

Steps towards safely managed sanitation webinar series: Guided clinics for practical progress

Webinar #5. Scaling up service delivery in urban settings

Tuesday 3 June 2025 – 10.00-11.00 CEST



Housekeeping



Please **turn off your microphones** (except for the final discussion/Q&A).



In case of **technical problems**, feel free to **ask for assistance in the chat**.



Please **use the chat** for questions and comments – which will be addressed at the end of the webinar, or later by email.



Webinar will be recorded – recording and slides will be shared with attendees.



Please keep your **questions relevant to the topic of the webinar**.

You can switch between French and English interpretation by clicking the interpretation icon at the bottom of your Zoom window.

Overview of session

1

Steps

2

Introductory presentation urban sanitation

2

What are important enablers to drive urban sanitation?



Business Models for Sanitation Service in Dakar

Mouhamadou Gueye ,
Technical Advisor of the General Manager at National Office of
Sanitation of Senegal (ONAS), Senegal



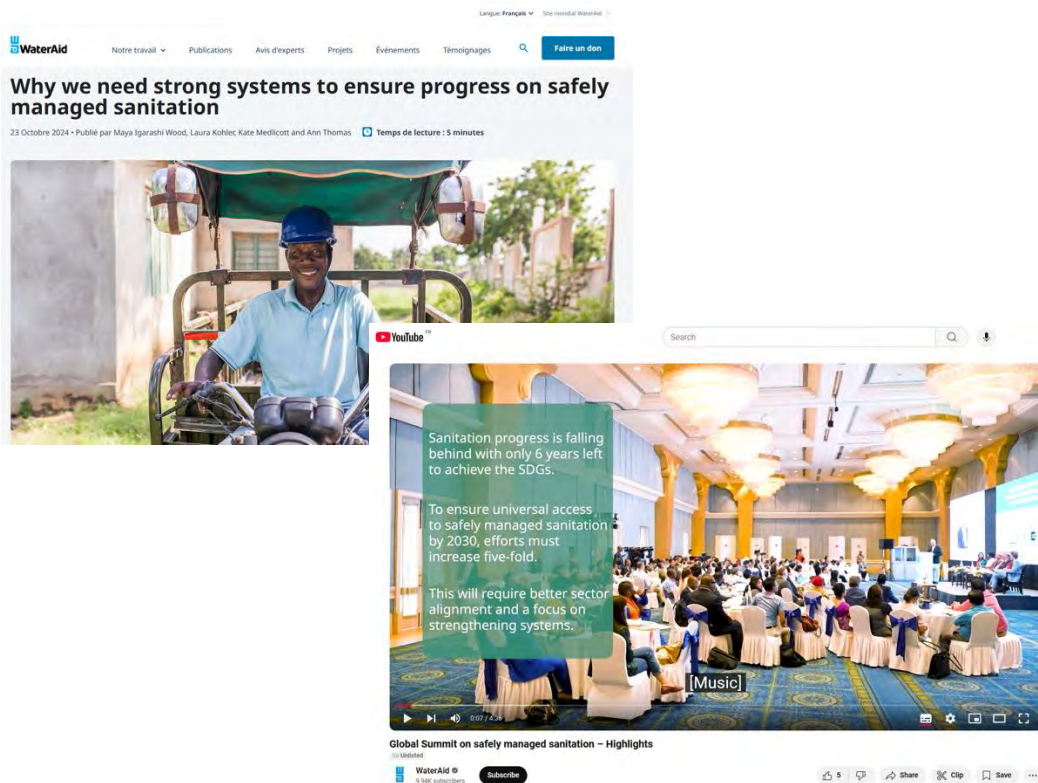
CWIS in Dhaka

S. M. Anwar Satter ,
Superintending Engineer & CWIS Focal person with Dhaka Water &
Sewerage Authority (DWASA), Bangladesh

Webinar series and related resources

Sanitation Summit, Nepal, June 2024

Watch [Summary](#) and [Thematic videos](#)



[Webinar series \(hosted at SuSanA\)](#)

- | | | |
|----|---|---------------|
| #1 | Strengthening sanitation governance and policy implementation | 25 February |
| #2 | Financing safely managed sanitation: accessing available resources | 25 March |
| #3 | Strengthening data systems for decision making | 15 April |
| #4 | Scaling up service delivery in rural settings | 13 May |
| #5 | Scaling up service delivery in urban settings | 03 June |
| #6 | Human resource capacity strengthening for safely managed sanitation | 17 June (tbc) |

Register here:



Steps to achieve universal access to SMS

- **Checklist to demystify and help navigate** through available guidelines and tools.
- **Assist country teams** to work with national and sub-national levels counterparts to implement **government-led, systems strengthening approach**
- **Ensure activities are complementary** and aligned across partners and sector stakeholders.



Overview of session

1

Steps

2

Introductory presentation urban sanitation

2

What are important enablers to drive urban sanitation?



Business Models for Sanitation Service in Dakar

Mouhamadou Gueye ,
Technical Advisor of the General Manager at National Office of
Sanitation of Senegal (ONAS), Senegal



CWIS in Dhaka

S. M. Anwar Satter ,
Superintending Engineer & CWIS Focal person with Dhaka Water &
Sewerage Authority (DWASA), Bangladesh



