

Professionalizing Water Service Delivery in hard-to-serve communities

Presenters

Jude Esang – Service Delivery Manager

Gbandan Blessing Francis – Stakeholder & Government Relations Manager

Saha pioneered utility-grade water service in the last mile.



01 • DESIGN

Our service was designed specifically for communities under 1,000 people. Adaptable to various water sources. Cost-effective. Built for uptime.



02 • DELIVER

Today, over 135,000 people in 448 rural communities are drinking safe water from 470 Saha Water Service Points.



03 • DEMONSTRATE

We publish practical evidence on cost, performance, and operations to enable replication because reliable rural water service should be the global norm.

SERVICE
SCOPE

135,907

PEOPLE
SERVED

448

RURAL
COMMUNITIES

470

WATER
SERVICE POINTS

● The Challenge

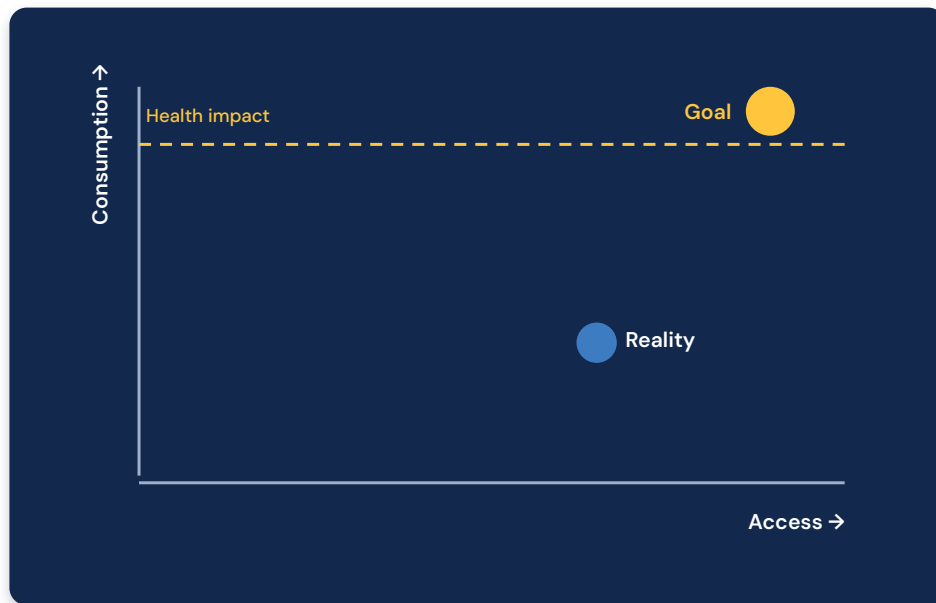
Access without use changes nothing

Households only see a health benefit when safe water is both available and actually consumed. The challenge was how the water systems were managed.

- Volunteer operators
- Price set at higher than community can afford / able to pay (alternative is free)

Between 2008 and 2020, one expectation carried the whole model:

the system would be run by volunteer entrepreneurs and would cover all of its own costs.



01

● SECTION

Covid 19 Free Water and its impact on water consumption

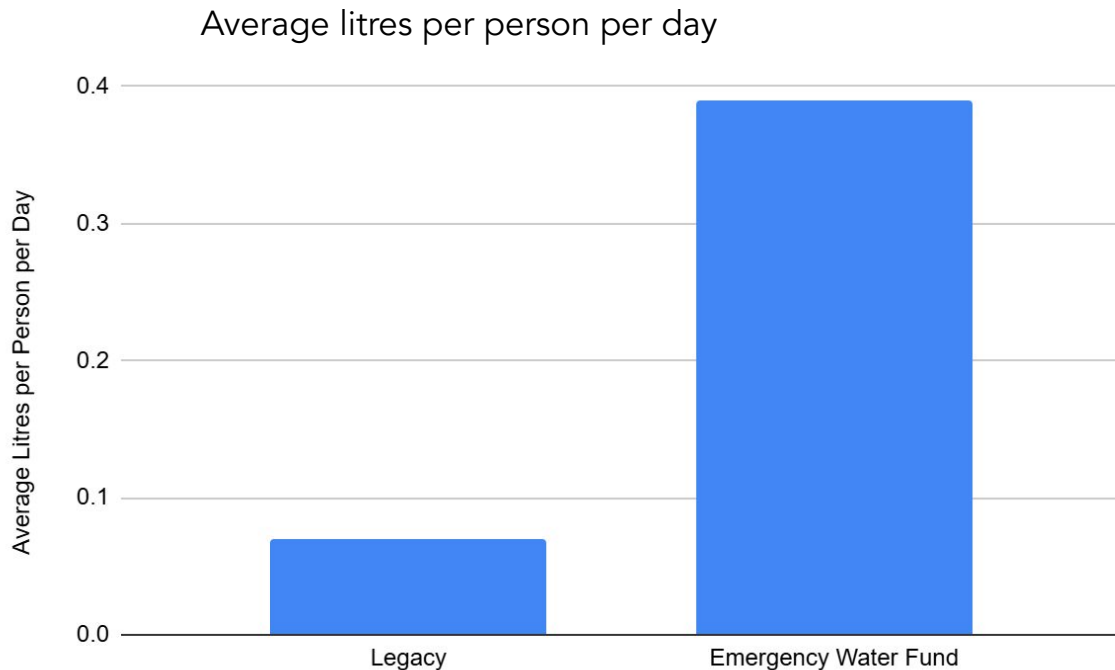
What changed when we changed to align with the free water mandate — measured across production, consumption and water quality.

