



Professionalising water services in the rural water sub-sector of Ghana

A partnership to drive change

@ 2025

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About the cover photo: Anthony Gyamfi Amponsah is CWSA's Community Relations Officer in Wassa Dunkwa, Western Region. He is proudly standing next to the newly built water facility in the small town, which will serve over 5000 people with safe and sustainable water services.

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Acronyms

COM	Community Ownership and Management
CWSA	Community Water and Sanitation Agency
GHS	Ghana Health Service
GSA	Ghana Standards Authority
HR	Human Resources
IT	Information Technology
MMDAs	Metropolitan, Municipal, and District Assemblies
MOH	Ministry of Health
NCWSP	National Community Water and Sanitation Programme
NRW	Non-Revenue Water
PPP	Public-Private Partnership
R-WUP	Rural Water Utilisation Project
SDG	Sustainable Development Goal
SOPs	Standard Operating Procedures
WASH	Water, Sanitation, and Hygiene
WSMS	Water System Management Staff
WSMTs	Water and Sanitation Management Teams
WSUP	Water and Sanitation for the Urban Poor

Foreword

Learning is central to reform. The key question should not be whether we are doing the right things right, but rather, how can we do things differently to improve.

Ghana's journey towards sustainable rural water services has been transformative, marked by significant milestones and collaboration.

Since 2017, the Community Water and Sanitation Agency (CWSA) has undergone a remarkable shift. Initially established to provide technical support to local governments in the delivery of water services, CWSA now actively manages small-town water systems. CWSA's vision is to become a rural water utility, ensuring the sustainability and improvement of water services in the rural water subsector.

The aim of these reforms is to professionalise water service delivery, bringing in skilled professionals to manage technical operations, water quality, finances, and billing. The development of a policy framework for these reforms addresses critical issues, such as the relationship with local governments, the role of the private sector, and sector regulation.

The foundation for this transformation was laid over two decades ago when Ghana adopted the community ownership and management approach for rural water services. However, it became evident that many systems were not functioning to their full lifespan. IRC, through initiatives like the Triple-S and SMARTerWASH projects, conducted extensive research to understand the underlying factors contributing to system failures and established a national database on the state of water services in Ghana, providing critical data to advocate for a shift in planning and investment.

The Rural Water Utilisation Project (R-WUP), supported by the Conrad N. Hilton Foundation, and based on a partnership between CWSA, IRC, Safe Water Network, and WSUP, was initiated in 2021 to facilitate CWSA's transition to a utility. This project focuses on improving internal mechanisms, enhancing operational efficiency at the facility level, improving asset management and water quality, and fostering a strong learning environment. The partners of the R-WUP were carefully chosen not only to collaborate, but also to share knowledge, informing how things are done.

As we continue this journey, the collaborative efforts of all stakeholders dedicated to improving water, sanitation, and hygiene services in Ghana remain crucial. The lessons learned and the innovative approaches developed in R-WUP serve as a blueprint for CWSA's transition and the overall future of water systems design and management in the country. Together, we are working towards a future where every community in Ghana has access to sustainable, safe, and reliable water services.

Vida Duti

Country Director, IRC Ghana



Introduction

In the heart of rural Ghana, the Community Water and Sanitation Agency (CWSA) has been championing the development and management of essential water infrastructure in rural areas and small towns since 1998. Established by the CWSA Act of 1998 (Act 564), the agency's mandate is to facilitate the provision of safe water and related sanitation services to rural communities and small towns, coordinating all stakeholders and interventions under the direction of the National Community Water and Sanitation Programme (NCWSP).

The NCWSP, launched in 1994, emphasises community ownership and management (COM), encouraging effective community participation in planning, implementing, and managing water and sanitation facilities. This approach is based on the assumption that communities, as custodians, will ensure the sustainability of these systems. Over the years, the NCWSP has made significant progress, with 29,895 boreholes fitted with handpumps, 559 small town piped systems and 1,275 limited mechanised systems constructed across the country. Access to water supply in rural communities and small towns in Ghana has risen from 27% in 1992 to 61.87% in 2023, contributing to improvements in water-related sanitation and hygiene (Ghana Statistical Service, 2024).

Despite these achievements, the sustainability of community-managed systems began to falter, leading to challenges such as non-functional or partially functioning water systems, repeated breakdowns, increasing water losses, and inadequate community capacity to manage complex systems. In response, CWSA initiated policy reforms in 2017 to transform into a public utility organisation responsible for the provision and management of small-town piped water systems. This reform aims to professionalise the operations and management of piped water systems by employing Water System Management Staff (WSMS) and expand CWSA's mandate to include the management of these systems. However, point source water facilities will continue to be managed under the community ownership model.

As of 2024, 196 out of the 559 small town piped systems are under CWSA's management within the pilot phase of its reforms. A decision has been made to confer asset ownership on CWSA for all publicly funded small-town water systems, despite contributions from District Assemblies (DAs) and communities. The reforms are crucial for creating an enabling environment to increase coverage and meet Sustainable Development Goal (SDG) 6, which requires all households in Ghana to have access to safe water on the premises by 2030 (MSWR, 2024).

CWSA is not alone on this journey. People working on accelerating access to safe drinking water in Ghana have been following and contributing to the reform in different ways, at different times. This includes the Ministry of Sanitation and Water Resources, the Coalition of NGOs in Water and Sanitation (CONIWAS), the World Bank, private sector organisations, and many more. The stakes are high, and the ambition is great:

To be the leading public sector rural water service delivery organisation in Africa.

In 2021, Safe Water Network, IRC, and Water and Sanitation for the Urban Poor (WSUP) created a partnership to assist in the reform, with funding from the Conrad N. Hilton Foundation.

With a clear mission: to help CWSA become a utility, make water systems more efficient, build infrastructure for safe water, and strengthen sector learning to ensure lasting progress.

The Rural Water Utilisation Project (R-WUP) has been implemented in Ghana's Western Region, in Mpohor and Amenfi West Districts where, in 2020, still 38% of the population had no access to safe drinking water (Ghana Statistical Service, 2024).

As the project is in its final year, and the reform enters a new phase, it is crucial to listen to perspectives from people involved at all levels and from all corners of the water sector in Ghana. This booklet tells stories of change and asks the questions that still remain.

Chapter 1

CWSA's reform vision and journey so far

From facilitator to utility: a brief history of CWSA's transition

Since 1998, CWSA has facilitated the development of WASH infrastructure in rural Ghana and provided technical support to local government and communities under the community ownership and management (COM) model. Over 20 years, water coverage improved from 27% in 1990 to 62% in 2020 (Ghana Statistical Service, 2024). However, many community-managed systems became non-functional due to poor technical and financial management, frequent breakdowns, poor water quality, high Non-Revenue Water (NRW), and high energy costs.

CWSA, along with various partners, conducted research to understand the frequent breakdown of water systems, identifying issues like infrastructure quality, weak monitoring, capacity challenges, and resource constraints. The national database for CWSA was updated to align with the service delivery approach which provided evidence to advocate for better planning and investment in water services. In 2017, CWSA initiated a policy reform to expand its mandate to manage piped water systems in rural areas, transitioning

into a rural utility. The reforms aim to improve operational efficiency and sustain water service delivery of small-town water systems. This transition involves legislative amendments and operationalising the new model.

The vision

CWSA's perspective

The Community Water and Sanitation Agency (CWSA) aspires to be the leading public sector rural water service delivery organisation in Africa. To achieve this vision, CWSA has initiated measures to operate as a professional organisation with values, cultures, and ethics akin to a world-class utility.

