

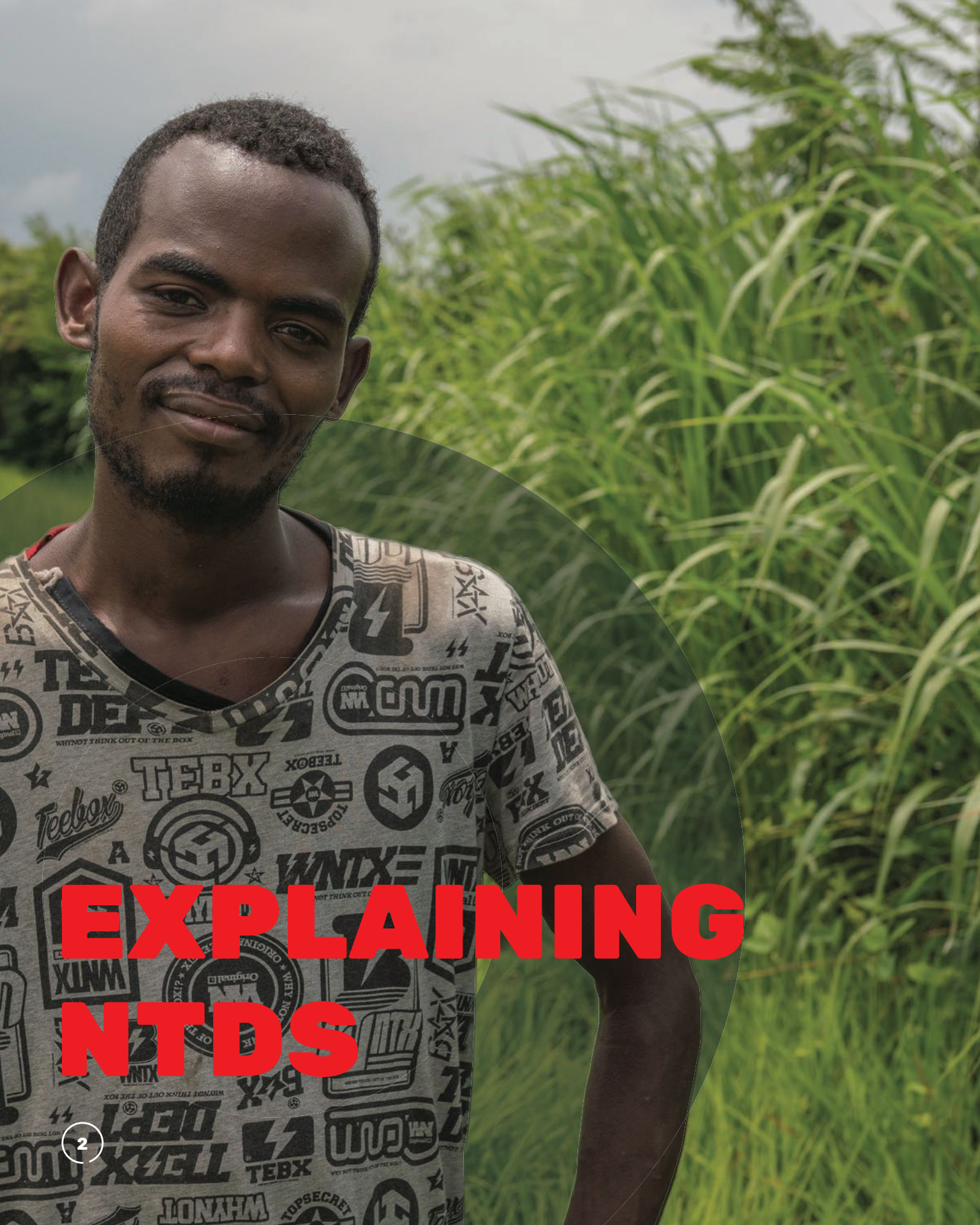


A ROADMAP *for the* FUTURE

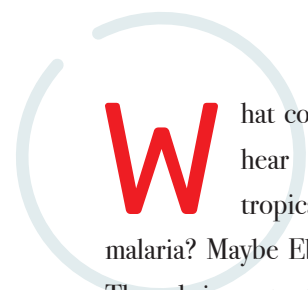
The Reaching the Last Mile
Fund's commitment to
ending neglected tropical
diseases (NTDs)



REACHING *the*
LAST MILE
FUND



EXPLAINING NTDs



What comes to mind when you hear the phrase neglected tropical diseases? Is that like malaria? Maybe Ebola? How about Zika? Though important to end, none of these diseases are considered neglected tropical diseases (NTDs). In fact, most people can't name one of the twenty diseases classified as NTDs by the World Health Organization (WHO). But for over 21% of the world's population, these diseases are part of their lives.

NTDs are a group of parasitic and bacterial infectious diseases that affect more than 1.7 billion of the world's most impoverished people, including more than

1 billion children. The five most prevalent NTDs are intestinal worms, schistosomiasis, lymphatic filariasis (LF), river blindness, and trachoma. Over 40% of the global NTD burden is concentrated in Africa.

These five diseases are all preventable and treatable with generously donated medication provided by pharmaceutical companies and WASH investments. For some of them—particularly river blindness and LF—we've come a long way in the race to see the end. After decades of treatment and the dedication of countless scientists, health workers, teachers, researchers, and communities, the last mile is in sight.



