

UTILITY-GRADE WATER SERVICE FOR THE LAST MILE

# Strategic Plan

2023–2027

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ORGANIZATION

Saha Global

SERVICE AREA

Northern Ghana

WEB

[sahaglobal.org](https://sahaglobal.org)

# Executive Summary

Saha Global is a Ghana-based non-profit that ensures access to safe and affordable drinking water for rural communities. We partner with women living in last-mile villages and train them to launch and run community water treatment plants. To date, we have trained over 1,000 women who provide safe drinking water access to more than 127,000 people living in 389 villages throughout the Northern, Savannah, Oti and North East Regions in Ghana. Since 2009, Saha's water treatment plants have delivered 16.7 million liters (1,677 m3) of clean water to our partner villages.

This 5-year Strategic plan (2023–2027), outlines Saha's strategy for transforming from our legacy social enterprise model to a rural water utility in order to provide cheaper, more reliable service to our customers and dramatically increase clean water

consumption per person in the communities we serve. By 2027 Saha will more than double our footprint, providing clean water to 258,000 people in 838 of the hardest to reach communities with the greatest need for improvement while advancing women's economic empowerment. This approach has been shown to reduce child mortality by 28%.<sup>1</sup> Furthermore, Saha will have reduced the cost/L of water delivered by 90% compared to 2022 while delivering 20x more clean water and increasing entrepreneur income by 57%. Our new strategy is centered on improved compensation and professionalized support for our women water entrepreneurs so that we can support the Government of Ghana (GoG) in their goal to ensure that every Ghanaian has access to potable water.<sup>2</sup>

## The Need

Over 600 million people worldwide lack access to basic water services.<sup>2</sup> Almost 122 million people, the majority living in rural areas, are drinking water from surface water sources.<sup>2</sup> Despite improvements in water access since 2015, only 32% of countries are on-track to meet SDG 6.1: universal basic water services by 2030.<sup>3</sup> Ghana, like 98% of countries in Sub Saharan Africa, is not on track to meet SDG 6.1.<sup>3</sup> In rural Ghana, 2.14 million people (16.2 % of the population) are drinking surface water or water from other unimproved sources of water. Saha works in the poorest, rural areas, where 30% of people (758,738 people), currently drink from surface water sources. While there have been exciting partnerships over the past 5 years that have focused on universal coverage in specific districts in Ghana,<sup>4</sup> the vast majority of the rural water service providers in these partnerships need to work in towns with populations of 1,000 people or more to make their solutions viable. In order to achieve universal, equitable access to safe and affordable drinking water for all, people living in these small, last-mile villages must not be left behind.

### Sustainable Development Goal 6

ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

#### TARGET 6.1

By 2030, achieve universal and equitable access to safe and affordable drinking water for all.

#### INDICATOR 6.1.1

Proportion of population using safely managed drinking water services.

<sup>1</sup> Kremer et al, "Water Treatment and Child Mortality: A Meta-analysis and Cost-effectiveness Analysis."

<sup>2</sup> From draft of the Revised National Water Policy that is currently in Parliament.

<sup>3</sup> World Health Organization and UNICEF, "WHO/Unicef's Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) metrics."

<sup>4</sup> International Red Cross, "Working Together for Safe Water in Ghana, the Journey So Far."



## DEFINITIONS

# The drinking water service ladder

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### SAFELY MANAGED

Drinking water from an improved water source that is accessible on premises, available when needed and free from faecal and priority chemical contamination

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### BASIC

Drinking water from an improved source, provided collection time is not more than 30 minutes for a roundtrip including queuing

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### LIMITED

Drinking water from an improved source for which collection time exceeds 30 minutes for a roundtrip including queuing

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### UNIMPROVED

Drinking water from an unprotected dug well or unprotected spring

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### SURFACE WATER

Drinking water directly from a river, dam, lake, pond, stream, canal or irrigation canal

