

SFD Report

Ouahigouya Burkina Faso

Final Report

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WaterAid.

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SFD Report Ouahigouya, Burkina Faso, 2018

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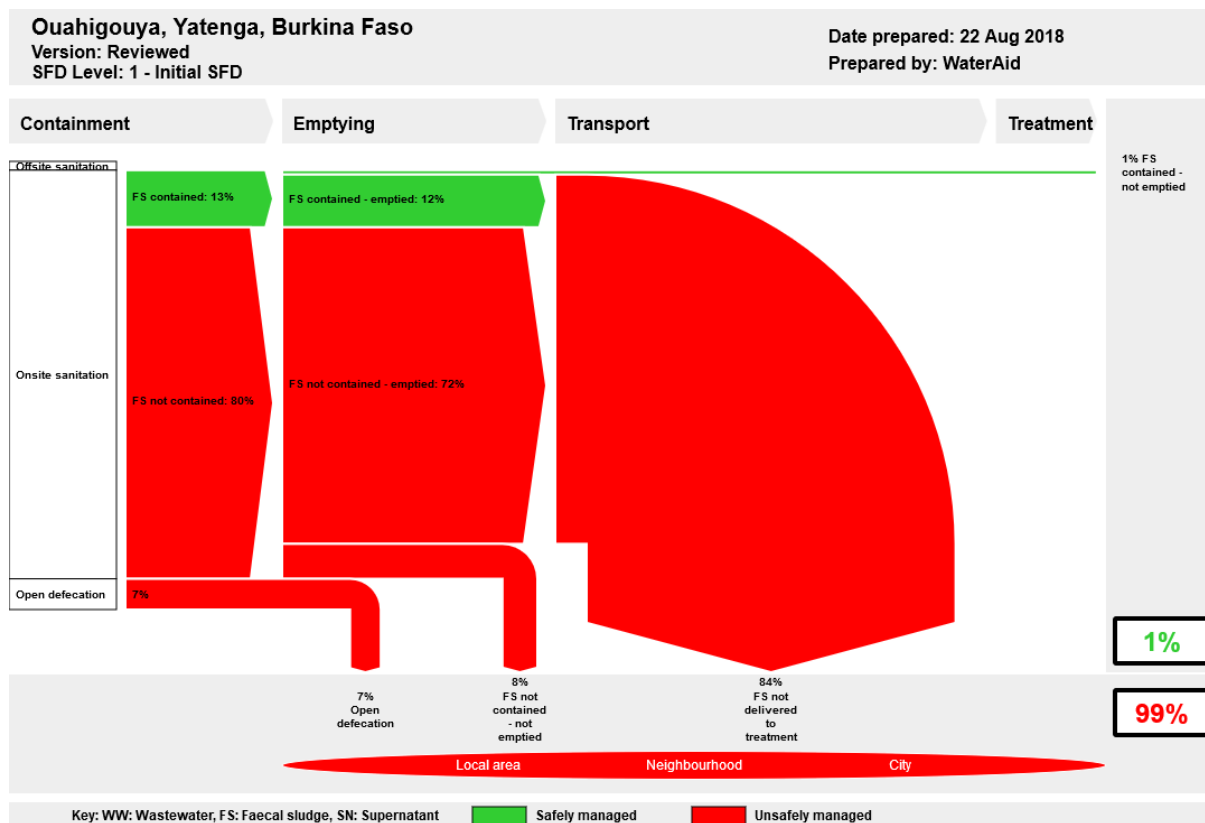
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1. The SFD Graphic



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2. Diagram information

SFD Level:

Initial

Produced by:

WaterAid Burkina

Collaborating partners:

Burkina Faso National Water and Sanitation Utility (ONEA)

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3. General city information

Ouahigouya is a mid-sized city located in the northern part of Burkina Faso and is the capital of the Province of Yatenga. Ouahigouya is approximately 180 km from Ouagadougou, the capital of Burkina Faso. Ouahigouya district is composed of both urban and rural areas. The urban area is 108 km² and is divided into 15 administrative areas. The rural area is composed of 37 villages. This study focuses on

the urban area. According to the general census (1985, 1996 and 2006), the population was about 38,902 in 1985, 52,193 in 1996 and 73,153 in 2006. The population growth rate was 2.6 percent between 1985 and 1996 and 3.4 percent between 1996 and 2006. The population is currently estimated to be 109,264 (INSD, 2017).

4. Service outcomes

Ouahigouya does not have a centralised system for wastewater and excreta treatment. On-site sanitation systems are the main sanitation mode used by the population. The range of containment technologies includes simple pit latrines, ventilated improved pits (VIP) with simple or double pits, and pour flush toilets (PFT) with septic tanks connected to soak pits.

