### **Inclusive Urban Sanitation Stories**



# Extending sanitation services to informal settlements in Ouagadougou, Burkina Faso

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### Summary

Informal settlements in the context of Ouagadougou are human settlements that are not structured (not shown in the cadastral plan) and occupied outside the official rules for acquiring housing land and in the absence of official land tenure. Access to land is achieved through negotiations with customary owners, but this procedure is not formally recognized by the urban authorities. The proliferation of informal settlements in Ouagadougou is the result of a housing crisis and rapid population growth.

The political will to improve living conditions in the informal settlements of Ouagadougou is increasing. A national strategy for upgrading informal settlements has been developed, as part of

the review of the national urban policy. The review was prompted by the Saaba informal settlement upgrading project, which led to the provision of integrated basic services such as running water, sanitation, electricity and passable roads.

This case study draws lessons from the Saaba pilot project for clarifying responsibilities and improving wastewater and faecal sludge services at citywide scale, including in informal settlements.

### **Overview**

#### **Geographical information**

Country: Burkina Faso City: Ouagadougou City population: 2,453,496



#### Problem

- Until recently, informal settlements have not been recognized by urban authorities. As a result, there are no formal connections, and the provision of basic services is lacking. There is no specific strategy to address sanitation in informal settlements.
- Construction and operation and maintenance of sanitation facilities are provided by limited skills labour that are not contracted and supervised by a mandated authority.
  Specific standards for faecal sludge treatment are not included in regulations related to sanitation and wastewater discharge.

#### **Solution**

- The accountability framework for containment is strong, with designated institutions responsible for monitoring (Ministry of Environment, Water and Sanitation (MEEA) and Ministry of Health and Public Hygiene (MSHP).
- A pilot project has been launched to develop informal settlements under the Ministry of Urban Planning, Land Affairs and Housing. Office National de l'Eau et de l'Assainissement (ONEA) has adopted responsibility for the development of water and sanitation services in 'urban agglomerations', through which ONEA is clearly mandated to coordinate sanitation services to informal and spontaneous settlements, supported by a wide range of private sector and civil society organizations.

### **Problem**

According to the latest population census conducted in 2019, the city of Ouagadougou has a population of 2,453,496 inhabitants – 12% of the population of Burkina Faso and 45.4% of the country's urban population – distributed in both formal and informal settlements (RGPH, 2019). The city has 80% formal and 20% informal settlements (SEKPE, 2019).

In Burkina Faso, the Ministry of Environment, Water and Sanitation (MEEA) is the governmental authority responsible for sanitation and wastewater services. The MEEA defines water and sanitation policies and strategies at the national level and its General Direction of Sanitation (DGA) is in charge of monitoring the implementation of these policies. It is interesting to note 96.3 of the population in Ouagadougou depend on onsite sanitation Table 1.

Demographics	Population in Ouagadougou city	2,453,496
	Population Density	90.3 / KM <sup>2</sup>
	Low-income area (LIA) population	809,654
Water and sanitation services	Water network coverage (%) connections	99
	Sewerage coverage (%)	0.4
	Dependent on onsite sanitation (%)	96.3
	Access to improved containment (%)	46.2
	Dependent on shared facilities (%)	6.7
	Wastewater treated (%)	18
	Sludge treated (%)	36 – 38
	Population in Ouagadougou city	2,453,496
	Population Density	90.3 / KM <sup>2</sup>

Table 1: Summary of key data for Ouagadougou city

Source: ONEA

The Office National de l'Eau et de l'Assainissement (ONEA), a national public utility, accompanies the DGA in its responsibilities. ONEA has the mandate to deliver water and sanitation services in all urban areas. This mandate consists of the creation, promotion, improvement and management of wastewater and sanitation in urban and peri-urban areas. In principle, the municipality has the role to ensure the implementation of sanitation policies and monitor provision of sanitation services. ONEA plays the role of contracting authority, working with private service providers such as emptying operators, masons and craftsmen as well as engineering companies.

In Burkina Faso, 20% of the city is considered as living in the informal settlements. The spatial organization of these informal settlements does not follow geometrical forms. In addition, housing is not planned and there is no formal piped water network, electricity supply, roads or sanitation. Public education or health facilities are generally lacking.

Figure 2 and Figure 3 represent the conditions at the informal settlement in general and the Sabaa commune in particular. These areas are located on the city margins, on the edge of

formal areas, are marked by anarchic and unsustainable construction and are very difficult to access, especially during the rainy season. There are wide disparities in the living standards of informal settlement populations, with many living below the national poverty line but others being better-off.