Sanitation service delivery at scale – Urban settings



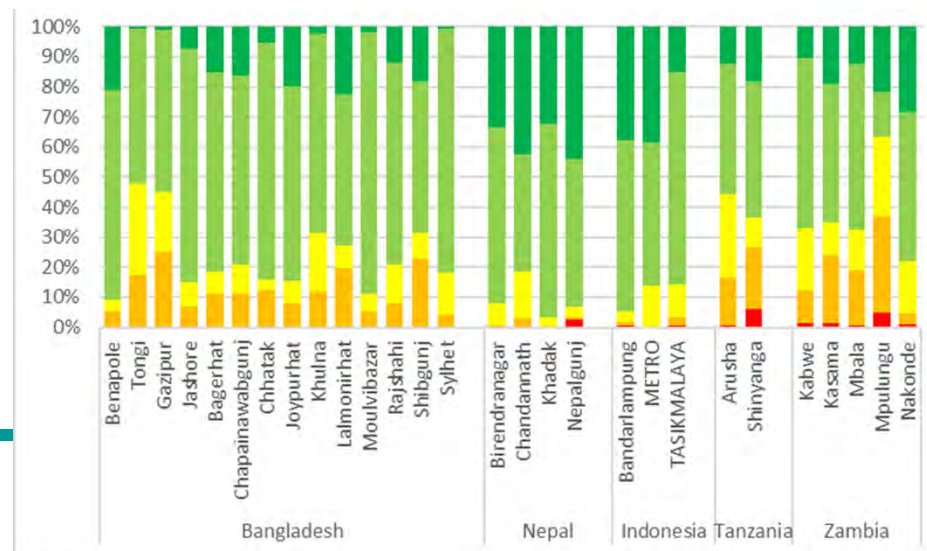
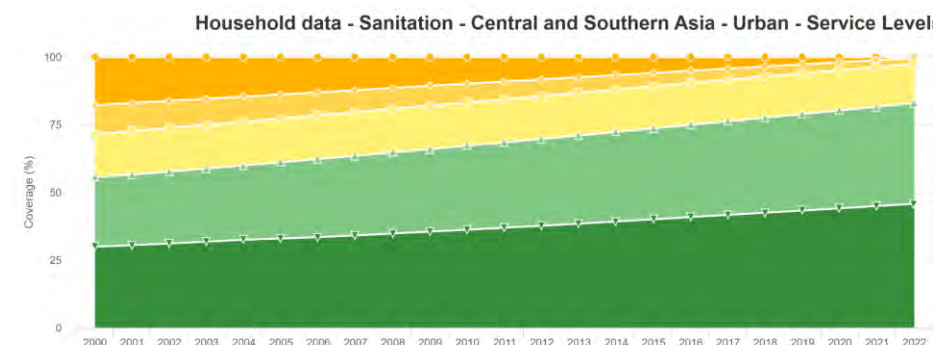
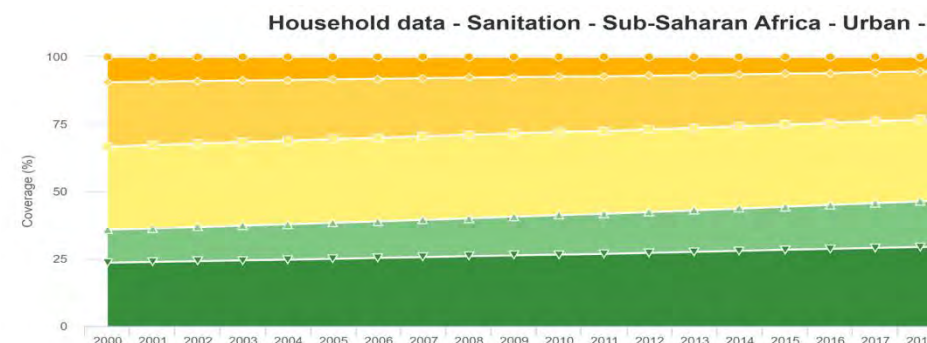
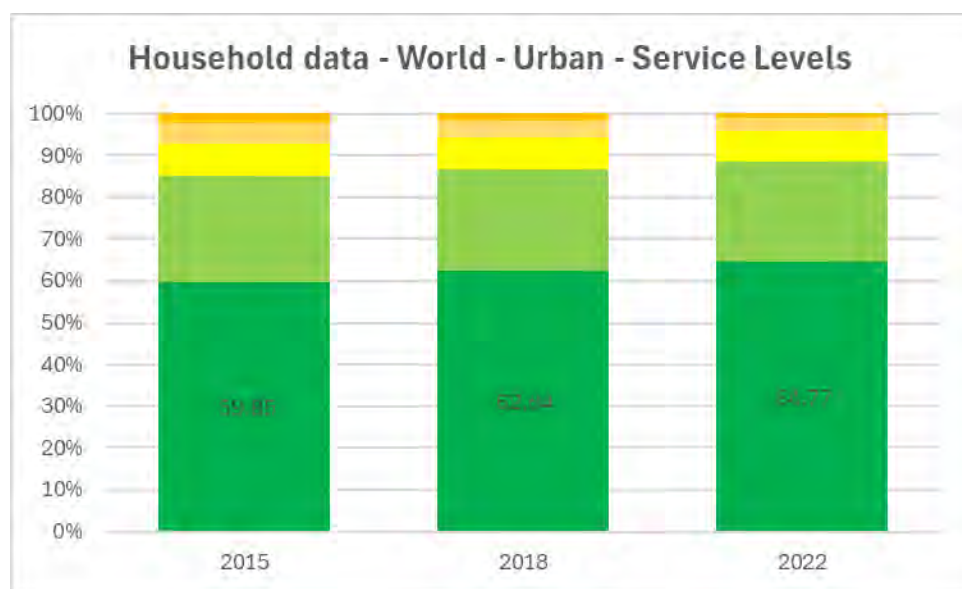
Lungi Zuma Biyela

Utility Partnerships Senior Advisor
WaterAid



Sanitation in Urban Settings

- Rapid urban population growth
- High % of the urban population lives in informal settlements



What is unique about the urban context?



Diversity of people



A diversity of containments



Mixture of wastes



Interfaces with other services and sectors



Pollution of our living environment



Density of housing



Plight of sanitation workers



Large investments...
Too many unused



Complex regulatory settings



Pollution of the water bodies we depend on

Why aren't we there yet...

- Inadequate and/or sporadic investments
- The needs of marginalised groups of people are not considered
- Behaviour change
- Non-sewered sanitation is left to the household to manage
- Minimal co-ordination between the responsible authorities



