

PROJECT REPORT 2024

# A Powerful path to sustainability and greater equality in Uganda



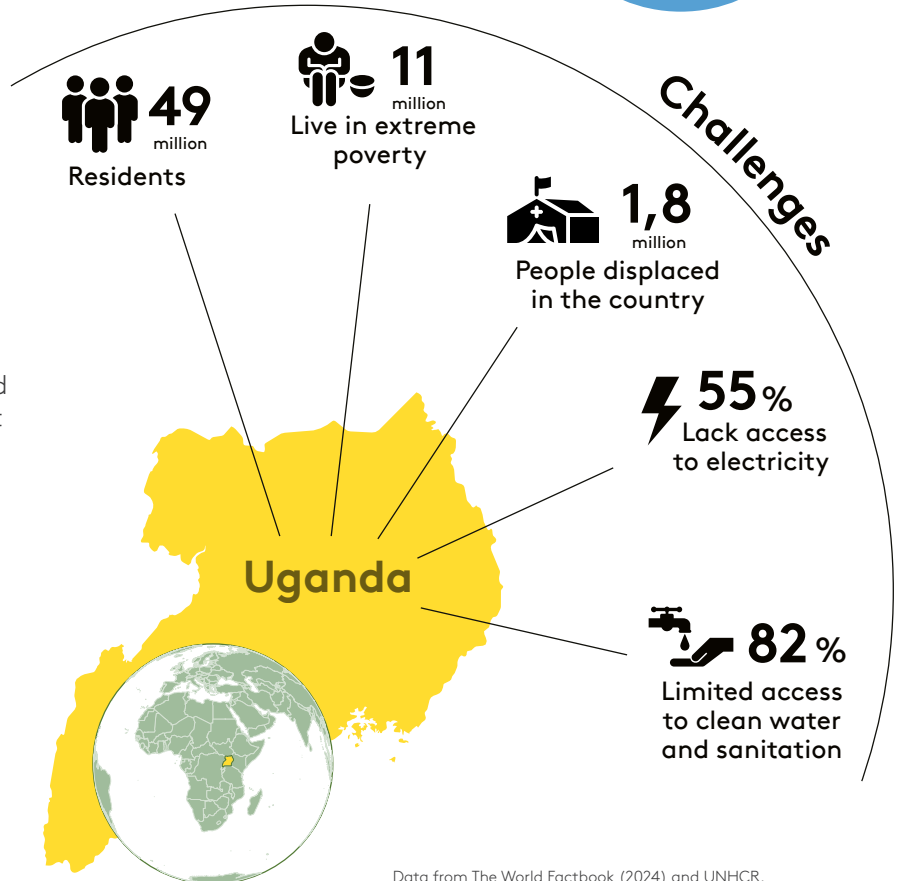
Solvatten in collaboration  
with SFS

# Solvatten in Uganda 2024

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**By supporting Solvatten, you make real-world impact.** Contributing to our mission – brings meaningful change directly to women, families and communities by providing safe and hot water.

Thank you for partnering with us, together we can make real impact for people AND planet.



## SFS's contribution



### What is Solvatten?

Solvatten is an innovative, durable, and portable system that uses the sun's rays to both treat and heat water. After a few hours in the sun, the water is free from the bacteria, viruses, and parasites that could spread disease, such as dysentery, cholera, and intestinal worms. Providing clean hot water is what makes Solvatten's method stand out compared to other water purification methods. Through this method, Solvatten has improved health and hygiene, and lowered carbon emissions from energy use.

#### Solvatten:

- Water is cleaned and heated in 2-4 hours
- Each unit provides approximately 6000 litres/year
- An indicator shows when the water is clean
- Can be used multiple times per day
- Easy to use and carry
- Does not require batteries, spare parts, or chemicals
- It is durable – each unit lasts at least 7-10 years





# Changing life in Uganda's refugee settlements

Uganda is known for its progressive asylum policies. Over 1.75 million refugees and asylum seekers from South Sudan, Sudan, the Democratic Republic of the Congo (DRC), and Somalia have made Uganda their home. While the Uganda's open-door refugee policy is admirable, it also comes with significant challenges, such as providing access to water and energy and other essential resources.

An estimated 91% of refugees in Uganda live in settlements with inadequate or non-existent infrastructure. This makes access to safe water and energy for all refugees a daily struggle. During 2024, water resources have become further strained. Nearly 120,000 refugees have entered Uganda since January and have found refuge in settlements. Influx of refugees has further emphasized the critical need for sustainable access to energy and clean water, sanitation and hygiene, known as WASH services.

Thanks to your contribution, Solvatten is able to help Uganda's refugee settlements have reliable access to clean and hot water.

In partnership with United Nations High Commissioner for Refugees (UNHCR) Solvatten is making a real difference in Uganda's refugee settlements. When the fundamentals are met, one immediate benefit is that young people have more time to dedicate to school and are more likely to complete their education.

