

Integrated Planning Framework for water, sanitation and solid waste management



The Integrated Planning Framework (IPF) for **water**, **sanitation** and **solid waste management** aims to guide small towns through a structured, step-by-step process that transforms fragmented, sector-specific service delivery into coordinated, financially viable, integrated planning.

The IPF aims to align actors, manage **interlinkages** across basic services, and create a practical pathway from analysis to sustained, locally owned improvements in public health, environmental quality, and service performance by diagnosing the enabling environment, building a robust spatial and socio-economic baseline, engaging stakeholders in co-developing a costed strategic roadmap, and preparing bankable, well-coordinated project proposals.



Phase 3: Community roadmapping workshop in Kakoge Town Council, March 2025

The IPF has five distinct planning phases:

- 1 Assessment of the Enabling Environment
- 2 Integrated Baseline Assessment (IBA)
- 3 Roadmapping & Community-Based Solutioneering
- 4 Modular/Coordinated Planning
- 5 Implementation and Monitoring, Evaluation and Learning (MEL)

Let's learn more about each of the five phases.

1 Assessment of the Enabling Environment

The first phase uses a mixed-methods approach to analyse the context for integrated planning, mapping stakeholders and their interests and influence. The governance framework is analysed through desk reviews and interviews, with a focus on policies, legislation and institutional relationships. Financial flow reviews trace resources across sectors and levels, while interviews aim to identify and clarify coordination issues. A capacity audit assesses the readiness of local institutions for integrated planning. This phase produces a stakeholder map and a governance summary and establishes a multi-sectoral task force for subsequent planning.

This is a working reflection of an ongoing process.

2

Integrated Baseline Assessment (IBA)

This phase establishes a data-driven evidence base through mixed methods. Data collection integrates GIS mapping, interviews, household surveys and the sampling of water, sanitation and solid waste management infrastructure and practices. This information is used to locate and assess existing service levels.

The spatial data is combined with demographic and socio-economic datasets to generate thematic maps. Through spatial analysis, the assessment identifies critical interlinkages e.g. between sanitation and solid waste. A demand-supply gap analysis is performed by comparing current service delivery with population needs and evaluating formal and informal solid waste collection service providers. Key outputs include georeferenced baseline maps and a prioritised list of service gaps with associated challenges.

3

Roadmapping & Community-Based Solutioneering

Using a participatory approach, findings are translated into a strategic action plan. Stakeholders analyse and rank identified challenges to create a shortlist of priority interventions. Solution options for each priority are screened against feasibility criteria (affordability, suitability, acceptability, capacity needs, supply chains). Solution profiles with technology choices and resource estimates are developed. The output is a costed strategic roadmap defining phased interventions, responsibilities, timelines, and financing strategies for capital and operational expenditures, ensuring endorsement.

4

Modular/Coordinated Planning

Phase 4 focuses on engineering design and project preparation, translating strategies into bankable proposals. For critical interventions, specific technologies and management structures undergo detailed technical and site-specific feasibility studies, including topographic assessments. A key component is managing interlinkages through coordination and establishing formal collaboration mechanisms to synchronise infrastructure planning across sectors, thereby minimising conflicts and maximising benefits. The final output are detailed project proposals with resource estimates, which are tailored to specific funding sources, such as district budgets, national programmes or donor funding.

5

Implementation and Monitoring, Evaluation and Learning (MEL)

Using a participatory approach, findings are translated into a strategic action plan.

This execution phase employs project management processes to implement the coordinated interventions outlined in the plans. A Monitoring, Evaluation, and Learning (MEL) system is established with sector-specific service-level indicators featuring interlinkage indicators, to measure outcomes. A mechanism for data collection, performance reviews, and audits is institutionalised. The phase closes through a final workshop, where challenges and successes are documented. These lessons update the strategic roadmap and procedures, ensuring the framework evolves based on evidence.

The proposed IPF provides a sequential pathway for small towns to transition from fragmented management to integrated planning for water, sanitation, and solid waste services. Through assessment of the enabling environment, spatial evidence, roadmap development, and the preparation of bankable projects, the town can address urban service challenges holistically. The framework builds local ownership and strategic planning capacity beyond external support.



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

WABES
integrate

Authors: Ronald Sakaya¹, Christoph Lüthi², Abishek S. Narayan²

¹ Makerere University, Uganda

² Eawag-Sandec, Switzerland

Publisher: Eawag-Sandec: Department of Sanitation, Water and Solid Waste for Development, Swiss Federal Institute of Aquatic Science and Technology.

License: CC BY 4.0. 

Funding: This activity and development of this learning brief was part of the WABES (Water, Behavior Change, and Environmental Sanitation) program, with support from the Swiss Agency for Development and Cooperation (SDC).

Learn more: www.sandec.ch | info@sandec.ch