Structured support increased consumption

300%

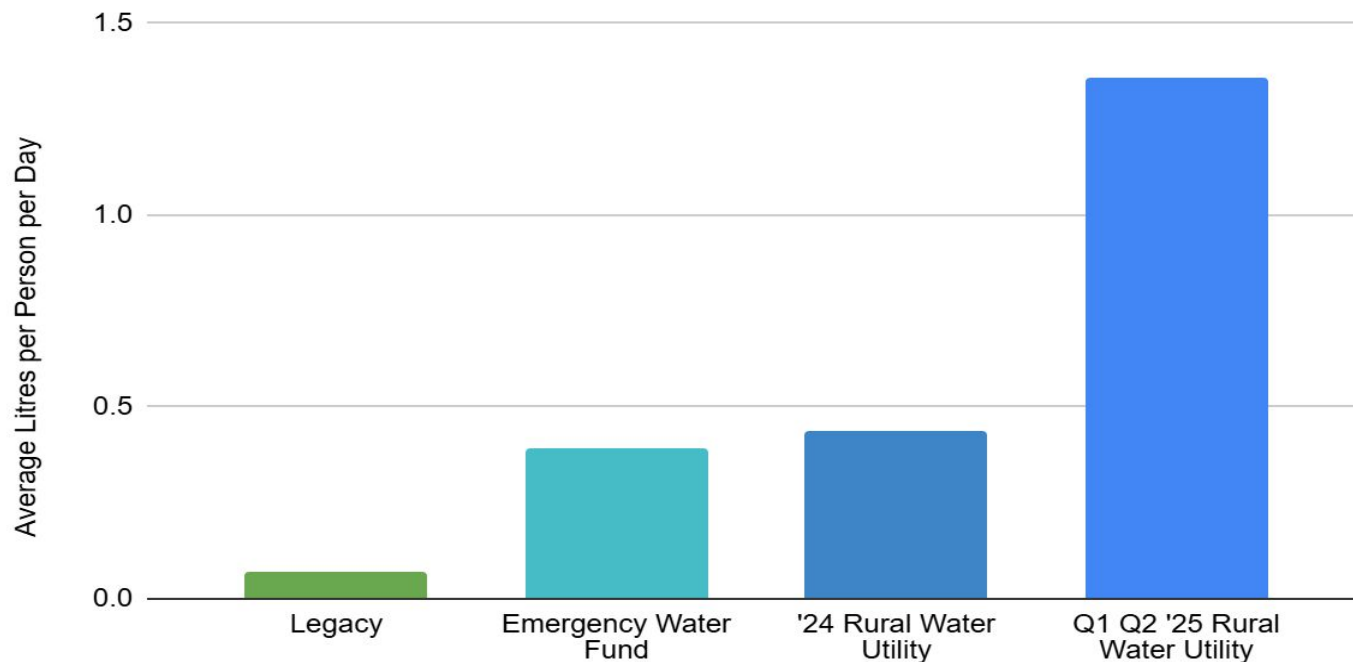
When Saha provided free water, consumption jumped roughly 3-fold.