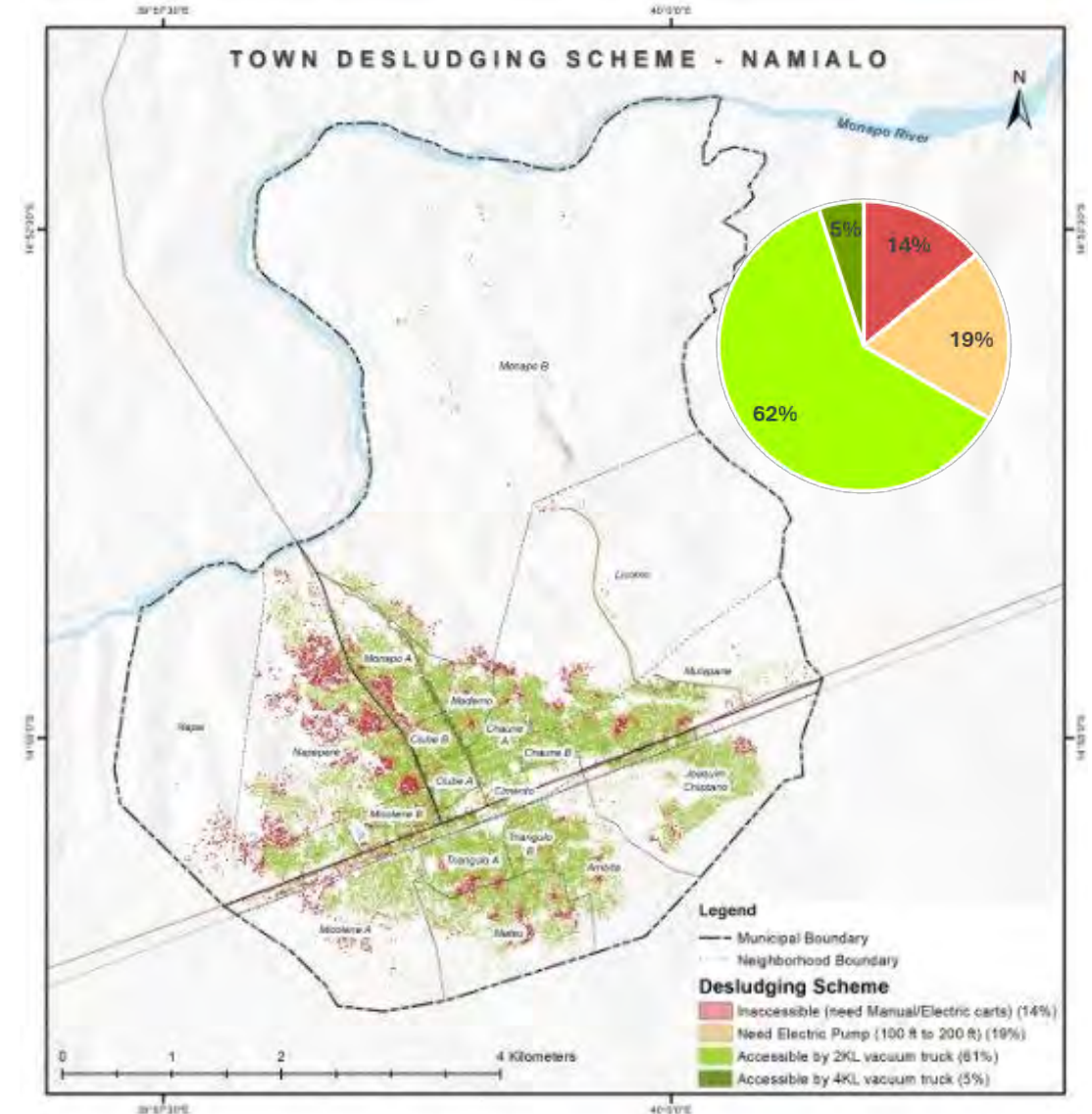
What do we mean by city wide?

Spatially reaching all parts of the city

Along the sanitation value chain



Socially reaching all classes of people in the city



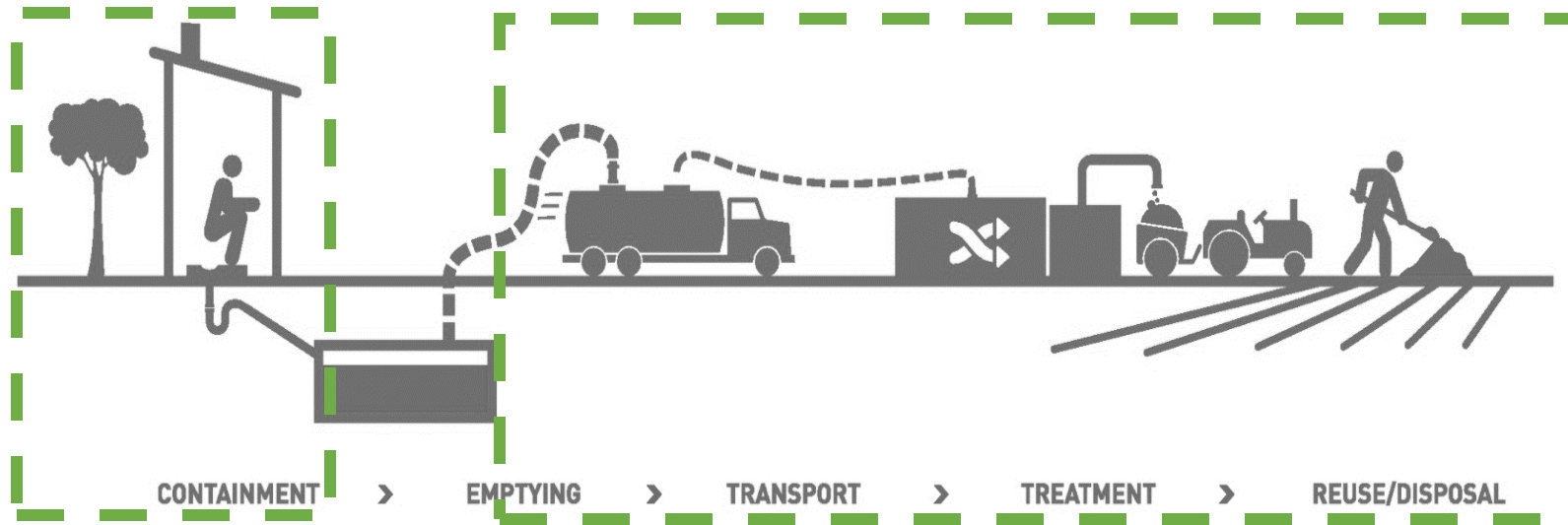
Urban Sanitation Service Delivery

POLICIES

FINANCE

STANDARDS

DATA



Household

Public utility (national, sub-national)