Ninety-three percent of households use an individual sanitation facility. Of these, 68.5 percent have a simple pit latrine, 23 percent have safe facilities (e.g. a VIP or watertight pit), and 1.5 percent have a septic tank. Seven percent of households still practice open defecation. All health care facilities and schools are equipped with public toilets. However, 20

percent of the school latrines are damaged or out of service (Koanda, 2006; MHU, 2012 and ONEA, 2018).

According to Blunier, 2004 and Koanda, 2006, when their tank or pit is full, households contact and pay either manual emptying operators (70 percent of emptying) or a private mechanical emptying and transportation service provider (30 percent of emptying). About 1.2 percent of households just close the pit and dig a new one or use neighbours' facilities. After emptying, manual operators abandon the faecal sludge in the street (45 percent) or in a composting box (32.5 percent). A composting box is a kind of solid waste disposal bin. The mechanical operators discharge FS on the outskirts of the city. The city has no FS treatment plant.

5. Service delivery context

Burkina Faso has recognised access to sanitation as a human right since December 2015 and this is mentioned in the country's constitution. National sanitation policy has been established since 1997, which aims to protect and improve health. The documents that regulate the sanitation sector are:

- The national policy for water adopted since 1998.
- The national policy and strategy for sanitation adopted in 2007.
- The national programme for wastewater and excreta sanitation (2016 – 2030).
- The national plan for economic and social development (2016 – 2020).

Recently (2018), a national strategy for wastewater and excreta sanitation chain management has been adopted.

In the local context, there is a sanitation strategy plan (SSP) developed and implemented by the National Agency for Water and Sanitation (ONEA) for Ouahigouya. ONEA intervenes in this city through its Department of Sanitation.

Unfortunately, the regulation is not enforced by decrees, decisions, standards or guidelines defining clearly the management wastewater and excreta.

6. Overview of stakeholders

The institutional roles for wastewater and excreta management are clearly defined. The Ministry of Water and Sanitation is in charge of wastewater and excreta management. The

mission of this ministry is to ensure the implementation and monitoring of the government programmes on water and sanitation.

The Ministry of Water and Sanitation intervenes through the Department of Sanitation and the decentralised departments of water and sanitation at regional level. These departments implement the sanitation programme in collaboration with the ministries in charge of health, housing, environment, finance and decentralisation.

In the local context, municipalities are in charge of sanitation in their cities according to the decentralisation law adopted in 2009. In Ouahigouya, the municipality is supported by a public local development agency (EPCD) partly funded by Swiss Development Cooperation. Ouahigouya municipality is also supported by ONEA, the national utility in charge of water and sanitation, which is in charge of on-site sanitation and sewage systems in urban areas.

Locally, the private sector is involved in construction of sanitation facilities construction, management of ablution blocks and provision of emptying services for pits using mechanical and manual equipment. Some market gardeners reuse the faecal sludge as a fertiliser.

Key Stakeholders	Institutions / Organizations /
Public Institutions	City Council, Ministry of Water and Sanitation, Ministry of Health, Ministry of Housing, Ministry of Finance, Ministry in charge of Environment and Ministry in charge of Decentralisation National Agency of Water and Sanitation (ONEA)
Non-governmental Organizations	Public Communal Establishment for Development (PCED)
Private Sector	Private emptiers
Development Partners, Donors	Chambery city (France), Swiss Development Cooperation French cooperation agency
Others	Manual emptiers, market gardeners, academia

Table 1: Summary of key stakeholders (Koanda, 2006)

7. Process of SFD development

This initial SFD was developed in two steps:

- Collecting and reviewing of existing data.

- Developing SDF graphic and drafting the report.

8. Credibility of data

Data used to produce the report included data from Master's thesis (2004), PhD thesis (2006), Ouahigouya SSA (2006), Ouahigouya regional planning development programme (2012) and the national utility monitoring report (2018). With the exception of the ONEA monitoring report, all other sources are out of date. Key informant interviews (KIIs) were held with ONEA sanitation department staff at the national level and at the local level in Ouahigouya. In Ouagadougou, the KIIs were held on 20 August 2018 and in Ouahigouya, on 20 August 2018.

9. List of data sources

- Blunier, P. 2004. "Faecal sludge mechanical collection and transportation in Ouahigouya city: Market analyse and financial flow reorganization proposal." Master thesis. 82p.
- Koanda, H. 2006. "Toward sustainable urban sanitation in sub-Saharan Africa: Innovative approach for faecal sludge management plan." Doctorate thesis. 360 p.
- MHU. 2018. "Regional planning and development program". 216 p.
- ONEA. 2006. "Ouahigouya' Sanitation Strategic Plan." 56p.
- ONEA. 2018. Monitoring database.
- INSD. 2017. "Statistic directory of 2017". 370 p.

