Nyahururu Water and Sanitation Company Ltd.

Five-Year Financial Sustainability Action Plan: Booklet

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WaterFund
Financing the Water Sector

Table of Contents

4 Introduction
5 Questionnaire Findings
8 Objectives
10 Financial Sustainability Action Plans
16 WASREB Progress Indicators
19 References
20 Thank You

• Introduction •

This booklet was designed as supporting material for the five-year financial sustainability action plan poster. It aims to provide more details on the key findings and actions as well as support the progress monitoring. This booklet includes the explanations for the recommended action steps and a table for tracking the progress towards reaching the objectives. It also provides findings from the customer questionnaire and identification of the business model. The financial sustainability action plan was developed during workshops in February 2020. The purpose of this booklet is to help track the progress towards the utility's targets and is intended to be used as a workbook to be filled in with further details such as people responsible for actions, resources allocated to the activities and timelines and completion dates. As this booklet is intended to be utilized by the utility, it focuses on the findings and actions and does not explain the methods. More information on the methods and project implementations can be found in the General Recommendations – booklet provided to the Water Sector Trust Fund.

• Questionnaire Findings •

The sample size for the questionnaire was 10% of the utility's customer base. A total of 15 customers filled in the questionnaire. From all the questionnaire respondents 59% were male and 69% were over the age of 35, while 63% were unemployed (figures 1, 3 & 5). The average household size was 7 residents per household.

13.3% of customers feel like the water supply isn't enough for their needs.

7.1% of households treat their water at home by boiling and filtering the water.

Customers felt very well informed by the utility and were very satisfied with water quality and customer service (figures 2 & 4). The customers stated that they would be willing to pay more for improved water quality.

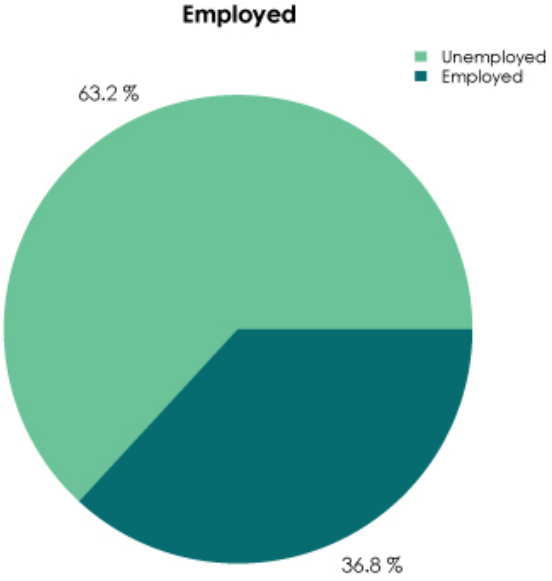


Figure 1. Employment of questionnaire respondents

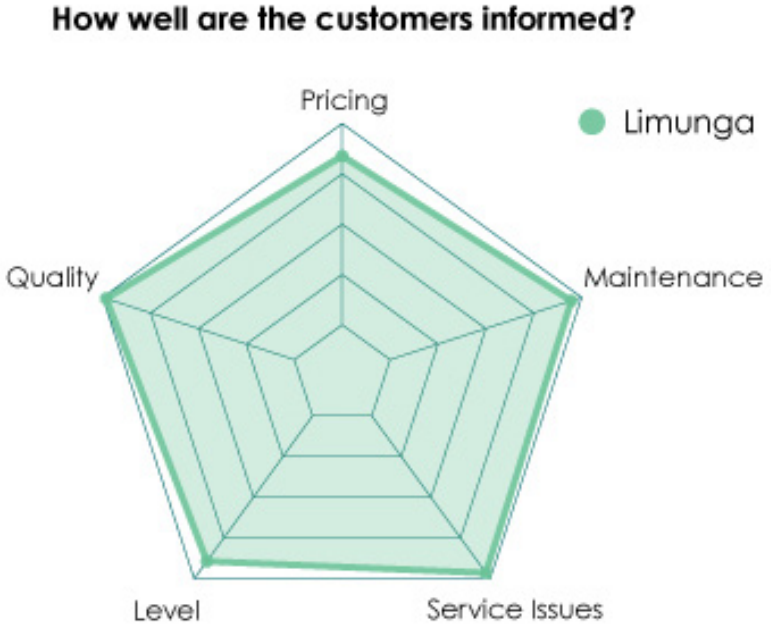


Figure 2. Spider web figure on how well the customers feel like they are informed on pricing, maintenance, service issues, water level and water quality.

