



LEARNING NOTE

EMPOWERED WASH SYSTEMS AT RURAL DISTRICT-LEVEL IN AFRICA (EMPOWERWASH-AFRICA PROGRAM)

PRESENTATION AND ANALYSIS OF THE RURAL DRINKING WATER SUPPLY DELIVERY MODEL IN RWANDA

SUMMARY

The EMPOWERWASH-AFRICA programme was launched by the African Water and Sanitation Association (AAEA) with the support of the Conrad N. Hilton Foundation. This project aims to improve Water, Hygiene and Sanitation (WASH) systems in rural communes, targeting 30 communes in six countries (Burkina Faso, Cameroon, Ethiopia, Ghana, Malawi and Uganda). The first phase lasted one year from August 2023 to October 2024. In order to increase the impact of the programme, AAEA drew inspiration from Rwanda's successful management models by organising a Benchmarking mission from 16 to 20 July 2024 in Kigali and Rulindo commune.

This learning note presents the results of the benchmarking mission conducted in Rwanda. The purpose of this study is to analyze the management model of rural drinking water services in Rwanda. Since 2023, Rwanda has adopted a water supply and sanitation management model centered on the Water and Sanitation Corporation (WASAC), which operates under a system of delegated management through public-private partnerships. This model allows local actors to engage directly in a framework regulated by the Rwanda Utilities Regulatory Authority (RURA), while benefiting from the technical and managerial support of WASAC. Nevertheless, significant challenges remain, including the technical and managerial constraints faced by start-ups, as well as infrastructure financing. In this learning note, AAEA will analyze the Strengths, Weaknesses, Opportunities and Threats (SWOT) of Rwanda's rural drinking water supply model.

INTRODUCTION

Access to adequate drinking water and sanitation services is a major challenge in many African countries, especially in rural areas. In sub-Saharan Africa, 400 million people face a drinking water deficit. Only 46% of people in rural areas have access to safe drinking water, compared to 81% in urban areas. Only 24% of people in rural areas have improved sanitation facilities, compared to 42% in urban areas. The significant differences between urban and rural areas reveal the urgency of initiatives to improve access to water and sanitation in rural areas, where 80 per cent of sub-Saharan Africa's population lives.

There is a notable mismatch between water policies and action strategies to facilitate access to water for rural populations, with service providers facing significant barriers, including insufficient infrastructure and operational weakness, compounded by rapid population growth, strict regulations and the impacts of climate change.

To achieve Sustainable Development Goal (SDG) 6, it is essential to carry out revisions at the institutional level, integrating new stakeholders such as municipalities and small-scale operators in the water and sanitation sector.

In this context, the African Water and Sanitation Association (AAEA), with the support of the Conrad N. Hilton Foundation, has initiated the EMPOWERWASH-AFRICA programme. The objective of this program is to improve Water, Hygiene and Sanitation (WASH) systems in the communes of 30 rural communes across six countries: Burkina Faso, Cameroon, Ethiopia, Ghana, Malawi and Uganda. The program ran from August 2023 to October 2024.

To maximize effectiveness, AAEA has learned lessons from Rwanda's successful management model. In this perspective, a mission was organized to Kigali and Rulindo, Rwanda, from July 16 to 20, 2024. The objective of the mission was to examine the rural drinking water supply model in Rwanda, and to exchange with key stakeholders in the sector.

The objective of this learning note is to identify and document good practices. The factors identified during the benchmarking mission to Rwanda will be useful to the AAEA in developing its 2024-2028 strategic business plan, which provides for great access to drinking water in rural areas. The learning note, will present the strengths, opportunities, weaknesses and threats (SWOT) of the rural drinking water supply model in Rwanda.

METHODOLOGICAL APPROACH

The benchmarking mission to Rwanda used approaches to understand good practices and barriers to the rural drinking water management model in Rwanda:

- **Desk review / Literature review** : The Benchmarking Mission team conducted desk research based on reports and synthesis documents in the field of water in Rwanda.
- **Key Stakeholder Interviews**: The mission team interviewed 7 industry stakeholders to obtain detailed information on the obstacles encountered.
- **Field visits**: the objective of the workshop was to get a first-hand look at the reality of the rural drinking water supply sector in Rwanda.



AAEA photo credit: 1, 2, 3, 4, 5 and 6: Meeting between AAEA, WASAC, Ministry of Infrastructure, Water For People, RURA, Owen Lord Company, Rulindo District officials and the Forum of Private Operators for Water and Sanitation Systems in Rwanda (FEPEAR)

RESULTS

RURAL DRINKING WATER DELIVERY MODEL IN RWANDA

The Integrated Rural Drinking Water Distribution System in Rwanda aims to ensure equitable and sustainable access to safe drinking water in remote and often dangerous areas. This model is based on

close collaboration between government, local authorities, private actors and communities, with a focus on efficiency, sustainability and quality of services.