Ouahigouya, Burkina Faso, 2018

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Abbreviations

EcoSan	Ecological Sanitation
EPCD	Etablissement Publique Communal de Développement (Public local development agency)
FS	Faecal Sludge
FSTP	Faecal Sludge Treatment Plant
HRBA	Human Right Based Approach
INSD	Institut National de la Statistique et de la Démographie (National utility in charge of statistic and demography)
MDGs	Millennium Development Goals
MHU	Ministère de l'Habitat et de l'Urbanisme (Ministry in charge of Housing)
NGOs	Non-Governmental Organizations
OD	Open Defecation
ONEA	Office National de l'Eau et de l'Assainissement (National Agency in charge of Water and Sanitation)
PFT	Pour Flush Toilet
RPGC	Regional Planning and Development programme
SDGs	Sustainable Development Goals
SFD	Shit Flow Diagram
SSA	Strategic Sanitation Plan
VIP	Ventilated Improved Pit
WWTP	Waste Water Treatment Plant

1 City context

Ouahigouya is a mid-sized city located in the northern part of Burkina Faso. It is the capital of the province of Yatenga and about 180 km from Ouagadougou and 222 km from Mopti in Mali via National Road 2 (Figure 1). Ouahigouya district is composed of both urban and rural areas. The urban area is 108 km² and is divided into 15 administrative areas. The rural area is composed of 37 attached villages. This study focuses on the urban area.

According to the general census (1985, 1996 and 2006), the population of Ouahigouya was about 38,902 in 1985, 52,193 in 1996 and 73,153 in 2006. The population growth rate was 2.6 percent between 1985 and 1996 and 3.4 percent between 1996 and 2006. Between 1996 and 2006, the population growth rate increased by 0.8 percent (INSD, 2017). The current population is estimated at 109,264 (Table 1).

Table 1: Population of Ouahigouya (source: INSD, 2017)

Year	Population
1985	38,902
1996	52,193
2006	73,153
2018	109,264 (est.)

The topography is characterised by a peneplain and the average altitude is about 340m. The landscape is unrelieved. Some hills, plateaus and some depressions with gentle slopes can be found.

The climate is sahelo-soudanian with two main seasons: a short rainy season from June to October and a long dry season from November to May. The rainfall is insufficient and irregular, fluctuating between 500 mm and 800 mm per year. August is the rainiest month of the year. The annual average temperature is 28.4°C. Maximum temperatures are recorded during May and the average is 42.8°C. Minimum temperatures are recorded during January and the average is 25.7°C (Figure 3). The average daily evaporation is 5.5 mm.

Ouahigouya is located in the upper part of the drainage basin of the Nakambé. There is no permanent river, but some marshland fed by rain water. However, the main hydraulic resources come from two dams (Goinré Dam and Aouréma Dam) and groundwater (Figure 2). The two dams are also used for agriculture purposes. The level of the water table is between 8 to 12 metres during the dry season and one to three metres during the rainy season.

The economy of the city is based on agriculture, livestock farming and market gardening, with 85.7 percent of Ouahigouya inhabitants occupied in these activities. Other activities are trading, arts and crafts, service provision and administrative activities. Market gardening is practiced near surface water. The main crops are potatoes, carrots, onions, tomatoes, cabbages and French beans. Farmers use chemical fertilisers and manures. The products are sold in the capital of the country, in neighbouring countries and in Europe.



Figure 1: Position of Ouahigouya city (source: Google Earth, 2018)



Figure 2: Ouahigouya city and key physical and geographic features (source: Google Earth, 2018)

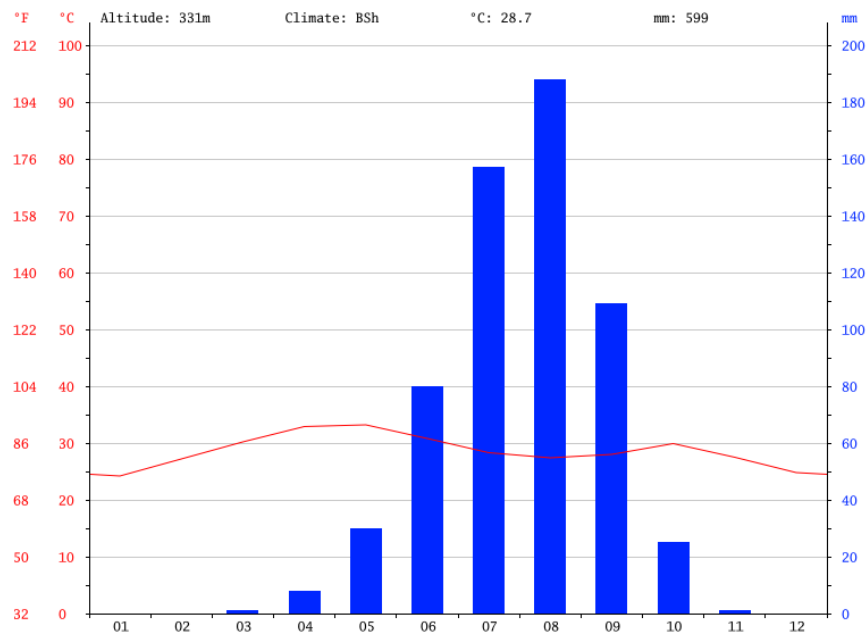


Figure 3: Temperature variations (source: Climate-data.org, 2018)

2 Service Outcomes

2.1 Overview

Ouahigouya does not have a centralised system for wastewater and excreta treatment. The population relies on on-site sanitation. The range of containment technologies includes simple pit latrines, ventilated improved pits (VIP) with simple or double pits, and pour flush toilets (PFT) connected to septic tanks with soak pits.