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Source: WHO and Unicef's Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) metrics

# The Saha Solution

Saha's model works where other clean water alternatives fail, providing limited or basic water access to small, remote, rural villages. We have been working in northern Ghana since 2008, where we currently have 389 safe water enterprises that serve more than 127,000 people. In our legacy model social enterprise model, Saha donates the capital equipment that each business needs to get started (including Safe Storage Containers (SSCs) to every family), works with the community to choose 2–3 women entrepreneurs to run the business, and then trains the women to treat surface water with two local products (alum and chlorine). The entrepreneurs then sell the treated water to members of their community. 100% of the revenue from water sales stays in the community and is managed by the entrepreneurs. The entrepreneurs use the revenue to cover the operating costs of the business: water treatment products (alum, chlorine) and maintenance --and keep the remaining profit as payment for their time and work.

In our legacy model, Saha does not provide any direct funding to the businesses after opening day, but does fund a minimum of 10 years of Customer Care, which includes delivery of water treatment supplies, monthly water quality testing, mentoring for the entrepreneurs, and support with problem solving. Our Customer Care team is very high-touch, visiting most of our partner communities at least once every 3 weeks, and often more frequently. The cost of these Customer Care activities is covered by Saha's fundraising activities and not by revenue from water sales. In 2018, Saha launched a microinsurance program called the Maintenance Service Fee (MSF). Through the MSF, water entrepreneurs pay an annual premium to Saha in exchange for unlimited technical repairs throughout the year. In 2020, 100% of eligible Saha businesses opted into this program and then renewed their enrollment in 2021.

## Success



### Pre-pandemic

Prior to 2018, Saha relied on volunteers to fund and implement new clean water businesses in Ghana. The program allowed us the funding and time to prove our model, but it was expensive and restrictive to our growth. In 2018, we launched a 3-year Operating Plan, which included phasing out the volunteer program and scaling to 226 new villages by the end of 2020. When COVID-19 hit in March of 2020, we had hit every target set in the 3-year Operating Plan for 2018 and 2019 and were on track to achieve 2020's goals well. Our impact in the first two months of 2020 was greater than our annual impact in every single other year of our existence at that time, other than 2019.



# What we learned from the Emergency Water Fund



## COVID-19 and the Emergency Water Fund

In response to COVID-19 and the GoG's free water mandate, Saha launched the Coronavirus Emergency Water Fund (EWF) in June 2020. Running for a total of 10 months, the EWF allowed 226 Saha water businesses to provide clean water for free by covering the cost of water treatment, including the cost of stipends and bonuses for the women entrepreneurs. Changes to the pricing and distribution model resulted in dramatic increases in the amount of clean water delivered. Average clean water delivery per household across EWF villages increased 6x when compared to the 2019 average and stayed at this level throughout the duration of the program. When the EWF program ended in March 2021 and Saha returned to the legacy model, clean water delivery fell back to historical levels at that time. Since the amount of clean water delivered by Saha's water treatment plants is a direct indicator of clean water consumption by people in our partner villages, this dramatic increase has exciting implications for Saha's impact.



## Water Affordability

In Q4 of 2021, in partnership with Rippleworks, Saha launched a series of R&D projects to investigate the main drivers of the increase in clean water delivery during the EWF. Results showed that clean water delivery is maximized when the entrepreneur receives a salary from Saha and water is discounted from our current prices but not provided free-of-charge, earning the entrepreneur a small commission on each bucket of water sold.

In addition to increasing clean water consumption, which is necessary for meaningful health impacts,<sup>5</sup> the EWF and follow-up research results revealed important insights on water affordability for Saha's target population. Affordability is included in SDG 6.1 and has been widely accepted as an essential component for improving worldwide water access, but industry-wide definitions and metrics for affordability are only just beginning to be explored.<sup>6</sup> Saha believes the strongest indicator for affordability is our customers' behaviors. To achieve universal access to affordable drinking water, the price of water needs to reflect actual willingness to pay.