CWSA now directly manages 194 piped water supply facilities and oversees the remaining facilities by delegating operations to private operators while

ensuring compliance with water quality, tariffs, and asset management standards. CWSA manages the small-town piped systems with creativity and technological innovation, collaborates with MMDAs for rural water supply delivery, and serves as a focal point for learning and translating new strategies into sustainable practices.

CWSA also provides information, advice, and policy guidelines on water and sanitation services, establishes clear procedures to maximise staff commitment and quality, adopts strategies to meet national targets for safe water delivery, and mobilises funding for WASH programmes. CWSA's mission is to deliver safe and sustainable water, sanitation, and hygiene services to rural communities and small towns in Ghana (**CWSA**).

Ing. Dr. Worlanyo Kwadjo Siabi served as the Chief Executive Officer (CEO) of CWSA until 2023, leading the reform process. In December 2023, President Nana Addo Dankwa Akufo-Addo appointed Aloysius Adjete



CWSA Head Office in Accra, Ghana

as the new CEO. Since January 2025, Vincent Senam Kuagbenu has stepped in as the new CEO of the Community Water and Sanitation Agency.

The vision is embedded in CWSA staff's hearts and minds from local, regional, to national levels. They share a unified vision of transforming the agency into the leading public sector utility service delivery organisation in Africa. This vision is driven by a commitment to high standards of service delivery, including adequacy, reliability, safety, and affordability of water services.

The transition from a facilitator to a utility service provider required the employment of new professionals at all levels, beginning with the management of water systems taken over from communities. This is also one of the key promises that increases the commitment of political leaders to the reform. As a result, CWSA's staff grew from 250 to over 1400 employees.

I was working in the media industry when I first heard about the Community Water and Sanitation Agency (CWSA). At that time, I was looking for a change, something more impactful and meaningful. When I heard the former director¹ speak about the vision of CWSA, it resonated deeply with me. He talked about the importance of providing safe and sustainable water to rural communities, and the need for professional management to ensure the longevity of these systems. His passion and commitment to the cause were infectious, and I knew I wanted to be a part of that vision. Transitioning from the media to CWSA was a significant shift, but it felt like the right move. I was inspired by the director's vision and motivated by the opportunity to make a real difference in people's lives through improved water services.

- Linda Dedoo, Extension Services Specialist, CWSA, Western Region



Linda Dedoo, CWSA with Abubakari Wumbel, IRC and Michael Selassie Adrah, WSUP.

¹ Ing. Dr. Worlanyo Kwadjo Siabi was the Chief Executive Officer (CEO) of CWSA until 2023, when President Nana Addo Dankwa Akufo-Addo appointed Aloysius Adjetej as the new CEO.

Linda Dedoo's story is strongly connected to the reform. She was recruited in 2017. Peter Agbo Wedzi, a Senior Engineer working at the Western Region CWSA office, also joined around the same time. They both started as water system managers in small towns and after a few months, transitioned to the regional level. Linda focuses on land acquisition, customer service, and commercialisation, whereas Peter oversees the technical aspects of the water systems in the region.

One significant part of the vision is the professionalisation of water system management. This includes deploying professional staff to each system, including community relations officers, water system managers, technical engineers, accounts officers, revenue officers, and local and water safety officers at the regional level. Under the Community Ownership and Management (COM) model prescribed by the NCWSP, community members would select managers to instil a sense of communal commitment and enable them to manage water facilities. However, CWSA is now shifting to professionalise community water services management. This involves a competitive process to hire qualified, paid individuals, often young graduates from technical universities. This change aims to address the challenges posed by strong social bonds, which, while fostering a sense of belonging, can hinder effective management of water systems when it comes to collecting revenue from friends and family. Both processes were implemented based on sector guidelines and models (**CWSA**).

The vision for the reform is to ensure that all water systems are profitable and sustainable, meaning they should be self-financing. This involves generating enough revenue for day-to-day operations, extensions, rehabilitations, and even constructing new facilities to improve water access in rural communities and small towns. Funding the vision of employing a full team of professionals for each water system from the current revenue collected is challenging, so only a few systems in Ghana employ the complete list.

More practical aspects of the vision are addressing technical issues related to water quality, operations and maintenance challenges with existing water infrastructure, high non-revenue water, and staff capacities. The vision aims to transform CWSA into a rural utility that manages water systems comprehensively, from administration to service delivery.

Community member testing new water point in Wassa Dunkwa, Western Region.





Bird's eye view on Esiama, Western Region. Hope Kwambla Kuedufia, Water systems manager, CWSA and Michael Selassie Adrah, WSUP walking towards one of the small-town systems taken over by CWSA.

A bird's eye view from the water sector in Ghana

The reform aligns with Ghana's commitment to Sustainable Development Goal 6 (SDG 6), which aims to ensure the availability and sustainable management of water and sanitation for all. The Ministry of Sanitation and Water Resources sees the reform as essential for achieving this goal.

"SDG 6.1 aims to ensure the delivery of water services for everyone, whether you're living in a small town or a rural area. If we are not able to sustain these services, it becomes a significant issue for the whole country.

So, if that space was going to become more sustainable, it was necessary for us also to give thought to see how it can be done professionally."

- Kwabena Gyasi-Duku, Director, Water Directorate, Ministry of Sanitation and Water Resources

There is clear recognition by Ghana's water sector of the need for a comprehensive overhaul of the rural water sector, professionalising water service delivery, and ensuring sustainability through improved management practices and stakeholder engagement. CWSA has made the decision to assume a utility role, they will be performing effectively, even during their transition phase.

"The introduction of professional management practices will enhance service reliability and community health, while enhancing job creation and local economic development."

- Mr. Frederick Agyemang, Chief Director of the Regional Coordinating Council, Western Region

People involved in the water sector are hoping for more affordable and sustainable services for rural communities. The broader sector is geared up to play its part in ensuring that CWSA will succeed in meeting their basic operational costs and providing reliable services year-round.

Change takes time: challenges and progress

Legal backing and financial challenges

Initially, organisational development experts advised against initiating the reform without ensuring proper legal frameworks and preparedness. Despite this caution, CWSA began piloting the new model in 2017 to gather insights and support for building their direction.

In November 2019, the reform process involved preparing a policy framework for rural water sector reforms, which was sent to the Cabinet for approval (**CWSA, 2019**).

In January 2020, the Cabinet approved the policy reforms, paving the way for the next stage of the reform process (**CWSA, 2020**).

In 2024, CWSA sought further Cabinet approval to become a full-fledged public utility, which would bring the agency under the regulatory supervision of the Public Utilities Regulatory Commission (**Graphic Online, 2024**). To complete this process, several issues still need to be addressed, including the relationship with local governments, the role of the private sector, sector regulation, and the interface with Ghana Water Company.

As CWSA transitions into a rural utility, improving sector monitoring, coordination of actors, and regulation of other service providers in the rural subsector are key. Underlying issues slowing progress include:

- Outdated data on water infrastructure and services.
- Multiple platforms and approaches within the WASH sector complicating coordination efforts.
- Lack of formal partnership arrangements between CWSA and other service providers.
- Limited clarity on standards, enforcement, and reporting requirements among service providers.

Another central hurdle has been the lack of adequate funds for the day-to-day running of the water vision and the need to settle huge legacy debts left by the community from their management period. This includes an estimated GHS 40 million (USD 8.8m) in electricity bill debts that were accumulated by the previous community management structures. Without having the legal framework, clear service delivery model, and proper financing in place, the reform has been a significant undertaking, marked by gradual progress.