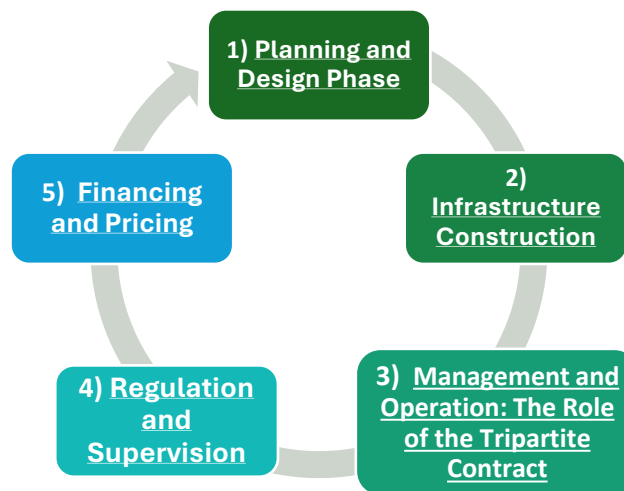


Figure 1: DIAGRAM OF THE PRESENTATION OF THE MODEL FOR THE DELIVERY OF THE DRINKING WATER SUPPLY SERVICE IN RURAL AREAS IN RWANDA;

SOURCE: Draft Report EMPOWERWASH-RWANDA Mission

This model is composed of several phases including:

- 1) **Planning and Design Phase:** The implementation of the model begins with careful planning coordinated by MININFRA in collaboration with local authorities and communities. In this step, it is necessary to assess water needs through feasibility studies and community consultations. Thanks to these studies, it is possible to find the technical solutions that are best suited to local specificities, such as special water needs and geographical constraints.
- 2) **Infrastructure Construction:** After identifying the needs, it is possible to start the process of building the infrastructure. This process is often a joint effort between the public sector, NGOs and the private sector. WASAC is responsible for the supervision and coordination of these projects. These can include wells, boreholes, pumping systems, and distribution systems.
- 3) **Management and Operation: The Role of the Tripartite Contract:** After the installation of the infrastructure, management and operation are governed by a tripartite contract between three parties: WASAC, the local district and a private operator.
 - a) **WASAC(a)** : The operational management of water systems is provided by WASAC, a provider of water and sanitation services. Its role is to ensure the maintenance of infrastructure and to ensure the continuous and reliable provision of services. WASAC works closely with private operators to ensure that service standards are met. In the district, this contract is supervised by the WASAC branch manager.
 - b) **The Local District (b)**: The mission of the local district is to coordinate and supervise locally. It is essential for the delivery of projects, the management of community relations and the resolution

of operational problems that may arise. Communication between communities and other stakeholders is also facilitated by the district.

- c) **The private operator (c)** is responsible for managing the water infrastructure on a daily basis. The maintenance of equipment, water treatment, distribution to users and management of the financial aspects of the service are among his responsibilities. Performance, maintenance and customer service expectations are specified in the tripartite contract. At this stage, special attention is being paid to youth enterprises by entrusting them with the responsibility of managing rural water systems.

This tripartite scheme ensures a transparent division of labour and establishes a framework for effective collaboration. It also promotes transparent and accountable resource management, while ensuring that the services offered meet the needs of rural communities.

- 4) **Regulation and Supervision:** RURA is responsible for regulating water services. RURA grants operating permits to private companies, sets prices for water services, and ensures compliance with national water quality standards. Regular monitoring and audits ensure that the services comply with the quality standards and regulations in force. Only qualified operators can be authorized to provide drinking water services, which ensures the security and reliability of supplies. Its role is essential to ensure that services remain equitable and of high quality.

- 5) **Financing and Pricing:** Water projects are funded from a variety of sources, such as government budgets, contributions from development partners, and NGOs. RURA sets water service tariffs to ensure accessibility for consumers and the financial viability of operators. The pricing model was developed with the aim of being accessible while offering operators the opportunity to cover their expenses and invest in infrastructure maintenance, while generating a profit margin. Prices are adapted to operating and maintenance expenses, with particular attention to ensuring access to drinking water for rural populations.

