For nearly a decade, Embrace Relief has provided critical support to millions of people across the globe in a number of ways. No matter the issue, our goal is to develop an understanding of the unique challenges facing different parts of the world, and to be part of a sustainable solution that enriches the lives of people in the communities we serve.

On March 22, 2022, Embrace Relief hosted its first Roundtable Discussion Series event, another step in driving the conversation around global sustainability and aid for those in need around the globe. The report that follows summarizes that discussion, “Sustainable Fresh Water Systems During COVID-19.”

We sought out experts with close ties and deep perspectives on the clean water crisis in sub-Saharan Africa and asked them to share the details of the situation on the ground, the biggest challenges their communities face, and their proposed solutions. The two-hour roundtable raised some thought-provoking questions and allowed for a fruitful exchange of ideas, which you can see outlined in the report below.

We hope that the ideas discussed lead to a greater understanding of the clean water situation in sub-Saharan Africa, and that they inspire meaningful, long-lasting change. From Embrace Relief’s perspective, our discussions with stakeholders on the ground will inform how we operate, too.

Embrace Relief would like to sincerely thank all of the speakers who took part in our roundtable discussion for continuing this dialogue. We have plans to host more Roundtable Discussion Series events in the future in support of our humanitarian missions, as well. It’s all in service of shining a spotlight on the many different challenges in the world, and working towards solutions.

Thank you for your support of Embrace Relief, which makes all of this possible.

With Gratitude,

William Alexander Morel
Board Member
Embrace Relief Foundation
More than two billion people worldwide lack access to clean water, sanitation and hygiene (WASH) facilities, a crisis that continues to feed cycles of poverty, disease, and stagnation around the globe.
People – usually women and young girls – must make physically draining long-distance journeys on foot to access the water they need to survive.

The situation is particularly troubling in sub-Saharan Africa, where hundreds of millions of people in urban and rural areas either drink from contaminated or poor-quality water sources and risk waterborne diseases like cholera and dysentery.

To celebrate World Water Day, March 22, the Embrace Relief Foundation hosted a thorough and lively virtual discussion of the challenges and potential solutions to the clean water crisis in sub-Saharan Africa in the first edition of its Roundtable Discussion Series.
Speakers and presenters represented a variety of backgrounds and many combined years of expertise, from government officials and public health workers in Africa to advocates for humanitarian aid in the U.S. The speakers sought to give their perspective on water, sanitation and hygiene challenges, and how they intersect with the great global issues of structural poverty, climate change, the COVID-19 pandemic, and more.

The two-hour discussion – which was conducted over Zoom by moderator Alex Morel, an Embrace Relief board member and St. John's University professor, and live-streamed across numerous platforms including YouTube, Facebook, Twitter and LinkedIn – allowed all speakers to make a short presentation on a particular aspect of the WASH issue before answering questions from fellow panelists. A short Q&A featuring questions from viewers concluded the roundtable.

**OUR SPEAKERS**

- **Dr. Benjamin Djoudalbaye**, speaking for Her Excellency Minata Samate Cessouma, Commissioner for Health, Humanitarian Affairs and Social Development for the African Union
- **Luka Matic**, Associate Program Officer for Embrace Relief
- **Group Captain Sadiq Garba Shehu (ret.),** Senior Special Assistant to the President of the Republic of Nigeria on Humanitarian Affairs
- **Christopher Askew-Merwin**, Policy and Advocacy Coordinator for InterAction specializing in WASH advocacy
- **Felix Kaiza**, a journalist from Tanzania
- **Njoroge Kamau**, a public health worker in the Horn of Africa region
We must address the challenge of infrastructure

- Dr. Benjamin Djoudalbaye

Dr. Benjamin Djoudalbaye opened the discussion on behalf of the African Union by noting the importance of partnerships in responding to continent-wide health crises.

“As a commission, we don’t go directly to the member states to implement the solutions to these problems,” he said. “But what we can do is ensure coordination, collaboration, and communication, to enable partnerships to respond to the challenges we face. Together, we have the power to improve our situation and the issues we are facing.”

Improving WASH services across Africa is imperative as one critical piece in the fight against all infectious disease outbreaks, Dr. Djoudalbaye said, but especially the ongoing COVID-19 pandemic. Hand hygiene is “a significant element of the WASH framework program” as a protective measure against COVID transmission, he said.
Biggest Challenge For Achieving the African Union’s WASH Goals?

Lack of Infrastructure

Lack of Clean Water

Lack of Sanitation/Hygiene

“We are dealing with the water-borne diseases that are the consequence of poor WASH, but before we arrive at that level, we need to invest in infrastructure,” he said. “If the infrastructure is not in place, people must use polluted water from the rivers [or other sources]. So we need to address the challenge of infrastructure, and that is the biggest challenge the continent is facing.”
When we construct or reconstruct a well, we want an open line of communication with those communities. We’re looking to provide a long-term solution.

