

How to make urban and sanitation planning work?

Lessons learnt from West Africa, South East Asia, Madagascar, and Haiti

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1. Introduction

In preparation for the 2015 BORDA Symposium, BORDA had asked GRET to address the following questions:

- ▶ What are the main challenges to make sanitation programmes at the municipal level successful?
- ▶ What bottlenecks and mistakes in international cooperation should be avoided?
- ▶ What is needed from national and local players and the international community to ensure integrated management of used water and sanitation (especially for the West African region)?

This presentation paper will give some suggestions to answer these questions, based on the experience of field projects in Africa, Southeast Asia, and Haiti. Starting from GRET's strategic frame for action in water and sanitation, the presentation will first focus on strengthening local actors in the sanitation sector, before investigating the three axes that are necessary to implement an integrated approach. Finally, some mistakes that should be avoided and some advice to ensure integrated management of used water and sanitation will be presented.

Figure 1 (left)
Sanitation mapping
in Madagascar



Figure 2 (right)
Faecal sludge
treatment plant
operated by a local
municipality



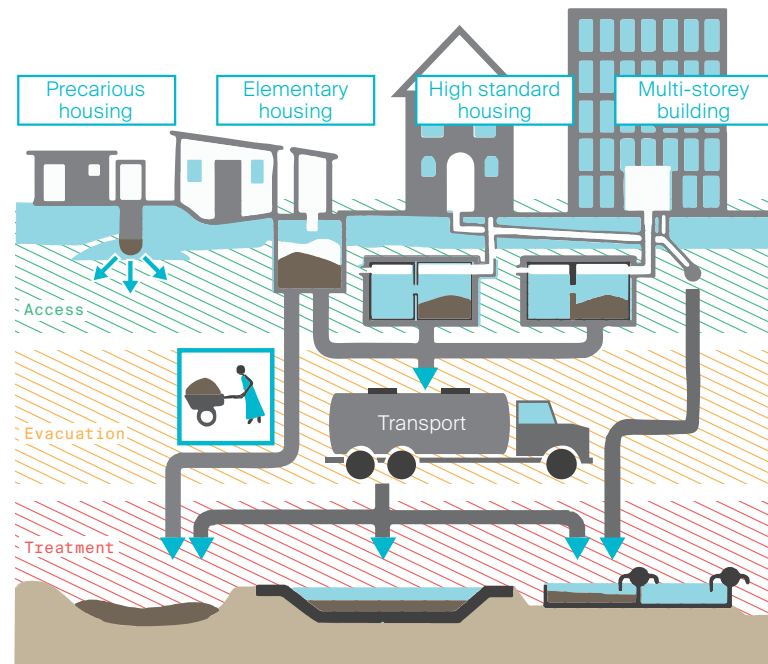


Figure 3
Complete sanitation
chain (Projection
Network)

2. Strengthening the sanitation sector actors

Capacity building of the actors in the sanitation sector is one of the main objectives of GRET's projects. This ensures that sanitation services will be correctly delivered to its users over the long-term. GRET's capacity building takes place through the following three types of actions:

1. **Training:** Theoretical and practical trainings are delivered so that local actors can learn their roles and responsibilities, and how to put them into practice when providing sanitation services.
2. **"Learning by doing" over the long-term:** Through implementing field projects, local actors actually experience what they have learnt during the trainings, ranging from local diagnostics to service delivery and follow up.
3. **Technical assistance:** GRET builds long-term partnerships with local sanitation actors and assist, train and accompany them over the years to be fully operational in providing sanitation services, which are often something new for these actors.

Two actors are especially targeted by GRET for capacity building: sanitation service owners and sanitation service providers.

Service owners (generally municipalities or national utilities) are supported in their responsibilities, including sanitation planning, service definition, service implementation, control of sanitation services, social role, etc.

For example, in Antananarivo, Madagascar, local sanitation authorities have been trained on how to conduct sanitation mapping and how to control the faecal sludge management services that are delivered by local operators.

In Diawara, Senegal, the municipality conducted local water and sanitation planning which was implemented with GRET's assistance over 10 years, including: water supply system (2008–2012), solid waste collection and treatment (2012–2015), rainwater management (2014–2016), and wastewater management (2014 to present).