More than

1 IN 5

**PEOPLE
WORLDWIDE**

are affected by

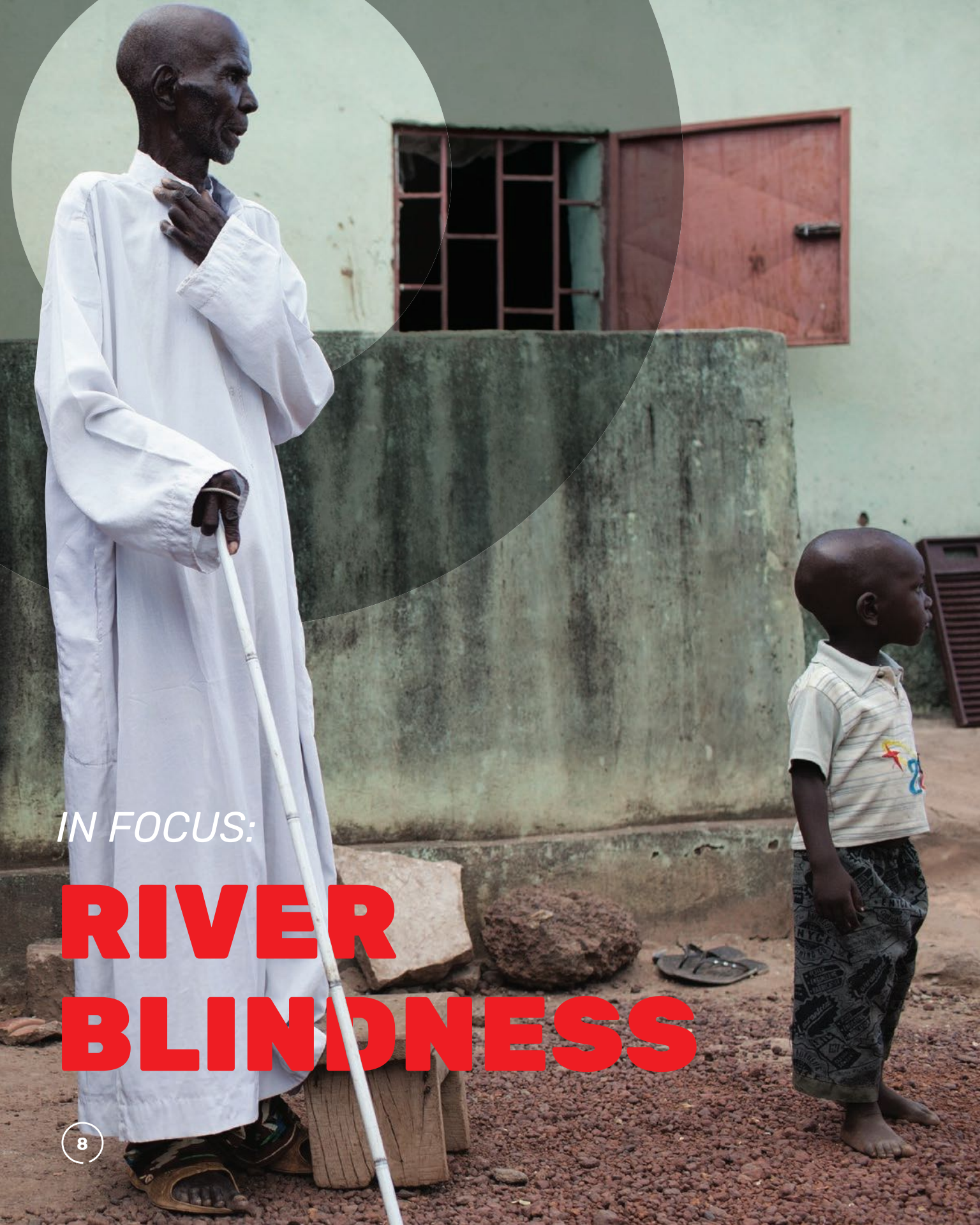
**NEGLECTED
TROPICAL
DISEASES.**

The impact of NTDs on the health of millions

While NTDs affect the most marginalized people and communities, they tend to be neglected because they are not as deadly as many other infectious diseases—about 170,000 people die from NTDs each year. Despite that, their effects should not be minimized. NTDs affect significantly more people in Africa than malaria and HIV/AIDS combined. They can cause vision impairment, blindness, enlarged legs, disability and skin infections. If left untreated, they can also cause long-term damage to the liver, kidney, bladder, and intestines.

In children, some NTDs like parasitic worm infections can lead to malnutrition, cognitive impairment, and stunted growth.





IN FOCUS:

RIVER BLINDNESS

At 76, Fily Kamara has lost his sight due to river blindness. For a community like Tambanoumouya, Senegal, which is along the fast-flowing Gambia river, this is a common fate for many his age. Fily's friends, brother, and other family members also lost their sight due to river blindness. He remembers people constantly scratching their skin—another effect of river blindness. In areas like this, there would often be entire communities where blind people being led around by children with sticks or poles was common.

“This disease, if you are ill, if you have the disease, you cannot work—it destroys work”

Like others in his village, Fily relied on subsistence farming for his livelihood. When his vision began to get worse, he had to stop working. By the time he got tested for the disease, it was too late for the treatment to take effect and save his sight.


For people living and working near fast-flowing rivers and streams, their daily activities put them at risk of being infected with river blindness. If they are repeatedly bitten by black flies, which carry the parasite that causes river blindness, they will start showing symptoms of the disease. This can include severe itching, disfiguring

skin conditions, and vision impairment. Without treatment, the itching can become more severe and lead to infections and the vision problems can progress to permanent blindness.

Mocé lost his eyesight decades ago due

to river blindness. He lives in Tienfala, in Mali, where 5.9 million people are still in need of treatment for the disease. Mocé now uses a cane to walk and even relies on his grandson to lead him around town—which was a common image in much of West Africa before successful treatment programs.

“The disease comes slowly. Little by little until the eyes become dark. Since I got the disease, my eyes cannot see.”

A photograph of a man in a long white robe, seen from behind, leading two young children. The child on the left is wearing a blue shirt and dark pants, holding a long white stick. The child on the right is wearing a light-colored striped shirt and patterned pants. They are walking on a dirt path next to a wall made of mud bricks. The background shows more of the same wall and a clear sky.

It's estimated that there are more than

**14.5 MILLION
PEOPLE WITH
SKIN DISEASE
AND OVER
1 MILLION
PEOPLE WHO
ARE BLIND**

because of river blindness.

**Almost 218 million
people in 30 countries**

were in need of treatment for river blindness in 2019.

136.8 million people

were treated for river blindness in 2019.

The WHO's goal is to

**eliminate river
blindness by 2030.**

River blindness is treated with the medication ivermectin (Mectizan®) on a yearly basis for

10–15 years.

