



# International Lifeline Fund

ANNUAL REPORT FY 2021-22





# Founder Message

Dear friends,

This past year was a historic one in Lifeline's evolution. Through our partnership with charity: water, we were able to create and/or rehabilitate 49 fresh-water wells – thereby providing access to clean drinking water to more than 30,000 individuals who had been drinking from contaminated sources and/or walking inordinate distances to collect their water. Further, we laid the groundwork for the expansion of our ClearWater Initiative into piped water systems and are poised to build our first such system in 2023.

On the clean energy side, we completed a series of factory improvements that have enabled us to increase our production capacity to upwards of 10,000 fuel-saving stoves per month. At the same time, we significantly expanded our distribution efforts – opening up sales hubs in three districts and supporting them with a ramped-up marketing campaign. As a result of these efforts, more than 53,000 households gained access to fuel-saving stoves, enabling them to dramatically reduce both their fuel expenditures and exposure to toxic smoke.

While we are proud of these achievements, the hallmark of Lifeline's FY 2021 was the vital steps we took in bringing an assortment of innovative ideas to life – ideas that offer the potential to solve problems that have long vexed efforts to reach those who suffer from lack of access to clean water and energy. Among these steps were:

- The distribution and deployment of a new sensor for hand-pump equipped boreholes, which Lifeline helped develop and which remotely monitors their performance, thereby enabling communities to proactively address functionality issues before they ripen into major breakdowns.



- The testing of a drip irrigation initiative in which water from the borehole is used to irrigate a small plot of land and the revenues thus generated pay for its own maintenance, the financing of which has proven to be a difficult, if not, insurmountable obstacle for the large majority of rural communities.
- The piloting of a creative solar energy product (i.e., Power-Blox), a cube in which solar energy can be stored long after sundown and that can be layered one on top of another to form a modular mini-grid, thereby enabling rural communities to satisfy their most basic energy needs.
- The launch of an effort to adapt a proven green energy technology (i.e., the Babington atomizing burner) to the school setting in Uganda – a technology that involves the super-efficient burning of virtually any liquid fuel type and that has the potential to begin weaning Africa off of its crippling dependence on biomass.

None of the progress we have made in this past year and, indeed, throughout our history would have been possible without the generous support and dedicated efforts of the entire Lifeline community – our donors, our partners and our incredible staff. I am profoundly grateful for the contributions of each and every one of you and am supremely confident that, building on that progress, the year to come will be our most impactful yet.

Sincerely,



Daniel Wolf

## Board of Directors

*Chairman*

Dan Wolf

*Vice President*

Deborah Terry

Mark Lampert

Brett Freedman

Jay Schulkin

John P. Brown

Alexander Kunin

Sheila Birungi

Harriet Isom

T V Balasubramanian

Dr. F. Ronald Denham

Neil Bellefeuille

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A woman with dark skin and braided hair, wearing a green t-shirt, is bent over in a field, tending to a young plant. She is looking down at her hands as she works. The background shows more plants and a clear sky.

# Before they thrive, they must survive.

In the communities where we serve, women are disproportionately responsible for both the daily running of the home and undertaking economic activities to sustain their households.

When they are on the road collecting water or foraging for wood, everything else comes to a standstill. Children go hungry waiting for their mothers to come back home and cook. Little time is left over for farming and operating small businesses.

This situation perpetuates a vicious cycle of poverty.