- 1 Price of water
- 2 Payment of operators
- 3 Reliable technical support

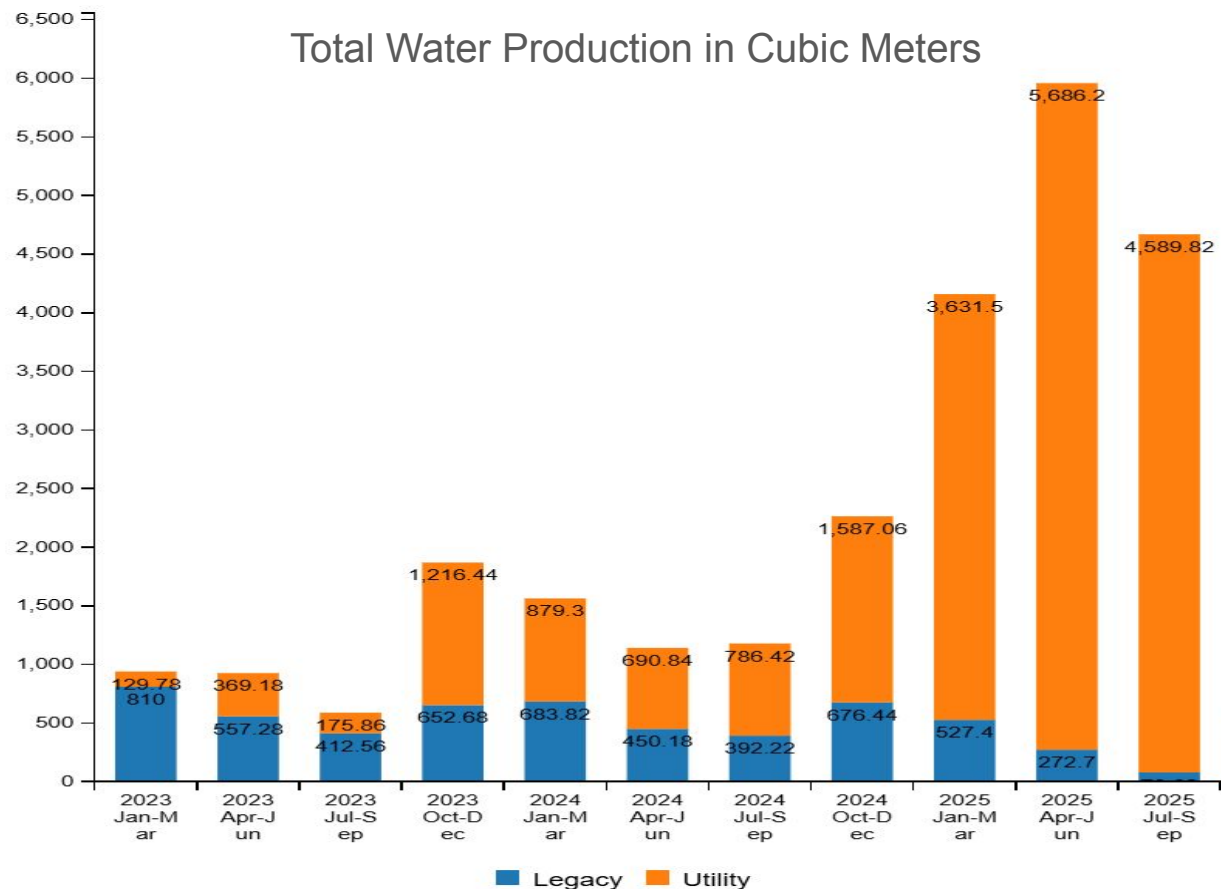


Production now exceeds even the free-water peak

Average L/P/D under different operational models

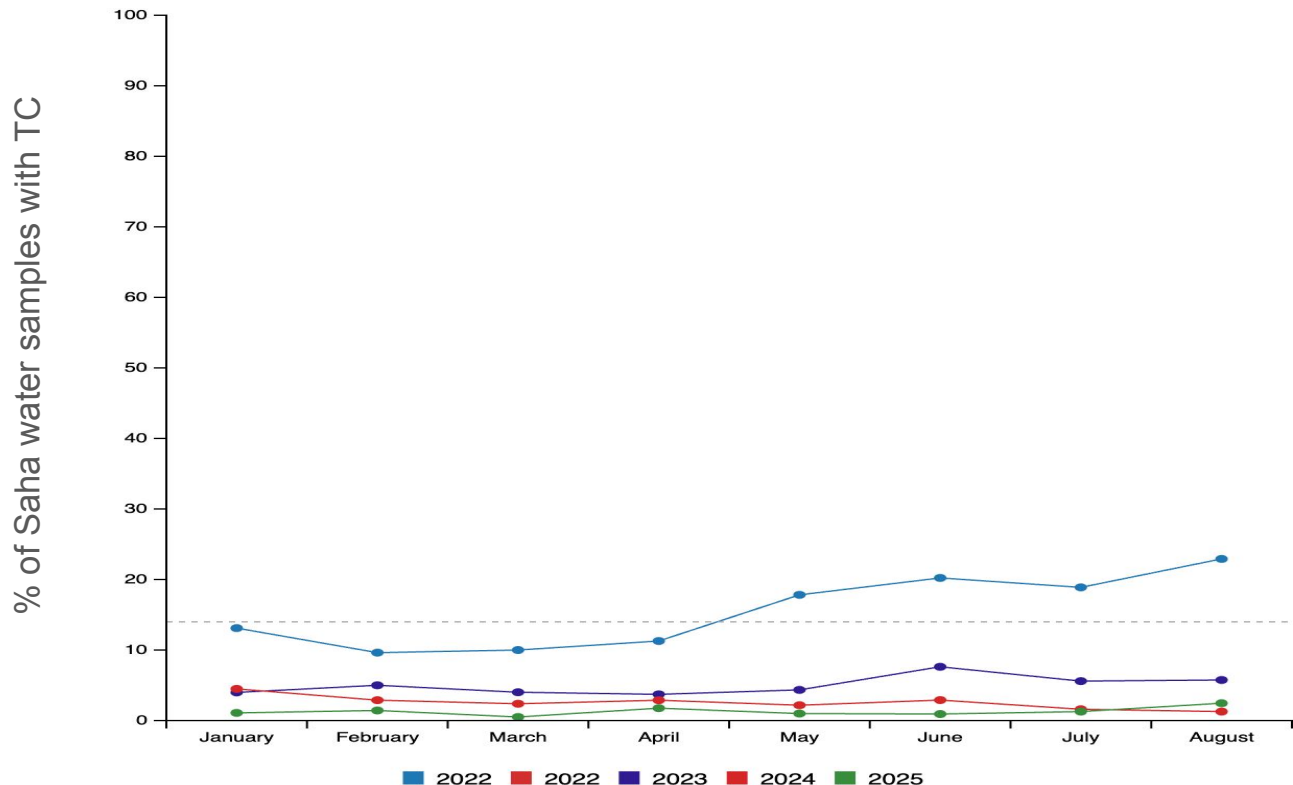


Safe water production climbs under professionalization



Contamination falls as payment is tied to performance

The share of samples testing positive for total coliform has fallen year on year — from a 2022 peak above 20% to consistently low single digits in 2025.



The results are clear: we cannot sustain rural water systems by relying on volunteers and expect to cover all costs through tariffs.

Community-based management may work in places, but generally it has not. Recognising this — and adapting our approach — is the key to reliable last-mile service.