Local government

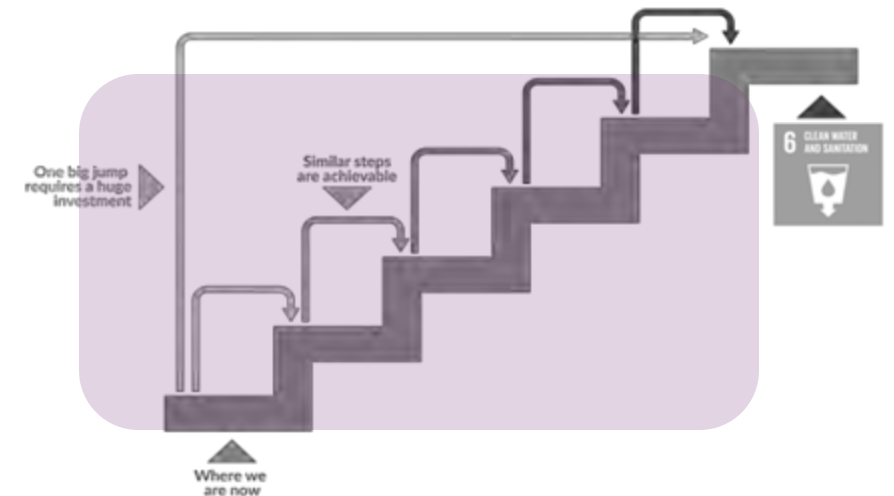
Private operator/s

REGULATION

INNOVATION

CWIS is one of the approaches to scale sanitation across a city. It is...

- A framework for a public service approach to urban sanitation, where all members of the city have equitable access to adequate and affordable improved sanitation services
- CWIS means using appropriate systems of all scales (sewered & non-sewered) across the entire sanitation value chain to achieve safe, equitable and sustainable service outcomes
- CWIS brings together urban service 'problem solvers' to use data and evidence to leverage scarce public resources

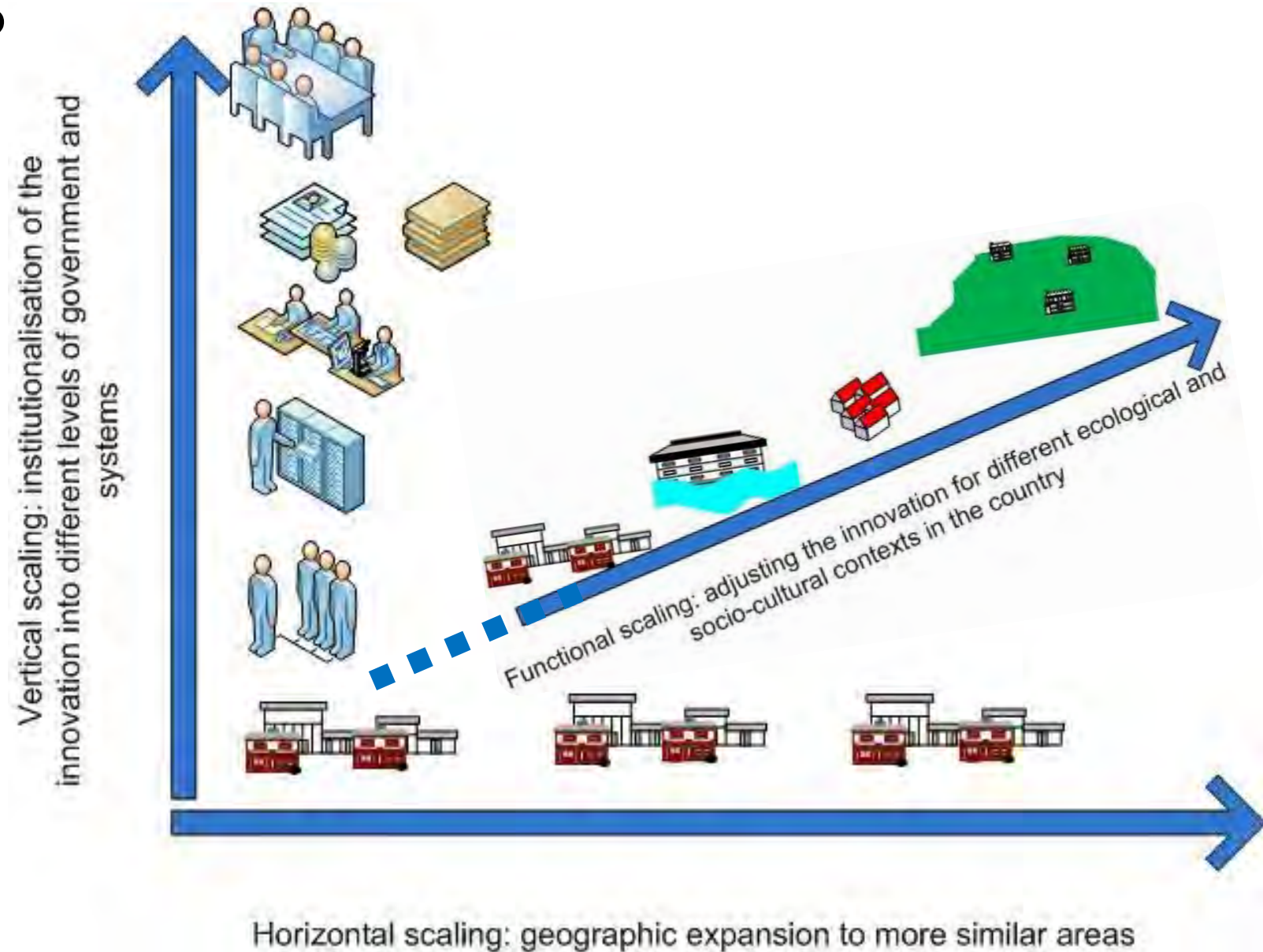


CWIS 2x3 framework

CWIS SERVICE FRAMEWORK			
CORE CWIS OUTCOMES	EQUITY   	SAFETY  	SUSTAINABILITY  
	Services reflect fairness in distribution and prioritization of service quality, prices, and deployment of public finance/subsidies.	Services safeguard customers, workers, and communities from safety and health risks—reaching <i>everyone</i> with safe sanitation.	Services are reliably and continually delivered based on effective management of human, financial and natural resources.
CORE CWIS FUNCTIONS	RESPONSIBILITY	ACCOUNTABILITY	RESOURCE PLANNING AND MANAGEMENT
	An authority(ies) executes a clear public mandate to ensure safe, equitable, and sustainable sanitation for all.	Authorities' performance against their mandate is monitored and managed with data, transparency and incentives.	Resources—human, financial, natural, assets—are effectively managed to support execution of mandate across time/space.