There have also been efforts to

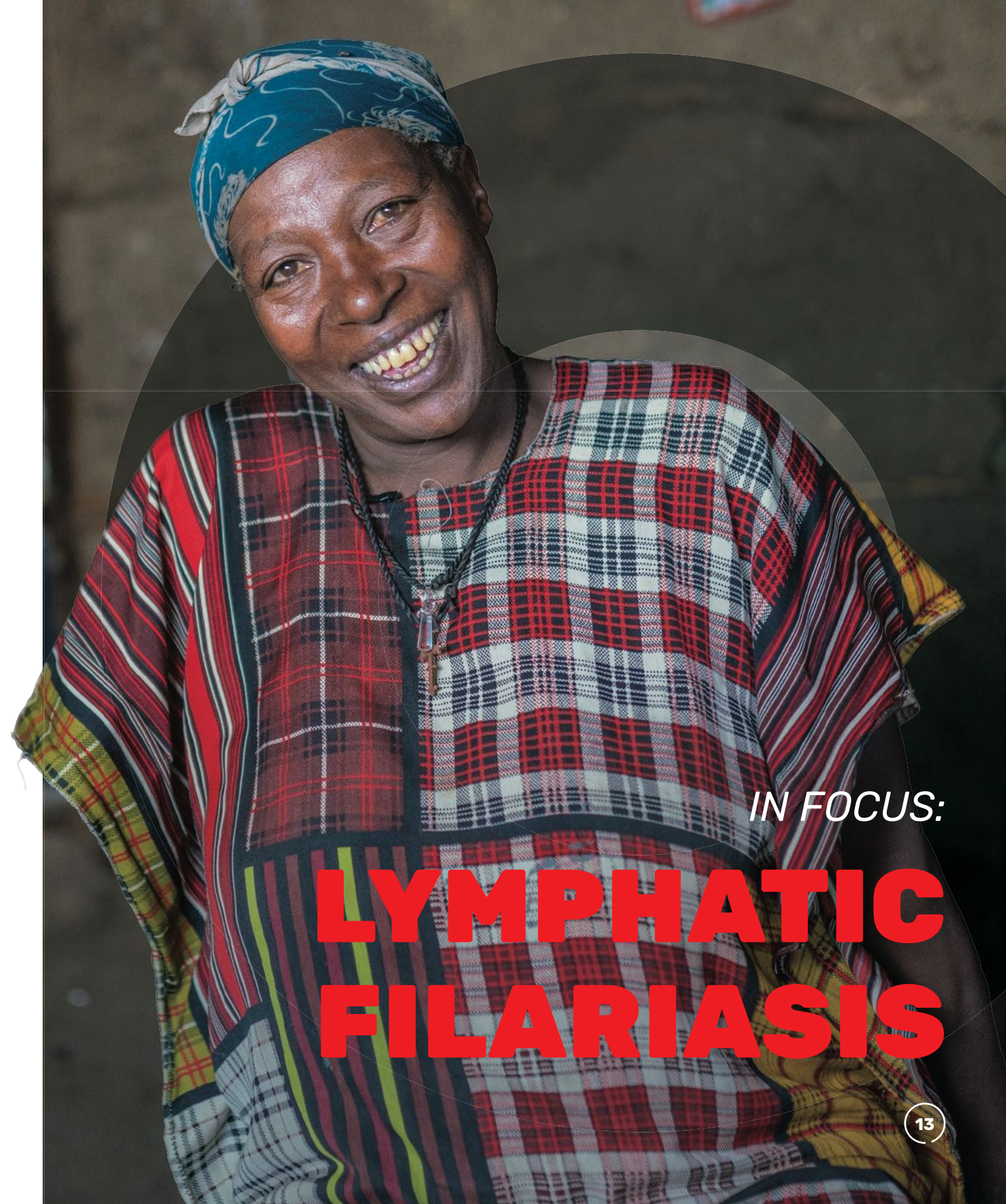
control the black fly

that transmits the disease-causing parasite.

Kasech Fantu lives in Sankora, Ethiopia with her two children and suffers from elephantiasis, an advanced stage of lymphatic filariasis (LF). There are times when her legs are too swollen and painful, so she stays at home in bed. Unfortunately, when LF advances to elephantiasis like this, there isn't much that can be done to reverse it. For Kasech, keeping her legs clean, putting bandages on them, and getting exercise can provide relief, but it is often only temporary.

"Before my legs were like this, we used to play a game at school where you run with a handkerchief from one side to another. I was always the best at running."

Similar to river blindness, LF is a disease caused by a parasite that is transmitted by an insect—in this case a mosquito. People are often infected as children, without knowing it. As adults, repeated infection leads to severe swelling in certain parts of the body including the legs and genitals as the parasites attack the lymphatic system. This is known as elephantiasis and can cause permanent disability. Even if someone doesn't experience physical signs of infection, LF can damage the kidneys and the body's immune system.



IN FOCUS:

LYMPHATIC FILARIASIS

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[Learn more](#)