ANALYSIS OF THE STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS OF THE RWANDAN MODEL

The literature review and key informant interviews highlighted the following Strengths, Weaknesses, Opportunities and Threats of the current model of rural water service delivery in Rwanda:

•FORCES

- A comprehensive approach that includes qualified human resources, technological equipment and the participation of the Government, private actors and citizens.
- The criterion for selecting qualified operators is competence, which allows them to operate water services in compliance with the quality standards established by the decrees that detail the terms of licensing and quality standards.
- The technology offers the possibility of setting up gravity and pumping systems adapted to local conditions.
- Through rigorous tracking and monitoring, as well as rigorous quality standards, the water supplied is safe for consumption.

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- Collaborative agreements between WASAC, districts and private operators ensure a transparent distribution of responsibilities and promote efficiency and sustainability of services.
- Community participation plays an active role in the planning, implementation and management of water projects, which strengthens their commitment and ensures their implementation.

•WEAKNESSES

- The management of mountain systems requires the use of motorized pumps, which leads to increased expense and complexity.
- Often, start-ups lack technical, managerial, and financial skills, and their lack of experience without proper mentoring can jeopardize their effectiveness.
- Ensuring the continued compliance of all operators with established standards can be a challenge, requiring robust resources and monitoring capabilities.
- It is often difficult to adapt licensing criteria and procedures to local realities and the specificities of youth enterprises.

• THREATS

- Changes in weather can impact the availability of water resources, the reliability of infrastructure and increased management expenses.
- Economic fluctuations can have an impact on energy financing and investment.
- Rapid population growth is leading to an increase in water demand and challenging existing infrastructure.
- Without adequate funding for maintenance, existing infrastructure can rapidly deteriorate, jeopardizing the quality and continuity of services.
- Conflicts of interest can hinder coordination between the various actors (public and private), which can reduce the effectiveness of interventions.

•OPPORTUNITIES

- Training and mentoring programmes can be set up to strengthen the technical and managerial skills of start-ups.
 - It is possible to set up actions to attract additional funding and to vary the sources of financing for the maintenance and expansion of water infrastructure.
 - The incorporation of new technologies can optimize the efficiency of water networks and reduce operational expenses.
- Deployment of policies that support increased funding and fair pricing models.
- Promoting more flexible and tailored policies can help to overcome regulatory challenges and encourage wider participation of private actors and youth enterprises.

Lessons Learned

The analysis of the Rwanda model revealed several lessons, namely:

- As far as **the institutional component** is concerned, the model in Rwanda is characterized by an **integrated and collaborative approach**, involving various actors such as the government, WASAC, private operators, youth companies and local communities
- **Awareness and training** : To provide awareness and training opportunities for all actors in the supply of drinking water in Rwanda
- **Access to finance**: Development partners need to provide more financial resources to institutions responsible for rural drinking water supply in Rwanda

- **Networking and advocacy:** Establishing networks for the defence of the rights of users, communes can be advantageous, by providing a platform for the sharing of knowledge and experiences in Rwanda on the provision of drinking water in rural areas.
- **At the level of skills:** The criterion for selecting qualified operators is competence, which allows them to operate water services in compliance with the quality standards established by the decrees that detail the terms of granting licenses and quality standards.
- **At the level of the technological option:** The technology offers the possibility of setting up gravity and pumping systems adapted to local conditions
- **Community participation:** plays an active role in the planning, implementation and management of water projects, which strengthens their commitment and ensures their implementation

CONCLUSION

The Rwandan model is distinguished by a collaborative and integrative approach, involving different actors such as the government, WASAC, private operators, youth enterprises and local communities. With a strong institutional and regulatory framework, this model aims to ensure the safety and reliability of drinking water distribution. However, it faces obstacles such as the lack of funding for infrastructure maintenance

In short, the model has the objective: to provide sustainable and equitable access to drinking water for all rural communities. With adequate investment, rigorous management, and continuous adaptation to local needs, these models have the potential to become examples for other countries to follow in search of effective solutions for rural drinking water supply

In summary, the goal of the model is to ensure sustainable and equitable access to safe drinking water for all rural communities. By investing enough, managing rigorously and constantly adapting to local needs, these models could become benchmarks for other countries seeking effective solutions for rural drinking water supply.

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LEARNING PARTNERS



PROJECT DETAILS

The Conrad N. Hilton Foundation has given its support to the African Water and Sanitation Association (AAEA) to set up the EMPOWERWASH-AFRICA I program for a period of one year from August 2023 to October 2024. The objective of this programme is to improve water, hygiene and sanitation (WASH) systems in rural communes, focusing on 30 rural communes in six countries: Burkina Faso, Cameroon, Ethiopia, Ghana, Malawi and Uganda.

DISCLAIMER

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