Operational inefficiencies

The rural and small-town piped water supplies that CWSA needs to manage are characterised by poor maintenance culture and obsolete technologies prior to hand-over, high non-revenue water due to illegal connections and frequent leakages from aged pipelines, and significant percentages of groundwater supplies not meeting acceptable water quality standards. (CWSA). Some areas, where CWSA would become the rural utility, have very low levels of access to safe water, necessitating significant investments in rehabilitating old systems, and building new infrastructure. Contributing factors include limited investments in designing and constructing comprehensive and equitable piped water systems, high levels of E. coli contamination in drinking water sources, and frequent breakdowns of water systems.

Organisational capacities and community engagement

The reform represents a significant change for CWSA, which also requires delicate negotiation and leadership skills. Gaps in the agency's capacity to manage both internal and external change processes posed challenges in efficient and sustainable management of water systems. Increased staffing accelerated the takeover of water systems, but communities have not always been supportive, as the transition disrupted established social and economic structures.

After her first promotion from water systems manager, Linda led a team in the Central Region to start managing about 11 water systems. She faced significant challenges along the way. Chiefs, opinion leaders, and youth groups could become very upset as they suddenly lost income, and asset ownership without compensation. The transition to CWSA management meant a loss of communal revenue streams and allowances for the community volunteers in the Water and Sanitation Management Teams (WSMTs). Linda and her team had to navigate these sensitive issues carefully, sometimes having to leave quickly due to tensions.

Despite these challenges, she remains optimistic, saying, "Some of us are reformers, and we would be very happy in the next five years to see CWSA become what we want it to become."

The Rural Water Utilisation Project (R-WUP) was thus welcomed by CWSA to support the transition and address these challenges effectively in the Western Region. The project also aimed to identify opportunities for scale across CWSA and the country.



New ladder at the Esiamia water system, installed by Safe Water Network



Chapter 2

Change stories from the Western Region

About the Rural Water Utilisation Project

R-WUP, supported by the Conrad N. Hilton Foundation, is being implemented between 2022-25 to support CWSA's transition in the Western Region.

The project had four key objectives are:

- Develop CWSA's internal organisational change management process to drive the transition towards a rural utility
- Improve the operational efficiency in the management of water systems
- Develop infrastructure for delivering safely managed water
- Support sector strengthening and learning.

Central to the project is partnership, each organisation contributing to its success. CWSA as the prime beneficiary, provided overall leadership, overseeing infrastructure development and chairing a management committee. Key people involved were CWSA staff working at the 11 water systems operated by CWSA in the Western Region, new staff employed to operate the two new systems under construction, CWSA staff working in Takoradi, in the Western Region, and in Accra, the CWSA Head Office .

Safe Water Network Ghana focused on technical support and advisory to improve the operational efficiency of piped water systems through improving water quality and billing efficiencies. Water and Sanitation for the Urban Poor (WSUP) Ghana provided overall support for organisational change development, using their utility strengthening framework. IRC's role in this project was enhancing sector learning and systems strengthening, including a focus on data management of water systems, fostering partnerships, and improving coordination mechanisms for learning and development.

Box 1. Partner in focus: IRC

"Learning is a central pillar of the reform process. CWSA chose to implement the reform in various stages across the country to gather insights and inform the final framework.

This approach allows for documenting lessons learned and applying them to improve operations when the reforms are scaled out."

- Vida Duti, Director, IRC Ghana

Better communications around the progress of CWSA's development into a utility is expected to support increased collaboration and understanding amongst WASH stakeholders in Ghana. IRC Ghana focused on opening up communication and involving various stakeholders in the process.

A key step for providing the necessary evidence for sector engagement was to map water services in the Western Region of Ghana to gather information on the facilities (functionality, reliability, distance, delivery models in place, operations, and management) and performance of the service providers and authorities.

The **Rural water utilisation project : state of water services in the Western Region : Ghana report** (GSS, IRC Ghana and CWSA, 2023) presents the findings of a mapping conducted by the Ghana Statistical Service. It gives a comprehensive overview on water infrastructure, services, and stakeholders in the Western Region and aims to support sector strengthening and learning, a key element of supporting CWSA's change journey. These insights are therefore crucial for building and strengthening systems that ensure a financially sustainable and effective rural water service model.

In addition, IRC played a key role in facilitating sector dialogue on the reform process. Key milestones included holding dedicated events at the annual NGO Mole Conference in 2022 as summarised in **Leveraging partnerships for a professionalised public utility in Ghana** and **WASH Reflections Issue 96**, engagement with MMDAs and service providers in Takoradi in 2023 as presented in **WASH Reflections 98**, and sharing project findings at the national level at the National Level Learning Alliance Platform (NLLAP) 2024 as discussed in **WASH Reflections Issue 96**.

The story of Esiama: a model for replication

Since the reform started in 2017, CWSA has taken over 11 water systems in the Western Region, where non-revenue water stood at 36% in 2023 (GSS, IRC Ghana and CWSA, 2023). The project has supported rehabilitation – such as replacing broken ladders and renovating corroded tank parts of the Esiama water system. The system serves a customer base of 544, including 525 households, 16 institutional customers, two commercial customers, and one non-residential customer.

A day in the life of Hope

Since 2019, Hope Kwambla Kuedufia has been the dedicated water system manager in Esiama. His role involves a variety of responsibilities, primarily focused on revenue mobilisation, and ensuring the smooth operation of the water system.

Hope's favourite part of his job is the morning interactions with his customers. His days start early, around 6:00 AM. By 6:30 AM, he is out of the house, ready to begin his revenue mobilisation duties. With his receipt book and debt list, Hope visits his assigned customers to collect payments. This task is crucial for maintaining the financial health of the water system. By 7:50 AM, Hope is back at the office, waiting for the first officer to arrive. Once the officer is present, Hope heads out again to check on the water system's performance from the previous night. He examines the water levels, pump operation, water quality, and records the quantity of water pumped into the tank. The rest of the day consists of administrative duties. He coordinates with other officers, addresses any issues that arise, and ensures that the water system operates smoothly.



Clockwise from left: Hope and Michael Selassie Adrah (WSUP) interacting with staff member George Nyarko, Technical Assistant, CWSA at the Esiama water system; Bookkeeping at the Esiama CWSA office; chlorine doser.



Hope's passion for water management stems from his childhood in the Volta region, where access to clean water was scarce. His academic journey, including a Master's in Development, Planning, and Management, further fuelled his dedication. During a practical programme in Boku, he worked on solutions for contaminated water sources, solidifying his desire to improve rural water access. After completing his master's, he applied for a position with CWSA. He was selected and started as a community relations officer. Three years later, Hope was promoted to Water System Manager at the Esiama water system.

Hope joined CWSA around the time the agency started its reforms. He remembers the research done by CWSA and IRC revealed that the existing model of building water systems and leaving their management to local communities was not yielding good results.

Hope feels fulfilled knowing that he can contribute to achieving CWSA's vision and improving water access and quality for the people of Esiama, which he experiences as a vibrant and welcoming community. The area is famous for its harvest festival, Kundum, which brings together people from all over Ghana to celebrate in this small seaside town.

Safe water for Esiama

When Hope joined the Esiama community, the water quality was poor, with high levels of iron. Through R-WUP, Safe Water Network provided equipment, such as compressors, blowers, and filter media to treat the water, and trained Esiama staff on how

Box 2. Partner in focus: Safe Water Network



"Water is life, but more importantly, safe water is life."

