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Uganda, Clean Water and Sanitation

Uganda: Reinventing Sanitation

A quote from the Lancet editorial states, “It is already well known that improved sanitation could prevent 1.5 million deaths from diarrheal illnesses a year, enhances dignity, privacy, and safety, especially for women and girls, benefits the economy—every dollar spent on sanitation generates economic benefits worth around nine more—and is better for the environment,” (Rijsberman and Zwane, 2012). In many Western countries around the world, the ability to flush a toilet is so widely integrated into everyday life it is often overlooked. On the contrary, this is a luxury in some developing countries, especially Uganda. Uganda, a periphery country located in sub-Saharan Africa, has always struggled with clean water and sanitation. When this struggle became one of the country’s greatest issues, the government felt that the need for clean water was a priority over sanitation, causing the entire country to dismiss the concern of proper hygiene (Rijsberman and Zwane, 2012).

In Uganda, the population is estimated to be around 38,319,241 people (World Trade Press, "Uganda: Demographics"). The urban population is around 16.1% of the total population, whereas the rural population is estimated at around 83.9% of the total population (World Trade Press, "Uganda: People"). The type of government that exists in Uganda is a Presidential Republic, therefore, the government leaders are President, Vice President, and Prime Minister (World Trade Press, “Uganda: Structure”). Currently, 71.2% of the land is cultivated (World Trade Press, “Uganda: Geography”). The major crops in Uganda include: coffee, tea, cotton, tobacco, cassava, potatoes, corn, millet, and more, whereas the exports include: coffee, fish and fish products, tea, cotton, flowers, horticultural products, and gold (World Trade Press, “Uganda: Economy and Trade”). The average farm size in Uganda is 1.5 hectare, which compares to two average size classrooms in the U.S. (World Trade Press, “About Uganda”). The climate of Uganda is tropical, experiencing rains with the exception of two dry seasons, one from December to February and the other from June to August. Uganda is landlocked, fertile, and contains many lakes and rivers (World Trade Press, “Uganda: Geography”).

The typical family size in Uganda is around 4.7 people. Most of these families live in thatched huts lined with mud and wattled walls (World Trade Press, “About Uganda”). The process of making these dwellings is cheap, which promotes itself well to the inhabitants. The diet which most of these families eat is generally composed of starches, present in customary dishes such as matoke, boiled and mashed plantains, or ugali, a hard cornmeal porridge. Major crops of the country also present themselves on the table, such as cassavas, yams, and sweet potatoes. Much of these foods come from the agricultural sector in Uganda, which is derived from farms and sold at rural markets. These foods may be cooked over hot charcoal on an open fire or cooked on wire mesh over an open fire (World Trade Press, “Uganda: National Cuisine”). These methods of cooking are common due to the easy availability of the materials. In Uganda, the labor force is

around 50% services, 40% agriculture, and 10% industry. Jobs in the industry include working at sugar, brewing, tobacco, cotton textiles, cement, and steel productions. The average wage is around \$18,000 per year (World Trade Press, "Uganda: Economy and Trade"). In terms of education, most children will begin at age six and will finish around the age of thirteen. In January of 1997, Uganda launched a program known as 'Universal Primary Education Program,' which provided free primary school education for up to four children from each family. Yet, the quality of this education is concerning considering that there is only one teacher for every 50 students (World Trade Press, "Uganda: Structure"). The health care in Uganda is not accessible to many as 70% of doctors practice in urban areas, where only 20% of the population resides, which causes rural coverage to be greatly insufficient: one doctor for every 22,000 people. However, the healthcare is free due to the nation's free universal access to state held medical facilities (World Trade Press, "Uganda: People"). Access to clean water, toilets, electricity, and other commodities is concerning; about 80.9% of the population has undeveloped and poor access to sanitation facilities, causing many health concerns to arise ("Africa: Uganda — The World Factbook - Central Intelligence Agency"). Also, there is a great disturbance surrounding the infrastructure, which has caused industrial growth to be hindered by the large costs and only 20% of the population has access to electricity. Another safety concern is the use of children as a source of labor, which is demonstrated through 36% of the nation's children, ages 5 through 14, being employed (World Trade Press, "Uganda: People"). Regarding nutrition, 85% of the population is living in disadvantaged rural areas with food insecurity problems, causing the number of undernourished people to be around 4.4 million as of 2008 (World Trade Press, "Uganda: People").