How to scale from city-wide to nation-wide urban sanitation?

- What to scale?
- By whom?
 - Who leads
 - Who supports?
- What is the pace?
- What is the investment?



Overview of session

1

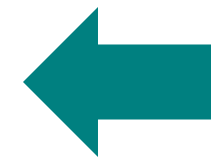
Steps

2

Introductory presentation urban sanitation

2

What are important enablers to drive urban sanitation?



Business Models for Sanitation Service in Dakar

Mouhamadou Gueye ,
Technical Advisor of the General Manager at National Office of
Sanitation of Senegal (ONAS), Senegal



CWIS in Dhaka

S. M. Anwar Satter ,
Superintending Engineer & CWIS Focal person with Dhaka Water &
Sewerage Authority (DWASA), Bangladesh



Program For Scaling Up The Structuring Of The Fecal Sludge Market In Senegal (PSMBV)



Mr Mouhamadou GUEYE

On-site Sanitation Promotion Cell

Organisation: National Office of Sanitation of Senegal (ONAS)

Email: mouhamadou.gueye@onas.sn
or gueyemouhamadou1970@gmail.com

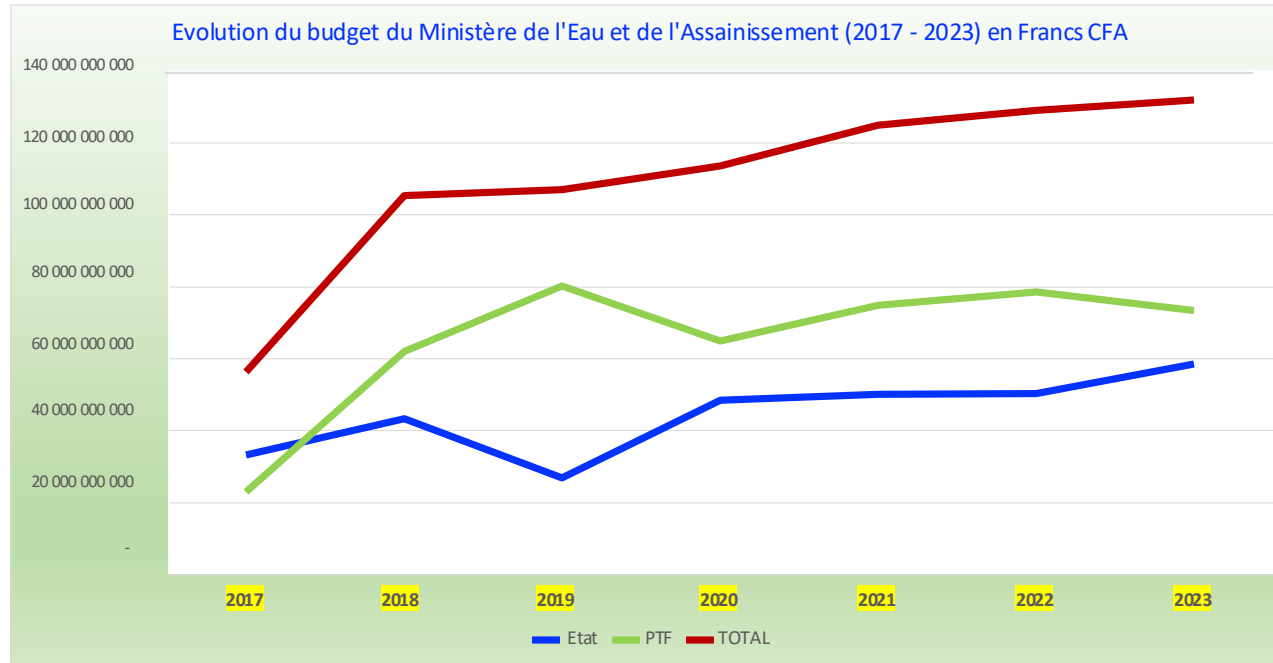
Mobile (phone): +221776315208

Context

- The basic access rate in urban areas is 88.9% ;
- The basic access rate in rural areas is 62.20% ;
- The basic access rate in Senegal is 74.20 % of which 61,20 % with non shared toilets.
- The **Sectorial Development Policy Letter (SDPL)** (2016-2025) is the current reference framework in the water and sanitation sector:
"contribute to the achievement of sustainable development objectives aimed at guaranteeing, by 2030, universal access to drinking water and sanitation while ensuring integrated management of water resources".



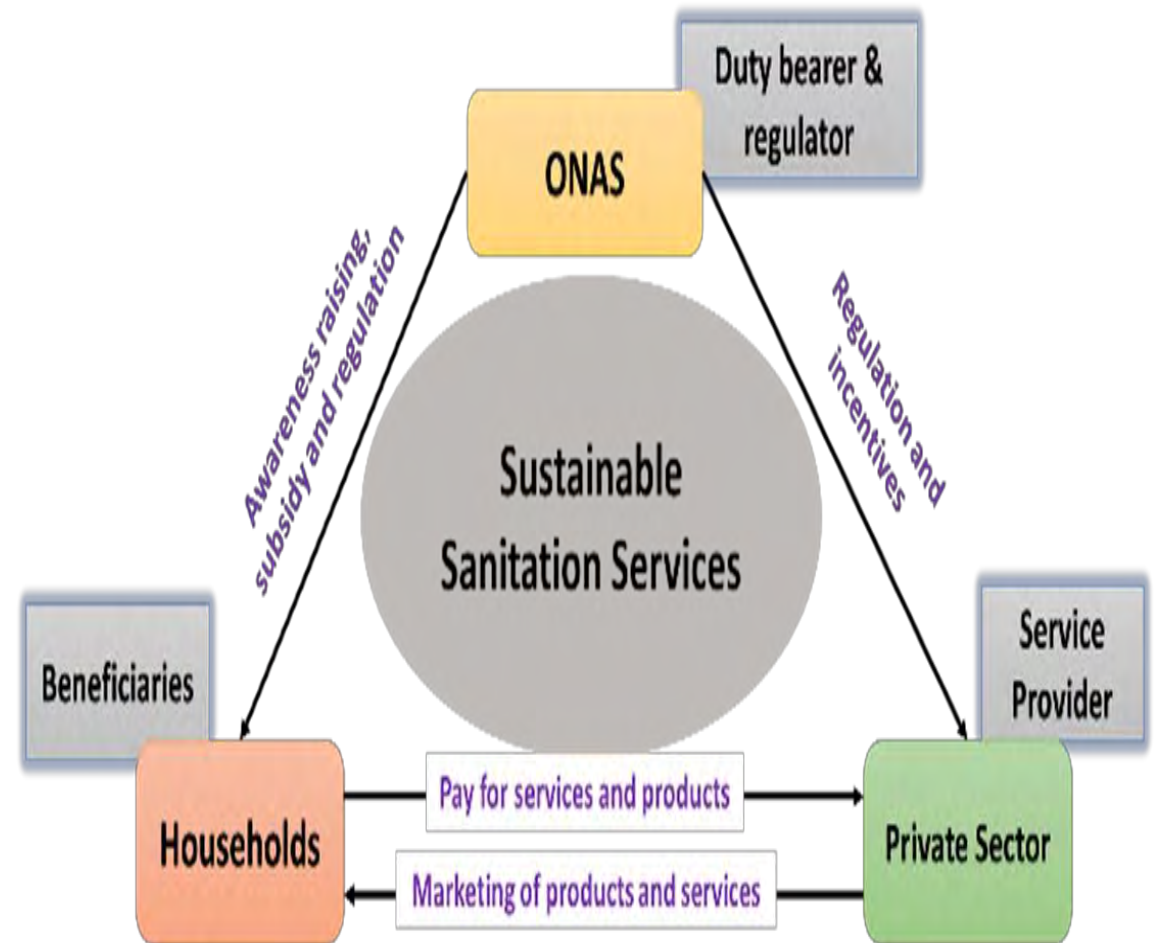
Financial Flows:



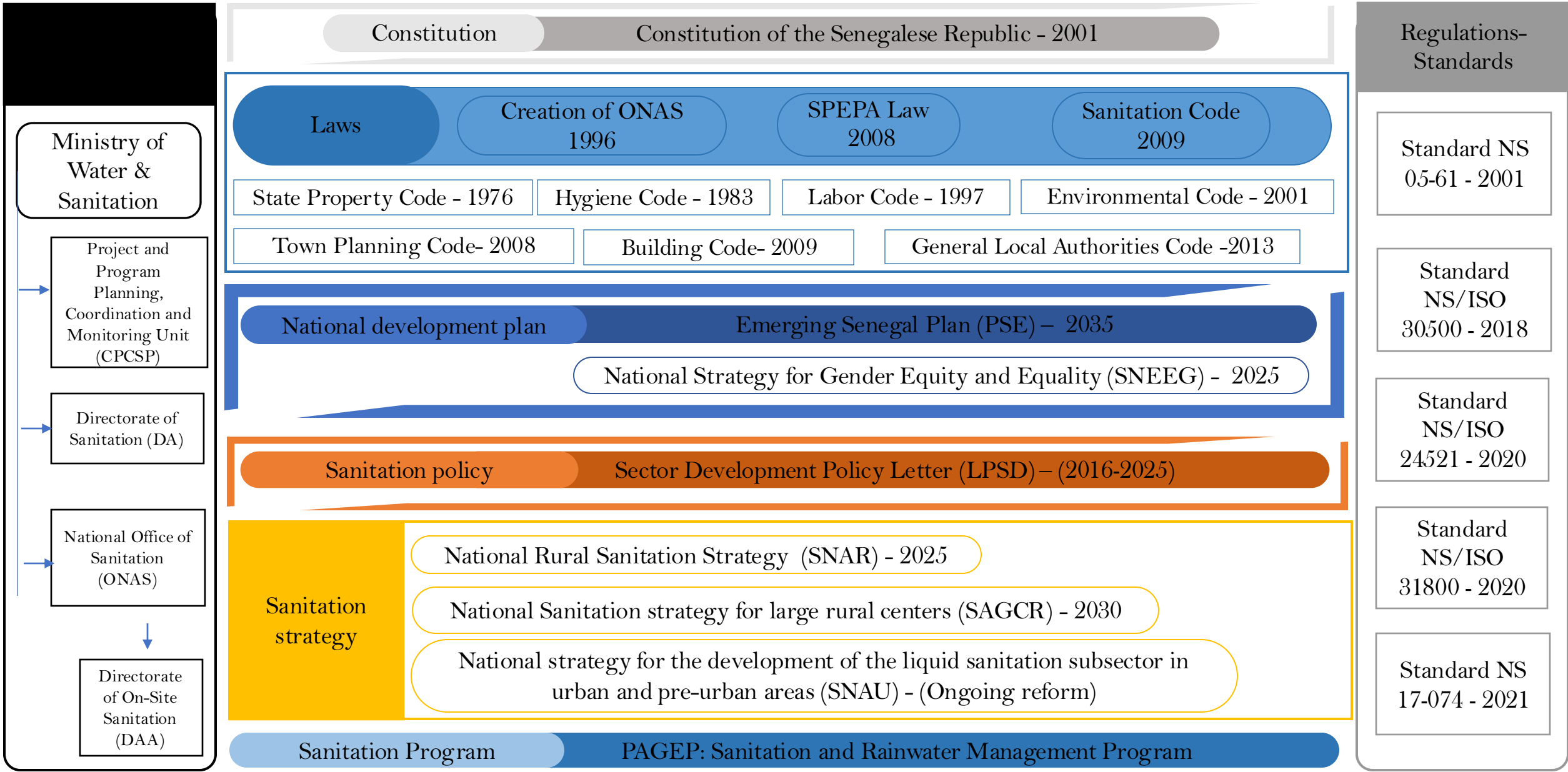
1 Franc CFA = 545 \$US

An increase of 134% of the budget of the water and sanitation Ministry from 2017 to 2023
Senegalese Government Counterpart : 41%
Partners Counterpart : 59%

Sanitation Service Delivery Model:



INSTITUTIONAL ARRANGEMENTS OR FRAMEWORK :



QUANTITATIVE OR QUALITATIVE RESULTS AND SUSTAINABILITY:

Funds in a framework of the Program for the Scaling up the Structuring of the Fecal Sludge Market (PME-SMBV 2020-2025)	Amounts in \$US	Partners
Project of On-site Sanitation in Dakar Region (PAAD)	31 192 661	French Development Agency (AFD) 80% Loan/20% Grant
First phase of Project of Accelerating Inclusive Sanitation and Hygiene for Eight Cities in Senegal (PAAHIS)	51 376 147	Islamic Development Bank (IsDB) 65% Loan/35 % (LLF) Grant
First phase of Project for Renewing the Emptiers Trucks (PARC)	3 669 725	Gates Foundation, Government, Commercial Bank 40% Loan/50% Grant/10% Equity
Component On-site Sanitation of Project for Access to Water and Sanitation Services for a Sustainable Resilience in Poor areas (PASEA-RD)	23 853 211	African Development Bank (AfD)
Component On-site Sanitation of Project Integrated for Water and Sanitation Safety (PISEA)	146 788 991	World Bank (Loan)
Component On-site Sanitation of Project for Water and Sanitation in Rural Area (PEAMIR)	36 697 248	World Bank (Loan)
Pilote phase of the Project for Structuring the Fecal Sludge Market (PSMBV 2011-2020) and Project for Inclusive Sanitation and Innovation (PAIS 2020-2025)	13 335 141	Gates Foundation 100% Grant
Total in \$US	306 913 123	

Challenges & Lessons learnt

- Rehabilitation of the existing sanitation facilities with sustainable materials and more promotion for On-site sanitation
 - Focussing ONAS activities in a role of Asset Management Agency
 - Lack of an Regulatory Agency despite of Public Service Delegation (PSD) contracts in Sanitation and Water Sector and lack of Decree for Regulation of Emptiers Activities
 - Structural Financial balance problem: the sanitation taxes or incomes cover only 60% of the expenses
 - Whole Public Service Delegation in the overall Value Chain of Sanitation subsector (FSTP and STP)
-

Call to Action or Reflection

- ☐ Investment in Water supply in hard and soft should be accompanied by Investment in Sanitation in order to avoid « the syndrom of Suburban Train (Sanitation subsector) which would like to catch up the High Way Train (Water subsector) » ?
 - ☐ Regulation by the contract or Regulation by an Agency dedicated. What is the best way to provide safe management sanitation services to users in an affordable cost ?
 - ☐ Government and/or Partners and/or Private sector what is the best way to make sustainable Sanitation ?
-

Below is a Link of a video duration 4 minutes about:
« Ensuring access to adequate and equitable
sanitation
for all in Senegal »

<https://www.youtube.com/watch?v=9jWDqeX0ysl>


CWIS in Bangladesh



S. M. Anwar Satter

*Superintending Engineer & CWIS Focal person
Dhaka Water & Sewerage Authority (DWASA)*



A group of children are sitting on the ground in a slum area, playing with clay pots and cups. The background shows a corrugated metal wall and some debris. The text 'City Wide Inclusive Sanitation: Bangladesh' is overlaid in white, with a white horizontal line underneath it.

City Wide Inclusive Sanitation: Bangladesh

S. M. Anwar Satter
Superintending Engineer
& CWIS Focal person

Dhaka Water & Sewerage Authority (DWASA)

03.06.2025

Sanitation Status in Bangladesh

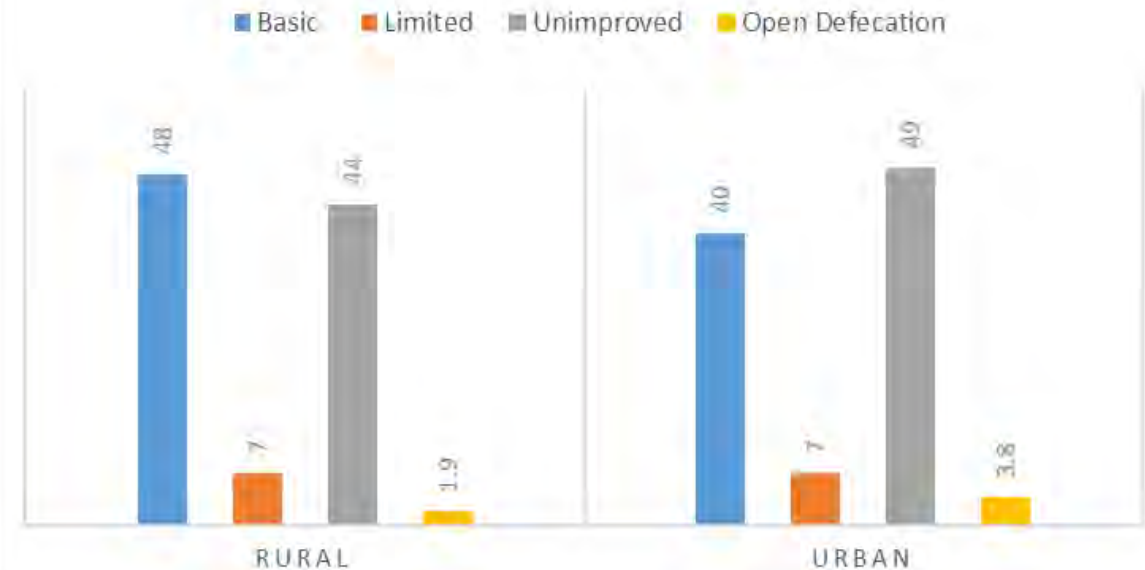
Three Key Issues to ensure Safely Managed Sanitation and Environmental Protection

- 71% HHs toilets directly/indirectly (90% in Slums) discharges to open drains/water bodies.
- Existing sanitation system is not being able to cope up with increased population density, occupancy (vertical extension, design and construction inadequacy, limited alternative sanitation service provision)
- Septic tanks-soakaways mostly do not work in big cities because of compact soil with low infiltration capacity