6x

INCREASE IN DELIVERY PER HOUSEHOLD

Across EWF villages, versus the 2019 average.

226

WATER BUSINESSES IN THE EWF

Free clean water for 10 months from June 2020.

<sup>5</sup> Clasen, "High Adherence is Necessary to Realize Health Gains from Water Quality Interventions."

<sup>6</sup> UNICEF, "The Measurement and Monitoring of Water Supply, Sanitation, and Hygiene (WASH) Affordability."

# Then and Now: Saha's Next 5 Years

Saha was founded in 2008 when the concept of using social enterprise models to solve some of the world's most challenging problems was starting to take off. There was a lot of excitement — and later expectation — around financial sustainability. Saha attempted to build our water service model to meet these expectations while still being able to serve our target population. This led to our legacy model where we donated the capital equipment for each water business but required that entrepreneurs sell the treated water to cover all operational costs. The start-up cost was low and the service model worked well for getting water businesses open and keeping them open — 98% of water businesses opened by Saha since 2008 are still in operation today. Saha, however, was indirectly subsidizing these businesses through our extensive Customer Care program, which involved frequent village visits to support the entrepreneurs.

The EWF highlighted the pain points of the model for both our customers and entrepreneurs and showed how much greater Saha's impact could be if we professionalized our service and introduced a direct water subsidy. At the same time, more organizations,<sup>7</sup> governments<sup>8</sup> and research institutions<sup>9</sup> have started recognizing the need for more professionalized rural water services<sup>10</sup> and the potential for water subsidies to help achieve SDG 6.1, especially subsidies targeted at the very poor — Saha's target population. Even champions of Safe Water Enterprises (SWEs) recognized that a significant portion of the world's population, an estimated 1.7 billion people, would need partial subsidies in order to be served safe water through SWEs.<sup>11</sup> The time is right for Saha to transition away from our legacy model and increase our impact by making water more affordable for those at the bottom of the pyramid.



## The Rural Water Utility Service Model

Over the next 3-years, Saha will be phasing out our legacy model and increasing the amount of clean water delivered by our water treatment plants and consumed by our customers by transitioning to a Rural Water Utility (RWU) model. Under this approach, Saha entrepreneurs will be salaried, skilled, supplied, and supervised, and our customers will be offered a reliable, professional and affordable water service. The women entrepreneurs will be paid for running the community water treatment plants, similar to the employees of the municipal water treatment plants that serve urban areas. Saha will continue to donate the capital equipment needed to set up community-based water treatment plants and will now also directly subsidize the cost of water treatment, including direct payment to the women water entrepreneurs, increasing their individual income by 57%.

The RWU service model will not only allow Saha to better serve our current target demographic, but will also better position Saha for government partnership and/or adoption at scale.

<sup>7</sup> World Bank, "Doing More with Less: Smarter Subsidies for Water Supply and Sanitation."

<sup>8</sup> Sasman, "Namibia: A case for rural water subsidies."

<sup>9</sup> Aquaya, "Implementation of Targeted Water Subsidy Programs."

