Regulation for non-sewer sanitation in Africa

1 Purpose of this note

The initiative to involve the private sector began with the pilot program to structure the market for faecal sludge initiated in Senegal. Although this program was a success, some adjustments are currently needed. There has been significant progress in both the transport and management of stations, and many countries have undertaken reforms in this area.

The current practices are ‘copy & paste’ of the approaches used in Senegal in most countries with the same mistakes. This is the case in Niger, in Cameroon and will be the case in Benin. In all these countries (including Senegal) where the involvement of the private sector is in place, the viability of the systems remains very problematic and there is an urgent need to make the necessary corrections to achieve the expected results.

It is to this end that this note has been prepared. The objective is to improve methods by highlighting best practices. It follows benchmarking missions carried out in different countries with different approaches.

2 Why regulate sanitation services?

In recent years, there has been a growing involvement of private sector actors in the management of sanitation services in Africa. The main objective of this trend is to accelerate safe access for households. However, this dynamic must be accompanied by a well-balanced regulation that is an essential component of sanitation governance.

Regulation of sanitation services in its economic, social, environmental and public health dimensions is an essential function of governance. It ensures better outcomes in terms of affordability, consumer protection, service quality, public health and environmental protection. It also aims to ensure that all stakeholders fulfill their mandates and that standards, obligations and performance are met.

The achievement of the SDGs cannot be achieved without monitoring five (5) levers: financing, information management, capacity development, innovation and governance, which regulation helps to monitor.

3 Priority areas for regulation

3.1 Sanitation services tarification

Price regulation can be defined as the establishment and implementation of a set of specific rules for the definition of tariffs and prices, incentivizing operators to achieve optimal results in terms of prices adopted, quantities produced and quality standards offered.

It is considered one of the most important regulatory areas, and whether the services are described by public or private ownership and regardless of the regulatory model, the setting of tariffs is necessary and essential to ensure the sustainability of sanitation services.

Tariffs must be sufficient to cover the costs of providing the service.
3.2 Quality of Service

Quality of service is an essential element in the provision of on-site sanitation, especially for users. Service quality regulation is defined as the establishment and implementation of a set of specific rules to achieve a certain level of service according to certain characteristics such as technical requirements or customer responsiveness.

Quality of service parameters in the case of on-site sanitation regulation may include indicators such as response time to user requests, complaint handling time, cleanliness of the premises after a service at a user’s home.

**In the case of implementation, service quality parameters should be included in the service contract, with operators being rewarded or penalized according to their level of compliance.**

3.3 Competition regulation

Competition regulation is defined as the establishment and enforcement of a specific set of rules to prevent the abuse of a dominant position by one or more operators. **Competition is important in the provision of sanitation and sludge management services.**

The value chain for sanitation services can be fragmented, and different operators may work on on-site sanitation emptying, transport, treatment and disposal, or possible reuse of by-products.

It is important to ensure service quality and public health regulations when trying to establish competition in the market—for example, by avoiding a situation where service providers limit the equipment of sanitation workers to reduce costs.

3.4 Sanitation workers’ Protection

Sanitation worker protection regulation is defined as the establishment and implementation of a set of specific rules applicable to sanitation providers to ensure the protection of the health of sanitation workers (drivers, workers, technical staff).

Regulatory actors are required to verify through field visits all available mechanisms and assess the extent to which they are compliant.

However, regulatory actors can collect the opinions of sanitation workers through various consultation processes, review the results, and possibly modify regulatory policies.

3.5 Environmental Protection

Environmental regulation in sanitation is defined as the establishment and implementation of a set of specific rules applicable throughout the value chain to protect the environment.

The regulatory authority regulates the quantity and quality standards of discharges and the treatment/use/disposal of wastewater, effluent, and fecal sludge to prevent the release of highly polluting substances into the environment.

**However, in most African countries, these standards are not in effect, as sewage sludge plants are often under-capacity.**
3.6 Public Health Regulation

There is a strong interconnection between public health, service quality regulation and the environment in sanitation regulation.

Public health regulation for safe management of the sanitation chain is an emerging area of regulation. Legislation, regulations and relevant elements can be found in the following areas: local government public health, occupational health and safety, environment, etc.

Regulatory standards can be put in place at each stage of the value chain, such as planning and construction standards for toilets and on-site treatment technologies, licensing of emptying service providers and fecal sludge transport,

Occupational health and safety regulations to protect workers, and minimum standards for wastewater and sludge treatment as well as specific standards for safe use of wastewater and sludge based on the type of use.

4 The different regulation strategies

There is no single model of regulation. Each model presents specific options depending on the country context and government objectives.

