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Nigeria, Water and Sanitation Crisis

Nigeria: The Poor Sanitation Practices

Nigeria is a country located in West Africa that shares land-based borders with Chad and Cameroon in the east, the Republic of Benin in the west, and Niger in the north. Nigeria is noted as the most populous country in Africa, totaling approximately 206 million individuals. This country nearly doubles the runner up for the most populated African country, Ethiopia. Nigeria is often regarded as the wealthiest country in Africa and is deemed as a middle income and mixed economy country. However, these statistics have resulted in people turning a blind eye to the extreme poverty and the intensifying water, sanitation, and hygiene (WASH) crisis that has been the root to the country's issues such as malnutrition and diseases (BorgenProject, 2020). Back in 2018, the president of Nigeria, Muhammadu Buhari, declared the country to be in a state of emergency in regard to the water, hygiene, and sanitation crisis. With clean water being the foundation of life, the country's lack of access to it has resulted in many negative consequences. There is an absence of a unified government, and with that divide comes difficulty in organizing efforts to overcome the sanitation predicament. The issues flowing from the government have trickled out to the public causing lack of support from local communities. Out of the 206 million individuals in Nigeria, only 26.5 percent of the population has clean and safe water available. This means almost 75 percent of Nigeria's population are left to deal with unsafe water conditions that lead to life-threatening diseases and a life expectancy ranging only 58 to 61 years old (World Atlas, 2017). There are multiple techniques that are being explored, some even as recent as the past few months, to aid and help Nigeria in overcoming this health challenge. Some ideas are intended as more long-term solutions, while other ideas are being developed to help ease the present and immediate burden.

Nigerian families hold a strong bond, and every family member holds some important role. Unlike marriages in the United States, where it is a symbol of a "love" connection, Nigerian marriages are often used more for the social factor. Having many children in one family is viewed as a status symbol. Many Nigerian women have birthed 10 children. The birth rate in Nigeria per a population of one thousand people is 43, compared to the death rate of twelve per one thousand people. Sadly, with this statistic comes the horrifying infant mortality rate of 72.6 deaths per 1,000 live births (Shrestha, 2014). This is primarily the result of poor water sanitation in Nigeria's clinics and hospitals. Child birth requires a sterile area, however, in Nigeria many of the clinics do not have access to clean water to provide to their vulnerable patients. Currently, about half of Nigerians have identified as Christian. With this fast-spreading religion, it is clear to see where certain aspects of family life has been influenced, but many of the family norms are still strictly followed. Women and young children are the most disadvantaged. Nigerian women to this day are still oppressed, and it is clear how the amount of respect varies depending on the gender and age of a family member (Callaway, 1987). An average Nigerian person will eat the typical three meals a day, with each meal being made up with approximately 70 percent carbohydrates, 20 percent proteins, and multiple other nutrients in smaller amounts. Nigerian cuisine is typically comprised of dairy, vegetables, meat, pastas, and various kinds of fruit.

The typical healthcare in Nigeria is directly impacted by the lack of sanitation in the country's water. Data shows that 29 percent of all clinics and hospitals in Nigeria have no access to safe and sanitized water. With an already compromised immune system, the patients are placed at an even greater risk for

infections and complications (Global Citizen, 2020). Education for children is free and available to any student in Nigeria, however, the number of students actually enrolled and receiving their education is low. Around 10.5 million children ages five to fourteen are not attending school and further north in Nigeria the statistics are even worse with just above half of the children enrolled at a school. There are still some socio-cultural norms that are still circulating in Nigeria which discourage young girls from enrolling in school. With the recent Covid-19 pandemic, the enrollment in Nigerian schools had an even more alarming statistic for all ages and genders. Unlike the United States, where schools switched the mode of education to virtual, for most poverty-stricken countries, virtual learning was not a viable option. Throughout the pandemic, students were and still are unable to return to the brick and mortar style of learning, leaving a large part of the global population without access to an education.