Since receiving two major shipments in 2024, Solvatten kits have been distributed across refugee settlements, helping to meet the pressing needs of both new arrivals and long-term residents. By improving access to clean hot water, these kits contribute to:

- Health and Hygiene. Reducing water and poverty related diseases and promoting better hygiene practices in overcrowded settlements.
- Environmental Sustainability. Minimizing the reliance on firewood helps preserve forests and reduces carbon emissions.
- Empowerment and Equality: Freeing up time and energy. Women and children would otherwise walk long distances to collect firewood for treating water.

*The surge of refugees in Uganda has placed immense pressure on already limited resources, making continued support in Solvatten more important than ever. Thanks to UNHCR's Refugee Coordination Model (RCM), we can also ensure that Solvatten kits are effectively reaching the most vulnerable populations.*

*– Simon Odong, WASH coordinator in Uganda*



# Social sustainability and Equality – A Common Ground

Equality is the cornerstone of healthy and a stable society. Yet, in many low- and middle-income countries, access to clean energy and safe water remains out of reach for millions of households. Providing these essential services is a critical first step toward building a better society for all.

Solvatten provides a simple life-changing solution. It improves daily life, making families healthier and stronger. By replacing the need to collect firewood for boiling water, Solvatten gives women and children more time for school, work, and building better futures. This small change makes a big difference, empowering women and helping entire communities grow and thrive.

## Looking ahead

In the coming months, more Solvatten kits will be distributed as part of ongoing efforts to improve WASH services in Uganda's refugee settlements. Your contribution has already made a significant impact. With continued collaboration, we can ensure that even more families will have access to the clean and hot water they need.

Thank you for being a part of this. Together we are building a foundation for long-term sustainability and resilience for some of the world's most vulnerable communities.

## Project details

**Focus area** - Refugee settlements in Uganda, such as Kyaka II, Bidibidi, and Kyangwali

**Time period** - Since 2020

**Total kits** - 17 700 Solvatten kits distributed

**More than 100 000 people have access to safe and warm water everyday.** Solvatten focuses on vulnerable groups, such as households located far from clean water sources and individuals with specific needs. Refugee leaders and community structures have played an essential role in identifying beneficiaries.

Our partner since 2020 – UNHCR collaborated with local stakeholders like the Refugee Welfare Councils, Village Health Teams, and protection partners to ensure effective distribution and use of kits.

**What's next?** Clean water risk recontamination. Therefore its advisable to use household water treatment before use.





# Sunshine story

We walk up the dusty road to the highest point in the refugee settlement in Mukondo Zone, Kyaka II. The red sand swirls in the air, clinging to everything it touches. As we reach Dusabe Nyirasafari's modest home, we find a group of children playing with a broken tire outside. The youngest, a little girl, beams at us with a wide smile, squinting her eyes against the sunlight.

Dusabe, a single mother of five, fled the war in Congo six years ago. Alone and without relatives who can help, she is solely responsible for taking care of her family.

Sitting next to her son, Dusabe shares the struggles she had faced. "I often complained at village meetings about drinking unclean water," she says. Her children had been frequently falling ill and getting safe drinking water was an exhausting challenge. On top of that, firewood for boiling water is also limited, and time was even more so.

Standing up, Dusabe points to the Solvatten-kit basking in the sun nearby. Her smile widens. "Look here," she says, "I just pour water into the Solvatten kit, leave it under the sun, and get on with my other household tasks."

Thanks to Solvatten, life has changed for Dusabe and her children. With easy access to clean hot water, her family is healthier. Having Solvatten also helps her stretch the small monthly financial support she receives – and without a stable income, every bit of savings counts. Solvatten has become an indispensable part of her daily life, offering her hope, resilience, and the ability to focus on building a better future for her and her family.

*I just pour water into the Solvatten kit, leave it under the sun, and get on with my other household tasks.*

– Dusabe, single mother of five





## Solvatten – how does it work?

Solvatten purification is based on three well-known methods: filtration, heat pasteurization, and UV disinfection. It is the combination of heat and UV light from the sun that destroys microorganisms that cause disease. When the water is heated, any microorganisms are prevented from reproducing.

Solvatten is designed so that the maximum amount of UV light reaches the water. When the sun's rays reach the container's black, bottom plate, the temperature rises. At sufficiently high temperatures, cell membranes of harmful microorganisms can no longer protect the cell nucleus. The bonds in the cell's DNA are broken down by UV-B radiation. When the cells are rendered harmless, the water becomes safe to use. Solvatten is manufactured in Sweden and is currently used by more than 750,000 people in over 40 countries.



### Filtration

Water is filled through a hole with a fabric filter where larger particles are caught.



### Heat pasteurization

Heat from the sun heats the water and kills pathogenic material.



### UV disinfection

High temperature associated with UV light damages the microorganisms' DNA, which prevents them from reproducing.

## Partnering for change

Founded in 2006, Solvatten has grown from an idea to a reality. The Solvatten Groups mission is to provide people living in low and middle income countries with clean and hot water in an affordable, portable, and environmentally friendly way.

We are deeply grateful for your commitment to Solvatten's mission. Your support strengthens vital climate actions and safeguards the health and well-being of communities in low-income regions of the world.

Thank you for being an essential part of this vision for a more sustainable future.

Would you like to know more?  
We would love to hear from you!

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