*Rural communities have the potential to lift themselves out of poverty. But first, women must gain back the productive time lost in the struggle to access their families' most pressing needs: water and energy.*



# At a glance

## Clean Energy

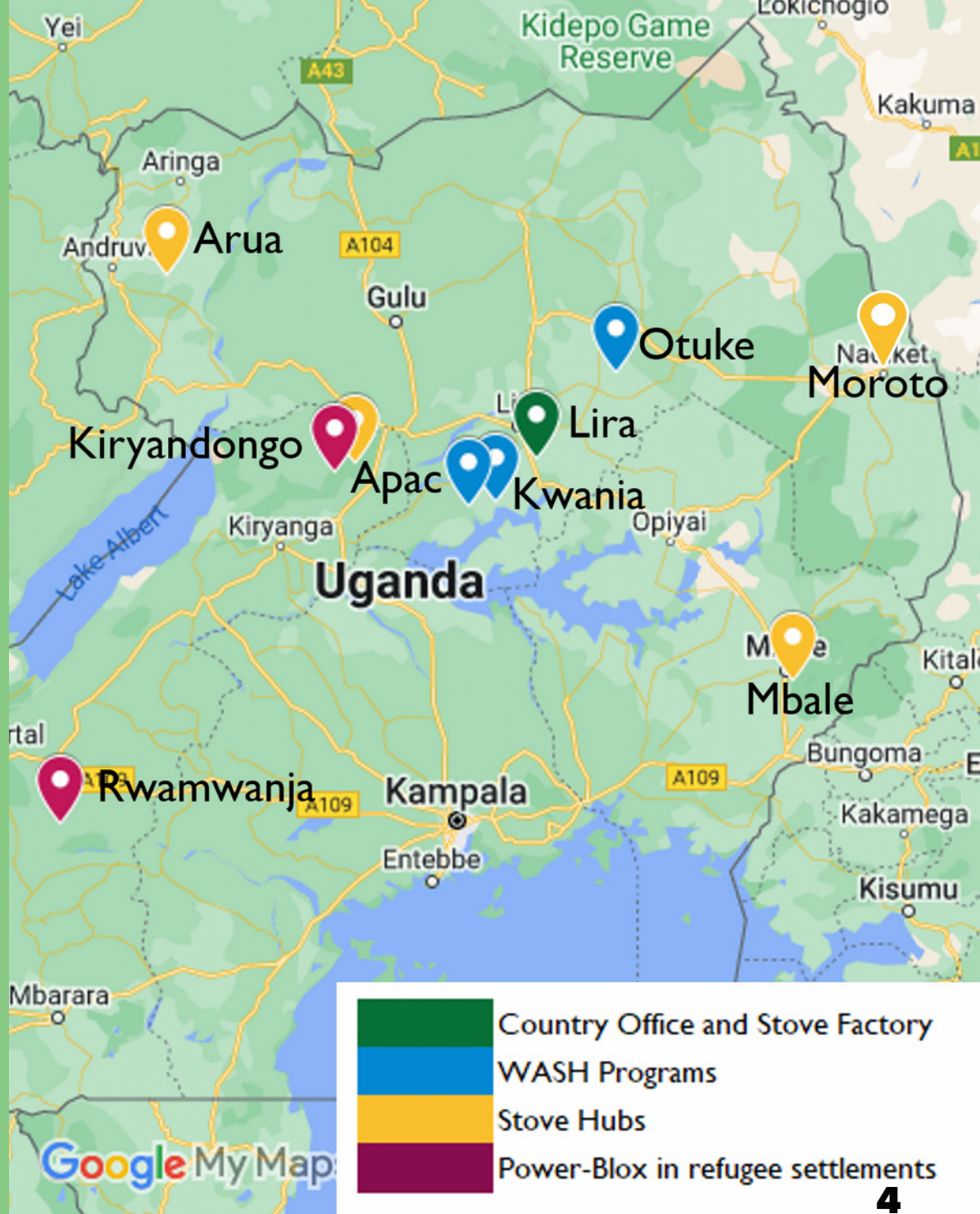
- 53,000+ fuel-efficient cookstoves sold
  - CO2 emissions reduced by 79,000+ tons annually
  - Wood consumption reduced by 25,000+ tons annually – the equivalent of 119,000+ trees
- Over 7,000 students' meals now cooked on Lifeline institutional stoves
- Power-Blox pilot solar project launched in two refugee settlements.