- Joseph Owusu Ansah, Head of Engineering and Technical Services, Safe Water Network

Providing poor quality or contaminated water can lead to waterborne diseases, which is why ensuring water quality is crucial for the health benefits of the communities served.

Safe Water Network emphasised the importance of water quality by improving water quality tools, providing test kits and conducting training sessions for CWSA staff, highlighting the need to meet Ghana and WHO standards. Their two 3-day residential training programmes titled "Improving The Water Quality Culture Within Our Systems" and Water Safety Planning was attended by was attended by over 40 people from CWSA staff in the Western Region, and one representative for water safety from each of the other regions. It covered basic treatments and disinfection methods, particularly chlorination.

"We are properly trained to ensure that there is no cross-contamination along the way. [Safe Water Network] were guiding us through their trained staff on how to handle water safely. I think this has had a positive impact on the region."

- Peter Agbo Wedzi, Senior Engineer, Western Region, CWSA

Learnings from these trainings were applied in the Esiama Water System, but first, some structural issues needed fixing:

- The overhead tank ladder was repaired for access.
- Corroded manhole lids, tank balustrade, and other metal parts were replaced.
- Faulty valves and bulk meters were replaced, allowing the team to clean the concrete reservoir thoroughly.
- A new chlorine dosing pump was provided to activate the disinfection system.
- The iron removal system was refurbished.
- Basic test kits for measuring chlorine residual and iron were provided.

This shows that Safe Water Network piloted more significant improvements in water quality at the Esiama water system. They provided basic and advanced testing equipment and encouraged staff to develop standard operating procedures (SOPs) for using them. Having staff engage with the development of the SOPs increases their buy-in and understanding of the procedures.

Additionally, Safe Water Network supplied the Regional Office with test kits to monitor water quality:

- Field incubator.
- Aquagenx microbial analysis kit.
- Pocket Pro test kit for pH, TDS, conductivity, and temperature.
- DR 300 Digital Colorimeter for chlorine and iron/manganese testing.
- A Water Mission Tablet Chlorinator was also presented as an alternative to the liquid chlorine dosing system.

A 4-day training programme on the use of these test kits was also organized for the Regional Quality Specialist and the National Quality Specialist.

Joseph and his team continue to follow up with CWSA staff in Esiama and regionally to ensure proper use of the equipment and adherence to the SOPs, reinforcing the training and effectively implementing the water safety plan. Joseph expressed hope that the pilot project's success in Esiama, and the importance of water quality would be recognised across CWSA, emphasising the need to allocate a budget for it at the beginning of each financial year.

to ensure water quality is up to standard. As a result, the water quality has significantly improved, positively impacting the lives of the residents.

The water chlorination process at the Esiama water system involves several key steps to ensure the water is safe for consumption by eliminating microbial organisms. Each morning, the process begins by filling the tank and adding chlorine, the amounts of which are regulated with a doser. The doser is set to release chlorine regularly, ensuring a consistent and controlled dosage. The chlorination process is monitored using chlorination test kits provided by the Safe Water Network. These kits help measure the chlorine levels in the water to ensure they are within the safe and consumable range of 0.4 mg/L. This careful monitoring ensures that the water remains safe for consumption while effectively eliminating microbial contaminants.

Managing assets and empowering people

R-WUP played a significant role in rethinking how the Esiama water system is managed: both from a staffing and an asset management perspective.

Hope feels he has personally benefited from the leadership training facilitated by WSUP. This training – facilitated by WSUP - helped him and other managers develop team-building skills and understand the importance of delegating responsibilities. This approach ensures that the team can sustain the water system's success, even in the absence of the water system manager.

R-WUP also supported CWSA to digitalise their water assets. Box 3 tells the story of WSUP's role in the process. Overall, R-WUP activities led to an updated asset inventory and the introduction of an mWater platform, which allowed for the digitisation of all water system installations. Another key milestone in the professionalisation of Esiama's system.

“This digital platform provides a visual representation of the water system, making it easier to manage and maintain.”

- Hope Kwambla Kuedufia, Water Systems Manager, Esiama

The Esiama water system is well on track to be an example for others in achieving collective success. In July 2022, they received the prestigious title of the best water system in the region, signed by former Regional Director, Ing. Henry Asangbah . The selection process considered various factors, including the revenue generated, non-revenue water, and the team's attendance and response to work.

Overall, Hope is grateful for the project's impact. He looks forward to further opportunities for training and development to continue improving the rural water sector in Ghana.

State of the art water systems in the Western Region

With funds from R-WUP, the construction of two new piped water systems with solar power, prepaid meters, and water ATMs started in 2021. These systems can provide safe water to at least 11,500 people who were not served before, using state of the art technology.

Initially, the two communities selected to receive these new facilities were the district capital of Mpohor, and Wassa Dunkwa in the Wassa Amenfi West district. However, finding groundwater in the district capital Mpohor failed, leading to the expansion of the search area. After multiple attempts and significant investments, water was found 15-17 kilometres away in Adum Bansa. The project had to adapt to a new location, leaving the leaders of Mpohor deeply disappointed.

CWSA staff still hope that funds will be available in the future to extend Adum Bansa's drinking water to people living in Mpohor.



The new water system in Wassu Dunkwa

The story of Wassu Dunkwa

Extending water services to remote and neglected areas is crucial to ensure that everyone can benefit from the Sustainable Development Goals.”

- Anthony Gyamfi Amponsah, Community Relations Officer, Wassu Dunkwa

The second water system was constructed in Wassu Dunkwa, a mining community located deep into the North-East of the Western Region. From Takoradi, the region’s capital, it takes about 5-6 hours by car to reach the community.

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A brand-new office building, as well as piped water systems operated by solar power, are only waiting for some final administrative and technical fixes to start hosting staff and serving communities with water. There are seven standpipes which are expected to be fully operational from 2025, once prepaid smart meters have been installed. Over 200 households have signed up for the services, but at least 500 households (over 5000 people) can be served by the system with potential to extend services to nearby communities. While provisions for connections into homes and other public spaces have been made, facilities for schools and healthcare facilities have not yet been installed.

Box 3. Partner in focus: WSUP



“For every change, you need to look at the people who are going to be involved. Engaging staff from the start is essential for successful transitions.”

- Frank Kettey, Country Manager, WSUP

WSUP’s holistic approach involved assessing the current context, identifying gaps, and engaging with all 1400 staff through surveys to gather insights on the transition, using **WSUP’s utility strengthening framework**. WSUP engaged multiple departments at CWSA, including HR, IT, Extension and Commercial Services Department, and Technical Services, in various activities. Their trainings,

while mostly focusing on the Western Region, included at least one person from each of the 15 regions in Ghana, ensuring broad representation and knowledge dissemination.

The process began with a self-assessment by CWSA staff members – bringing together senior management, regional staff, and water system managers for the first time - to diagnose issues. This was followed by a fresh thinking workshop that helped identify areas for innovation, leading to various training activities, including a leadership training, innovations around non-revenue water management, and one of the biggest highlights: a focus on asset management.

Michael Selassie Adrah was hired by WSUP specifically to support the implementation of R-WUP in the Western Region of Ghana. His presence in the region helped WSUP work more efficiently, making connections between the needs at the water system and regional level and WSUP’s head office in Accra. One of Michael’s personal highlights of the project was a visit to Uganda – his first visit abroad-, where the Umbrella Water Authority in Western Uganda is also receiving support from WSUP in their transition, also funded by the Conrad N. Hilton Foundation. Former CWSA Director of the Western Region in Ghana, Ing. Henry Asangbah was also inspired by this trip. One of the recommendations he came home with was to improve asset management in the region. WSUP helped with mapping both above and below-ground assets, aiming to create a comprehensive data repository of assets. They then worked on setting up a tool in the mWater platform – the same tool used in Uganda - that maps all water systems, including tanks, valves, and treatment plants, making it clear where customers and water systems are located. This was a key step in CWSA’s journey towards digitalisation.