CLICK TO WATCH KESACH'S STORY

538.1 million people

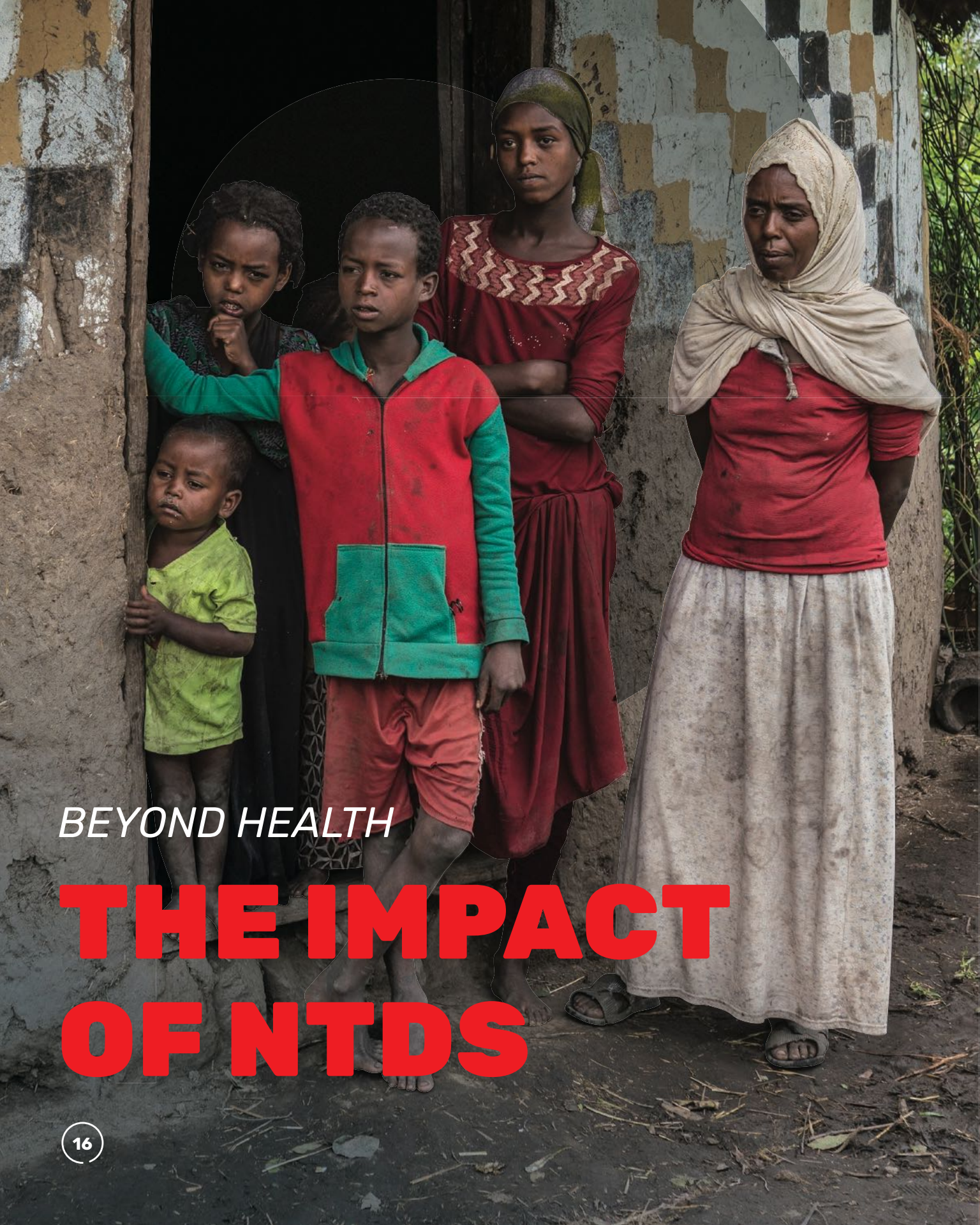
were treated for
LF in 2019.

It is estimated that at least
36 million people
have the advanced stage of
LF known as elephantiasis.

According to the WHO
**MORE
THAN 858
MILLION
PEOPLE
IN 50
COUNTRIES**

were in need of treatment
for LF in 2019.

Different combinations of
the medicines ivermectin
(Mectizan®), albendazole, and
diethylcarbamazine citrate (DEC)
are administered for up to 7 years.



BEYOND HEALTH

THE IMPACT OF NTDs

In addition to the negative health effects that NTDs have on people, there are adverse consequences that extend beyond the person who is infected by these diseases.

There are implications for children’s education, the financial health of families and communities, and mental health

Financial & Economic Ripples

“When I was younger, I worked hard on my farm and earned more than many in my community.

But then I got sick, and was unable to work.”

Lelamo Mukhtar Turgemu was a wealthy landowner who was able to provide for his 10 children in Sankura, Ethiopia. However, as his case of LF progressed to elephantiasis, he became too sick to tend to his farm and eventually had to sell off some of his land.

“God gave me land, money, and children...but now I am unable to even care for my children.”

Lelamo’s wife Kaybiya has since taken a second job in town to make up for her husband’s lost income, and their eldest son is doing his best to take over farming responsibilities from his father. In an effort to assist his mother with providing for the family, this has come at the expense of continuing with his education.

If the primary financial provider for a family goes blind or has such enlarged legs that they can no longer work in the fields or sell their food and goods in the market, it affects the whole family. Most of the affected





families cannot afford to lose any income because it means less money will be available for essentials like food, medicine, schooling, soap, and charcoal to boil water to prevent other diseases. Land that has been farmed on for decades may have to be sold, and animals, which represent a family’s wealth, may also need to be sold. If the primary financial provider is a man, his wife, who is already likely taking care of the children, doing housework, and traveling sometimes for hours to get

water, will have to take on more work to try to earn money.

In the 1970’s in West Africa, up to 50% of adults in some areas were blind from river blindness. Out of fear of contracting the disease, people abandoned their land along fertile river valleys. This led to increased poverty and famine. According to the WHO during this period, “economic losses were estimated at \$30 million, and [river blindness] became a major obstacle to socio-economic development.”¹

Research has shown that treating NTDs can have a positive ripple effect:

- Between 1995-2010, it is estimated that the African Program for Onchocerciasis Control (APOC) prevented 8.2 million years’ worth of healthy life from being lost in sub-Saharan Africa, at a cost of about \$257 million.²
- Between 2000-2014, it is estimated that the Global Programme to Eliminate LF (GPELF) prevented 175 million years’ worth of healthy life from being lost, saving \$100.5 billion.³

Education Ripples

“Since I am better disposed to care for them, I want to fulfill my responsibility even if I don’t have the resources. I want to make them happy.”

Fouwad wants to do all that he can to help his family. With his father Lelamo unable to farm and his mother Kaybiya working in the home and at multiple jobs, Fouwad feels a great level of responsibility to care for his siblings and parents. That means he is unable to continue his studies or pursue his dreams.

Unfortunately, Fouwad is also experiencing symptoms of LF. He hopes they don’t get worse so that his other siblings won’t be needed to help in the fields.