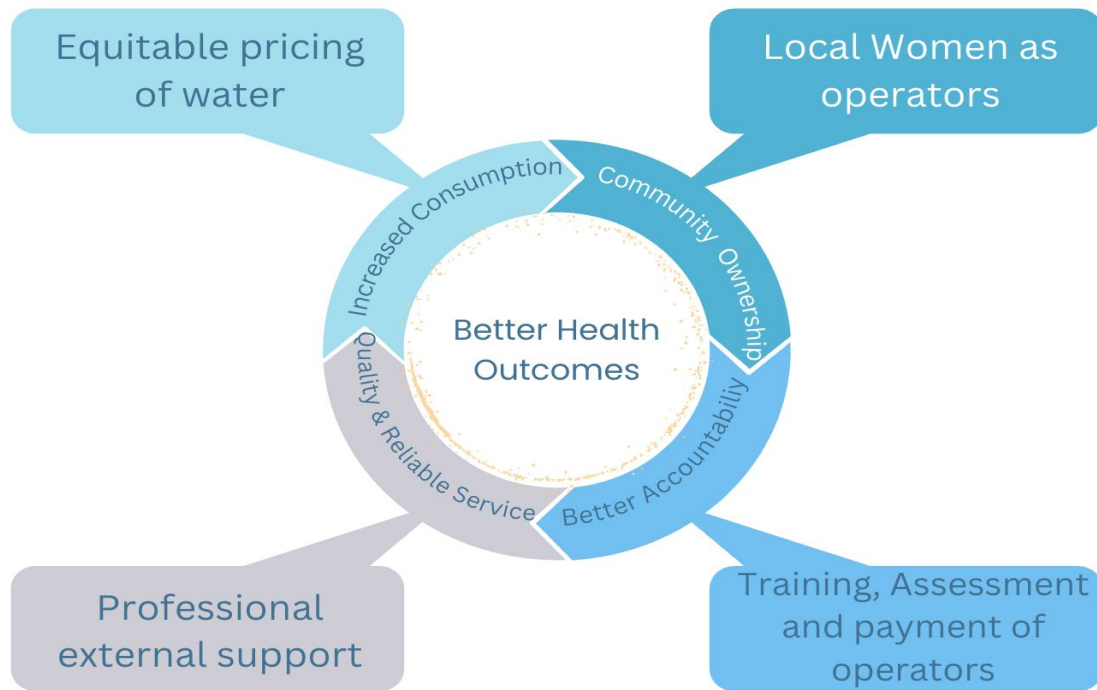
02

● SECTION

Professionalization: The operational framework

You've seen the results. Here's what actually powers them.

Professionalization of service delivery is key to the goal



Local women, engaged as independent contractors

- 1 Partner with the community to select operators
- 2 Sign a contract with clear Key Performance Indicators (KPIs)
- 3 Provide training; equip with mobile phones
- 4 Pay a monthly operator fee, plus a performance bonus

HOW OPERATORS ARE PAID

GHS 173 /month

Fixed monthly operator fee

+ GHS 48.5 /month

Performance-based bonus



Training, Assessment & Payment

Professionalization is a managed cycle, not a hand-off

Train

Pre-implementation and post-implementation training for every operator.

Assess

Monthly KPI assessments against clear, measurable standards.

Pay

Monthly fixed payments plus performance-based bonus payments.

Operator KPIs

- ✓ Refill rate per month greater than 1
- ✓ Water available more than 85% of the time
- ✓ Positive microbial test ≤ 1 in a month
- ✓ 95% of customers report water is available
- ✓ Calls in when supplies or tech repair is needed

● PROFESSIONAL EXTERNAL SUPPORT

1

Procurement & quality assurance

Supplying treatment materials and consumables while maintaining product consistency and quality standards.

2

Operational support

Routine and emergency technical assistance — plumbing, repairs and equipment replacements — backed by a micro-insurance program.

3

Water quality monitoring

Monthly microbial water quality testing across all operating sites.

4

Independent verification

Funding third-party laboratory testing by CSIR–Water Research Institute to validate safety and compliance.

Comprehensive technical support keeps service consistent and water safe.



03

● SECTION

**So, where next are we taking
professionalization?**

● NEXT STEPS

Can you guess?



● NEXT STEPS

Yes, we are taking the lessons to communities with boreholes

We're extending the professionalized model to borehole communities — one paid operator overseeing the system (calling in, reporting, collecting fees) supported by a professional management team

1 operator · GHS 50

to oversee the system each week

PROFESSIONAL MANAGEMENT OF BOREHOLES INCLUDES



Preventive maintenance



Reactive repairs & troubleshooting



Spare-parts procurement & logistics



Water quality monitoring & testing



Performance monitoring & reporting



Operator supervision & support

04

● SECTION

Professionalization comes at a cost

Reliable, recurring service has a price. Here's the true cost of serving the last mile — and how we close the gap.

● HOW DID COST CHANGE?

Costs under the surface water model

	RWU	Legacy 2022
Direct \$ per litre	\$0.05	\$0.22
Direct \$ per cubic metre	\$48.47	\$219.90
Direct \$ per person / year	\$3.36	\$2.88
CapManEx annualized \$ / person / yr	\$0.23	\$0.23
Management / admin \$ / person / yr	\$2.26	\$2.26
Total \$ per person / year	\$5.86	\$5.14

Cost per litre collapsed; because people now drink far more,

Total \$ per person is high. Producing far more water per person at a fraction of the unit cost

● HOW DID COST CHANGE?

Costs under borehole model

Community payments contribute toward maintenance, technical support, monitoring, operator management and oversight — but cover only a small portion of the real cost of delivering reliable water.