Ninety-three percent of households use an individual sanitation facility. Of these, 68.5 percent of households have a simple pit latrine, 23 percent have safely-managed facilities (e.g. a VIP, PFT or watertight pit), and 1.5 percent have a septic tank. Seven percent of households still practice open defecation (OD). All health facilities and schools are equipped with public toilets (Table 2). However, 20 percent of latrine at schools have collapsed or are not functioning (Koanda, 2006; MHU, 2012 and ONEA, 2018).

Table 2: Type of excreta facilities in Ouahigouya (source: Koanda, 2006, MHU, 2012 and ONEA, 2018)

Type of facilities	percent households	percent of facilities (considering public facilities)	Sources
Simple pit latrine	68.5 percent	60 percent	Koanda, 2006 adjusted according to ONEA, 2018
VIP and PFT	13 percent	21 percent	ONEA, 2018
Watertight pit	10 percent	10 percent	ONEA, 2018
Septic tank	1.5 percent	2 percent	MHU, 2012
Open defecation	7 percent	7 percent	Koanda, 2006

Construction of facilities is the responsibility of the owners. For implementation of the Ouahigouya SSA, ONEA officially provides 27-60 percent subsidies to households for construction of facilities such as VIP, PFT and watertight pits. ONEA uses the sanitation taxes that households pay with their drinking water bills to support households. ONEA also receives support from donors, including the French cooperation agency, German cooperation agency and the World Bank.

According to Koanda (2006), when their pits or tanks are full, households are responsible for arranging and paying for emptying the faecal sludge. Households contact either manual operators (70 percent of emptying) or the only mechanical operator (30 percent of emptying). All the emptying and transport operators are private. About 1.2 percent of households close the pit and dig a new one or use neighbours' facilities. After emptying, the manual operators abandon the faecal sludge in the street (45 percent) or in a 'composting' box (32.5 percent). A composting box is a kind of solid waste disposal bin. The mechanical operator discharges faecal sludge on the outskirts of the city (Blunier, 2004). Figure 4 describes how the sanitation chain services are organised in Ouahigouya.

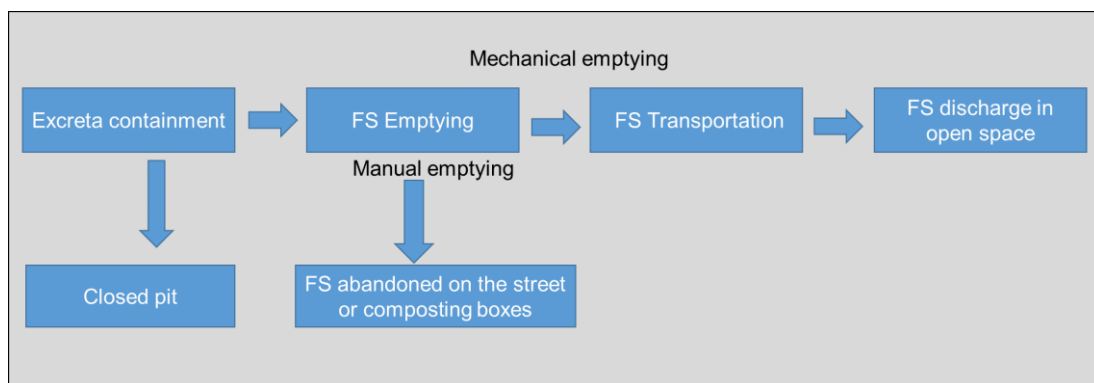


Figure 4: Sanitation chain services organized in Ouagahigouya

This study considered four containment technologies that are used in Ouahigouya (see Figure 5). The detail of the grid is explained in section 2.2.1.