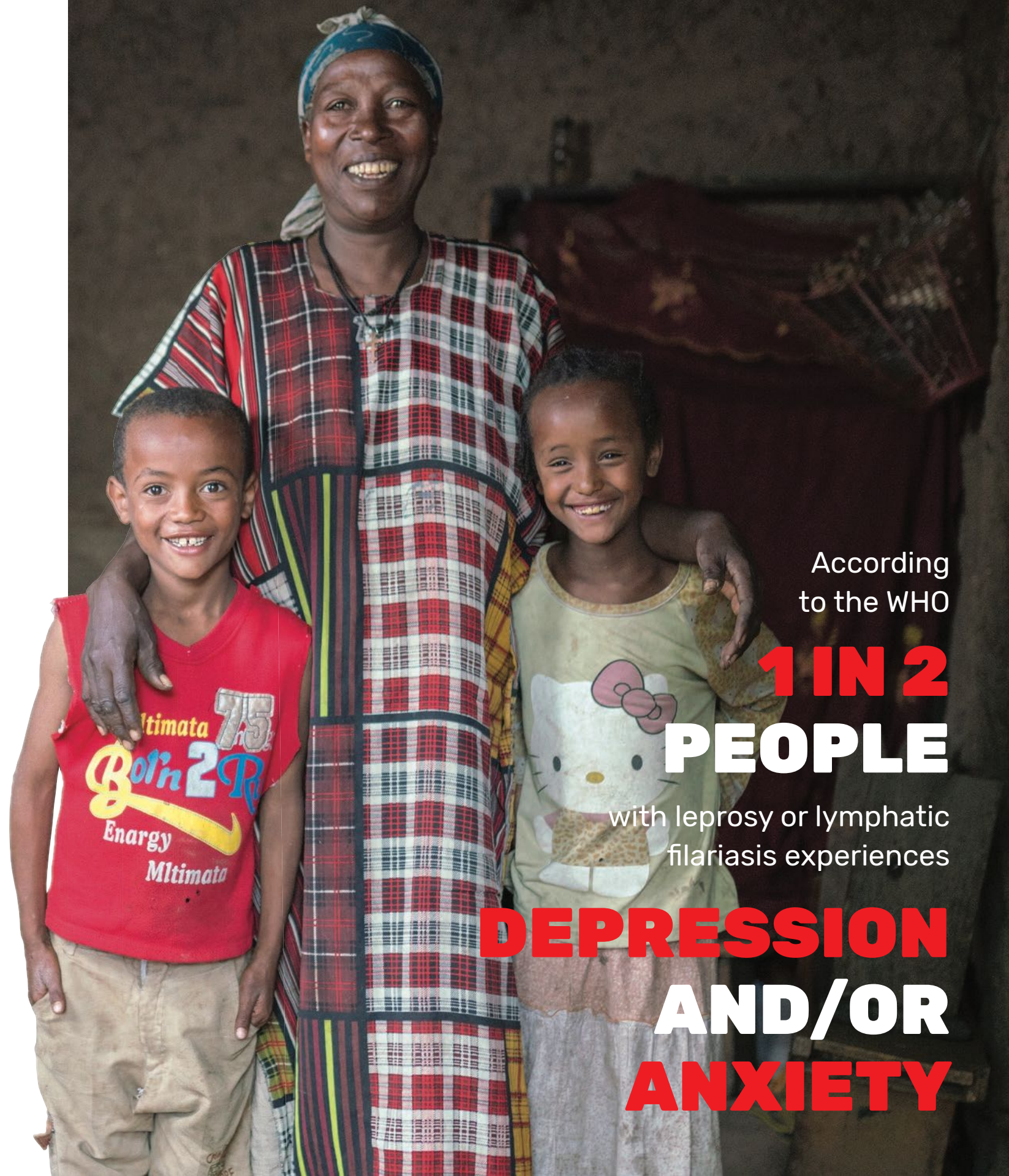
Families have to adapt to their new realities when someone gets sick with one or more NTD. In these instances children are often affected the most. Even if a family is still able to afford the uniforms, supplies, and school fees to send their children to school, they may not have enough for all of their children.

That means making a choice about who gets to go to school and who stays home—a choice no family should have to make. Additionally, children may have to take on jobs their parents normally would do, like farming, fishing, or even taking care of their younger siblings. Some children also are asked to lead a vision-impaired parent or grandparent around the community. All of these ripple effects keep kids out of school, which affects their futures and can trap them in a cycle of poverty.

Mental Health Ripples “Oh, there’s someone who has that condition on the other side of that hill.” “I think I’ve seen someone with large legs like that, but don’t know where they live.” “There might be someone who is blind that lives near the river, but we never really see her.” These are common answers when you ask members of a community if they know anybody who has elephantiasis or who has gone blind from river blindness. In some communities, it may be that there are genuinely few people who are living with the late stages of these diseases. However, in other communities, it is because there is stigma, shame, discrimination, and social isolation associated with them.



Kasech knows first hand what this feels like. “When I do go outside the people ostracize me, and I get embarrassed to go out in public even to shop. I just stay in, or sometimes I wear big socks and go outside, but the flies surround me.” Luckily, Kasech tries not to let the stigma and shame get to her. She lives her life with joy, laughter, and love for her children, who she is hopeful won’t need to suffer as she has thanks to initiatives like the Reaching the Last Mile Fund. According to the WHO, “one in two people with leprosy or lymphatic filariasis experiences depression and/or anxiety.”



According to the WHO

1 IN 2

PEOPLE

with leprosy or lymphatic filariasis experiences

DEPRESSION

AND/OR

ANXIETY



WORKING TOWARDS CHANGE

THE REACHING THE LAST MILE FUND

At its core, the Reaching the Last Mile Fund is an initiative to alleviate poverty. It can help remove barriers to people’s prosperity.

The Reaching the Last Mile Fund (RLMF) takes an innovative approach to NTD work by offering a proof of concept for the elimination of river blindness and lymphatic filariasis worldwide.

Administered by the END Fund, RLMF is a 10-year, US \$100 million initiative launched in 2017 by His Highness Sheikh Mohamed bin Zayed, Crown Prince of Abu Dhabi. It is a global partnership between philanthropists, governments, and NGOs.

Work on these diseases has been going on for decades in some instances. Daily Kamara, Village Chief in Tambanoumouya, Senegal remembers what it was like growing up there.

“When I was young, there were a lot of elderly that were blind. But at the time, the village didn’t know that the flies were making them blind. We received the doctors who came to fight the little flies, that made us blind. Since that day, there were less blind people in the village.”

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[Learn more](#)

CLICK TO SEE HOW ONCHOCERCIASIS ELIMINATION HAS
PROGRESSED IN MALI, DESPITE THE COVID-19 EPIDEMIC



15.1 million treatments

for river blindness and LF were delivered in 2019, at a value of \$62 million.

In the same year,

358,883 health workers were trained

to expand treatment and outreach.

438 surgeries

were provided to individuals experiencing advanced LF.