## ClearWater

- 49 handpumps constructed and rehabilitated
- 31,000 people gained access to clean water
- 4,500 students gained access to improved sanitation latrines

## Water Point Maintenance

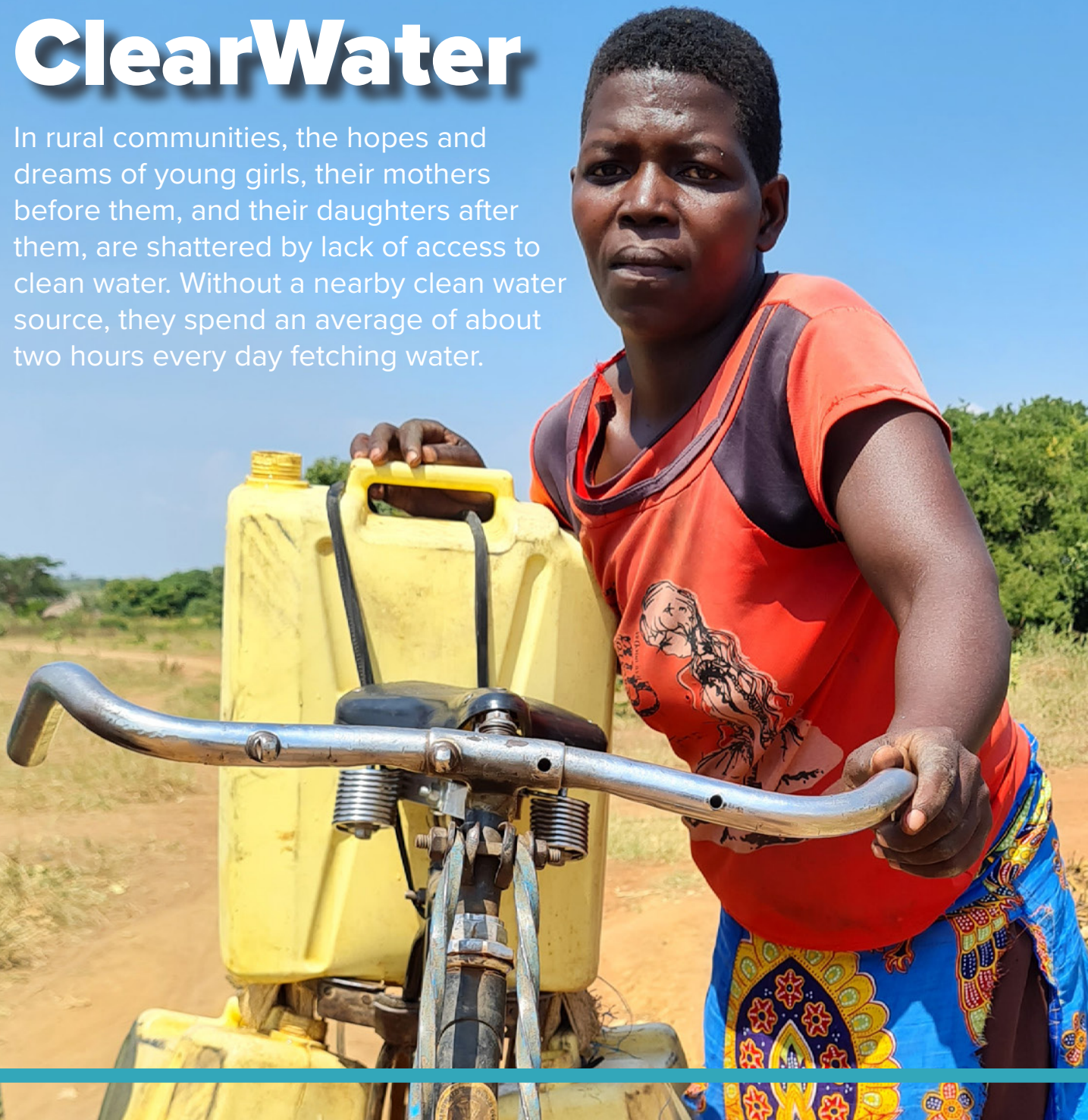
- 50 communities subscribed
- 376 smart handpump sensors distributed among 16 organizations
- 99.5%+ uptime
- 98% customer satisfaction





# ClearWater

In rural communities, the hopes and dreams of young girls, their mothers before them, and their daughters after them, are shattered by lack of access to clean water. Without a nearby clean water source, they spend an average of about two hours every day fetching water.