For example, with respect to remediation, there are different options for regulatory mechanisms that can be applied across the entire value chain (containment, transport, treatment and end use/disposal).

The most effective regulatory model depends on a multitude of factors, including the country's legal and political system and its governance structure.

4.1 Regulation by contract

Also known as the French model. This is one of the predominant models, particularly in countries where municipalities or governments are responsible for service delivery.

4.2 Government Regulation

The public sector owns the assets and has management responsibility. The model exists in Burkina Faso.

4.3 Regulation by an independent public agency

This involves the creation of an agency responsible for conducting regulation in a more or less autonomous manner and adapting the rules to changing circumstances. This is the model in the field of sanitation in the majority of ESAWAS member countries - the example of Zambia is often cited as a reference.

4.4 Regulation by an external party

In this model, external contractors are used to carry out certain tasks such as tariff review, benchmarking or dispute resolution.

1 The Office National de l'Eau et de l'Assainissement (ONEA) of Burkina Faso ensures the management & regulation of sanitation services, mainly emptying operations

2 The Eastern and Southern African Water and Sanitation Regulators Association (ESAWAS) is a network of regional water supply and sanitation regulators.
4.5 Self-Regulation

Service providers regulate their own activities, set tariffs and quality standards, and monitor their own performance.

5 What regulation in non-sewer sanitation sector in Africa

Unlike drinking water, the involvement of the private sector in sanitation services in Africa is very recent. All the studies have shown that this strategy is an element that can promote the achievement of the Sustainable Development Goals (SDGs) but also ensure the sustainability of the works.

In view of this, reforms are underway in many African countries to involve the private sector in the management of autonomous sanitation services.

However, this involvement of the private sector must be accompanied by an efficient regulatory system that will clarify the roles and responsibilities of all stakeholders.

5.1 Regulation System

The basic principle of a regulatory system is the existence of an independent regulatory body.

However, this is not consistent with certain practices. The solution could be the installation of a fall team at the level of institutions (ministries, public bodies or municipalities) to ensure the role of regulator. This is the case in the Yaoundé Urban Community. This approach must be accompanied by the establishment of a performance contract that would cover the various indicators to be monitored, but above all a partnership approach between the parties in the conduct of evaluation operations. There is, however a significant need for skills transfer at the level of public administrations.

5.2 Regulation of the transport link

The transport link is an important element in the value chain of on-site sanitation. It is at this level that private sector involvement is most important in Africa.

5.2.1 Characterization of private emptiers

The vast majority of emptiers are in the informal sector. Significant efforts to structure them are underway with the creation of local associations and the establishment of the Pan African Sanitation Actors (PASA). The main difficulties of the emptiers revolve around access to financing and the renewal of emptying trucks.

Several studies have been carried out in this regard by the United States Agency for International Development (USAID) and the Agence Française de Développement (AFD).

3 In the case of the delegation management of the Yaoundé sewage sludge plant, the urban community has set up an autonomous team to evaluate the performance of private operators.
4 The APAA brings together all African actors in the private sanitation sector
5 Wash Banking Sector overview / 2018
6 Securia/Veolia Emptying Technical Support Study January 2020
5.2.2 Regulation of the transport sector

The regulation of the emptying profession is essential for the proper structuring of the autonomous sanitation emptying chain. It is the only framework that defines the roles and responsibilities of each party.

However, very few African countries have established a system for regulating the transport link.  

5.2.3 Tariff’s regulation

The cost of disposal is a very important element in the management of the value chain. It must allow the service provided by the emptier to be remunerated.

That said, it is important to keep in mind that a very high price penalizes access for the poorest and a very low price will not ensure the viability and sustainability of sanitation services.

Tariffs should be set in an inclusive manner among all stakeholders and reviewed periodically.

In practice, no studies are conducted to define emptying rates. In countries where emptying is not regulated, operators dictate the rates.

5.2.4 Sanitation workers’ Regulation

The protection of sanitation workers is a very important element, as these are the operators in the vehicles (drivers and laborers).

The public operator must ensure that measures are taken to ensure their health: vaccination, regular medical check-ups, wearing of protective clothing.

5.2.5 Regulation of compliance with environmental standards

The regulation will concern the implementation of devices to prevent the release of highly polluting substances into the environment.

This provision is not effective insofar as very few countries in Sub-Saharan Africa have the capacity to treat all the fecal sludge that is collected. The capacity to treat all the fecal sludge that is collected.

5.2.6 Quality of Service Regulation

The quality-of-service parameters include mainly the cleanliness of the area after an emptying service at the user’s home.

5.3 Regulation of Faecal Sludge Treatment plant

5.3.1 Operations’ Contractualization

A leasing contract is a contract by which the public authority (the leasing authority) entrusts, for a fixed period of time, to a legal entity (the lessee), the operation of the sanitation works that it provides a public service.