For the children in the village, Daily thinks they may not even know what the disease is, not from lack of education, but because nobody is being infected anymore. The only reminders are the few older people who are left in the village who went blind like Fily because treatment didn't reach them in time. They serve as a cautionary tale for why RLMF is so important to sustain the elimination efforts.

One of the people who was part of these elimination efforts in Tambanoumouya was Amadou Fall Seck, Team Leader for the National Epidemiological Evaluation Team in Senegal. He recalls how in the late 1980's for every 100 people, there were 66 with river blindness. In Amadou's opinion, river blindness did a lot of dam-

age to Senegal during that time and caused not only physical damage to people, but socioeconomic damage to the country. Thinking about the progress that has been made though, he is more optimistic. "Now in those villages, the last time we evaluated, we did not find one positive. I think that if we persist, we can eliminate [river blindness] in this zone in Senegal."

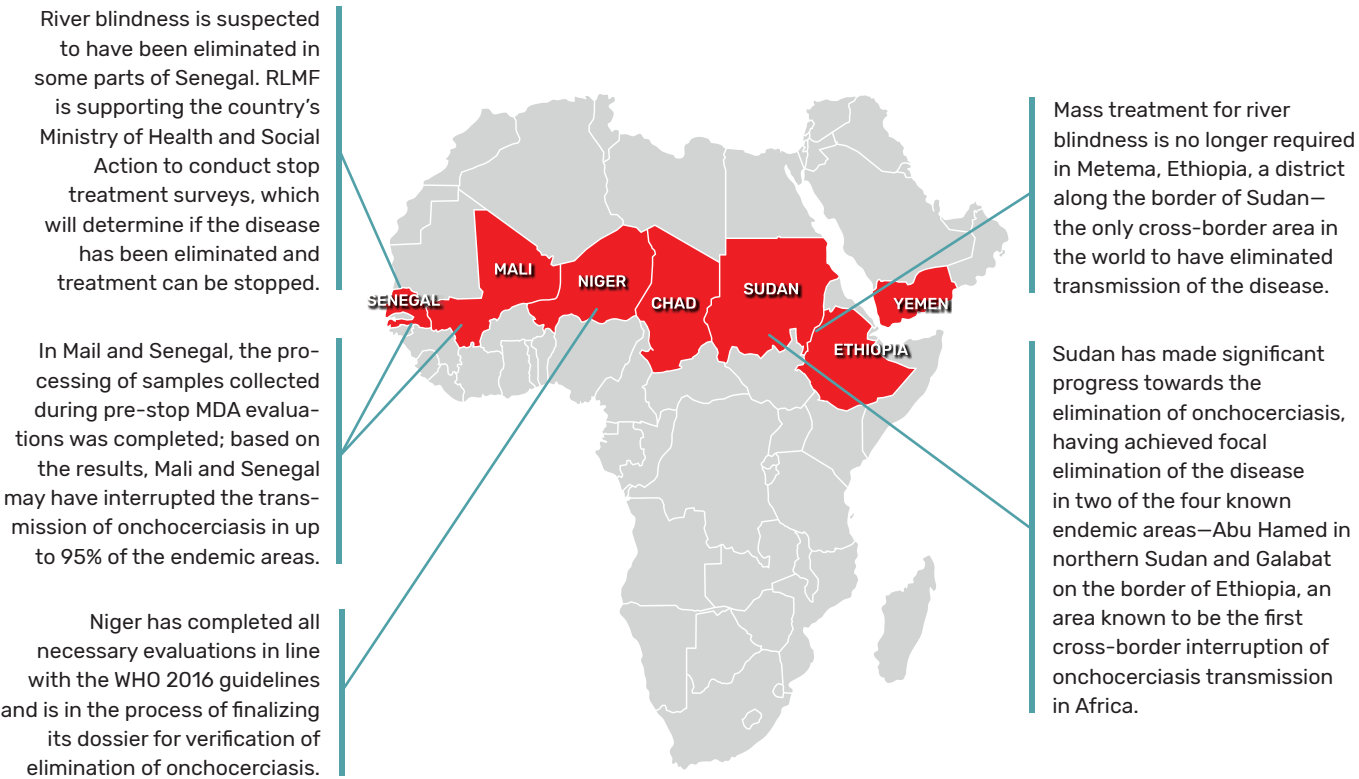
RLMF aims to pave the way for global elimination of river blindness by building on these past successes, while complementing ongoing efforts, and reducing the diseases' global footprint. In doing so, the Fund will also work towards lymphatic filariasis elimination as a public health problem in countries where both of these diseases are present.

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[Learn more](#)



CLICK TO WATCH THE STORY OF RIVER
BLINDNESS ERADICATION IN SENEGAL

The Fund currently has programs in seven countries: Mali, Senegal, Niger, Chad, Sudan, and Ethiopia in Africa, as well as in Yemen in the Middle East.



RLMF tailors its approach according to the level of disease burden in each country. For example, in countries with few or no cases of river blindness, the Fund will help accelerate the pace of elimination, while in high-burden countries it will scale up mass drug administration programs and river blindness elimination verification activities.



In Focus:
World
NTD Day

The United Arab Emirates (UAE) has a long history with the fight against NTDs, which began with a personal donation in 1990 by the UAE's late founding father Sheikh Zayed bin Sultan Al Nahyan.

In the spirit of this commitment, in 2020 the Abu Dhabi Crown Prince Court (CPC) helped launch the

inaugural World NTD Day. For a sector that has the word “neglected” in its title, this was a celebration of all of the accomplishments that have been achieved to date, while acknowledging the hard work that still needs to be done.

On January 30, 2021, more than 360 organizations from 61 countries supported the second annual World NTD Day, helping to engage the gen-

eral public in the mission to end NTDs. Similar to the CPC's other commitments in the global health space, World NTD Day puts people at its center. From frontline healthcare workers who have proven to be more important than ever to people affected by NTDs, getting to know the faces behind the movement will help power it for the future.



Lulu Group continued its Reach fundraising efforts with a renewed nationwide campaign for 2021.

In Focus: The REACH campaign

The Reach Campaign is the first-of-its-kind fundraising initiative in the UAE designed to help reach the end of river blindness and lymphatic filariasis (LF). Launched in February 2020 in association with Emirates Red Crescent and in partnership with forward-thinking brands and corporations, The Reach Campaign

takes an innovative approach to raising money to end the diseases, while also educating the public about river blindness and LF through strategic, targeted advocacy efforts. All money raised by the Reach Campaign goes to the Reaching the Last Mile Fund.