Globally, 946 million people openly defecate, and 48.5 million of that statistic is attributable to the Nigerian people. With around 25% of the Nigerian population openly defecating (no accesses to a sanitary bathroom option), it is no wonder that human feces is one of Nigeria's major causes of water contamination, and it explains how the percentage of people without sanitized water has become so great. The local Nigerian families and communities are left to deal with the disposal of human waste. In rural areas, 71% of the population does not have access to a clean and sanitized toilet, meaning many people are having to use the restroom in a bush or a bag. Around one third of the Nigerian population has zero access to clean and sanitized water and these 33% of people that make up this statistic have to rely on surface water and unimproved water sources. 70% of Nigerians reported to having access to water sources, however, more than half of these people were unaware that their water source was contaminated (Cullen, 2020). With contaminated water comes life threatening diseases, obstructing the development of a country through the resulting malnutrition and poverty. Nigeria has an overwhelming number of cases of cholera, typhoid fever, and diarrhea. These waterborne illnesses have resulted in the tragic mortality rate in children five or younger, with nearly 70,000 young children passing away annually. Compared to many other countries, Nigeria has a low life expectancy where for women it is 61 years old and for men it is 58 years old. This data is not surprising given the conditions of the hospitals. With approximately 29% of clinics and hospitals deprived of clean toilets and sanitary water, patients who are already at risk have now had an even greater risk factor added with higher chances of complications and infections. There are many economic costs that stem from Nigeria's disproportional sanitation and its impact on poor neighborhoods is particularly painful.

Poor sanitation has an impact on much more than just a person's well-being. It has a snowballing effect that can cause even greater strain in a community. Many schools in Nigeria lack access to bathrooms causing a negative impact on girl's school attendance rates. Numerous Nigerian female students admitted to missing school for a week every month because of their period and having no bathroom readily available on school grounds (Cullen, 2020). In a more economic standpoint, poor sanitation costs Nigeria around 3 billion U.S. dollars yearly or 1.3% of the national GDP. Open defecation is the costliest of the types of unimproved sanitation practices. This is hugely part to the amount of time it takes to find a location to defecate, with each person (that takes part in openly defecating) taking two and a half days a year to find a safe and private location (WSP, 2012). The United Nations had set goals to halve the number of global individuals living without access to a toilet by 2015. This goal was unfortunately deemed unsuccessful, but thankfully more promising efforts have been made in the more recent months. Both private organizations and the World Bank have come together to set both long- and short-term goals to help the sanitation issues in Nigeria.

For example, Ajegunle district is a poor neighborhood of Lagos home to three million Nigerians living in poverty. Day to day life had always been a big struggle, but when the Corona Virus pandemic hit, everyday life seemed impossible. Families were ordered to stay in their poorly built homes as an attempt to prevent the virus from spreading. This act proved to be more detrimental than actually contracting the illness. Many families were left to starve in their homes, since their only way to get food was through food handouts from private organizations. In this particular neighborhood, there is a public toilet that

releases the waste directly into the water used for cleaning and cooking. An organization called Justice and Empowerment Initiatives sought to resolve this contamination issue. They devised a plan to build a public bathroom with a composting system known as biofuel digester which is used to breakdown the waste. To encourage the locals in the area to use the new bathroom, a painter created a beautiful mural on the wall of the facility. This helped people's attention be drawn to the new addition in their community. This simple installation of a clean and sanitary bathroom cost only 1,800 United States dollars and has had a tremendous impact on the neighborhood (DW News, 2021). This is clearly an example of the kind of humanitarian work that needs to be replicated.

While conditions in Nigeria in regard to the water sanitation are still severe, very recently, the World Bank provided a grant to the Nigeria Sustainable Urban and Rural WASH Program. This means that the bank will provide a 700-million-dollar credit towards supplying 6 million Nigerians with safe drinking water and 1.4 million Nigerians will be granted access to better sanitation services and resources. Therefore, 2,000 local schools, hospitals, and clinics will be given access to water, sanitation, and hygiene services and local Nigerian communities will be given assistance in becoming free of open excretion. This grant is executed through Nigeria's National Action Plan for the Revitalization of Nigeria's Water Supply, Sanitation, and Hygiene Sector. The world bank has approximated that one dollar put towards improving global sanitation with result with five dollars in economic and social benefits (World Economic Forum, 2015). The Nigerian Government's National Action Plan has big goals to resolve the crisis of Nigeria's water supply, sanitation, and hygiene sector. The Nigerian government has set big goals to have universal access to a securely managed water supply, sanitation, and hygiene sector by the year 2030 (Chima, 2021). This government plan is set to be carried out in three stages: The Emergency Plan, the Recovery Plan, and the Revitalization Strategy. The government has also recognized the fact that open defecation is one of the major causes of water contamination, so they have set forth the Toilet Campaign striving to make the country free of open defecation by the year 2025. The 700-million-dollar grant will specifically aid in developing infrastructure which in turn will improve clean water distribution, hygiene in communities, and provide more and more sanitation facilities (Oracle News, 2021).