Local service providers are professionalised on technical solutions, management schemes, communications, service user relations, financial management, etc. For example, Sanimart (toilets stores) managers in Mauritania have been trained on the production of moulded toilets, on small business administration, and on marketing communications to sell their products.

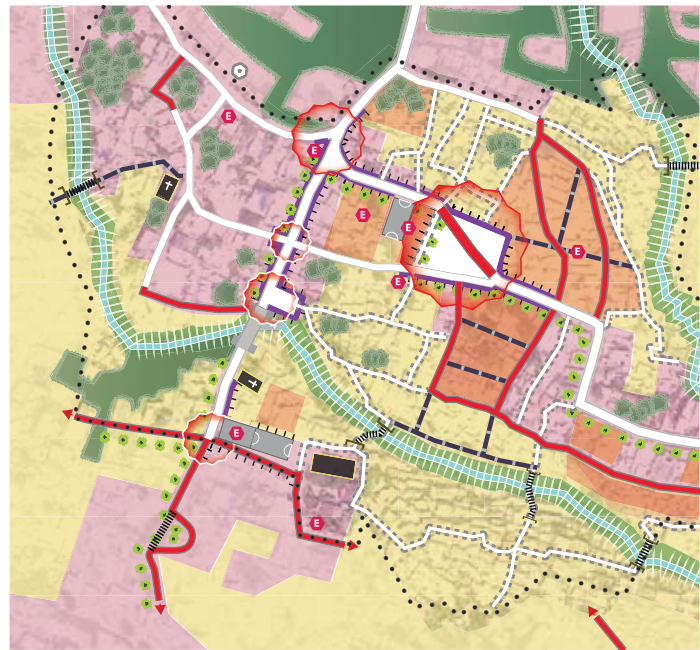
3. Three axes for implementing an integrated approach

An integrated approach must be used for a sanitation service to operate in an effective manner over the long-term. All sanitation projects and services should address the following three axes for an integrated approach:

1. Take into account all segments of the sanitation chain, including access to sanitation, waste water collection and treatment. Sanitation is not only restricted to toilets, as shown in Figure 2.
2. Propose actions based on in-depth diagnostics and local sanitation planning.

To adapt to the local context, a sanitation service must be defined and designed based on a diagnostic of the real field situation, such as existing sanitation solutions and actors, socioeconomic aspects, urban and physical constraints, etc. This diagnostic is used to define a realistic local sanitation plan to guide interventions over a period of five to fifteen years. Ideally, sanitation planning should be integrated into a local urban master plan to take into account interactions with other services that can interfere with sanitation (e.g., solid waste management, water systems, stormwater management). As well, sanitation can be relevant with other urban actions.

3. Take into account all aspects of sanitation:
 - ▷ Stakeholders: Management systems must be clearly defined, and local actors must be supported in their roles and responsibilities.
 - ▷ Communication: A strategy must be defined to correctly implement awareness raising campaigns and marketing communications.
 - ▷ Technical: Adapted, affordable, and relevant solutions must be chosen and designed taking into account local constraints, and technical and financial capacities.
 - ▷ Financing: Financing schemes covering the operation and maintenance costs of sanitation services must be implemented, so that these services can be delivered over the long-term.



4. Bottlenecks and mistakes in international cooperation to avoid

Two main problems arise in international cooperation concerning the current funding of sanitation projects and services:

- ▶ Short-term funding cannot succeed in implementing a sustainable sanitation service. From the initial diagnostic to effective service delivery, many phases must be implemented (e.g., land tenure, environmental administrative procedures, validation from all stakeholders, appropriation, consultation with residents). Some of these phases are time-consuming and not compatible with the traditional three-year project funding approach used by most donors. For example, in Madagascar, the environmental procedures needed for authorisation to use a new faecal sludge treatment station take between 18 to 24 months. Under these conditions, a minimum five-year programme approach is needed. As a reminder, in France, it takes eight to twenty years between the day it is decided to build a new wastewater treatment plant and the day the plant starts being operational.