In its first year, Reach exclusively covered river blindness, adopting the slogan “Give 2, Save 2”, in reference to the fact that just 2 Emirati Dirhams

could provide treatment and protection for one person from river blindness for one year, in essence saving the vision in a pair of eyes. During the month of Ramadan in 2020, the campaign set a fundraising goal of 2 AED million, exceeding it by ending the season with over 2.8 million AED raised. The month-long Ramadan campaign reflected the Holy Month’s spirit of giving and was designed to allow the

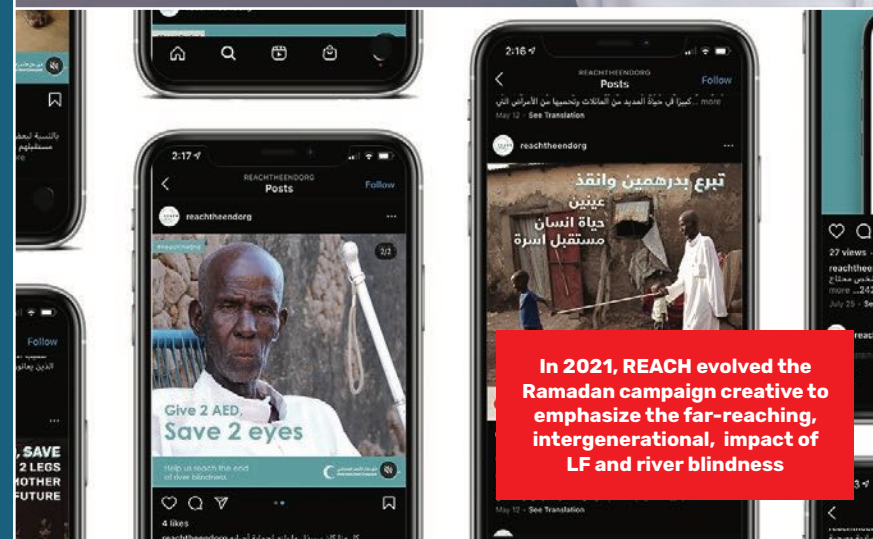
community to partake in charity while navigating social restrictions and safety measures in place to combat COVID-19.

Following the second annual World NTD Day in 2021, Reach officially added LF to its care portfolio, expanding on the opportunities for the UAE community to make a direct impact on NTDs. This addition saw an evolution of the slogan to “Give 2 AED, Save...”, highlighting the myriad of ways in which a small donation can make a difference to a person’s life; protecting families, limbs, vision, and futures. Members of the community are encouraged to donate by SMS, through an online portal, or at several partner touch-points, with activations across platforms.

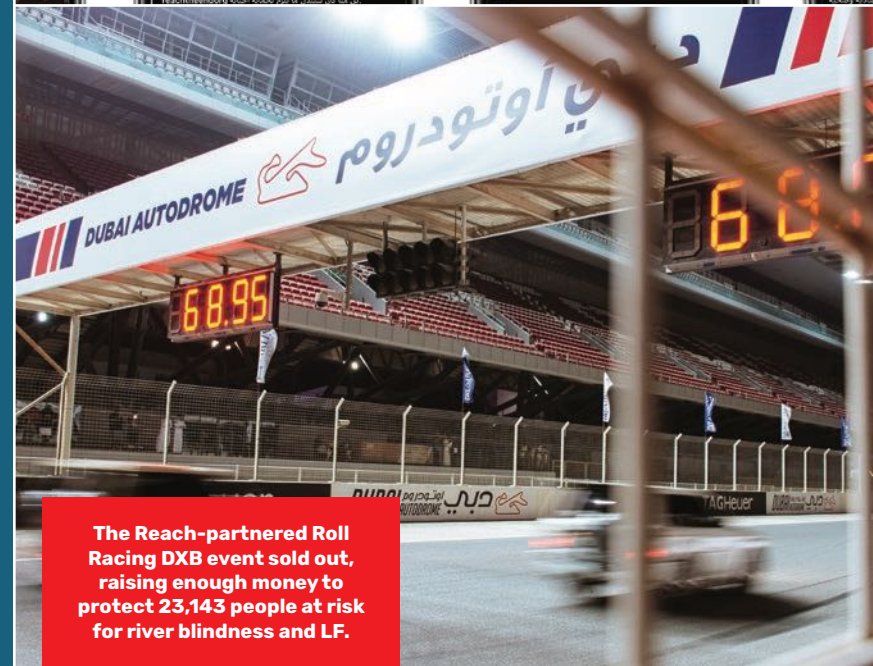
Reach continues engaging the community through advocacy, activations and fundraising opportunities, and while the campaign is headquartered in the UAE with communication largely based in the country, it is designed to gradually expand to global audiences. The Reach Campaign is supported by strategic partner Emirates Red Crescent; founding partners Abu Dhabi National Oil Company (ADNOC), Etihad Airlines, and Lulu Group; supporting partners ADMM/Yas Marina Circuit, Al Masood LLC, Aldar Properties PJSC, Abu Dhabi Department of Municipalities and Transport, Dubai Autodrome, Etihad Arena, Flash Entertainment, L’Occitane, Miral, Noon and Troon; and media partners Abu Dhabi Media and TikTok.



2020 Ramadan campaign creative demonstrated the simple gesture TikTok users could use to activate a special filter, raising awareness of “Give 2, Save 2” and river blindness.



In 2021, REACH evolved the Ramadan campaign creative to emphasize the far-reaching, intergenerational, impact of LF and river blindness



The Reach-partnered Roll Racing DXB event sold out, raising enough money to protect 23,143 people at risk for river blindness and LF.