Figure 2 - View of an informal settlement in Saaba, Ouagadougou city. Source: 2ie.



Figure 3 – Uncontrolled FS deposit in Saaba, Ouagadougou city. Source: 2ie.

The sewerage network only covers only 0.4% of the urban population of Ouagadougou, and only those people living in formal settlements (ONEA 2018). The sewer network, with a total length of 76.4 km carries wastewater from connected households to the Kossodo wastewater treatment plant (WWTP). Onsite sanitation is used by almost the entire city and is therefore present in both formal and informal settlements.

Sanitation facilities construction and maintenance are provided by masons and plumbers who may or may not have received specific training in the construction of sanitation facilities. It is the households who contact private individuals directly to have the facilities built.

Emptying of pit latrines and septic tanks is done either manually or mechanically with emptying trucks. Other means also exist such as carts and tricycles. However, manual emptiers also dump the sludge at uncontrolled sites, sometimes because of the tipping fee and the distance, but also because the three controlled emptying sites are not adapted to the quality of the sludge they carry.

Decree No. 2019-0320 defines standards, criteria and indicators for access to sanitation, but there is less accountability for emptying services. In addition, regulations exist on wastewater discharge (Decree No. 2015-1205 of 28 October 2015 on wastewater discharge standards and conditions defines the maximum values of pollutant loads to be respected at all times by water samples and taken punctually along the discharge cycle). However, there is no specific standard for faecal sludge treatment.

### **Solution**

Several ministries have the mandate to hold service providers accountable for sanitation and wastewater. The Ministry of Environment, Water and Sanitation (MEEA) and other designated agencies of the Ministry of Health and Public Hygiene (MSHP) are responsible for monitoring the quality of by-products and discharges (for example, the national public health laboratory and the water and forestry services).

The accountability framework for access to sanitation containment is strong. Decree No. 2019-0320 defines standards, criteria and indicators for access to sanitation; Decree No. 2015-1205 of 28 October 2015 defines wastewater discharge standards and conditions.

Several bodies support the institutional actors and the populations in the management of services, including NGOs, civil society organizations, and technical and financial partners. Training and research organizations are in charge of innovations and the provision of qualified

human resources for the management of the water and sanitation sector. Wastewater and onsite sanitation procedures are described in Figure 4.

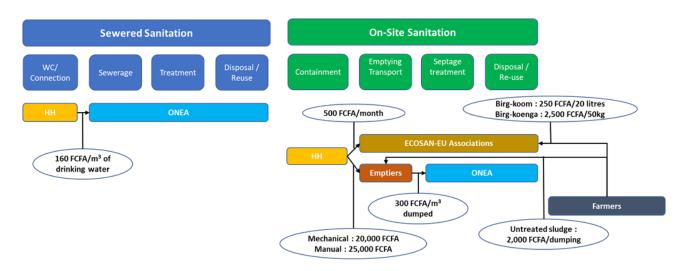


Figure 4 - Wastewater and on-site sanitation service fees and charges in Ouagadougou.

Burkina Faso is committed to the Sustainable Development Goals (SDGs) on access to adequate and sustainable water and sanitation services for all people by 2030. It is, to date, the only French-speaking country in West Africa to have integrated access to water and sanitation as a national ambition into its constitution (article 18 of the constitutional law no 072-2015/CNT revising the constitution of Burkina Faso).

Burkina Faso has national policies on access to sanitation for all, confirming the political will to address the issue at national scale. A national investment programme is in place for the period 2016–2030, which includes clear plans for sanitation.

Historically, there has been no specific strategy to address sanitation in informal settlements. However, the Ministry of Urban Planning, Land Affairs and Housing and the City have now initiated a project for the restructuring of informal settlements (one of its development strategies). The project was launched in 2021 and will be focused on Djikofè district in the commune of Saaba for its pilot phase. This project intends to confer on informal settlements the structure of an urbanized area to facilitate projects implementation, including sanitation improvements.

ONEA's mission concerns urban centres that have a population of more than 10,000 inhabitants. Its willingness to take spontaneous areas into account in the development of water and sanitation services is summed up using the concept of 'Urban Agglomeration' instead of 'Urban area'. According to ONEA's Director of Sanitation, the urban agglomeration concept also takes into account the populations of informal or spontaneous settlements.

