SHARING LOCAL ACTION

Local Solutions Series

Kigali - Kumasi: a tale of two cities

Innovating water and sanitation

4th April, 12:00 noon GMT

Webinar: register HERE

KIGALI | LOCAL ACTION

IMPROVING SANITATION AND WATER QUALITY

The City of Kigali is working towards improving living conditions of two newly upgraded informal neighborhoods of Mpazi and Busanza. To do this, we are introducing rainwater harvesting systems as an alternative and affordable water source and establishing smart waste collection solutions

Kigali Global Mayors Challenge

6.4 By 2030, substantially increase **water-use efficiency** across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

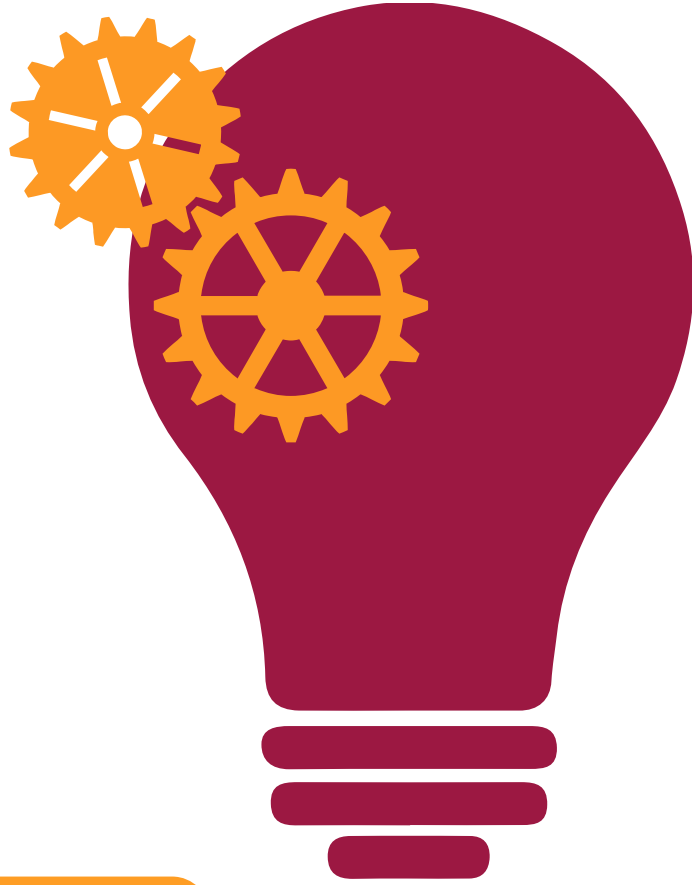
Local Action:

By 2025, we will **reduce household water expenditure** for residents in Mpazi and Busanza

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and **municipal and other waste management**

By 2025, we will install smart waste stations and sensors for the **efficient and real-time collection by waste collectors** in both neighbourhoods

THE PROBLEM



- Kigali is one of **16** cities in Rwanda with a population of 1.7 million - it is a rapidly growing city
- Neighborhoods like Mpazi and Busanza are undergoing rapid development This has led to **disproportionately high costs of maintaining new utilities** and led to unaffordable costs for water and solid waste management for resettled residents
- Water demand has doubled in Kigali and more than doubled for semi-urban settlements

Reports by the Rwanda Housing Authority (RHA) indicate that **48,000 households** with occupants comprised mainly low-income earners, do not have the resources for accessing & affording the municipal water supply

THE SOLUTIONS

Mpazi settlement: 94 households

Busanza settlement: 1,311 households

Action ONE:

Constructing rainwater harvesting reservoirs and distributing collected water into dwelling units. This will introduce an additional tap that households can use for non-drinking and non-eating purposes to reduce their expenditure on water

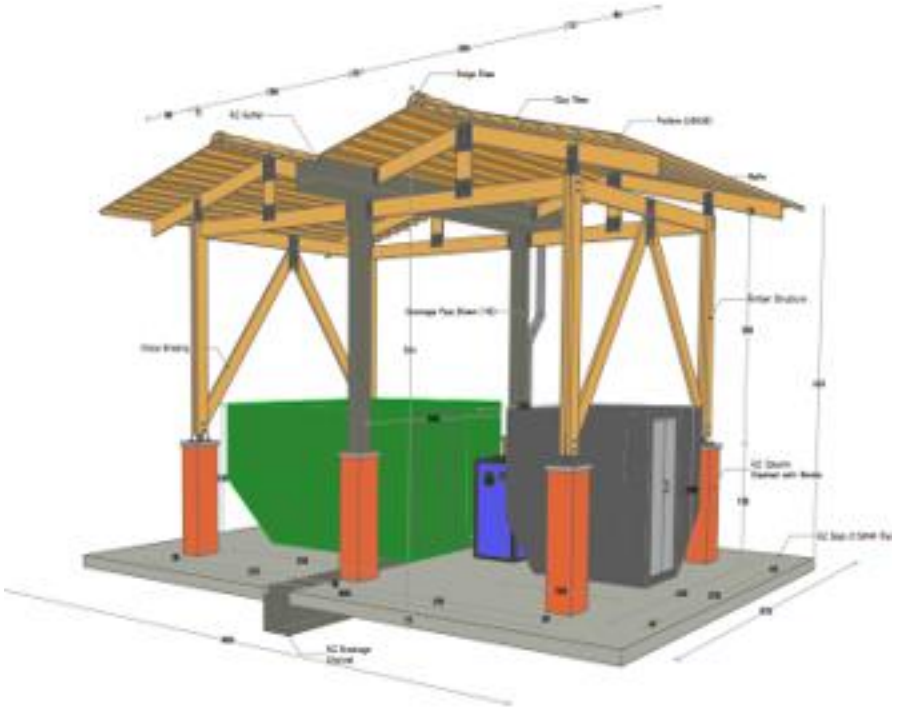
Action TWO:

Introducing and building smart waste collection stations in the newly upgraded neighborhoods to improve waste segregation by households and solid waste management

Partners below will provide specific skills and expertise, which together will contribute to effective project implementation:

PARTNER	FUNCTION
Ministry of ICT and Innovation	Support in IT provision for waste collection stations
Rwanda Housing Authority	Responsible and collaboration for upgrading informal settlements
Rwanda Water Body	Guide on rainwater harvesting techniques and sustenance

Designs for the reservoirs



Smart waste collection bins

CHALLENGES AHEAD

1

High market price inflation, increasing the prices of inputs, and affecting the original budget

Mitigation Strategy:
Balancing the budget will be managed by revising the procurement plan where some services and activities will be merged to be provided by one company instead of each being procured independently, removing some previously planned services/activities

2

The site of Mpazi does not have the required space to implement the construction of smart waste stations and rainwater harvesting construction works

Mitigation Strategy:
Ensure that space is reserved in the planning and design of Phase II rehousing project.it's currently being designed

NEXT STEPS

1. Procurement

Finalizing the hiring of consultants, such as:
- Consultant for design studies and supervision
- Contractor for smart waste construction

2. Conducting studies

Baseline studies to be conducted, such as:
- Socio-economic needs assessment
- Topographical and geotechnical study
- Detailed project engineering design

3. Civil Work

Actual construction of:
- Smart waste stations
- Rainwater harvesting system

4. Knowledge transfer

- City-to-city exchange
- Student training
- Stakeholder and beneficiary workshops

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THANK YOU!

David Musonera, Project Supervisor,

Kigali Global Mayors Challenge project

david.musonera@undp.org