Michael’s trainings on using mWater empowered staff across the Western Region. Water systems managers like Hope now capture data on the mWater platform, and senior engineers like Peter Agbo Wedzi can keep track of assets at the regional level in real time. The plan is to integrate water quality data, building on the support of Safe Water Network in the same.

Additionally, WSUP has worked on energy efficiency and NRW assessments and subsequent training activities to make operational improvements. Specific initiatives have involved the establishment of District Metered Areas (DMAs) to reduce physical water losses, enhancements in customer metering and billing accuracy, and the implementation of revenue collection and debt management strategies to mitigate commercial losses. Additionally, WSUP is introducing scheduled operation and maintenance plans for pump houses and treatment plants to optimise energy resource utilisation.

WSUP has established key process assets such as process maps and standard operating procedures for critical commercial functions, including new connections, metering, billing, revenue collection, debt management, marketing, and customer service. Other assets, such as customer charter, policy guidelines, and structural frameworks, have also been introduced to enhance commercial operations. These initiatives aim to clarify roles and responsibilities while streamlining and standardising commercial processes, ultimately improving utility management.

The overall engagement and understanding created in staff around utility management helped shift their mindset, ensuring they understand and perform their roles more effectively.

Frank emphasised that the approach in the Western Region, including mapping assets and extending water systems, serves as a model for scaling efforts to other regions, demonstrating the value of these initiatives in enhancing overall efficiency and performance across CWSA.

“This tool has been instrumental in managing water assets, including customer data, pipe networks, and standpipes. The mWater platform allows staff to visualise data, monitor infrastructure remotely, and gather customer feedback through surveys.”

- Peter Agbo Wedzi, Senior Engineer,
CWSA Western Region

“The leadership training helped us a lot in dealing with each customer, and with people who may be more influential than us, such as politicians and other stakeholders.”

- Linda Dedoo, Extension Services Specialist,
CWSA Western Region



Michael Selassie Adrah training Western Region CWSA staff on mWater.

A new way of working: introducing Mahama, Anthony and Matey

CWSA's approach to ensuring accelerated service provision in Wassa Dunkwa was to hire three new staff during R-WUP. This ensured that while construction was ongoing, staff could already benefit from trainings provided by project partners and would be ready to manage the new water system once completed.

Mahama Musa is the Water System Manager. He studied environmental science with a focus on water quality. In his position, Mahama is expected to ensure that water supplied to the community meets international standards and is available at all times. Mahama remembers the training on asset management, which helped his team map all their assets using the mWater platform, making their work easier and more efficient by allowing remote monitoring and prompt issue resolution.

Anthony Gyamfi Amponsah is a Customer Relations Officer. Anthony's primary duty is to engage the community, educate them about the importance of safe water, and explain the tariffs associated with the water provided by CWSA. Growing up in an area with limited water access, he was motivated to pursue a Bachelor of Arts in Integrated Community Development. Anthony and his team successfully engaged community leaders and religious institutions in Wassa Dunkwa, gaining their support and enthusiasm for the water initiative, which was a significant motivator for them, and crucial to engage new customers.

Matey Kpabitey was hired as the Water System's Engineer. He is most proud of the treatment plant established through R-WUP, which removes iron from the water. He started working in Wassa Dunkwa, alongside Mahama and Anthony in 2023.

Since then, Mahama and his team have set up a temporary workspace under a mango tree as their office is not yet fully equipped. The community has been supportive, providing chairs and tables for their activities. Although the building is completed, administrative hurdles with the contractor and between changing leadership at the Western Region office have delayed their moving into the office. Despite these challenges, Mahama is optimistic and believes their office will open soon.



Newly constructed CWSA office building in Wassa Dunkwa.



Mahama, Anthony, and Matey at the Wassa Dunkwa water system.



Anthony working under the mango tree

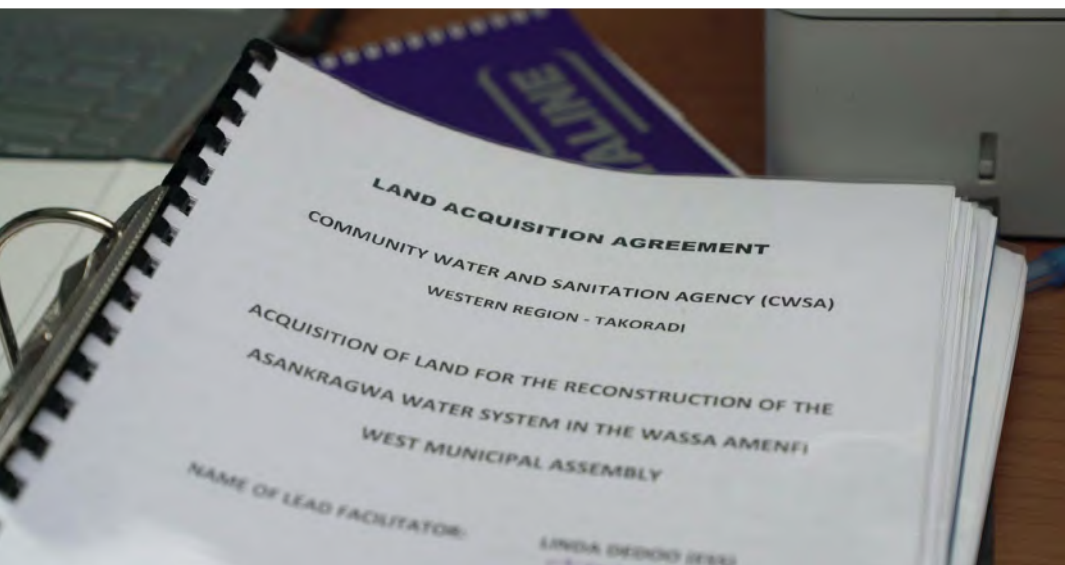
Leaving no one behind

The construction of the new office adhered to safeguarding guidelines, and included frequent negotiations with District Assemblies and landowners, ensuring community buy-in for the land acquisition process.

In the Wassa Dunkwa community, a widow with four children owned a piece of land that was crucial for the construction of a pump house for a new borehole. Linda, who was responsible for arranging land acquisitions, initially arranged to acquire a 15 by 15 metre plot from the widow, unaware of her situation. Following safeguarding guidelines, the land acquisition and payment were completed. However, the technical team working on the new system's design later requested an increase in the land size to 18 by 50 metres for a solar farm. It was then that the widow revealed her husband's passing and her reliance on the land for farming, which was her sole livelihood.

Deeply moved and determined to adhere to safeguarding guidelines, which emphasised that no one should be left behind, Linda explained to the widow the benefits the water project would bring to the community and her children. Eventually, the widow agreed to the acquisition. She now earns money from visitors who come to take pictures of the solar farm. She was also compensated for the land and her cacao plantation's value as determined by the Wassa Amenfi West Municipal Assembly Agriculture Department guidelines.

Linda reflected on the experience, realising the profound impact land acquisition decisions can have on people's lives. While CWSA paid for the land, the widow's cacao plantation could have potentially sustained her for life. During a visit to Wassa Dunkwa, the widow approached the team, expressing concerns about her well running dry when the new system was in use and her inability to afford the water service tariff. While the technical likelihood of a correlation between the water system and the well is low, Linda planned to discuss these issues with the hydraulic team and recommended introducing a pro-poor tariff to ensure no one, especially those contributing to water access, is left behind. This project significantly enhanced Linda's understanding of the nuances of safeguarding, land validation, and the complexity of negotiations. Balancing leaving no one behind with the profound impact of bringing safe water to a community's health and wellbeing is no easy feat.