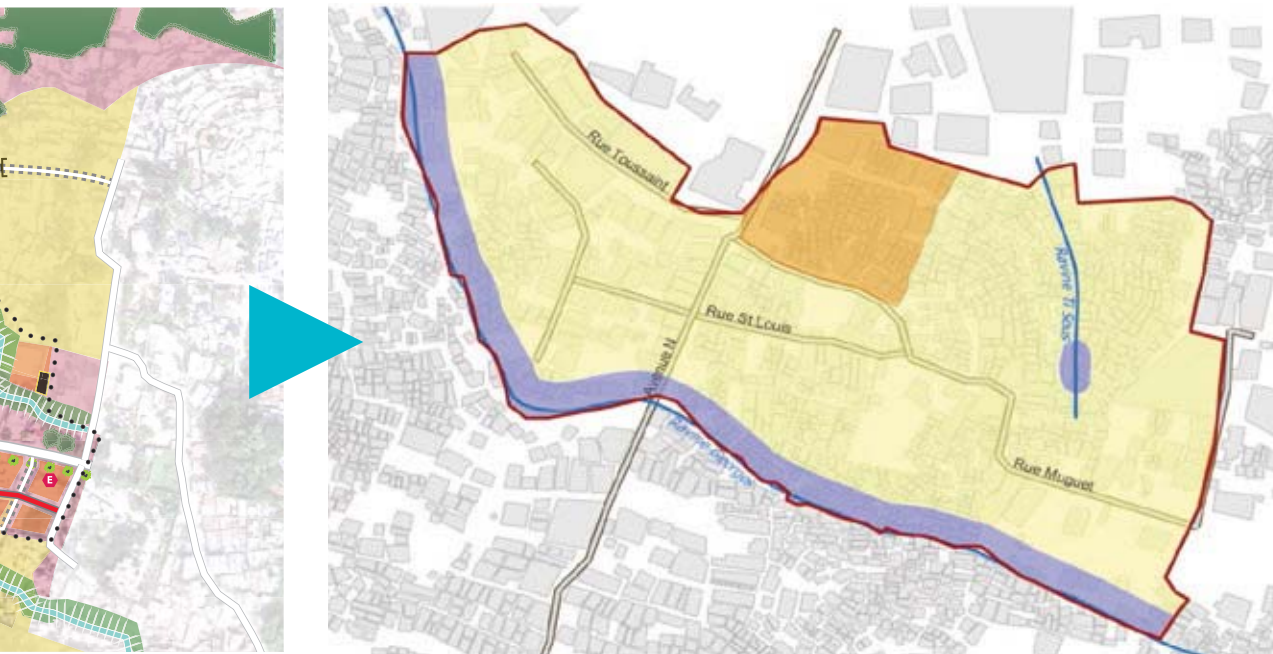


Figure 4
Urban master plan
and sanitation
mapping of the
Baillergeau district in
Port-au-Prince, Haiti

- ▶ Funding in the sanitation sector is still too focused on building infrastructure and not enough on human resources and soft activities (e.g., long-term capacity building). At the same time, innovative approaches for sanitation services are needed to deal with the current challenges and to reduce infrastructure costs and funding. For example, when innovating in a sanitation market-based approach in Mauritania, GRET succeeded in lowering the price of a toilet from €100 to €60, and lowered the subsidy needed from €94 to €24 per toilet. This approach first needed to invest in skilled human resources, but has now multiplied four times the impact of a given infrastructure subsidy fund.

5. Integrated management of used water and sanitation

First of all, as discussed earlier, sanitation actors in the international community should implement a vision taking into account the complete sanitation chain. A first step in this direction has been taken when going from the Millennium Development Goals, which focused on toilet building, to the Sustainable Development Goals, which will deal with collection, transport, and treatment of wastewater. Indicators and observations of

the complete sanitation chain must now be defined and implemented to help monitor progress.

Secondly, sanitation projects and programmes should also focus on small- and medium-sized cities, which are currently quite forgotten by sanitation actors. These cities do not have the means, nor the capacities, to deal with their own sanitation problems.

Finally, national and local players and the international community must be aware of the need for realistic and adapted sanitation planning and solutions. For example, on-site and decentralised sanitation solutions should be more systematically investigated, even in large cities. Sewerage systems are not “the ultimate sanitation solution” and they are usually far too expensive for locally available funds. Decentralised and modular sanitation services and solutions often provide far more adapted alternatives, and support a progressive approach that is more relevant with local finances (e.g., modular sludge treatment plants built in Antananarivo, Madagascar during the Miasa project, as shown in Figure 1).