# Legacy model and Rural Water Utility model, compared

|                                  | Water source                                                                                                                                                                                                | Treatment method                                                                                                                                                                                       | Sales and women's income                                                                                                                                                                                                                                                  | Monitoring and Customer Care                                                                                                                                                                                                                                                                                                                                                                                       | Sustainability and exit                                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Saha legacy model</b>         | Water is sourced from dugouts where rainwater runoff accumulates. Villages have to meet a specific criteria (i.e. size, distance from a water source) to become a Saha partner village.                     | Water is treated with aluminum sulfate, and disinfected with chlorine. Saha donates locally available materials, including a 1,000-liter Polytank, a metal Polytank stand, and 3 blue 200-liter drums. | After covering operational cost, women entrepreneurs take home profit from water sales, earning about \$1/week for about 5 hours of work. Village leaders and entrepreneurs decide the price of water. Saha only requires the price to be high enough to cover all costs. | Through 10 years of Customer Care, entrepreneurs receive mentoring and technical support until they can run their businesses independently. Behavior change efforts continue. Water quality and consumption levels are monitored.                                                                                                                                                                                  | Saha sustains operations through the generous support of philanthropic funders. We also raise funds through regular donations from our Board and support from individual funders. |
| <b>Rural Water Utility model</b> | Water can be sourced from dugouts, existing boreholes and/or accessible groundwater. Villages that fall outside of Saha's legacy model selection criteria can be considered for Saha's rural water service. | No change in treatment method. Saha continues to subsidize capital equipment.                                                                                                                          | Entrepreneurs are paid \$10/month by Saha with the opportunity to earn an additional \$3.25 bonus. They also earn a \$.01 commission on each 20L SSC that they sell. Entrepreneurs sell treated water below cost.                                                         | Water treatment center functions better, requiring less in-person visits from Customer Care team. Saha incorporates third-party water quality testing from a certified lab in Ghana. Saha oversees entrepreneur performance: Low-performing entrepreneurs are put on performance improvement plans or transitioned out of role if unable to meet performance goals. High performing entrepreneurs receive bonuses. | The government of Ghana (GoG) partners with Saha as a Rural Water Utility. Water subsidies are funded by government WASH budget.                                                  |



# Scaling clean water delivered, cutting cost per litre

Throughout the transition, Saha will continuously evaluate the impact of the direct subsidies by tracking the amount of clean water delivered by our water treatment plants. The two key metrics for the transition's success are:

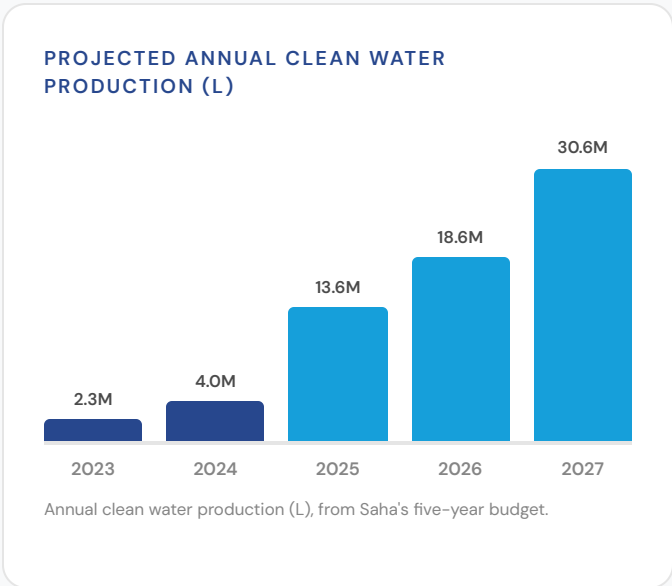
**METRIC 1**

the increase in clean water delivered by the RWU villages is as high or higher than the increase achieved in the 2021 Rippleworks project; and

**METRIC 2**

the cost/liter of clean water delivered is cheaper than all alternatives for clean water for our partner villages at the same level of service.

Once the model is refined and all current water businesses have been transitioned, Saha will then focus on scaling the RWU service model to new villages. Our goal is to radically scale the amount of clean water delivered to the communities we serve by expanding to new villages, increasing the amount of water delivered to our current partner villages, and reducing the cost/liter of water. From 2023–2027 Saha aims to provide a total of 69 million liters of clean water. Our ultimate aim is to deliver enough clean water so that the majority of people living in our partner communities are exclusively drinking clean water (90%<sup>12</sup> of the water consumed by at least 51% of the population that we serve is clean water).