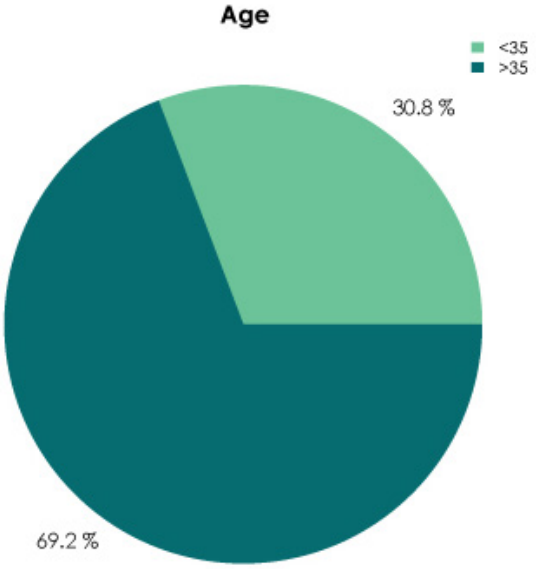


Figure 3. Age of questionnaire respondents

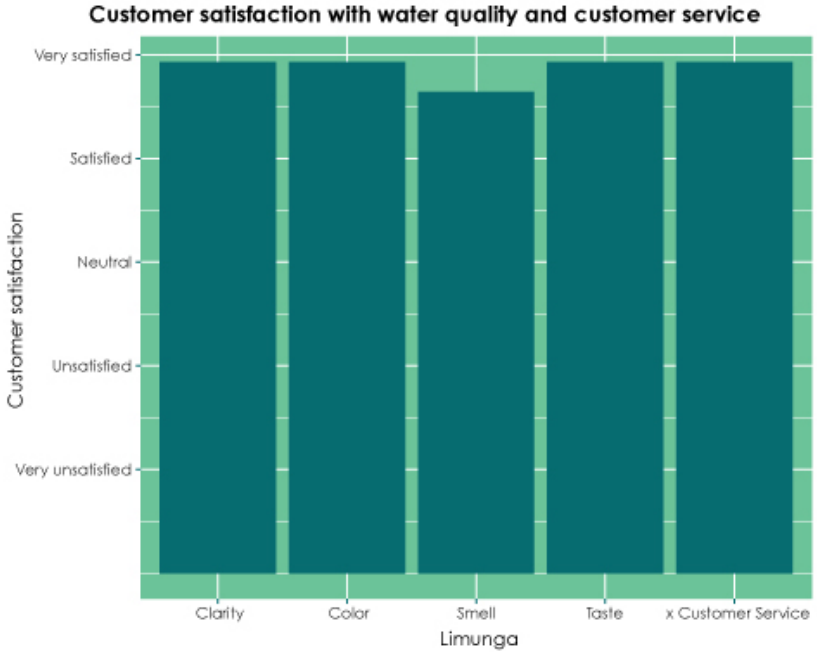


Figure 4. Customers' average satisfaction with the clarity, color, smell and taste of water as well as their satisfaction with customer service

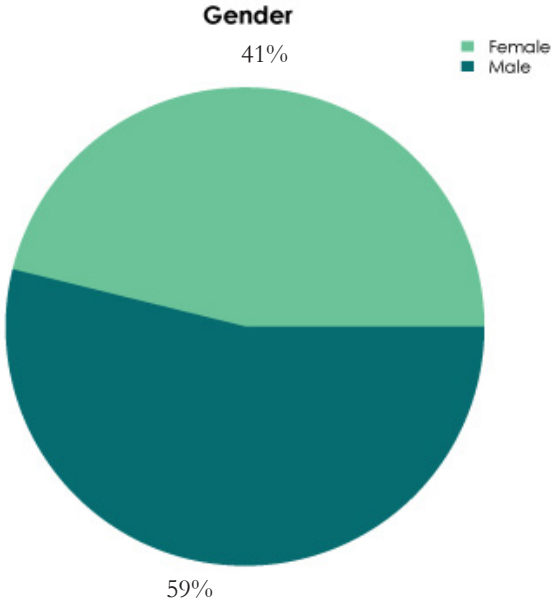


Figure 5. Gender of questionnaire respondents

Objectives

The key objectives for the Nyahururu Water and Sanitation Company Ltd. were established based on the workshops and discussions on the 20.2.2020 and the questionnaire findings. They describe the main areas of focus for the utility that are presented in the Financial Sustainability Action Plans.

- **Establish and minimize the amount of NRW:** High NRW level affects the financial sustainability of a water utility, as it makes it harder to meet existing demand and poses a risk to the water security (WASREB 2019, 12-13). Establishing and reducing NRW can help to increase water supply, cut operating costs and thus, lead to improved service delivery and customer satisfaction (WASREB 2019, 13).

- **Human resources:** By having management training and technical O&M training, the utility can improve their functionality (Caritas Switzerland 2018). Thus, we recommend having regular training on management, technical skills and financial skills to improve the operations, and also increasing communication between committees to ensure that all working in the utility are working towards same goals and targets.