Land acquisition agreement for Wassa Dunkwa, photographed in Linda Dedoo's office in CWSA Takoradi, Western Region.

Consumers at the heart of services: professionalising customer service

R-WUP has significantly shifted the focus of CWSA from merely community engagement to emphasising customer service.

As Ibrahim Adokor, Director of Planning and Investment at CWSA's Head Office explains, funding is crucial for the sustainability of water systems, including covering wages for new staff, rehabilitation of water systems, and day-to-day operations, with electricity being a significant cost. There was a gap between the production of water and the generation of revenue. To bridge this gap, an Extension and Commercial Services Department was established in CWSA, headed by Theodora Adomako-Adjei, Director of Extension and Commercial Services at the CWSA Head Office in Accra, to ensure that the water produced is consumed and paid for, thereby generating revenue for continuous operation.

WSUP played a crucial role in professionalising CWSA's new commercial department. They reviewed and refined the draft customer charter and provided guidance on various aspects, such as process mapping and generating standard operating procedures (SOPs), ensuring the department's effective formation and operation and that all aspects of water management, from customer services to revenue collection, are handled efficiently.

The process mapping involved identifying the commercial aspects of each department's activities and defining specific roles and responsibilities. For example, the process for new connections involves multiple



Ibrahim Adokor, Director of Planning and Investment at CWSA's Head Office.



Theodora Adomako-Adjei, Director of Extension and Commercial Services at the CWSA Head Office

units, from engineers to community relations officers and accountants. A commercial chain has been established to outline the steps and responsibilities for commercial activities. This helps in monitoring interventions and ensuring that all staff understand their roles in generating revenue and managing water systems. The project also included learning from the small enterprise model of Safe Water Network. This collaborative approach has been crucial in shaping the commercial unit.

established to outline the steps and responsibilities for commercial activities. This helps in monitoring interventions and ensuring that all staff understand their roles in generating revenue and managing water systems. The project also included learning from the small enterprise model of Safe Water Network. This collaborative approach has been crucial in shaping the commercial unit.

“What I intend to do is to put the documents in shape, to the extent that they can be tested at the water system level, where every staff, every day can see what their roles and responsibilities are, and what steps they have to go through to be able to deliver commercial activities.”

- **Theodora Adomako-Adjei, Director of Extension and Commercial Services, CWSA Head Office**

Hope from Esiama reflected on the “fresh thinking” training provided by WSUP, which included a focus on prioritising customer needs and improving customer service. This training emphasised the importance of timely responses to issues and building rapport with customers, leading to increased revenue and improved customer satisfaction.

Linda – who also benefited from R-WUP trainings - is now a key advocate for improved customer service in the Western Region. She understands the importance of customer satisfaction and has learned to categorise customers based on their behaviour. She approaches each customer with care and is in close contact with Theodora in the Head Office, regularly discussing operations and opportunities for improvement.

Challenges along the way: a new billing software

Safe Water Network aimed to leverage their expertise in water quality, sales, and marketing to introduce a digital platform that harmonises activities across various systems in Ghana. This platform was designed to manage over 110 systems, allowing for efficient data collection and management through tablets and applications.



“Digitalising operations is key to enhancing non-revenue management, customer satisfaction, and professionalising our work.”

- **Charles Yeboah, Head of Business Analytics and Innovations, Safe Water Network**

Charles Yeboah, Head of Business Analytics and Innovations, Safe Water Network.

However, the focus shifted to assisting with developing a new billing software due to existing challenges with CWSA's system. This led to a complex and instructive journey.

Before R-WUP, CWSA was using billing software developed by a former staff member. Recognising the risks associated with this dependency, CWSA decided to seek a new billing system that would provide more stability and control.

The Safe Water Network team developed a prototype, conducted beta testing, and piloted the software in the 11 systems in the Western Region. The focus was on integrating remote payment systems such as mobile money, and ensuring the software could scale effectively. They provided two rounds of training with WSUP and supplied tablets and other necessary equipment.

Despite the progress, the development of such an entirely new system takes time. The new software was being developed in India, which introduced complications related to time differences, and communication around troubleshooting. The development took significantly longer than CWSA had anticipated, so they made the decision to revert to their previous billing system. This legacy system had been continuously improved over time and had become more stable and reliable.

Now, the focus of R-WUP partners Safe Water Network and WSUP has shifted to optimising the existing billing software, including potential third-party involvement.

Esinu Ama Tsagbey, the IT Coordinator at CWSA, reflected on the experience and highlighted the valuable lessons learned. Despite the decision to stop using the new software to avoid duplication, the process introduced important concepts and reinforced the importance of continuous improvement. Esinu emphasised that the legacy system, used across almost all regions and systems, had proven to be reliable. However, the experience also underscored the need for CWSA to have greater control over their billing software to avoid future risks.

Esinu's story highlights the challenges and successes in the technological aspect of the CWSA reform, emphasising the importance of continuous improvement and adaptation to ensure efficient service delivery. The experience with the billing software serves as a reminder of the complexities involved in managing technological transitions and the need for careful assessment of interests and ownership. As well as being cautious about avoiding duplications when piloting new technology in an institution that already has established ways of working. Moving forward, CWSA aims to leverage the lessons learned to enhance their IT infrastructure and continue providing reliable water services to their communities.

"The experience with the new platform gave us confidence in our legacy system. An external consultant confirmed that we had a solid system that could be improved with a little support."

- Esinu Ama Tsagbey,
IT Coordinator,
Head Office, Accra



Esinu Ama Tsagbey, IT Coordinator, Head Office, Accra.



Chapter 3

Future direction and questions that remain

As the Rural Water Utilisation Project is in its final stages of implementation, lessons learned from the pilot in the Western Region are abundant. Taking these lessons, reflecting on them in CWSA and with the wider rural water subsector is crucial for Ghana's continued pursuit of reaching everyone with safe and sustainable water services.

The following sections introduce key questions that remain to be answered about the reform and recommendations drawn from CWSA staff – from the water systems level, Western Region and Head Office -, R-WUP partners, the Ministry of Sanitation and Water Resources, CONIWAS, and the World Bank.

Finalising the legal foundation for the CWSA reforms

Peter Agbo Wedzi, Senior Engineer at CWSA's Western Region Office, has a central question for the future: "When will CWSA have an approved policy document to help guide its work going forward?"

Veronica Ayi-Bonte from IRC Ghana asks:

"What is it that government wants to do about the rural water subsector? We need a quick decision so that we can go ahead and start working on it."

Having the legal backing and official government endorsement in place for CWSA is urgently called for by many.

The National Water Policy for Ghana has been updated in 2024, and it references the rural water reform and CWSA's role in it. This supports CWSA's case for continued reform but is not detailed enough to serve as guidance, clarify accountabilities, regulation and more.

An overarching legal act or policy for the rural water reform has been in the making since 2017. In November 2019, CWSA developed **a new community water services policy** which is under Cabinet review and will eventually require an amendment in the CWSA Act.

With the help of the policy, the Ministry of Sanitation and Water Resources aims to move away from siloed approaches and ensure that issues with licensing, tariff structures, and standards are addressed for a well-regulated and sustainable water sector that clarifies the roles and responsibilities of all stakeholders.