- Luka Matic

Speaking next and representing the Embrace Relief Foundation, **Luka Matic presented a breakdown of the organization’s Clean Water Program and its Fountains of Hope initiative**, which have combined to build and rebuild more than 500 water wells in the African nations of Chad and Cameroon, providing a reliable source of clean water to more than a half-million people over the past nine years.

Matic explained that Embrace Relief has worked closely with researchers with the National Water Laboratory of Chad to create an ideal well design that is relatively simple to build, operate and maintain, and which is built to a depth of 45 meters below ground. This depth allows the pipes to reliably filter out harmful bacteria, parasites and minerals from the water. These wells are also powered by mechanical hand pumps rather than by electricity or gasoline, reducing the cost of operation.
Embrace Relief’s Clean Water Program and its Fountains of Hope initiative, which have combined to build and rebuild more than 500 water wells in the African nations of Chad and Cameroon, providing a reliable source of clean water to more than a half-million people over the past nine years.

“Most of the wells we construct or reconstruct are in very remote areas,” Matic said. “And we’ve found that the mechanical wells are the easiest to learn how to repair if a problem comes up so that access to water isn’t interrupted. Individuals and community members can learn the basic maintenance and keep the wells up and working.”
Biggest Challenge For Implementing WASH infrastructure around the globe?

“It’s a vast area that needs attention focused on it,” he said. “Across the world, not only in sub-Saharan Africa, there are communities struggling with improved access to WASH. It’s a lot for single organizations to work towards, and it really requires a concerted effort on behalf of non-governmental organizations (NGOs), policy-makers, and researchers to attack the problem at its root.”
The key challenges for universal access are a combination of growing demand, inefficient service delivery, governance constraints, gender inequality, and weather and water-related risks.

-Group Captain Shehu

Speaking next and representing the Federal Government of Nigeria (FGN), Group Captain Sadiq Garba Shehu provided an in-depth look into Nigeria’s WASH situation, which has moderately improved over the past several years while failing to hit ambitious targets of universal access.

Out of the country’s population of 183 million, 48 percent of Nigerians have access to basic drinking water sources, and just 33 percent have access to sanitation. Just 3 percent of urban Nigerian households had access to piped water on their premises in 2015, a drastic decline from 32 percent in 1990 that reflects the country’s rapid urbanization. In rural communities, about 39 percent of households lack access to a basic water supply, and about half have access to sanitation.
The rapid urbanization of Nigeria has been a burden to the country’s 37 State Water Boards, which are responsible for providing water services to urban residents. With high operating costs and low revenues, many urban water systems do not function. (The federal government is responsible for providing WASH access to rural residents, Shehu said.)

“The State Water Boards have limited financial autonomy and are not financially or commercially viable,” Shehu added. “The water is subsidized by the government, but this can be a vicious cycle. The water must be affordable, but you need to get the revenue to run machines and pay workers. Nigerian citizens end up spending an estimated $700 million every year to obtain water from alternative water providers, which is about 10 times what it would cost to get their water from public utilities.”

Moving forward, Shehu described Nigeria’s plan to improve WASH access for its citizens, including the construction of 2,300 new water sources, 6,500 new sanitation compartments and hygiene facilities, as well as a national program to eliminate open defecation by 2025.

Shehu also urged organizations seeking to help expand WASH access to consider four crucial points as they search for solutions:

- Post-construction maintenance strategies for facilities in rural communities
- The use of solar-powered and mechanical technology, rather than electric/diesel/petrol-fed systems
- Sustainable, context-specific and targeted solutions
- The nexus of clean water supply sources, girl child education, and gender-based violence
Christopher Askew-Merwin spoke next on behalf of InterAction, an alliance of international non-governmental organizations (NGOs) and partner organizations in the United States that has advocated for humanitarian aid for nearly four decades.

InterAction’s role is threefold, Askew-Merwin said. First, it coordinates efforts to influence governments and other actors to shape global policies. Second, it brings together and represents a broad array of stakeholders. And third, it offers training and other resources to member organizations to help them adapt in a rapidly changing world.

“Much of my team’s work is U.S.-policy-based,” he said. “Our ‘Choose to Invest’ report is our annual funding recommendation for the U.S. international affairs budget. And that’s something that is written specifically for the U.S. Congress, to show how critical foreign aid is, how valuable that budget is, what impacts we are getting with that funding, and what an increase could do for so many millions of people.”
That advocacy has been largely successful, with increased aid leading in 2020 to an additional 3.9 million people receiving access to sustainable drinking water and 4.1 million getting access to sanitation service.

Moving forward, InterAction's WASH Working Group - whose member organizations include WaterAid USA, CARE, the Global Health Council, Save the Children, Habitat for Humanity International, and the U.S. Fund for UNICEF – is fighting for a $125 million increase in WASH development funding and a refresh of the U.S. Global Water Strategy.