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7 ONAD in Cote d'Ivoire and the Yaoundé Urban Community have set up systems to regulate emptying.
8 Cameroon has only one sewage sludge station; Benin, like many other countries, does not have a sewage sludge station; Senegal authorizes ‘wild dumping’ in regulated areas; in Burkina Faso, the capacity of the stations is clearly below the needs.
In principle, the operator does not make any investments, neither initially, nor for reinforcement and/or extension works. The operator collects fees directly from the users, but pays a fee to the contracting authority.

Recurring difficulties are noted in the contracts

- A long contract duration provides the operator with greater security so that it can commit to investments;\(^9\)
- The contracts more often highlight the obligations private sector. The obligations of the leasing authorities are often not mentioned. **Performance is linked to the obligations of all parties.**

A partnership approach based on a common vision and shared objectives can lead to successful outcomes.

5.3.2 **Indicators to be regulated at the operational level**

The indicators take into account all the elements of the transport link, such as respect for the environment, protection of sanitation workers and pricing. They take the form of a performance contract attached to the leasing contract.

*See appendix for a sample performance contract*

5.3.2.1 **Tariff**

As in the case of the transport link, analyses must be backed up by a financial model to ensure the viability of the partnership. Price is a very important element in the transport value chain. There is the price of collection but also the price of disposal. They. The analysis must be global and all parameters must be taken into account. The basic principle is to start from a financial model.

An exhaustive analysis of the expenses must be made at least once a year or each time of need to adjust the prices. This analysis should be done between the regulatory body and the private actors. **If adjustments are to be made upwards or downwards, they must be effective.**

6 **Conclusion**

In many African countries, reforms are underway to better involve the private sector in the management of on-site sanitation services. However, this involvement of the private sector must be accompanied by an effective regulatory system that will clarify the roles and responsibilities of all stakeholders.

There is no single regulatory model. The most effective regulatory model depends on a multitude of factors, including the country’s legal and political system and its governance structure.

**A spirit of partnership among stakeholders is a prerequisite for building systems that perform well over time and provide the highest quality of service to users.**

\(^9\) The duration of the contracts varies from 3 years (Cameroon) to 10 years (Senegal).
APPENDIX 1: PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th>No</th>
<th>Title</th>
<th>Definition</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Raw sludge quality</td>
<td>Performance of the Faecal Sludge Treatment Plant</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compliance rate of bacteriological analyses</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contractual analysis rate</td>
<td>90%</td>
</tr>
<tr>
<td>2</td>
<td>Reclamation of recovered sludge</td>
<td>Recovery rate of dried sludge</td>
<td>80%</td>
</tr>
<tr>
<td>3</td>
<td>Service discontinuity index</td>
<td>Downtime in the operation</td>
<td>10%</td>
</tr>
<tr>
<td>4</td>
<td>Level of user satisfaction</td>
<td>Complaints rate from users</td>
<td>2%</td>
</tr>
</tbody>
</table>

APPENDIX 2: CONTRACT MANAGEMENT ACTIVITIES

<table>
<thead>
<tr>
<th>Function</th>
<th>Activities</th>
<th>Documents to be produced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploitation</td>
<td>Identify the corrective or additional measures to be taken on equipment and installations for a better operation</td>
<td>Compliance Report</td>
</tr>
<tr>
<td></td>
<td>Implement operating procedures for the operation, maintenance and upkeep of the facilities</td>
<td>Operating instructions Operating sheet</td>
</tr>
<tr>
<td></td>
<td>Manage and maintain the main facilities</td>
<td>Monthly Reports</td>
</tr>
<tr>
<td>Customers Management</td>
<td>Identify the corrective or additional measures necessary for the proper accounting of the volumes deposited and treated</td>
<td>Business Management Software</td>
</tr>
<tr>
<td></td>
<td>Subscribing to the emptying trucks</td>
<td>Monthly Reports</td>
</tr>
<tr>
<td></td>
<td>Design and implement a computerized waste truck management system</td>
<td>Business Management Software</td>
</tr>
<tr>
<td></td>
<td>Implement a procedure for managing user requests and complaints</td>
<td>Procedures Manual</td>
</tr>
<tr>
<td></td>
<td>Follow-up on user complaints (emptiers, local populations, etc.)</td>
<td>Monthly Reports</td>
</tr>
<tr>
<td>Setting up a cost accounting system</td>
<td>Implement a system for monitoring operating costs by cost center</td>
<td>Chart of accounts Cost accounting.</td>
</tr>
</tbody>
</table>

We note that there is no obligation for the public service