- **Sensitization:** Based on our findings, we recommend using multiple techniques for sensitizing customers about the importance of paying, hygienene practices and the need for safeguarding the lines. According to our findings, by sensitizing the customers, the utility can increase its reliability, customer satisfaction, and financial stability.

- **Expanding services:** According to our findings, the utility has potential of expanding services to new areas and customers. We recommend looking into these possibilities when the utility has the financial resources needed available, and has ensured that the water source is not endangered due to the expansions.

- **Increasing resilience:** According to our findings, increasing financial and technical resilience is important so the utility is able to continue the operations even when minor issues occur. Our findings indicate that this can increase the reliability of the water supply, and thus, can help to increase customer satisfaction and revenue collection.

- **Business model mapping:** Identifying and planning the most suitable business model based on the *WASREB Guidelines for Provision of Water and Sanitation Services in the Rural and Underserved areas* is important for establishing a clear plan on the management structure and business progress plan towards becoming licensed. These steps include collaboration with different stakeholders such as County Government, regulated Water Service Providers and WASREB as well as public participation (WASREB, 2019). It is also useful to identify, whether private sector services could be utilized for more efficient operations and maintenance (WSTF, 2017). Monitoring the utility's performance with the WASREB progress indicators can provide useful information on the utility's operations and is also one of the licensing requirements (WASREB, 2019).

Financial Sustainability Action Plan

Year 1: Focus on NRW to Increase Water Supply

Deadline (Date)	Activity	Sub-Activity	Related Objective	Success Indicators	Person Responsible	Resources	Completed (Date)
	Improve the NRW management	Investing in NRW management (for leaks in pipes, illegal connections) and the optimal way to improve	Establish and minimize the amount of NRW	Shorter response times to fix pipe leaks & bursts			
		Rehabilitating pipe network	Establish and minimize the amount of NRW	Reduced NRW and increase water supply			
	Capacity building and training	Organize annual staff training meetings for technical knowledge	Human resources	Increased technical knowledge within the operational staff			
	Identifying the business model and delivery option according to the WASREB Guidelines	Situational Analysis by County Government to identify a suitable business model	Business model mapping	Business model identified with County Government			
		Selection of Delivery Option	Business model mapping	Delivery option selected			
		Public/Stakeholder Engagement	Business model mapping	Stakeholders engagement procedures finalized			

Year 2: Increasing Supply and Awareness

Deadline (Date)	Activity	Sub-Activity	Related Objective	Success Indicators	Person Responsible	Resources	Completed (Date)
	Explore additional sources of water	Investigate and study additional water sources in the area	Expanding services	Alternative sources explored for the possibility to increase water supply			
	Creating public awareness and sensitization	Hold regular public meetings	Sensitization	Public awareness of good hygiene practices and the need to safeguard the lines created			
	Expanding the service provision area	Plan for new pipe extensions to reach out to more customers	Expanding services	New pipe extensions planned if needed			
	Seek for funds for a new pipe extension	Writing proposals to partners with supporting documents	Expanding services	Funding applications sent with supporting documentation			
	Increase production	Investigate and discuss the potential linkage with the old community water supply and the new system with pragmatism	Expanding services	The potential linkage between old community water supply and new system investigated			
	Operationalization of the delivery option	Procurement and contracting of private operators if needed	Business model mapping	Private operators engaged if necessary			
	Revising Financial Sustainability Action Plan	Revising Financial Sustainability Action Plan for the 3rd- 5th years	Planning	Action plan revised			

Year 3: Project Efficiency

Deadline (Date)	Activity	Sub-Activity	Related Objective	Success Indicators	Person Responsible	Resources	Completed (Date)
	Consider alternative energy sources	Investigate if changing to solar power could lower electricity costs and increase environmental sustainability	Increasing resilience	Ensuring reliable water supply and a plan if solar/other renewable energy sources are possible to be utilized			
	Strengthen the business case	Look into the pumping regimes and related costs for the water utility	Planning	Ensuring that NyahuWaSCo does not start incurring losses by connecting water to Limunga			
	Review water tariff	Consider potential changes to water tariff to increase revenue	Business model mapping	Water tariff reconsidered			

Year 4: Expanding Service Provision

Deadline (Date)	Activity	Sub-Activity	Related Objective	Success Indicators	Person Responsible	Resources	Completed (Date)
	Increasing the number of connections	Utility can give subsidies to consumers in order to increase the number of connections	Expanding services	More connections with the help of subsidies			
	Planning Small Scale Service Provider (SSSP) take-over processes	If identified as part of the delivery option, plan take-over processes of SSSPs	Business model mapping	Plan for SSSP take-overs established			