Due to the presence of the British during the 1900s to the 1960s, sanitation and hygiene were high on the political and social agendas as the colonial government wanted their colony to be set to the highest standards for three reasons: the population would be less exposed to tropical illnesses and diseases, civilians would be healthier, and thus, a better source of labor and income for the colonial government, and lastly, it was the easiest way to 'civilize' the colony and represent the Christian ideals of 'cleanliness,' (Faul-Doyle and Doyle, 1996). Under colonial rule, laws were set that indicated the minimum number of toilets needed to be present in schools, hospitals, offices, and recreation areas. In order to ensure the criteria was being met, public health inspectors kept close eyes on the population and fined those who disturbed the process. Because of the constant effort to keep up with sanitation, Uganda was viewed as well-kept and clean to those from the outside (Faul-Doyle and Doyle, 1996). However, underneath all of the 'efforts' to keep Uganda clean, it was revealed that the system was disturbingly unsanitary and corrupt. If a city in Uganda had enough power or prestige, they could refrain from an inspection. Additionally, poor villages may have never received a visitation from an inspector and would lose the opportunity to have a proper lesson on water sanitation or hygiene (Faul-Doyle and Doyle, 1996). Yet, the worst feature of the inspection process was the failure to actually investigate each specific toilet or water source. Most of the inspections that took place only evaluated the physical aspects, such as the building standards of the toilets, instead of seeing if the sources actually worked. "As far as the 'government property' was concerned, a Ministry of Land, Minerals and Water Resources survey in the early 1980s showed that, over time, only 70 per cent [sic] of all sources were broken down, and that they stayed that way on average for six

months,” (Faul-Doyle and Doyle, 1996). The lack of effort to fully investigate the sanitation for each individual village would set a precedent for a greater national issue regarding sanitation and hygiene.

Following Uganda’s independence from Britain in 1962, no new reforms were taken to combat the hygiene issue. The lack of management by the Ugandan government did little, if not worsened, the sanitation quality. Years of internal conflict within the country caused the colonial laws to be ignored. This meant that no inspectors were checking up on the sanitation quality in villages, no maintenance workers were fixing latrines in the event that they broke down, and the Ugandan population became less knowledgeable on proper hygiene. By 1983, studies revealed that the lack of access to proper sanitation facilities lead to insanitation diseases becoming the second leading cause of deaths occurring in infants (Faul-Doyle and Doyle, 1996). Many individuals struggled with health concerns due to the poor service, and as a result, it created an incoming generation that was unable to participate in the labor force. However, in the mid 80s, ministries and aid agencies under the democratic government of Yoweri Museveni led to positive changes in terms of educating the population on sanitation (Faul-Doyle and Doyle, 1996). Sanitation lessons were placed into children’s curriculum and were designed to reach them in a fun, interactive way. The government made communities elect water and sanitation committees whose purpose was to target an improper latrine and come up the means for a new one. These committees also elected mechanics who were educated on how to fix a broken latrine and were encouraged to share their newly learned methods with their community members (Faul-Doyle and Doyle, 1996). Although these efforts found some success, the lack of physical facilities that met health guidelines prevented the Ugandan population the ability to put their newly learned concepts into effect. The effort to achieve clean water and proper hygiene is still desperately needed as about 80.9% of the population has undeveloped and poor access to sanitation facilities (World Trade Press, “About Uganda”). This has resulted in one of the nation’s biggest problems: open defecation.

Because of the existing unsanitary conditions, the Water and Sanitation Program reported that 3.2 million Ugandans resort to open defecation as a means of disposal (WSP "Africa: Economics of Sanitation Initiative"). “Open defecation refers to the practice of defecating in fields, forests, bushes, bodies of water or other open spaces.” (JMP, "Open defecation"). The Water and Sanitation Program projects the open defecation practice to have cost the Ugandan economy about \$177 million USD every year through four main factors: access time, premature death, productivity, and health care (WSP "Africa: Economics of Sanitation Initiative"). In terms of access time, the Water and Sanitation program states, “Each person practicing open defecation spends almost 2.5 days a year finding a private location to defecate leading to large economic losses,” (WSP "Africa: Economics of Sanitation Initiative"). Members of rural communities must take time out of their day to search for an area that allows them to dispose of their feces privately. The process of open defecation is dangerous as one is more vulnerable to sexual assault or physical attack while defecating, especially when no one is around (Africa: Economics of Sanitation Initiative | WSP”). The second factor, premature death, is a large cost to the country’s government. According to UNICEF’s Water, Sanitation and Hygiene Program (WASH), 33 children die every single day as a result of diarrhea directly related to either poor

drinking waters or unhygienic behaviors (UNICEF, "Water, sanitation and hygiene (WASH)). Losing members of the younger generation is creating a future where the workforce is limited in both quantity and quality, as those who are able to work are not in the healthiest state due to the current sanitation issues. There is evidence that the lack of sanitation and hygiene at home and at school has resulted in physical, cognitive and developmental issues among the children of Uganda. (UNICEF, "Water, sanitation and hygiene (WASH)) This leads to the third factor, productivity. Much of the population must take off work or school in order to care for their own poor health or another family member's health due to diarrhea or other sanitation related diseases caused by the current situation (WSP, "Africa: Economics of Sanitation Initiative"). The last factor, health care, causes many to seek treatment, placing a burden upon family member's financial backgrounds and government spending (WSP, "Africa: Economics of Sanitation Initiative"). Through these factors, the lack of sanitation in Uganda has caused immense harm upon the country and the inhabitants within.