List A: Where does the toilet discharge to? (i.e. what type of containment technology, if any?)	List B: What is the containment technology connected to? (i.e. where does the outlet or overflow discharge to, if anything?)										
	to centralised combined sewer	to centralised foul/separate sewer	to decentralised combined sewer	to decentralised foul/separate sewer	to soakpit	to open drain or storm sewer	to water body	to open ground	'don't know where'	no outlet or overflow	
No onsite container. Toilet discharges directly to destination given in List B					Significant risk of GW pollution Low risk of GW pollution						Not Applicable
Septic tank					Significant risk of GW pollution T1A2C5						
Fully lined tank (sealed)					Significant risk of GW pollution Low risk of GW pollution						
Lined tank with impermeable walls and open bottom	Significant risk of GW pollution Low risk of GW pollution	Significant risk of GW pollution Low risk of GW pollution	Significant risk of GW pollution Low risk of GW pollution	Significant risk of GW pollution Low risk of GW pollution	Significant risk of GW pollution Low risk of GW pollution						Significant risk of GW pollution Low risk of GW pollution
Lined pit with semi-permeable walls and open bottom	Not Applicable									T2A5C10 Low risk of GW pollution	
Unlined pit										T2A9C10 Low risk of GW pollution	
Pit (all types), never emptied but abandoned when full and covered with soil										Significant risk of GW pollution T1B7C10	
Pit (all types), never emptied, abandoned when full but NOT adequately covered with soil										T1B8C10	
User interface failed, damaged, collapsed or flooded											
Containment (septic tank or tank or pit latrine) failed, damaged, collapsed or flooded											
No toilet. Open defecation	Not Applicable							T1B11 C7 TO C9		Not Applicable	

Figure 5: SFD Selection Grid

According to Koanda (2006), some facilities are never emptied when full but abandoned; these are estimated at 2 percent of facilities in the city. Figures 6, 7, 8 and 9 illustrate faecal sludge management practice in Ouahigouya.



Figure 6: FS abandoned by manual emptiers on the street in Ouahigouya (credit: Koanda Halidou, 2006)



Figure 7: FS discharge in nearby open space in Ouahigouya (credit: Koanda Halidou, 2006)



Figure 8: Manual operators emptying a pit in Ouahigouya (credit: Koanda Halidou, 2006)



Figure 9: Shower connected to an open channel in the street (credit: Koanda Halidou, 2006)

2.2 SFD Matrix

Table 3 describes excreta containment that can be found in Ouahigouya. The first group of technology considered is the septic tank (2 percent of sanitation facilities). We assumed that all septic tanks are connected to a soak pit with low risk of groundwater pollution, according to the standard of septic tank construction in Burkina Faso. This means that septic tanks are correctly designed, properly constructed and fully functioning. For this study, it is assumed that 100 percent of the septic tank content is faecal sludge.

The second group of technology is the fully lined tank (sealed) with no outlet or overflow (10 percent). The watertight pit does not allow any percolation. This facility is correctly designed, properly constructed and well maintained with a lined tank with impermeable wall and base. These facilities are constructed in Ouahigouya in areas where there is a high risk of groundwater pollution and where the latrine is near the groundwater source that is used for drinking water purposes. These facilities allow the protection of groundwater.

The third group of technology is the lined pit latrine (19 percent). These are assumed to be lined pits with semi-permeable walls and open bottoms and no outlet or overflow where there is a 'significant risk' of groundwater pollution (VIP latrines and pour flush toilets) or a 'low risk' of groundwater pollution. The VIP and PFT are designed to allow supernatant to percolate through the bottom.

The fourth type is the unlined pit, with no outlet or overflow where there is a 'significant risk' of groundwater pollution. This category includes simple pit latrines. These are assumed to be correctly designed, properly constructed with permeable walls and base, through which infiltration can occur. Simple pit latrine takes many years to get full (more than five years).

When the excreta container is full, the household or institution contacts either a manual emptier or the single mechanical emptier. There is no faecal sludge treatment system in Ouahigouya. Faecal sludge is abandoned on the street or transported and discharged into open space on the outskirts of the city. It is assumed that ten percent of faecal sludge is not emptied from unlined pits and five percent is not emptied from lined pits. This part of faecal sludge represents supernatant that infiltrates the groundwater and the part in the bottom of the pit that the vacuum truck cannot pump out (Figure 10).

The fifth type is all types of pit, never emptied, but abandoned when full and covered with soil, with no outlet or overflow (one percent) and all types of pit, never emptied, abandoned when full but NOT adequately covered with soil, with no outlet or overflow (one percent). Open defecation is practiced (seven percent).

Table 3 describes the containment technology and estimated contribution to total excreta in Ouahigouya using the SDF variables.

Table 3: Containment technology description and estimated contribution to total excreta

SFD Variable Reference #	Description	Use Description	Estimated percent Contribution to Total Excreta
T2A2C5	Septic tank connected to soak pit, where there is a 'low risk' of groundwater pollution	Household and some administrative structure	2%
T2A5C10	Lined pit with semi-permeable walls and open bottom, no outlet or overflow, where there is a 'significant risk' of groundwater pollution	Household, school, market, health services	19%
T1A5C10	Fully lined tank (sealed), no outlet or overflow	Household	10%
T2A6C10	Unlined pit, no outlet or overflow where there is a 'significant risk' of groundwater pollution	Household	60%
T1B7C10	Pit (all types), never emptied but abandoned when full and covered with soil, no outlet or overflow	Household, school	1%
T1B8C10	Pit (all types), never emptied, abandoned when full but NOT adequately covered with soil, no outlet or overflow", "	Household, school	1%
T1B11 C7 TO C9	Open defecation		7%