Year 5: Improving Water Quality

Deadline (Date)	Activity	Sub-Activity	Related Objective	Success Indicators	Person Responsible	Resources	Completed (Date)
	Construction of a conventional treatment plant	Plan and construct a conventional water treatment plant	Water quality	Improved water quality			
	Creating a Financial Sustainability Action Plan	Make a financial sustainability action plan for the next five years	Planning	New financial sustainability action plan created with measurable and actionable steps			

• WASREB Progress Indicators •

This is a template for monitoring and evaluating the utility's progress through measurable indicators. It is recommended, that the utility strives to measure their progress through these indicators, because this information is important for the utility to become licensed. More information on calculating these indicator values are provided by WASREB and WSTF and Majidata website (2018). The progress indicators are the national indicators set by WASREB (2018) and they are defined followingly:

- **Operation and Maintenance (O+M)** Cost Coverage is the extent to which a utility is able to meet its O+M costs from internally generated funds. O+M Cost Coverage is critical to the performance of a utility as it is a first step towards full cost coverage. It ensures long term financial sustainability.

- **Drink Water Quality (DWQ)** measures the potability of the water supplied by a utility. It is a critical performance indicator since it has a direct impact on the health of consumers. This is a weighted composite indicator measuring compliance with residual chlorine standards (40%) and bacteriological standards (60%).

- **Revenue Collection Efficiency** refers to the total amount of money collected by a utility expressed as a percentage of the total amount billed over the same period. It has been used to measure the effectiveness of the revenue management system in a utility.

- **Water Coverage** refers to the number of people served with drinking water expressed as a percentage of the total population within the service area of a utility. It is critical in tracking the progressive realization of the right to water with regard to the accessibility component in the normative content of the right to water.

- **Pro-poor assessment.** WASREB has developed a tool for assessment of utility performance with respect to services in Low Income Areas (LIAs). The tool not only monitors the level of pro-poor services but also gives guidance on improving services in these areas. The tool consists of four sub-indicators namely: i) Service coverage in LIAs, ii) Service levels in LIAs, iii) Strategy and organisation with respect to service provision in LIAs, iv) Compliance to standards for water kiosks.

- **Water Governance Assessment** refers to systems that are involved in decision-making about water management and water service delivery. WASREB has developed a governance indicator tool with emphasis on the following six sub-indicators: i) Utility Oversight and Supervision, ii) Information and Control Systems, iii) Financial Management, iv) Service Standards, v) Human Resources, vi) User Consultation

- **Personnel Expenditures** as a percentage of O+M Costs measures whether personnel related expenses are proportionate to overall O+M costs as defined by the respective sector benchmarks.

- **Metering Ratio** is the number of connections with functional meters expressed as a percentage of the total number of active water connections. It is an empirical way for a utility to ensure that consumers only pay for what they consume. It is expected that the functionality of these meters is occasionally ascertained by the utility by sampling them for calibration or replacing the aged ones through adoption of a metering policy.

- **Non-Revenue Water** is the difference between the amount of water put into the distribution system and the amount of water billed as authorized consumption. It comprises of both commercial (apparent) losses and physical (real) losses. It is an operational indicator contributing to the sustainability question of the utilities and therefore is a significant measure that facilitates evaluation of the efficiency of operations by the utilities.

- **Hours of Supply** refers to the average number of hours per day that a utility provides water to its customers. It measures the continuity of services of a utility and thus availability of water to the customer. It is an important indicator on quality of service and shows the extent to which the utility is making progress towards the fulfilment of the human right to water and sanitation in terms of availability.

- **Staff Productivity** refers to the number of staff in employment for every 1,000 connections (total registered water and where applicable, sewer connections). It measures the efficiency in staff utilization. Staff productivity is affected by factors such as size of a utility, the nature of human settlement (distances between connections and number of towns served), skills mix, and the extent of outsourcing for services and whether a utility provides water alone or water and sewerage services together, among others.

Indicator	January	February	March	April	May	June	July	August	September	October	November	December
Operation & Maintenance Cost (%)												
Drinking Water Quality												
Revenue Collection Efficiency												
Water Coverage												
Pro-poor Assessment												
Governance Assessment												
Personnel Expenditure												
Meter Ratio												
Non-Revenue Water												
Hours of Supply												
Staff Productivity												

• References •

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Hamjambo!

We would like to thank the Nyahururu Water and Sanitation Company Ltd. for warmly welcoming us. Although our time together was short, we learned a lot from NyahuWaSCo's successes during our meeting, and that has helped us get a better perspective on rural water utilities. Although there are still challenges to face in Limunga, we believe those responsible for their operations are highly motivated and have proven themselves capable with the success of NyahuWaSCo. We hope this 5-year action plan serves you well, and we wish the entire community the best of luck in achieving their goals. Asante sana!

SuWaMa 2020
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