# Better Water Better Life

Providing clean water close to home can significantly contribute towards ending the cycle of poverty by freeing up time for girls and women, which can be used for school and productive use.

In partnership with charity: water, Lifeline is providing clean water access to rural communities, health centers, and schools in Northern Uganda.

In 2021, we rehabilitated 40 broken fresh water wells and installed 9 new fresh water wells, serving 31,000 people in Apac and Kwanja Districts.

In March 2022, we expanded to add Otuke District, where we will work towards achieving equitable clean water access.

## OVER 1 MILLION

woman-hours will be saved per year collecting water from drilled & rehabilitated handpumps completed in FY 2021.





# BREAKFAST: NO LONGER A LUXURY

Atim Margaret, age 49, now eats breakfast. She is much happier now because until last year, breakfast was an unattainable luxury.

As a child, she learned to endure hunger— she had to wait for her mother to come back home from collecting water several kilometers away. This hardship was then passed down to her own children; until Lifeline installed a borehole in her village in 2021. Margaret is one of millions of rural community members for whom basic things such as timely meals are a luxury until they are able to gain access to a nearby clean water source.





The assumption is that when a community has a new handpump installed they will forever have access to clean water. However, the reality is that 1 in 3 handpumps break down and become dysfunctional 3 to 5 years after installation.

Since 2017, Lifeline's preventative maintenance initiative, EverFlow, has provided reliable clean water access to scores of rural communities.

Subscribed communities pay an affordable monthly service fee. In exchange, they gain access to quality spare parts, a monthly maintenance check by a certified handpump mechanic, response to emergency repair calls within 24 hours, and access to a toll-free number for the helpdesk. During this year, Lifeline began piloting a drip irrigation program to help communities fund their preventative maintenance subscription.

# Prevention is The Cure





# INCREASING HOUSEHOLD INCOME

Like many others, the residents of Acandyang enjoyed their new borehole for only a few months before it broke down. They were then forced to haul water from the swamp while they collected money to repair it. It broke down again and again, each time leaving a trail of economic setbacks and ill health.

In 2017, Acandyang signed up for EverFlow. Since then, some household incomes have reportedly increased by 70%. Community members credited their livelihood improvement to one thing: a nearby reliable clean water source, which helped free up their time for productive use.

**98%**

customer satisfaction rate achieved

**99.5%+**

uptime rate for communities subscribed to EverFlow.

**12,500**

community members secured continuous & reliable access to clean water.





# Schooling with Dignity

Rural schools in Northern Uganda are plagued by a high dropout rate, especially in upper primary. This is due in large part to lack of access to proper sanitation and hygiene facilities at the school which are often dilapidated and on the verge of collapsing, if they exist at all.

Girls who lack facilities for proper menstrual hygiene management are especially affected. To address this problem, Lifeline, in partnership with charity: water, constructed drainable latrine blocks and changing rooms that serve 4,500 students in four schools.

## NO LONGER ASHAMED

Like many rural adolescent girls, Sarah, Elizabeth, and Gilba – all students at Alekolil Primary School in Apac District – live in a world where the topic of menstruation is taboo.

As a result, they faced a shameful choice: whether to change out their used sanitary pads in a decrepit filthy latrine or go to the school dormitory during class hours where “everyone will know”.

Lifeline and charity: water changed this narrative by constructing two five-stance latrine blocks in their school with a changing room in the girls’ block.