One method to tackle Uganda's sanitation epidemic relies on the national government to evaluate the current water and sanitation budget. The Water and Sanitation Program states, "Current sanitation investment in Uganda is between 0.1-0.5% GDP which is lower than several estimates for what is required (WSP "Africa: Economics of Sanitation Initiative"). For change to be possible, the government would need to dedicate at least 5% GDP toward rehabilitating the sanitation of the country. Once implemented, current national leadership would delegate the power in fixing the issue of sanitation to local government leaders. These leaders would then be the opinion makers of their communities and be allowed to impose fines upon those caught openly defecating but would also be able to declare incentives. Of the 5% GDP budget, 1% of it would go toward incentives that would be given out to community members who declare 100% latrine usage, as opposed to openly defecating. Local government inspectors can then validate through routine inspections and issue incentives to communities to further improve sanitation or benefit farming or the economic viability of the community. Naturally, this places a financial burden on the national government. But, a simple cost-benefit analysis can provide sufficient evidence for the necessity of assistance from the Ugandan government. Poor hygiene has plagued countless Uganda citizens with disease, death, and a life full of filth, particularly the poor. This has devastated the country of Uganda. If the national government could provide the ample resources to achieve such change, so many lives would be spared in the process. It is foolish to think that a country can develop or grow if it still has not figured out proper hygiene for its peoples. Future generations would be stuck on this issue if the Ugandan government refuses to help simply because it "costs too much". There is no currency more important than that of human lives, so there should be no hesitation in investing more in the survival of Uganda's citizens rather than the government itself.

But, help from the government is not always possible or reliable. With premature death all too common and an ever-increasing crisis regarding sanitation, there exists one ultimate solution: Community Led Total Sanitation (CLTS). CLTS targets the practice of open defecation and seeks to limit it through changing the behavior of individual communities. It places the burden of responsibility to end open defecation directly upon the community itself, establishing not only a need for change, but a desire as well. With help from stimulators within or outside the

community, those suffering will become aware of the devastation that open defecation is creating. The community will feel a call to action when there is mutual support for a collective benefit in the end (Rijsberman and Zwane, 2012). This program facilitates communities to analyze their current open defecation situation and determine the proper action needed to occur in order to improve it (Institute of Development Studies "The CLTS approach" 2018). It teaches the community not only how, but why open defecation is so problematic, it instills hope that things can and will improve. It brings the community and its people together to devise a way to end the epidemic that is hindering their quality of life. It may only take an individual to build a latrine and better the hygiene in their household. Yet, it takes a village to rid the existence of open defecation and ensure a better life for themselves and future generations.

The most powerful weapon in instituting change is awareness. But just like everything else, it takes time. Garnering attention to the struggles that occur outside the United States has fueled successful organizations like UNICEF to achieve their mission. UNICEF has achieved many obstacles in fighting hunger around the world and now has begun the feat of improving sanitation as well. The success of CLTS can be seen in the status of "open defecation free" (ODF) that Quinara, Guinea-Bissau has recently been afforded in July 2019 with the help of UNICEF (Geadas Durán & Tomassini, "Ending open defecation in Guinea-Bissau: It all starts under a mango tree"). UNICEF was able to receive funds and volunteers when awareness was brought to the desperate need for help in Guinea-Bissau, a country where roughly one in six people still practice open defecation (Geadas Durán & Tomassini, "Ending open defecation in Guinea-Bissau: It all starts under a mango tree"). By mobilizing the community through a combination of shock, disgust, shame, and pride, the facilitators were able to trigger behavioral change within the community. Awareness must exist in the very village the problem resides. It took a "walk of shame" to teach the community members that feces that are disposed of in the open, can travel through rain, bugs, and hands back to people's homes and mouths. The facilitators were not there to tell the members of the community to stop openly defecating, instead the community decided that alone, and devised their own plan to end it once and for all (Geadas Durán & Tomassini, "Ending open defecation in Guinea-Bissau: It all starts under a mango tree").

A similar accomplishment can and needs to be achieved in Uganda. The CLTS program does not have to be expensive for the government. Although increasing the government budget would be helpful, CLTS can be implemented within a reasonable cost (Crocker, Saywell, Kolsky, & Bartram "The true costs of participatory sanitation: Evidence from community-led total sanitation studies in Ghana and Ethiopia" 2017). If the government could invest in one village or community, with success, volunteers from that village could spread word of their success to other communities. The big picture can be overwhelming, but focusing efforts on even one village begins the process and brings a measure of victory, no matter how small. The evolution of accomplishment has the potential to take off quickly and with great achievement. In that respect, outside of the initial investment in only one community, the true cost would be the time and effort of the communities themselves.

It only takes one photograph or one story to receive sympathy and aid from developed countries. And although the idea of outside aid seems helpful and kind, in reality, the most success in the effort to end open defecation is when the community handles the issue from within and on their terms (Geadas Durán & Tomassini, "Ending open defecation in Guinea-Bissau: It all starts under a mango tree"). The important focus should be to teach the communities how to save themselves, as opposed to looking outward to be saved. The solution to the end of open defecation lies within the community and their desire to promote change. Using a toilet, toilet paper, and soap is something that every human being in the developed world should be thankful for. Every person in Uganda, and in the world, is deserving of clean water and the ability to remain hygienic. When given the power to educate oneself and the opportunity to develop new innovational ideas with the help of an entire community, amazing things can be accomplished. It truly takes a village to ensure that this is even possible.

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