solution for this problem that they are facing? They are struggling very badly to find anything that is going to help them fix this problem. The women of Ghana are too busy traveling around their communities in the attempt to find any type of water they can find, sanitary or not. As stated before, one out of every ten kids in Ghana dies before their fifth birthday, which is about 3000 children every year (*WaterAid UK - Where We Work - Ghana*). The men are busy working as much as they can at their jobs to financially support their families. The majority of these people are also getting sick from all the diseases that are being transported through the water they are attempting to drink. We have to get as many people as we can into this country to try to

help them. The more people that are willing to help Ghana and similar countries like Ghana, the more issues that will be getting fixed in these countries. We need to educate the people of Ghana in order to change this country. We can go into this country and fix everything, but who is going to keep everything in the right order so that any solution will work? If we educate the people of Ghana, they will be able to keep everything updated and they will be able to care for themselves.

Throughout this paper you have learned that a small country called Ghana, Africa needs help. From unsafe drinking water to poor sanitation, this country is struggling in so many different ways. Good water sanitation plays a very important part in our lives, whether we live in the United States or in a small village in Africa. Water sanitation affects things like your education, health, safety, the environment around you, and many more things. If we do not fix these things, the numbers of diseases and deaths in the world will just keep increasing. The more people will start to get sick and this country will start to crumble. The government and economy will not be able to keep up with the lack of people working due to illnesses. If we work together to help Ghana and other countries improved their water sanitation, the world can slowly become a better place. There are companies all over the world that takes donations to help fix issues that affect food security like water and sanitation. There are people all over that are willing to donate large sums of money that will go to the research to find solutions to these problems. For example Wateraid is working to make the world a better place by trying to provide everyone with clean water to drink and sanitary places to use the restroom and shower. If WaterAid and Tesla could work together to build water filtration systems that are powered by the Tesla Power Wall, that would make the perfect solution. The more people that can get on board with the company WaterAid, the more successful the company will be in attempting to find solutions to provide safe, sanitary water to everyone all around the world. When finding a solution for this problem, we need to start educating people all over the world about the kinds of problems that is going on in the countries surrounding them. After educating other people about the problems going on in all the other countries around them, we need to educate them about solutions and ways that we plan on fixing these kinds of problems. The more people that are aware of the things going on around them, the more people that are willing to help fix these kinds of problems. Before starting this paper and the research over Ghana, Africa, water and sanitation never seemed like it was such a big issue around the world, but now I have realized that a good chunk of the world's population is struggling from not having safe water or not having enough water at all. People around the world need water no matter what; water is a necessity for life. It's hard to go to school and make yourself focus on your schoolwork if one of your family members is sick due to drinking unsafe water. If one of your family members got a disease from drinking unsanitary water, you have the chance of getting that disease. You could very easily die from drinking unsanitary water, because of the diseases that are transported through water. How are you supposed to focus on your life when unsanitary water is taking control over it? Unsanitary water controls your health, schoolwork, your job, and any future you thought you might be able to have. So why are we not helping Ghana? In order to find solutions and fix this issue of unsafe water and poor sanitation, we have to get everyone on board. If we can get everyone on board, we as world citizens can make the world a better place.

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