Askew-Merwin said that the group's recommendations include prioritizing equitable access and affordability of water for vulnerable populations, outreach with those vulnerable communities to ensure their local needs are being met, emphasizing the links between water access and climate change resiliency, and emphasizing WASH as a key preventative measure for COVID and any future pandemics.

“The greatest challenge is getting Congress to understand how important this is,” Askew-Merwin said. “WASH is one of the few investments where the return on investment is just incredible for the amount of funding you put in. We’re talking about lives saved, economic improvements. But that can sometimes get lost on members of Congress and the federal government, because it’s difficult to advocate for something that doesn’t help U.S. citizens. But this does help U.S. citizens. Because by providing these facilities and making sure that everyone has access to healthcare facilities with hygiene and sanitation, we can reduce greatly the possibility of future pandemics and variant COVID strains. So this is, at its core, a question about protecting us all and helping everyone. The challenge is in getting that message across.”
Felix Kaiza, a Tanzanian journalist, argued that international aid organizations must embrace a wider array of WASH programs to truly help deliver water access, and all of its associated benefits, to people in developing countries.

“Many international charity organizations, the likes of Time to Help in Tanzania, have so far concentrated on the provision of clean and safe water,” he said. “Others have prioritized the issue of sanitation. This is perfectly OK. It is now time to go into other areas, like supporting community irrigation schemes and aquafarming for the sake of enough food supply and security, integrated with improved nutrition. This is what will go a long way to put in place the fullest intervention for the attainment of targets set in the bag of Sustainable Development Goals.”
Kaiza pointed out that water scarcity issues directly impact six of the 17 Sustainable Development Goals (SDGs), targets set by the United Nations and its member states and designed to be met by the year 2030 in order to ensure a livable, more equitable planet. These six include eradicating poverty (SDG #1), abolishing hunger (SDG #2), promoting gender equality (SDG #5), making cities and human settlements sustainable (SDG #11), combating climate change (SDG #13), and protecting terrestrial ecosystems (SDG #15). All are addressed by ensuring that clean water is accessible and available to all.

“It is here that I remember an observation repeatedly made by my rural mother, who died about three decades ago at the age of 80,” he said. “She used to tell me, ‘Amaizi gaba mwoyo,’ meaning ‘Water is the heart.’ To her, this resource is more than its conventional concept as a link to life.”

In Tanzania, groundwater is a vital source of urban and rural water supply, Kaiza said. He noted that the local village councils and water supply organizations have been effective at building sustainable rural water services, which account for about 50 percent of the groundwater used each day. Managing the supply of groundwater in a sustainable way is one of the chief challenges for the world as its population increases.

“Members and partners of the United Nations Water Council have to sit down and consider all aspects connecting water to life on our planet,” Kaiza said. “The resource is a right to man as it is to other animals, plants and insects. Where does one set the equilibrium in terms of availability and its use?”
Rounding out the discussion, public health worker Njoroge Kamau shared his personal observations from working on the ground in the Horn of Africa.

He began with a poignant story about a woman he met in an Internal Displaced Persons (IDP) camp in the town in Somalia, where he is currently located. Kamau described a conversation he had with the woman, a farmer and a mother of five who fled her original home because the cycles of flooding and drought in Somalia left her farm unviable.

“I asked her, what is the difference between where she is now and her original home? What are the good and bad in both of the places?” Kamau said. “One of the things she said is that access to water is something she has here that she didn’t have back home. She had water, but it wasn’t quality potable like it is in the camp. She’s grateful to have drinking water here. But being in a camp, she also doesn’t have a livelihood, and there isn’t enough food for the children. So it is a conundrum. She has something good, but she is missing something else.”
Whether it is in urban areas or rural areas, it’s a story you find in many places in Africa,” he added. “Families who are marginalized in society, who don’t have the opportunity to have the full realization of their potential, and their children.”

Kamau said this was a common situation he’s come across in his work in various East African countries, where a lack of water access is widespread and damaging, especially as climate change wreaks havoc on the water supply.

Access to water, and maintenance of water sources, is a particular problem in many of the urban locales he’s worked in, including Nairobi, Kenya’s capital. There, approximately 60 percent of residents live in “informal settlements,” which are often not serviced by the public utility and service companies. Those who do get service in these areas pay as much as ten times as much as other water-users in Nairobi.

Kamau urged targeted governmental policies to help mitigate the costs for vulnerable people, and for citizens to hold political leaders to task to help subsidize the cost of infrastructure investments and maintenance.

And for those seeking to help people in Africa access clean water, Kamau asked them to sit down with local leaders and listen to what was needed in those communities. Each community will have different needs, and will need to be able to sustain any improvements that are made.

“No organization has the resources to maintain a water system forever,” he said. “One of the ways to ensure sustainability of the water system, whether in Africa or any other place, is to involve the community, so that they can own the infrastructure itself.”
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