WHO PAYS FOR RUNNING COSTS?



The GH¢2 weekly household fee covers ~10% of the true cost of service. The remaining ~90% must come from external financing.

THE GAP, PER PERSON (Borehole Model)

\$2.77 /year

The cost of keeping safe water flowing to one person in a last-mile community for a full year. Small per person — but it must be reliable and recurring.

How will we fund it?

PILOT · EAST GONJA

District Last-Mile Maintenance Trust Fund

- Only professional service providers can qualify — no community-based management
- Payments based on results, anchored in a results-based-financing framework (uptime, quality)
- A governing board decides on eligibility and payout

DISTRICT CO-FINANCING

10% DACF

Districts should allocate the water share of the DACF not only to new systems, but also to ongoing O&M — and could contribute directly to the fund.

● IN CONCLUSION

Professionalization of rural water systems ensures sustainability and improves health outcomes for communities.

Thank You!



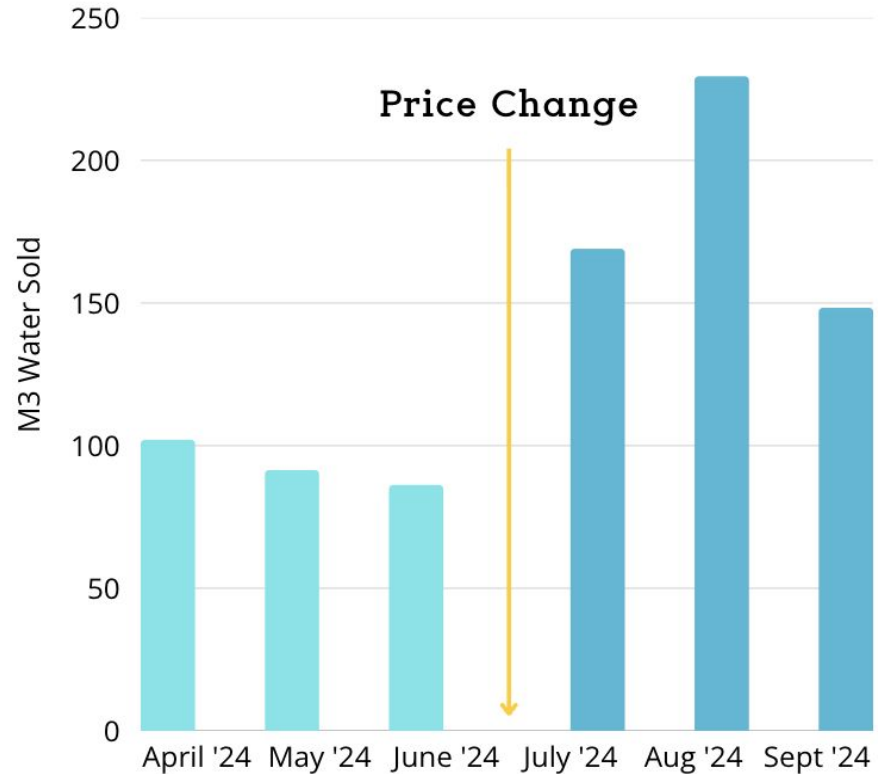
Appendix

Price of water affects consumption

Under the legacy model, 20 litres of water was sold at 50 pesewas.

Under our current model, 20 litres is sold for 10 pesewas.

*This presentation will focus on the management approach



Criteria for operator bonus

PERFORMANCE BONUS STANDARDS

The monthly bonus of up to GHS 48.58 is earned only when an operator meets every standard listed below, turning performance management into a clear, transparent incentive.

Production & refill

Refill rate above 1× each month.

Water quality

No more than 1 positive coliform/E. coli test per two-month period.

Effective calling

No reports of ineffective calling for the month.

Water availability

Water available more than 85% of the time.

Customer surveys

95% of customers report water is available.

See Saha's Commission & Bonus Evaluation SOP for the Service Delivery Team for full detail.

What does it cost to serve the last mile

	GHS / Person	USD / Person	Subsidized?	Includes
CapEx	46.5 GHC	\$3.0	Yes	Hardware & Set-Up Costs
OpEx	85.5 GHC / Year	\$5.86 / Year	Yes	Personnel (including Operators), fuel, transportation, water testing, half of chlorine costs. Without the overheads, subsidy

*These numbers are subject to change as Saha improves its service delivery model
Numbers are based on Saha's SSWTS*