The fight against neglected tropical diseases has come a long way. In part, this is thanks to life-long champions like Dr. Daniel Boakye, a leading medical entomologist and Senior Technical Advisor for the END Fund. Much like running a marathon, the last mile can sometimes be the hardest and requires the most determination, but makes the payoff that much more rewarding. Dr. Boakye's own words are useful in helping explain some of what reaching the end of river blindness really means:

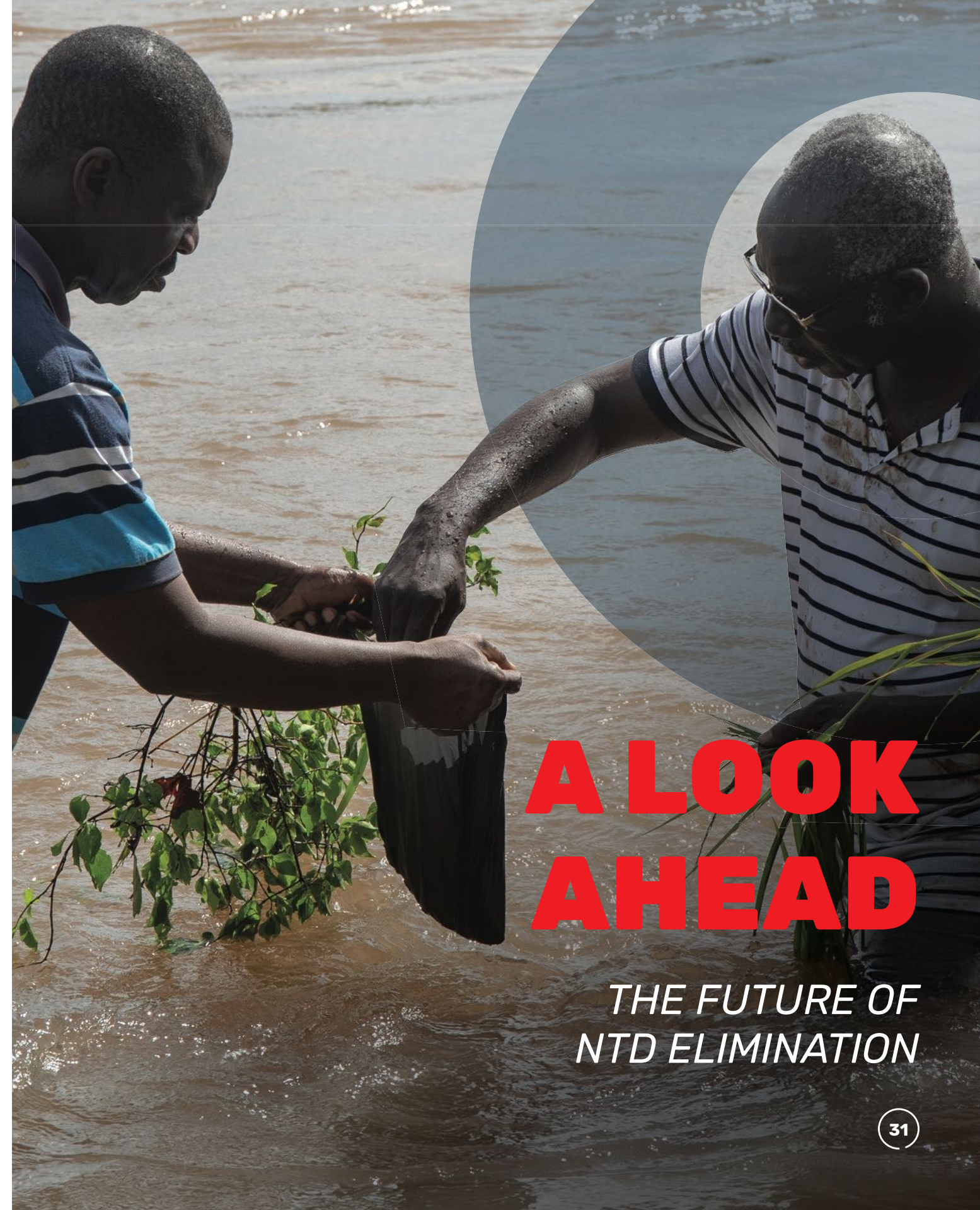
“Reaching the last mile is always the most difficult part. First you have to check all of the fast flowing stretches of rivers to find out where the flies are breeding. People in the community are recruited and trained to be able to collect the flies. The vector collector is well trained, they collect flies before they actually bite. We are expected to collect about 6K flies at each of the sites. The flies will then be processed in the lab to find out whether they carry any infections. We have evidence that in most places, the disease has been controlled as a public health problem.”

For LF, elimination is possible through annual treatment for 5-7 years. Though we

cannot forget the people who are already living with advanced stages of the disease. Part of the WHO's goals for LF include making sure these people receive the care, attention, and in some cases surgery they need.

The RLMF is committed to supporting innovations for years to come that will ensure every region of each country has the right tools and strategies to reach ambitious elimination goals.

In 2020 the world's attention was gripped by COVID-19. The pandemic affected people all over the world and placed a disproportionate strain on the global health community. COVID-19 demonstrated that health intersects with every other aspect of day-to-day life. In NTD-endemic countries, managing COVID-19 requires overcoming challenges like overwhelmed healthcare workers, stretched financial resources, and highly at-risk populations. However, in the midst of the pandemic, this important work of frontline workers continues in the fights against NTDs while also educating communities on COVID-19 and how to protect their families and communities.



A LOOK AHEAD

*THE FUTURE OF
NTD ELIMINATION*



RLMF looks to add to our accomplishments by reacting quickly to shifting circumstances, and by relentlessly focusing on innovative ways to accelerate progress—from investing in geospatial mapping exercises, to supporting advanced lab facilities and cross-border collaborations.

Looking back, Dr. Boakye finds it hard to believe that in West Africa alone before mass treatment began there were more

than 250,000 people who were blind because of river blindness. “Now there are a lot of places where people don’t even remember that the disease has been there. If you go to these communities, you don’t see little children leading the blind, but rather going to school.

“It’s rewarding to know that you have been part of something that has been taking away misery from a lot of people.”

“It’s rewarding to know that you have been part of something that has been taking away misery from a lot of people.”

According to the WHO,

16 countries and territories have eliminated LF

as a public health problem.

597 million people no longer require treatment for LF

due to successful treatment programs.

4 countries have eliminated river blindness.

1.8 million people live in areas that no longer require treatment

for river blindness.



We would like to acknowledge, thank and offer our sincerest gratitude to our partners— governments, health and development NGOs, the WHO, universities, visionary and committed investors, and pharmaceutical companies— without whom reaching the last mile of NTD elimination would not be possible.



REACHING *the*
LAST MILE
FUND