Several initiatives have been implemented to extend sanitation services in informal settlements:

The PERISAN project was a sustainable sanitation initiative implemented from 2012 to 2016 to improve the living conditions of the populations of 5 informal settlements and 16 peripheral sectors of the city of Ouagadougou. The implementation approach was to subsidise some elements of the household latrines. The 'LILI latrine' consists of a metal cabin, thus offering the household the possibility of moving the slab and the cabin in the event of a change in housing. PERISAN incited a strong demand for latrines. This project was developed by WaterAid (international NGO) in collaboration with Eau Vive (African NGO), ONEA and the Ouagadougou City Council, with funding from the European Union.

ONEA embarked on a plan to extend sanitation services to informal areas with its own funds, by delegating the services to private providers to encourage households to build a latrine. In addition, ONEA is working in collaboration with BASED (a design office for the promotion of sanitation in the urban environment) to extend sanitation services to new informal settlements to target areas outside the five settlements already receiving support.

- Since 2021 with support from KfW, through budgetary support, KfW is assisting ONEA in the extension of water and sanitation services to all informal (peripheral) neighbourhoods throughout Burkina Faso, with a focus on the 14 other cities outside Ouagadougou and Bobo Dioulasso.
- The clean manual emptying (VIMAPRO) project was an initiative led by Réseau Projection from 2015 to 2017 with the aim of formalizing manual emptying in Ouagadougou, through capacity building of manual emptiers. The project has contributed to a better recognition of manual emptying, which is common in both informal and formal areas. It has led to an improvement in emptier practices.

ONEA now has clear responsibilities for all urban areas (of 10,000 people or more) and is responsible for ensuring access to sanitation services in the informal settlements that are part of the 'urban agglomerations'. In practice, as soon as an informal settlement is identified to benefit from water and/or sanitation services, ONEA appoints a contractor who will act as an interface between the population and the service authority. This contractor – who lives in the area – must create a close relationship with the whole community and find means and strategies to encourage the expression of the need for sanitation services. The contractor reports the needs of the community to ONEA, which discusses them with its partners to provide options tailored to the community's context.

The municipality, on the other hand, ensures that informal settlements themselves are mapped in a continuously updated manner. ONEA will then be able to proceed with the identification of contractors in all these areas, as was the case in past initiatives with the five informal

settlements of the city. Contracts should be established with these contractors to motivate them to promote sanitation services in these areas. ONEA must also broaden its partnerships in order to subsidize these populations (generally the poor) to build their own sanitation facilities.

On the technical level, ONEA, in collaboration with the delegated authorities must continue to promote the 'LILI' latrines developed under the PERISAN project led by ONEA and WaterAid among the populations living in informal settlements. For the emptying and transport of faecal sludge from these pits, ONEA can collaborate with ABASE (the association of manual emptying workers in Burkina Faso) to provide training in manual emptying and sanitation to local people in informal settlements who will provide the services. To protect against uncontrolled dumping, these emptiers also need access to Faecal Sludge Treatment Plants that are both within reach and adapted to the characteristics of the sludge emptied and to their means of transportation.

### **Lessons learned**

The political willingness of the Government of Burkina Faso to engage with basic services in informal settlements and improve the sanitation chain in these areas will be key to successful implementation.

Since ONEA acquired clearer mandates and became officially recognized as responsible for coordinating sanitation services delivery in informal settlements, there has been better organization and stronger interest from different actors to achieve this objective. Several partners (support structures) such as WaterAid, the European Union and GIZ have joined ONEA to bring financial and technical contributions to the extension of sanitation services in the informal settlements.

Onsite sanitation systems are better adapted (technically and economically) to the informal settlements of the city of Ouagadougou. Updated mapping of informal settlements will provide better plans for the extension of any type of service to informal settlements.

### **Useful links**

Burkina Faso Population and Housing Census 2019 | GHDx (healthdata.org) Global Report on Sanitation and Wastewater Management in Cities and Human Settlements | UN-Habitat (unhabitat.org)

### Further reading and references

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#### About the author

Harinaivo Anderson Andrianisa (Associate-Professor and Head of Department), Asengo Gerardin Mabia, Mahugnon Samuel Ahossouhe (Junior Consultants) and Seyram Kossi Sossou (Senior Lecturer) are members of the Water, Sanitation and Hydro-Agricultural Development Engineering Department of 2iE. Harinaivo has over 20 years of experience in education, consulting and R&D, and in the design and management of projects of local to global scopes in the fields of water, sanitation and environmental engineering. His current interests are focused on Citywide Inclusive Sanitation Services, sustainable water, sanitation and waste services delivery, circular economy and urban mining.