Before sending the document to the Cabinet, CWSA took advantage of platforms, like the annual Mole Conference, to present the draft policy document to a broader audience and invite their contributions, including partners, NGOs, and private sector entities.

One key point that CONIWAS has been advocating for is to see the reform as a comprehensive, integrated reform of the rural water subsector, going beyond CWSA's institutional reform.

The policy, that is aimed at guiding this requires several issues to still be addressed before it can be approved, including the relationship with local governments, the role of the private sector, sector regulation, and the interface with the Ghana Water Company.

Once the Cabinet approves the policy, it will be disseminated to stakeholders, allowing for broader input and collaboration in its implementation.

Support from the Cabinet to finalise the policy is crucial and expected to remain steadfast in 2025 as all political leaders had CWSA's rural water reform included in their 2024 election manifestos.

Addressing the fragmented regulatory environment

IRC Ghana's Director, Vida Duti emphasises the need for decisive action and systems leadership to bring the reform process to a logical conclusion. She also stresses that staying in the transition phase indefinitely is not an option and that strong leadership from the government is essential to make the reforms happen. Her central question is: "What kind of regulatory framework do we need to support the sector reforms?".

One pressing question that indeed remains is the issue of regulation of water systems, including clarity on whose role it is to address asset ownership and ensure efficient service delivery.

The transition process for CWSA must be managed well with strong regulation to ensure sustainability.

Roles and responsibilities for regulation in Ghana are divided over several institutions, including the Ministry of Works and Housing, the Ministry of Local Government and Rural Development, the Local Government Service Secretariat, the Ghana Health Service (GHS) and Ministry of Health (MOH), the National Development Planning Commission, and the Ghana Standards Authority (GSA). There is concern amongst Ghana sector stakeholders about creating another large bureaucracy, given the track record of utilities in developing countries. Safeguarding measures are critical to avoid the same level of non-functionality seen in the past. Ensuring that the systems are viable and sustainable is essential for the success of the transition.

A robust and independent regulatory system can ensure proper monitoring of water services. Given the vast number of systems, effective monitoring is necessary to ensure sustainability. Ensuring sufficient funding and resources is crucial for success.

Continued discourse on this aspect of the rural water reform is required.

Clarity on CWSA's operational model

Frank Kettey, Country Manager of WSUP, his central question that remains to be explored regarding the CWSA reform is: "What would it take for CWSA to manage 500 water systems and comprehensively cover the communities they serve?"

This question highlights the need for strategic planning and scaling operations to achieve CWSA's vision of becoming the best rural water utility in Africa. It urges support for CWSA to become a performing utility capable of delivering sustainable services to rural communities.

Clarifying CWSA's operational model and continued stakeholder engagement in this is key

The reflections on CWSA's new model highlight a shift towards a more formal and professionalised approach to water service delivery. This model is characterised by the involvement of professionals in managing the water systems, as opposed to the previous community-managed model.

The rural water subsector is characterised by a mix of stakeholders and service delivery models – as also presented in the **mapping conducted by the Ghana Statistical Service** on behalf of IRC. While the initial plan aimed for a single overarching system, by now it is clear that different models might be more effective for different contexts. Insisting on one model could be counterproductive, especially if existing systems are functioning well.

For example, the government has passed the Public-Private Partnership (PPP) Act 2020, 1039, which encourages private sector participation in various sectors, including water. This act provides space for PPPs and private sector participation from actors such as the Safe Water Network and 4ward Development.

Adopting PPP arrangements helps in asset management, negotiations, and setting key performance indicators (KPIs). It can also help clarify how CWSA continues its support to NGOs, the private sector, and small water enterprises in providing water systems to communities.

Not all stakeholders are clear on whether NGOs are still expected to manage water points and limited mechanised schemes, or whether CWSA will take those systems over?

There is also a need to address the grey area of whether CWSA will continue to handle water-related sanitation under its utility status, or if it will solely focus on the provision of safe and sustainable drinking water. Not all sector stakeholders are clear on this issue.

R-WUP has contributed to clarifying the vision and shaping the model, providing a solid base for future endeavours and clarifying the need for attracting private investment. The responsibility for further developing the model and communicating about it to the wider sector lies with CWSA.

Embedding customer service into CWSA's DNA

“When will CWSA have a customer service policy in place?”

- **Linda Dedoo, Extension Services Specialist, CWSA Western Region**

“When will the Extension and Commercial Services Department become the center of operations of Community Water and Sanitation Agency?”

- **Theodora Adomako-Adjei, Director of Extension and Commercial Services, CWSA, Head Office**

The financial sustainability of CWSA's rural water reform depends on the agency's ability to collect enough revenue to continue rolling out professional services in rural Ghana.

The Extension and Commercial Services Department created in August 2024, has the potential to become the centre of operations at CWSA, and provide excellent customer services to improve revenue generation. R-WUP has supported professionalisation of the department through developing SOPs and guidelines.

It is also key to examine how CWSA approaches the continued takeover of water systems. R-WUP has also contributed to exploring other ways to engage with communities to understand their worries and needs when it comes to CWSA taking over systems.

Cross-learning between rural and urban water utilities, particularly with the Ghana Water Company, which has developed mechanisms for customer service and operational efficiencies, is key. This exchange of knowledge can help avoid past mistakes and drive progress.

Improving staff engagement on the CWSA vision

“The successes achieved in the Western Region can be scaled to other regions by focusing on priorities identified through engagement.”

- Frank Kettey, Country Coordinator, WSUP

The R-WUP activities have significantly influenced the way people in the Western Region understand the vision of the reform. Unlike in other regions where only regional directors attended the workshops and were expected to share knowledge gained, in the Western Region, everyone from the region to the water system level participated. This comprehensive involvement has ensured a deeper and more cohesive understanding of the vision and enhanced their motivation and ability to manage water systems effectively.

One way that CWSA-wide staff has been involved in reform consultations via R-WUP is through a comprehensive staff engagement survey conducted by WSUP. Therefore, it is key that staff know what will happen next with their recommendations, and how Western Region solutions and ideas will be implemented and scaled. This will also be important for staff retention and managing their continued buy-in for the vision.

Improving wider engagement on the CWSA vision

The central question of Ibrahim Adokor, Director of Planning and Investment, CWSA, is directed towards the broader rural water subsector in Ghana: “What do you think we have to do to increase your understanding of the policy reform that is being implemented by CWSA?”. This question aims to engage sector stakeholders in a discussion about how to better communicate and clarify the ongoing policy reforms.

Partner recommendations include sharing regular updates via sector engagement meetings, reaching out to people outside of CWSA for one-on-one consultations, and sharing newsletters. An even broader question is about ensuring that the CWSA brand is more widely recognised by the general population in Ghana. Investing in communication and marketing may help address challenges with taking over systems and increasing CWSA's customer base.



Anthony Gyamfi Amponsah writing payment receipts in Wassa Dunkwa.

However, it is important to be mindful and not only focus on raising awareness and spreading knowledge but increasing acceptance or buy-in as well. Various stakeholders are affected by CWSA's changes. Some actors have lost direct control of their assets; others now have another government entity as a potential competitor. By identifying the risks and benefits of other actors in water service delivery and making efforts to address them, stakeholders in Ghana can be more productively involved in the CWSA reforms.

Additionally, from the customer perspective, the right to water entitles everyone to have access to sufficient, safe, acceptable, physically accessible, and affordable water for personal and domestic use. Working towards achieving the human right to water may bring more customers on board.