Ouahigouya, Yatenga, Burkina Faso, 22 Aug 2018. SFD Level: 1 - Initial SFD
Population: 109264

Proportion of tanks: septic tanks: 100%, fully lined tanks: 100%, lined, open

System label	Pop	F3	F4	F5
System description	Proportion of population using this type of system	Proportion of this type of system from which faecal sludge is emptied	Proportion of faecal sludge emptied, which is delivered to treatment plants	Proportion of faecal sludge delivered to treatment plants, which is treated
T1A2C5 Septic tank connected to soak pit	2.0	100.0	0.0	0.0
T1A3C10 Fully lined tank (sealed), no outlet or overflow	10.0	100.0	0.0	0.0
T2A5C10 Lined pit with impermeable walls and open bottom, no outlet or overflow, where there is a 'significant risk' of groundwater pollution	19.0	95.0	0.0	0.0
T2A6C10 Unlined pit, no outlet or overflow, where there is a 'significant risk' of groundwater pollution	60.0	90.0	0.0	0.0
T1B7C10 Pit (all types), never emptied but abandoned when full and covered with soil, no outlet or overflow	1.0			
T1B8C10 Pit (all types), never emptied, abandoned when full but NOT adequately covered with soil, no outlet or overflow	1.0			
T1B11 C7 TO C9 Open defecation	7.0			

Figure 10: Ouahigouya SFD matrix

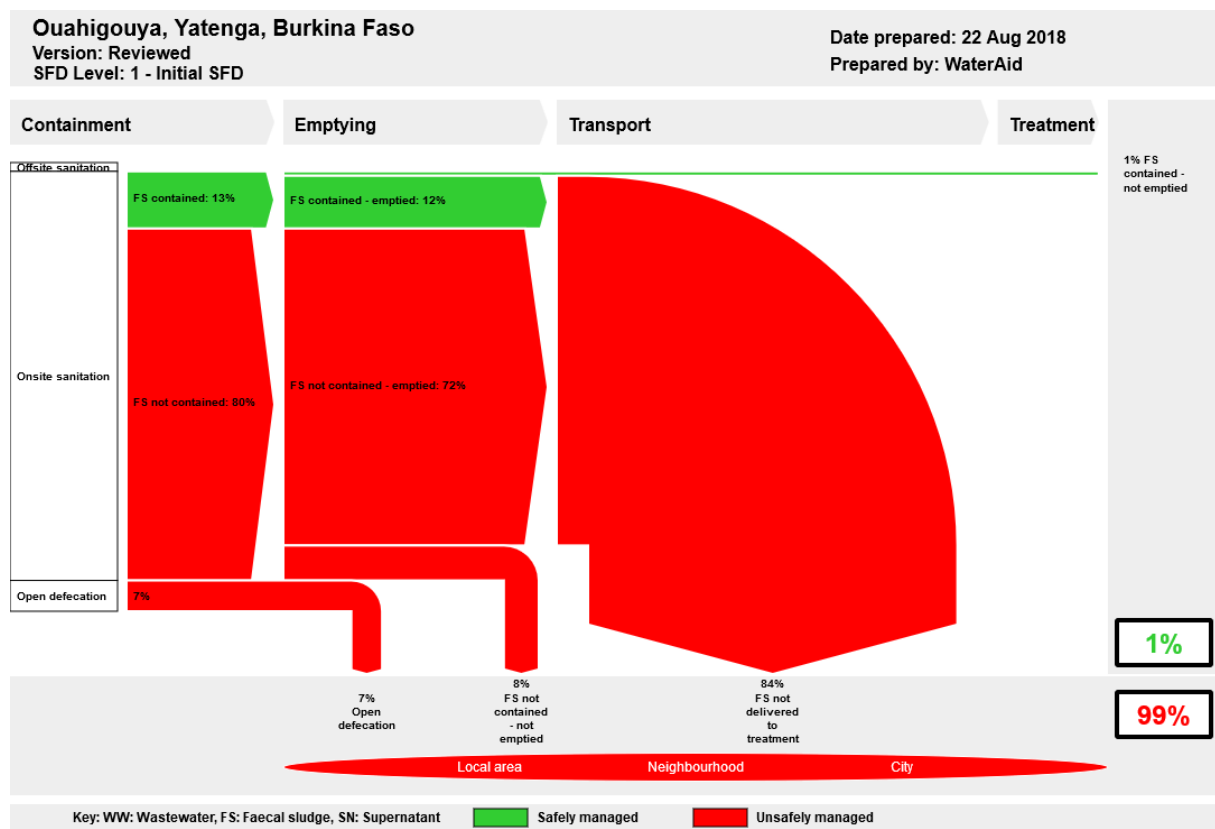
2.2.1 Risk of groundwater contamination

According to the literature review, in Ouahigouya, the soil is composed of fine sand, silt and clay and the groundwater table is between eight and 12 metres during the dry season and one and three metres during the rainy season (SSP, 2006 and Koanda, 2006). The average depth of excreta containment technology is between two and four metres. Each of these factors presents a significant risk of groundwater pollution.