**Tontama Sanou** is ONEA's Director of Sanitation Operations. Tontama is a Water and Sanitation Engineer, responsible for overall supervision of the implementation and operational and maintenance of sanitation services in the urban centers of Burkina Faso where the ONEA has assets. Tontama closely works with the Ministry in charge of Sanitation and partners to develop the Burkina Faso sanitation strategies and Plans. Soumaila Sodre is Sanitary Engineer at ONEA.

**Sam Drabble** is an urban WASH professional with over 10 years' experience in urban WASH research, technical publications, programme evaluation and peer-to-peer learning. He currently holds organization-wide responsibility for the Evaluation, Research and Learning function at Water & Sanitation for the Urban Poor (WSUP). While at WSUP Sam has supported the rollout of research programmes across WSUP's seven programme countries, authored or edited over 60 WSUP technical publications, and delivered research for wide-ranging institutional clients including World Bank, ESAWAS and WHO.

**Dewi Hanoum** is currently working at UN Habitat, Urban Basic Services Section covering the areas of WASH. She has decades of working experience in the field of sanitation, wastewater management and environmental management. She has a civil and sanitary engineering background and previously worked in academia and as a consultant.

The case study in this story is a further detailed of the case study presented at the <u>Global report for Sanitation and</u> <u>Wastewater Management in Cities and Human Settlements</u>.

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#### About the institution / organisation

The International Institute for Water and Environmental Engineering (2iE) is a higher education and research institution with a status of an international non-profit association of public utility, providing access to high-level training on the African continent for students and professionals in the fields of water, sanitation and hydraulics, civil engineering, energy and electricity, environment and sustainable development. 2iE trains engineer-entrepreneurs, dedicated for the development of the Africa continent, based on curricula that have been developed with potential employers to better responds to their needs, and ensure the employability and ease professional transitions of graduates. <a href="https://www.2ie-edu.org/">https://www.2ie-edu.org/</a>



The **National Office of Water and Sanitation (ONEA)** is a state-owned company created in 1985 with the mandate to provide sustainable water and sanitation services for urban centers of Burkina Faso. It currently operates in 59 centres serving about 10,000 population. <u>https://oneabf.com/</u>



Water & Sanitation for the Urban Poor (WSUP) is a non-for-profit company that helps transform cities to benefit the millions who lack access to water and sanitation. WSUP was created in 2004 as a response to the urban explosion that has left many cities unable to provide basic services, such as access to a toilet or drinking water, to low income communities. <u>https://www.wsup.com/</u>

#### **USUP** Water & Sanitation for the Urban Poor

**UN-Habitat** is a United Nations agency that works for a better urban future based in over 90 countries and promotes the development of socially and environmentally sustainable cities, town and communities. UN-Habitat strives for adequate shelter with better living standards for all, and advocates for urbanization as a positive transformative force for people and communities, reducing inequality, discrimination and poverty. <u>https://unhabitat.org/</u>



#### About the IWA Inclusive Urban Sanitation Initiative

IWA's Inclusive Urban Sanitation initiative responds to a huge and growing public need - safe sanitation in combination with access to safe drinking water and hygiene underpins good health. The aim of this initiative is reshaping the global urban sanitation agenda by focusing on inclusive sanitation service goals--and the service systems required to achieve them - rather than the traditional singular focus on expanding sewer networks and treatment works. This forms part of IWA's larger agenda to promote inclusive, resilient, water-wise, and sanitation-secure cities.

#### About the Inclusive Urban Sanitation Stories

The Inclusive Urban Sanitation stories are documenting some of the policies, practices, and approaches that demonstrate how stakeholders especially those in urban areas (e.g., public sector, operators, academics, regulators, and other key actors) are taking part or contributing to Sustainable Development Goal 6 which require water and sanitation concepts and norms to look beyond technology and the usual focus on building infrastructure. Increased focus is on safety, inclusion, environment, public health, and multiple technology solutions tailored to different geographies and socio-economic contexts for building climate-resilient cities. The stories aim to inspire urban stakeholders to discuss ways for advancing inclusive urban sanitation, especially in low- and middle-income countries.



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