People also need to be educated about sanitation. One attempt has been to simply raise awareness of the dangers of water contamination since so many communities had no idea that their daily practices were so severely harming their health. The Rotary Club has supported schools by making donations of things like books and desks and has recently been tackling the issues regarding unsanitary water (Rotary Service and Engagement, 2018). Different effective plans of attack have included things like providing developing communities with toilets that flush the waste into secure sewer systems rather than polluting and contaminating a river. Nigeria's death mortality rate has a significant portion caused by diarrhea. The simple act of educating locals about good hygiene can help to lessen the number of diarrhea cases by about 34%. In many countries, women will have to make long treks in order to find water to bring back home, but most of the time the water is unsanitary. Rainwater harvesting systems can easily be set up so that whenever it rains the water can be collected and stored to be used by the community. Another technique that has been gaining popularity over the past few years is to provide underdeveloped communities with things like solar disinfection, flocculants, or filters to help make water safe for consumption. With appropriate funding and application of these plans, the water and sanitation security issues happening in Nigeria could be eased. The government would need to resolve its infrastructure and just get everyone on the same mindset to help the rural Nigerian population.

One issue that may arise when trying to implement new sanitation practices in a community is the community's unwillingness to change their ways. Some cultures may find being told that the way they are living their everyday life is having a detrimental impact on their health as rude and offensive. It is important that when a private organization or global representative is attempting to speak to and educate a poverty-stricken community, that they take time to be respectful and try to understand what hardships these people may go through. It can be very easy to look down on someone for how they live their life, and it is a very different thing to experience the same hardships. To have the best possible outcome when

trying to implement change in Nigeria- and even globally- it is essential that the situation is handled with the upmost respect and in no way should the representative shame the community for their unsanitary practices. These individuals need to know that they have support from people all over the world and the World Bank's grant is going to provide their households with the necessary means to ensure access to toilets and sanitary water.

In terms of long-term solutions for Nigeria's water and sanitation crisis, both the World Bank and United Nations have been making good efforts recently. The World Bank's 700-million-dollar solution has goals set to be reached in years 2025 and 2030. There are short term solutions that could be implemented in households among various communities, however, these solutions would soon need to be replaced by longer-term goals. One of the simplest ways for a family to produce clean drinking water is to boil the water. This method is effective enough to kill pathogenic bacteria, viruses, and protozoa. If the boiling method still leaves the water with a cloudy white finish, it can be left alone to settle and then be poured through a clean cloth. The cloth method will not be able to remove all the harmful particles, but it can still filter out some of the larger particles. Boiling and filtering the water are the most accessible and plausible options for poorer households in Nigeria. A setback to this solution is accessibility. It can be easy to overlook the idea that many poverty-stricken households may not have access to pots or cloth. Some of the funds from the World Bank could go towards providing communities with pots, cloth, and bleach to help the people in the short term and at the same time help combat the water sanitation solution of the long run. Other techniques such as disinfecting water using household bleach is certainly an option, also. In times of emergency, where boiling water is not an option, the household could use one fourth of a tablespoon of unscented bleach per gallon of contaminated water. This has been deemed by the CDC as a 'last resort option', but when using the proper ratio, the bleach can purify making the water safe for consumption (CDC, 2019). There have been good strides in recent months with the impact of the short term goals in small communities. These positive outcomes have helped encourage the World Bank to put a lot of effort and funds into this cause.

The World Bank's course of action will seemingly have the best long-term outcome as long as each projected step and goal is followed through in a timely manner. The funding for this project has already been approved with a 700-million-dollar credit being distributed for the poorer rural areas in Nigeria. Nigerians might also benefit from installation of community wells and proper repair of existing wells, since infrastructure is lacking and use of surface water is a greater health risk. Many achievements have already been made including the building of a couple thousand water points and over 6,000 sanitation and hygiene facilities. This in turn has opened up thousands of jobs for Nigerians across the country (World Bank, 2021). With all these accomplishments happening within just a few years, it provides a sense of hope for what might come of Nigeria by the year 2030.

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