2.2.2 Ouahigouya Shit Flow Diagram (SFD)

The Ouahigouya Shit Flow Diagram (Figure 11) shows that 99 percent of faecal sludge is unsafely managed and only one percent is properly managed. This one percent represents contained faecal sludge that is not emptied. It is the part of faecal sludge that remains in the container or infiltrates. There is no faecal sludge treatment system in Ouahigouya. The 99 percent of faecal sludge that is not properly managed is made up of:

- 84 percent emptied from onsite containers but discharged without treatment;
- 8 percent which is not emptied from onsite containers that do not ensure safe level of protection from excreta; and
- 7 percent from open defecation.



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Figure 11: Ouahigouya SFD

3 Service delivery context

3.1 Policy, legislation and regulation

3.1.1 Policy

Burkina Faso has recognised that access to sanitation is a human right since December 2015, and this is mentioned in the constitution of the country. National sanitation policy has been established since 1997, and aims to protect and improve health. The documents that regulate sanitation sector are:

- The national policy for water, adopted in 1998, covers all uses of water and specifies the need for national sanitation policy and strategy effective implementation in order to ensure water resource protection.
- The national policy and strategy for sanitation adopted in 2007: the policy advocates going beyond the excreta management facilities construction and making available to the population appropriate social, institutional and financial services to provide sanitation end-product valorisation.
- The national programme for wastewater and excreta sanitation (2016 – 2030) stipulates that wastewater and faecal sludge treatment and reuse should be based on environmental aspects. This programme adopts the human-right based approach (HRBA).
- The national plan for economic and social development (2016 – 2020): Sanitation is mentioned in objective 2.5, which is to “improve the living environment, drinking water, and sanitation and energy access to high standard services.

In the local context, the National Agency for Water and Sanitation (ONEA) for Ouahigouya has developed and implements a sanitation strategy plan (SSP). ONEA intervenes through this department of sanitation. These programmes, plans and policies focus mainly on sanitation facilities access and positive behaviour adoption in order to protect the environment and water resources and stop open defecation. Management of wastewater and excreta sanitation services is absent from the legal framework. However, recently (2018), a national strategy for wastewater and excreta sanitation chain management has been adopted. This strategy is made up of five components:

- Consolidation of institutional performance
- Improving technical performance
- Professionalization of the service management
- Reinforcing partnerships and innovations
- Strengthening the population participation.

Unfortunately, the regulation is not enforced by decrees, decisions, standards or guidelines defining clearly the management of wastewater and excreta. The only decree that exists is one that regulates the discharge of wastewater in the sewage system and in the environment by setting some standard values.

3.1.2 Institutional roles

The institutional roles for wastewater and excreta management are clearly defined. The Ministry of Water and Sanitation is in charge of wastewater and excreta management. The mission of this ministry is to ensure the implementation and monitoring of the government programme on water and sanitation. The ministry's assignments are:

- Development, implementation and monitoring of national policies and strategies for wastewater and excreta management;
- Regulation and legislation of wastewater and excreta facilities standards;
- Design and construction of wastewater and excreta management facilities;
- Production and publication of statistical information on sanitation;
- Technical assistance to the project implementation;
- Environmental and social impact studies for sanitation projects.

The Ministry of Water and Sanitation intervenes through the department of sanitation and the decentralised departments of water and sanitation at regional level. These departments implement the sanitation programme in collaboration with the ministries in charge of health, housing, environment, finance and decentralisation.

In the local context, municipalities are in charge of sanitation in their cities according to the decentralisation law adopted since 2009. In Ouahigouya, the municipality is supported by EPCD (public local development agency), partly funded by the Swiss Development Cooperation. Ouahigouya municipality is also supported by ONEA, the national agency responsible for water and sanitation, which is in charge of on-site sanitation and sewage system in urban areas.

Locally, the private sector is involved in construction of sanitation facilities, management of ablution blocks, and mechanical and manual pit emptying. Some market gardeners reuse faecal sludge as fertiliser. All these stakeholders are supported by:

- National and international NGOs as WaterAid, Plan, Eau Vive, Action Against Hunger, IRC
- Capacity building and research organs such as the national university and some private universities
- Laboratory quality analysis
- Technical and financial partners such as the World Bank, European Union and international cooperation agencies from Sweden, France, Germany, Japan and Denmark.

Table 4 summarises stakeholders that intervene in the sanitation chain in Ouahigouya.

