

City-Wide Inclusive Sanitation Service Assessment and Planning tool (CWIS-SAP)

Summary:

The Citywide Inclusive Sanitation Services Assessment and Planning (CWIS SAP) tool is a Web Based tool that helps decision makers compare the outcomes of different sanitation interventions or investments. The tool analyses and illustrates how each proposed intervention is likely to affect the equity, financial sustainability, and safety of sanitation services in each urban area. To deliver safe and equitable sanitation services using limited resources, cities need information about the types of interventions that will have the highest impact while ensuring low-income areas are not left behind avoid negatively impacting service providers' financial viability and increase the amount of waste that will be disposed of safely (Bill and Melinda Gates Foundation, 2019).

Objectives:

- To help decision makers compare the outcomes of different sanitation interventions and investments.
- To assess business plans and tariff proposals to ensure that planned resource allocation is in line with policy objectives.
- To mobilize resources in support of inclusive sanitation interventions.
- To analyse and identify interventions that cost-effectively promote universal access to safely managed sanitation.

Key Stakeholders:

- Eastern and Southern Africa Water
- Athena Infonomics
- Sanitation Regulators Association (ESAWAS)
- Aguaconsult
- Bill & Melinda Gates Foundation
- Sanitation service providers
- Ministries responsible for sanitation Regulators
- City governments
- Development finance institutions
- Consultants
- Researchers

Implementation strategy:

- The tool is built around four key stages: input, financial models, aggregation, and results.
- The tool starts with a mapping of current city-level sanitation coverage and the costs to provide services, revenues and safety levels associated with each of the sanitation systems in use.
- It then allows the user to model up to three scenarios that consider changes to hardware, alternative revenue and service delivery models, or any mix of those interventions and compare how these will affect key city level outcomes.
- The tool presents the results of the calculations on the CWIS SAP dashboard. The dashboard provides users with a means of visualizing how each scenario affects the equity, safety and sustainability of sanitation services in the modelled urban area (Bill and Melinda Gates Foundation, 2019).
- The CWIS SAP project team has collaborated with national regulators and sanitation authorities to develop the tool and test it in Lusaka (Zambia), Nakuru (Kenya), and Khulna (Bangladesh).
- A second round of testing is ongoing in Dar es Salaam (Tanzania), Kampala (Uganda), and Trichy (India).

Resource Utilization:

The CWIS SAP project is implemented by Athena Infonomics, the Eastern and Southern Africa Water and Sanitation Regulators Association (ESAWAS), and Aguaconsult with support from the Bill & Melinda Gates Foundation (Bill and Melinda Gates Foundation, 2020).

Impact/Outcomes:

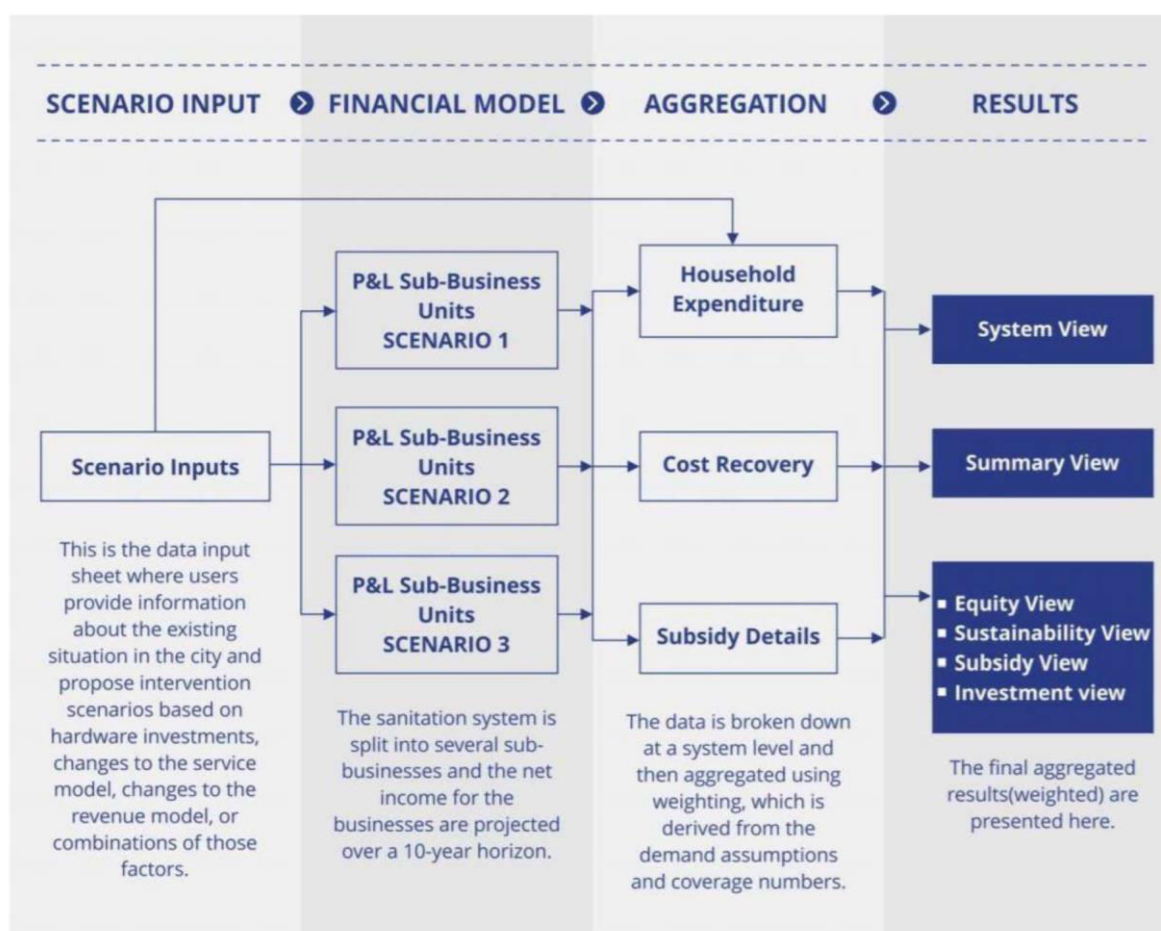
- In Lusaka, Zambia, the tool has helped the Lusaka Water Supply and Sanitation Company re-evaluate large-scale investments that were projected to generate losses for the utility while extending access to a relatively small share of the population.
- The utility and regulatory agency are now exploring alternative models that place a greater emphasis on safe and affordable onsite services delivered through a combination of regulation, subsidies, and private sector engagement.

Challenges/ Lessons Learnt:

- The tool seeks to help city authorities design better-informed sanitation interventions.
- The tool allows for comparison of multiple interventions to aid service providers' decisions about what to prioritize, considering both public needs and the service provider's financial sustainability
- The tool analyzes and illustrates the outcomes of possible interventions—including investments, but also changes to pricing and regulation—and provides decision-makers with a means of systematically evaluating their options and identifying those that cost-effectively promote universal access to safely managed sanitation.

Replicability & Sustainability:

Experiences from the six early adopter cities—which cover a range of planning needs, data ecosystems, and structures for sanitation service delivery—are being used to guide plans to scale up use of the tool and support its institutionalization in national decision-making processes. National partners are expected to facilitate replication with new cities and utilities, in their countries and at the regional level.



Source: (Bill and Melinda Gates Foundation, 2019)

Fact Sheet:

Thematic area	City wide inclusive sanitation services
First-year of the program	2019
Responsible institution	Athena Infonomics, the Eastern and Southern Africa Water and Sanitation Regulators Association (ESAWAS), and Aguaconsult
Target audience	Sanitation service providers and Regulators
Coverage	Lusaka (Zambia), Nakuru (Kenya), Khulna (Bangladesh), Dar es Salaam (Tanzania), Kampala (Uganda), and Trichy (India).