# Revolutionizing Rural Water Supply

In 2018, Lifeline assisted charity: water in the development of a new smart handpump sensor that transmits information relating to handpump usage and functionality to a cloud-based platform. This vital information enables problems with handpumps to be identified and addressed before service-interrupting breakdowns occur. Having assumed the lead role in the spread of this technology across Uganda, Lifeline distributed nearly 400 sensors this year to 16 organizations that are deploying them and providing feedback.





# Clean Energy







# Better Energy Better Life

Throughout Uganda, over 90% of families are dependent on biomass fuels. Such dependence perpetuates the cycle of poverty, as women are forced to spend countless hours each year collecting firewood or up to 20 percent of their household income purchasing charcoal. Lifeline has long been addressing this problem by producing and distributing fuel saving cookstoves. These stoves profoundly improve the quality of life by cutting the amount of time spent fetching or money spent purchasing wood fuels by 40%, saving additional time spent cooking, and reducing emissions of toxic smoke.



## FUEL SAVINGS

Sarah Nanzura became a single mom at 18. As her little child grew, so did his needs. She started looking for ways to be frugal. One day while listening to the radio, she heard about Lifeline's EcoSmart charcoal cookstove and its ability to reduce charcoal use. She was sold. Since purchasing the stove, Sarah has been spending dramatically less on fuel. She says she was also pleasantly surprised to find that the EcoSmart stove "cooks food [much] fast[er] and produces [very little] smoke". She uses the extra money to pay for other essential needs.



In May 2022, Biharibike Chrizos, an entrepreneur in Rwamwanja refugee settlement, purchased a Power-Blox unit. He has since used that unit to power his shop and light the adjacent shops that he rents out. As a result, all stores are able to stay open much later into the night and earn a better income. Another benefit: Chrizos' children are able to study at night.

## EXTENDED BUSINESS HOURS





# Solar Energy Innovation

Across sub-Saharan Africa, over 550 million people live without electricity. The results are dire: economic growth is stifled, educational opportunities are limited, and the quality of health care suffers.

Through its partnership with Power-Blox AG, Lifeline has introduced an innovative scalable solar-powered energy cube to small businesses in two of Uganda's oldest refugee settlements and their surrounding host communities.

Unlike other solar products, the Power-Blox unit can be stacked on top of one another, similar to Legos. This unique feature enables users to grow their electrical capacities and to construct modular minigrids across multiple structures and throughout an entire community. Lifeline is currently in the process of testing out and proving up its payment and marketing systems approach which, once perfected, can pave the way for deeper penetration of this clean energy access solution in refugee camps and rural communities across Uganda and beyond.



# FINANCIAL POSITION

## FOR THE YEAR ENDING JUNE 30, 2022

### Support & Revenue USD

Private Foundations & Individuals	132,811
Grants	1,638,810
Stove Sales	268,872
<b>Total</b>	<b>2,040,493</b>

### Expenses

#### *Environment Program*

Fuel-Efficient Cooking	665,819
Solar Electrification	137,029

#### *WASH Program*

Water Point Development	107,875
Water Point Maintenance	116,080
Hygiene & Sanitation	79,247
Field Office Admin	536,817
Global Office Admin	157,234
Fundraising	69,881
<b>Total</b>	<b>1,869,981</b>





# Our Partners

## Government Partners

Uganda Ministry of Water & Environment  
Uganda Office of the Prime Minister  
Apac District Local Government  
Kwania District Local Government  
Otuke District Local Government

## Implementing & Learning Partners

Aquaya Institute  
Stanford University  
Burn Design Labs  
Power-Blox AG  
Oregon State University  
Babington Technology  
UNHCR  
AVSI / CIDA-Pamiga

## Funding Partners

GWMT  
charity: water  
GIZ / EnDev  
Creating Hope in Conflict: A Humanitarian Grand Challenge  
The Stone Family Foundation







# Learn More

Read all the latest on our projects and impact on our blog, including the charity:water smart handpump [sensor pilot](#), affordable [solar electrification](#) in refugee settlements and [much more](#).

**Join us on social media!**