Table 4 : Stakeholders that intervene in sanitation chain management in Ouahigouya

Key Stakeholders	Institutions / Organisations /
Public Institutions	<ul style="list-style-type: none"> - Ministry of Water and Sanitation - Ministry in charge of environment - Ministry of Health - Ministry of Housing - Ministry in charge of decentralisation - ONEA - City Council
Non-governmental Organizations formal and informal	<ul style="list-style-type: none"> - EPCD - Market gardeners
Private Sector	<ul style="list-style-type: none"> - Private emptiers
Development Partners, Donors	<ul style="list-style-type: none"> - Chambery town in France (twin-city) - French cooperation agency - Swiss Development Cooperation
Others	<ul style="list-style-type: none"> - Manual emptiers

3.1.3 Service provision

In Ouahigouya, ONEA has developed and implemented a Sanitation Strategic Plan (SSP) since 2006. The SSP was developed based on the Millennium Development Goals (MDGs) and aims to achieve 75 percent access to a safe excreta and wastewater facility by 2020. Simple pit latrines are unsafe, according to the national standards. The SSP plans the construction of 10,149 on-site sanitation facilities for households and 121 public latrines between 2006 and 2020. This requires investment of US\$ 4,060,000 for the household facilities and US\$ 215,000 for the public facilities. To date, only 2,516 on-site facilities have been constructed in households. Access to sanitation facilities is 23 percent in the city of Ouahigouya according to ONEA. ONEA take into account only improved pit latrines like VIP, PFT and watertight toilets in its calculations. Most sanitation facilities in Ouahigouya are simple pit latrines. ONEA have involved some local masons, artisans and private contractors in the construction of the facilities.

Faecal sludge is emptied by manual operators and one private mechanical emptier. Some market gardeners use untreated faecal sludge as fertiliser.

3.1.4 Service standards

In Burkina Faso, there are two systems for sanitation management: off-site sewage systems and wastewater treatment plants, and on-site systems with excreta containers, faecal sludge emptying and transportation and, in some instances, faecal treatment plants and biogas production systems.

Off-site systems exist in the country's two largest cities and cover only the city centre areas and a handful of households, hotels, restaurants and industrial businesses (less than two percent).

For on-site systems, the adopted excreta containers are septic tanks, ventilated improved pits, pour flush toilets and EcoSan and SanPlat latrines.

For faecal sludge emptying and transportation, there is no real service standard. There is no system that requires emptiers to be registered and obtain a license to run their business. There is no control of this activity. There are no faecal sludge treatment plants except in the country's two largest cities.

The only adopted decree concerns standards for wastewater discharge into the sewage system and into open spaces. These standards were adopted in 2001 and reviewed in 2015. This standard is difficult to apply because the country does not have many wastewater and faecal sludge treatment facilities.

3.2 Planning

3.2.1 Service targets

The sanitation planning documents are the national programme for wastewater and excreta sanitation (2016 – 2030) at national level and the SSP at the city level. The national programme has been designed based on the Sustainable Development Goals (SDGs). The programme aims to:

- Eradicate open defecation (OD) based on behaviour change;
- Ensure universal and sustained access to sanitation services using the human-right based approach;
- Optimise wastewater and faecal sludge treatment and reuse;
- Develop research in wastewater and faecal sludge management;
- Reinforce sanitation sector financing.

In urban areas the programme plans to construct:

- 972,141 on-site facilities and 4,150 connections to the sewage system for households;
- 8,680 facilities in public places such as schools, markets and health services;
- 14 wastewater treatment plants (WWTP);
- 34 faecal sludge treatment plants (FSTP).

In the local context, the SSP of Ouahigouya plans the construction of 10,149 on-site sanitation facilities for households and 121 public latrines between 2006 and 2020.

3.2.2 Investments

The total investment of national programme in urban areas is about US\$ 762,000,000. Investment required for SSP implementation is US\$ 4,060,000 for households and US\$ 215,000 for public places such as schools, markets and health facilities.

3.3 Equity

3.3.1 *Current choice of services for the urban poor*

Both the national programme and the Ouahigouya SSP propose a range of technologies based on household willingness and capacity to pay. The plan proposes the construction of septic tanks for high income households and VIPs (double or simple pit) or PFTs for low income households.

3.3.2 *Plans and measures to reduce inequity*

To reduce inequity, the SSP subsidises the construction of excreta facilities up to 60 percent of the total cost of a VIP, PFT or watertight latrine. Septic tanks are not subsidised.

3.4 Outputs: Monitoring and reporting access to services

There is no system of monitoring and reporting access to services at national or city level for facilities provided by the government or city council in urban areas. ONEA has a monitoring and reporting system that publishes one report every six months. The reporting only concerns facilities constructed by ONEA based on the Ouahigouya SSP. Sanitation facilities constructed by households on their own initiative are not included in the report.

4 Stakeholder Engagement

This SFD report was compiled with little stakeholder engagement, which was limited to collaboration with the Department of Sanitation of ONEA. Key informant interviews (KIIs) were held with the ONEA sanitation department at the national level in Ouagadougou on 20 August and in Ouahigouya on the 30 August.

5 Acknowledgements

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6 References

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