10 USAID, "REAL Water – Rural Evidence and Learning for Water."

11 Dalberg Global Development Advisors, "The Untapped Potential Of Decentralized Safe Drinking Water Enterprises."

12 Brown and Clasen, "High Adherence is Necessary to Realize Health Gains from Water Quality Interventions."

# Strategic Priorities

Saha has established 3 strategic priorities for the next 5 years:

## Evolve



Phase out Saha's legacy enterprise model and expand impact through direct implementation as a Rural Water Utility, providing professional, affordable, basic water service to more than 250,000 people living in small, rural villages by the end of 2027, reaching 35% of the 758,738 people in the poorest rural villages that currently drink from surface water sources.

## Align



Align Saha's mission statement, impact goals, budget, brand language and key performance indicators with the SDGs and the Government of Ghana's (GoG) water frameworks, policies, plans, goals, and budget to better position Saha for government partnership and/or adoption at scale.

## Strengthen



Build Saha to deliver professional, reliable, safe water service to our rural customers.

# Measures of Success

## Evolve

Proven RWU model

Successful transition of all existing water businesses to the RWU model

RWU model scaled to 134,000 additional people by 2027, more than doubling Saha's current reach

Amount of clean water delivered by Saha annually increased by 20x (2027 v. 2022)

Cost/L of water delivered by Saha decreased by 90% (2027 v. 2022)

## Align

New KPI framework implemented that aligns with GoG and NGO standards

Established partnership with GoG and at least one (larger) NGO

Established a leading position in research on impact of water subsidies on health impacts

Relaunched Saha Water rebrand to align with RWU strategy

Saha's impact counted by Ghana Statistical Service as basic water access in official SDG reporting

## Strengthen

Transitioned to paid operator model in support of new RWU strategy

Expanded US and Ghana boards by a combined 5 members

Built organizational capacity to support scaling operations in Ghana

Raised \$12.8M to support growth



Annalise Miller for Saha

SPECIFIC OBJECTIVES

# Evolve

Phase out Saha's legacy enterprise model and expand impact through direct implementation as a Rural Water Utility, providing professional, affordable, basic water service to more than 250,000 people living in small, rural villages by the end of 2027, reaching 35% of the 758,738 people in the poorest rural villages that currently drink from surface water sources.

## 2023

PILOT

- Pilot RWU service model in 20 of Saha's current partner communities for 1 year with the goal of optimizing Operator pay and payment delivery method
- Develop RWU service model for rural villages with existing boreholes and/or accessible groundwater
- Increase water access from surface water to limited or basic water access in 75 new villages in northern Ghana
- Provide excellent Customer Care to 387 existing water businesses

## 2024

PILOT

- Roll out RWU service model to an entire Saha Customer Care geographic zone (70–80 villages)
- Increase water access from surface water to limited or basic water access in 45 new villages in northern Ghana
- Launch RWU in 5 new villages in northern Ghana
- Provide excellent Customer Care to 428 (non-water utility) water businesses
- Rebrand Saha Global to Saha Water

## 2025

RAMP

- Roll-out RWU service model in remaining 428 legacy model villages
- Provide excellent Customer Care to all 538 Saha partner villages
- Provide limited or basic water access in 25 new villages in northern Ghana using RWU service model

## 2026 & 2027

SCALE

- Provide limited or basic water access to 300 new rural villages using RWU service model
- Optimize RWU Customer Care, decreasing the cost/L delivered compared to legacy model

SPECIFIC OBJECTIVES

# Align

Align Saha's mission statement, impact goals, budget, brand language and key performance indicators with the SDGs and the GoG's WASH frameworks, policies, plans, goals, and budget so that Saha is better positioned for government partnership and/or adoption at scale.