Scaling R-WUP's impact beyond the Western Region

WSUP's Michael Selassie Adrah's question for the future is: "How will CWSA support their staff administratively and build their capacity as well?"

The importance of comprehensive training for technical staff during the transition of CWSA into a rural utility cannot be underestimated. Ensuring the technical know-how is adequate is critical, especially for systems requiring extensive treatment and maintenance. Since 2021, R-WUP has showcased how professionalisation can be accelerated through targeted capacity building.

The project has worked across levels and therefore many of the improvements (e.g. SOPs for the Extension and Commercial Services department) have already been embedded into CWSA's overall operations.

Successes achieved particularly in the Western Region can be scaled to other regions by demonstrating good performance at the water system level, particularly in asset management, water safety planning, and revenue improvement. Once the value of these efforts is shown through CWSA-wide integration in planning, documentation, and sharing of best practices, scaling will follow. Esiamia is a good example.

The interplay between water systems and regional offices is also key to informing and impacting performance across all regions. The Western Region's approach serves as a model for replication.

Paying attention to tariff systems and financial sustainability

The knowledge and skills of CWSA professionals help in solving problems at the water system level, reducing the need for issues to escalate to the regional or Head Office. Despite this professionalisation, the lack of resources to develop water systems to a high standard is a limiting factor.

Sector stakeholders and CWSA staff have highlighted the importance of developing a transparent tariff system to support professionalisation, prevent the misuse of resources, and to ensure rural communities can afford CWSA's water services.

Considering the balance between the social, political, and economic aspects of water needs more attention, ensuring that not everyone is required to pay the same amount for water. There should be a way to handle different needs and circumstances to ensure fair and equitable access to water for all communities.

The tariffs introduced by CWSA surpass those paid by urban communities for Ghana Water Company services, for example. While CWSA's issues with sustaining its own operations is understood and seen, poor tariffs have to be part of the equation if no one is to be left behind.

Other solutions often proposed to reduce costs include clustering systems so fewer staff can manage multiple systems – reducing operational costs, and increasing sustainability and affordability of services.

Embracing technology and innovation

The central question of Esinu Ama Tsagbey, IT Coordinator at CWSA's Head Office, about the reform is: "How will management and staff of CWSA embrace the use of technology to improve processes and activities at CWSA?"

Hope Kwambla Kuedufia, Water Manager of the Esiama water system, also called for improvements in technology, for example with regard to the digitalisation of the customer payment system.

They are joined by Charles Yeboah, Head of Business Analytics and Innovation at Safe Water Network, whose key question for the future of the CWSA reform is: "How will CWSA position the organisation to really leverage the existing innovations and technology to help them scale in the rural areas?"

R-WUP has introduced improvements and recommendations around the billing software, water safety planning, asset management and more. Learning from the challenges with the billing software as presented in Chapter 2, a recommendation is for CWSA to consider developing their own in-house system or purchasing the rights to software currently used to ensure the long-term stability and reliability of operations.

Modernising processes and utilising digital tools is a key element of enhancing efficiency and customer satisfaction.

Maximising the impact of new water systems

Anthony Gyamfi Amponsah, Customer Relations Officer at the Wassa Dunkwa system emphasised the need for extending water services to remote and neglected areas to ensure that everyone can benefit from the Sustainable Development Goals. He highlighted that while emphasis has historically been placed on bigger cities, many remote communities have been neglected.

The new water systems in Wassa Dunkwa and Adum Bansa can serve nearby communities with high quality water services. Ensuring no one is left behind and investments are targeted wisely to serve those communities that are currently left behind is key.

Moving from 'water is life' to 'safe water is life'

Joseph Owusu Ansah, Head of Engineering and Technical Services at Safe Water Network's central question is: "Will CWSA back their quality department with sufficient funding so that they can meet quality standards as per WHO guidelines?"

Various CWSA staff members trained by Safe Water Network on water safety planning emphasised the importance of taking quality seriously and allocating a budget for it at the beginning of each financial year.

Attracting staff that can help achieve CWSA's vision

Mohamed Kpegla, IT Officer, CWSA Western Region's central question is: "How can we attract the right caliber of staff to promote our agenda, such as mechanical engineers, electrical engineers, and water safety specialists?"

It is crucial for CWSA to have these specialised skillsets to sustain and enhance their utility services. The traditional method of recruiting staff needs to evolve to meet the demands of current and future operations.

Determining service area demarcation

There is ambiguity about definitions and terminologies used in the rural water subsector. CWSA's mandate is for rural and small communities, while the Ghana Water Company Limited's mandate is for urban areas. However, there are overlaps in peri-urban areas, which are at the focus of CWSA reforms. Referring to small towns with populations of around 56,000 can change attitudes and may increase the likelihood of success when looking for funding. The following questions remain to be discussed within the sector to ensure better cooperation with stakeholders working in the smallest, hardest-to-reach communities:

1. **How to determine service area demarcation? This is key for the following reasons:**
 - The former division between urban (GWCL) and rural (CWSA) areas does not take into account the future growth of towns and cities. It is important to clarify possible shifts in roles when small towns grow into urban areas.
 - GWCL is already serving some rural areas and is expected to continue doing so in the future. It is key to clarify the mechanisms for this and agree where it makes technical sense for them to continue providing services.
 - If safe water enterprises (and private operators) also become formalised as service providers, there will also be the need to demarcate service areas between CWSA and these safe water enterprises.

2. **Clarifying the role of districts as service authorities**
 - It is key to discuss alternative mechanisms and roles of districts as service authorities where CWSA is the service provider.

3. **Investment programmes**
 - In addition to utilisation, there may be a need to have concurrent large-scale investment programmes to address issues with e.g. broken-down systems.

Source: IRC, 2022, Options paper "utilitisation" for rural water supply in Ghana' (unpublished 2022).

Close up of Wassa Dunkwa water system



Chapter 4

Conclusion and calls to action

In conclusion, the transformative efforts of CWSA in rural Ghana, as detailed in this document, highlight the progress made towards ensuring sustainable and efficient water service delivery. Especially in the Western Region, where the Rural Water Utilisation Project (R-WUP) piloted solutions to accelerate the reform process. R-WUP has played a key role in supporting CWSA's transition, improving water quality, and fostering innovations that strengthen the sector. As the project concludes and the reform enters a new phase, it is crucial to continue building on these achievements to ensure lasting progress and the realisation of CWSA's vision of becoming the best rural water utility in Africa.

Get inspired by some calls to action shared by CWSA staff and R-WUP partners at the heart of this story:



"We need funding for this transformation, support us."

- Ibrahim Adokor, Director, Planning and Investment, CWSA Head Office



"Everyone should support CWSA reforms for sustainability of water system management. We have no other choice."

- Theodora Adomako-Adjei, Director of Extension and Commercial Services, CWSA Head Office



"Help us reach more people with better services."

- Bright Jones Obeng, Director, CWSA Western Region



"Please don't forget to support the CWSA reform. We are waiting."

- Linda Dedoo, Extension Services Specialist, CWSA Western Region



"We need your expertise to drive our mission forward... Help us achieve our vision of becoming the leading public sector utility service delivery organisation in Africa."

- Mohamed Kpegla, IT Officer, CWSA Western Region



"Support CWSA in their efforts to provide safe water supply to low-income communities, particularly in rural small towns."

- Frank Kettey, Country Coordinator, WSUP Ghana



"Systems leaders drive change. Be part of the reforms to transform the water sector of Ghana."

- Vida Duti, Country Director, IRC Ghana



"Safe water is life."

- Joseph Owusu Ansah, Head of Engineering and Technical Services, Safe Water Network

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