## Can the water and sanitation crisis in Africa's largest slum be solved?

Kibera, the largest slum in Africa located on the outskirts of Nairobi, houses hundreds of thousands of people in shacks made of iron sheets, sticks, and mud. The exact population of Kibera is unknown as most of the people living in the settlement are undocumented. Estimates range from 250,000 to as much as 2 million, however.

Some say that Kibera is not only the biggest but also the poorest slum on the continent. Access to clean water is very limited, there is no waste disposal system, and only the luckiest have electricity.



Kibera is the largest slum in Africa

Until recently, all people living in Kibera had to collect water from the dam, which constituted the primary reason for typhoid and cholera being endemic in the area. Now, residents can pay three KES, which equals to around \$0,03, and get twenty liters of clean water from a pipe connected to a water treatment plant. Indeed, it is a step in the right direction, but there are two fundamental challenges associated with this solution.

Firstly, the price for one water canister is affordable but if a family has multiple children, they need to purchase a few of them. Besides, twenty litres of water is not going to last for long if an entire family wants to use it for drinking, cooking, washing their hands, and showering. Most people in Kibera have less than \$1 a day to spend so they need to prioritise their expenses, and using rainwater or water from the dam instead of purchasing clean one is an area where many see an opportunity for savings.



Houses in Kibera are made of iron sheets

Secondly, for now there are only two of such water stations in the slum. That means that some who do not live in the pipes' vicinity have to walk considerable distances to get the water and then transport it back. Carrying water through the slum after collecting it is not an easy task as the majority of people do not have vehicles, trolleys or anything that could make carrying water canisters less laborious.

Consequently, a large proportion of Kibera's residents still uses the dirty water from the dam to cook or shower. In turn, many suffer from diseases that could easily be prevented. Diarrhoea and vomiting, which can lead to severe dehydration, occur frequently as the highly contagious norovirus causing these symptoms spreads through the ingestion of contaminated food and water.



Water in the dam has been degraded by waste

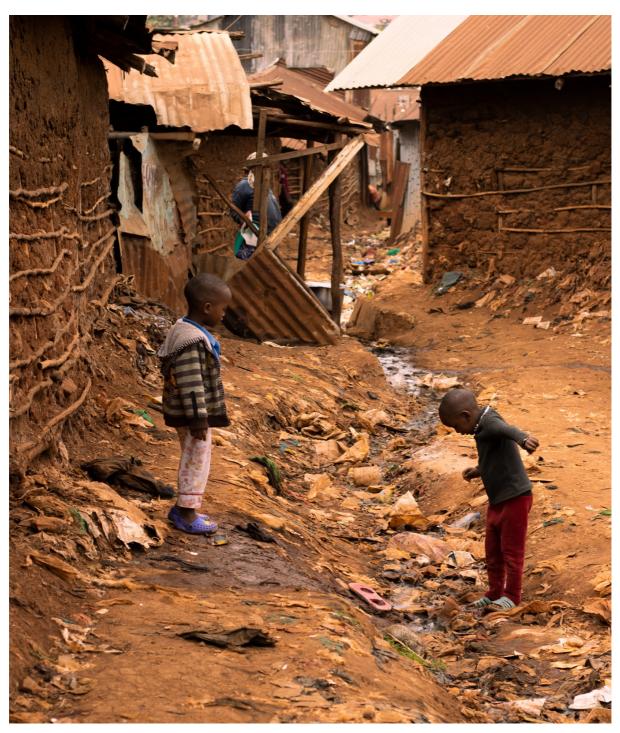
The sanitation situation in Kibera is even more challenging than the problem of limited clean water sources. As there is no sewer system in Kibera, the streets are filled with human and animal waste and open sewers drain into the dam that many still source water from. Some latrines can be found around the slum but each of them is shared by around fifty households. The condition of these provisional toilets is so bad that many people prefer to

satisfy their physiological needs outside. Additionally, once the toilets are full, individuals in charge of emptying them transport the waste into the nearby river further polluting it.



There is no garbage collection in Kibera

What also aggravates the sanitation crisis in Kibera is the fact that there is no garbage collection. People live among rubbish and children walk around barefoot stepping on waste and playing with it. Growing up in such conditions can negatively affect the development of children and their learning capabilities. More importantly, though, it can lead to deadly childhood diseases.



Children in Kibera play with omnipresent waste

One way to help the residents of Kibera is through education. Teaching them about the importance of personal and environmental hygiene is crucial to help them develop habits that can make Kibera cleaner. If everyone living there realised these things, lower rates of diseases caused by poor sanitation would follow.

And yet, people living in Kibera want to learn and make a positive change in their lives but due to environmental constraints, they are not able to take an action.

They might be aware of how important frequent hand washing is but with very few hand washing stations in Kibera, doing so is difficult. They might want to take the rubbish away to a designated spot to have it collected by the administration but there is no such place nor mechanisms in the slum. Finally, they might want to reduce the human waste in the streets but they have no access to adequate toilets.

For residents of Kibera clean water is a luxury. If they have it, they use it for cooking not washing hands or maintaining good personal hygiene. Just like with their daily expenses, they need to decide what is the most important when it comes to rationing water. The only solution to the water crisis in Kibera is building a reliable water system that would ensure that all the residents of the slum can easily access clean water and collect as much of it as they need.

Charities and NGOs are doing an amazing job in empowering people of Kibera and making sure they have knowledge allowing them to at least slightly improve their living conditions and lower the risk of catching diseases. Unfortunately, however, solving the water and sanitation crisis in Kibera requires building sanitation structures and connecting water pipes. Therefore, unless Kenyan government or international donors step in, simple tasks such as hand washing or taking the rubbish out will remain vastly challenging for Kibera's residents.

## About the author:

Katarzyna Rybarczyk is a Political Correspondent for <u>Immigration Advice Service</u>, an immigration law firm based in the UK but operating <u>globally</u>. Through her articles, she aims to raise awareness about security threats worldwide and the challenges facing communities living in developing countries. She has recently spent a month volunteering in the Kibera slum in Nairobi, Kenya.