## 2023

- Adopt Operating KPIs that align with the Standards and Regulatory Framework for Small Water Enterprises proposed by Safe Water Network, Ghana's National Drinking Water Quality Management Framework, the Community Water and Sanitation Agency (CWSA) Legislative Instrument of 2011, the CWSA's Sector Guidelines for Rural Communities and Small Towns, and the Revised National Water Policy (currently in Parliament for approval)
- Develop regular Operating KPI reporting schedule for Saha with CWSA and District Assemblies (DAs)
- Integrate regular third party water testing, develop schedule for testing with CWSA and report results to CWSA, DAs, and partner communities
- Identify Water Service Providers (WSP) or large International NGOs with current partnerships with GoG that are tasked with providing basic water services but are struggling to do so in small, rural villages in their project/service areas
- Learn about how the Ghana Statistical Service (GSS), the Ministry of Sanitation and Water Resources (MSWR), and the DAs work together to report on water access in Ghana
- Adopt new mission statement that better aligns with SDGs
- Update Saha website and brand materials to reflect new brand language that better aligns Saha's work with SDGs and GoG policies, frameworks and goals

## 2024

- Rebrand Saha Global to Saha Water

## 2024–2027

- Villages served by Saha's RWU service model are officially recognized and counted as having safe water access by GSS, MSWR and DAs

## 2026 & 2027

- A portion of the new villages served by Saha are in partnership with the GoG, either through direct partnership for through another WSP/International NGO in a current partnership with the GoG

## 2027

- Create roadmap for how GoG can finance Rural Water Utility on-going operations and maintenance costs at scale

# Strengthen

Build the organization that can provide professional, reliable, safe water service to our rural customers.

## 2023

- Make any necessary changes to legal structure so that Saha is able pay Operators directly
- Identify at least 5 champions in Ghana with strong relationships with government/WASH sector and formally engage as advisors or Board members (either US or Ghana Board)

## 2023–2025

- Build Water Quality Department
- Transform Customer Care team to deliver professional customer service to water utility customers
- Develop and implement structure for supporting Entrepreneurs including performance management and professional development
- Strengthen internal systems and operations, including legal, HR, finance and admin, so that Saha is better positioned to partner with government, funders, research organizations and large international NGOs

## 2023–2027

- Set fundraising strategy and raise \$12.8M for five-year budget

Taking advice from Kevin Starr at the Mulago Foundation, Saha's strategy "will respond to changing circumstances and new information." It will be reviewed "often, and the bias [will] be toward change."<sup>13</sup> While the plan will be reviewed each year, a key review point will be in year 3 as Saha plans for scale in 2026 and 2027.

<sup>13</sup> Starr, "Strategy: Go Big or Go...Oh, Just Go Big."

# 5-Year Budget

| Year  | Budget       | # of water utility villages | # of legacy model villages | Annual clean water delivered (L) | % increase in annual budget | % increase in annual clean water delivered | Phase |
|-------|--------------|-----------------------------|----------------------------|----------------------------------|-----------------------------|--------------------------------------------|-------|
| 2023  | \$1,884,840  | 20                          | 443                        | 2,252,267                        | 6%                          | 48%                                        | PILOT |
| 2024  | \$1,990,594  | 85                          | 428                        | 3,974,860                        | 5%                          | 76%                                        | PILOT |
| 2025  | \$2,588,487  | 538                         | 0                          | 13,623,621                       | 30%                         | 243%                                       | RAMP  |
| 2026  | \$2,717,397  | 613                         | 0                          | 18,627,389                       | 5%                          | 37%                                        | SCALE |
| 2027  | \$3,576,287  | 838                         | 0                          | 30,557,426                       | 32%                         | 64%                                        | SCALE |
| Total | \$12,757,650 |                             |                            | 69,035,563                       |                             | 1,257%                                     |       |

838

WATER UTILITY VILLAGES  
BY 2027

69M

LITRES OF CLEAN WATER,  
2023–2027

\$12.8M

FIVE-YEAR BUDGET TO RAISE



**SAHA**

**Safe water, every day, for everyone.**

[www.sahaglobal.org](http://www.sahaglobal.org)