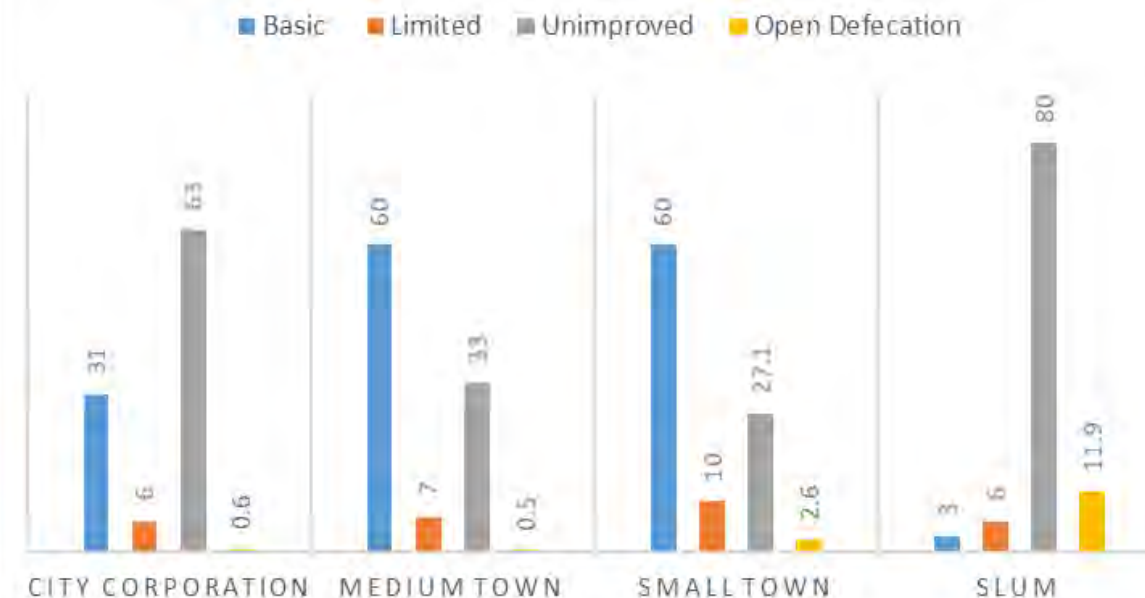
Source: Sanitation Compliance Assessment 2023, Dhaka City

Source: Bangladesh
SMOSS Report
2023

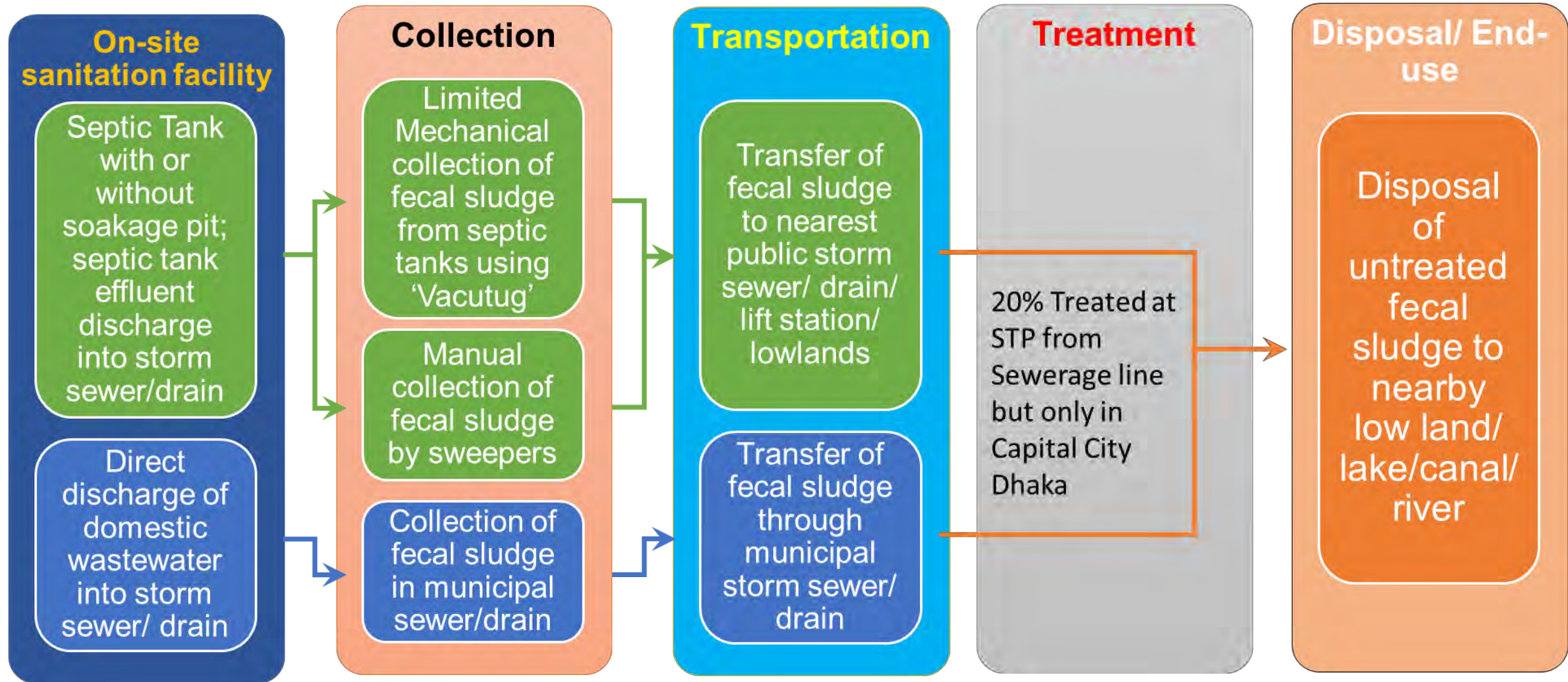
SANITATION ACCESS



SANITATION ACCESS TO URBAN SEGMENT



Summary of Sanitation Service Chain Situation in Bangladesh



Country Response: Case Dhaka City

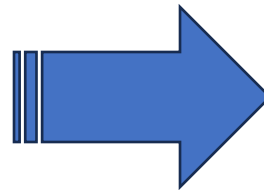
- The Capital of Bangladesh
- Inhabitant of 20 million people
- population density - 34,000 people per square kilometer
- Fecal sludge management caseload 3 million kg/day (avg 150 gm per p/d)



Change for Inclusivity and Sustainability

TRADITIONAL APPROACH

1. Master planning/ investment only for **centralized sewer systems**
2. **On-site not considered**
3. Financed by central Govt/loans
4. **Wealthy/business districts prioritized**
5. Limited coverage
6. O&M challenges
7. **Resource recovery not considered**
8. No performance management



SAFE, SUSTAINABLE INCLUSIVE SANITATION SERVICES

1. **Equitable sanitation services benefit everyone**
2. Fecal waste is safely managed along the **entire sanitation service chain**
3. Systems enable **resource recovery** and re-use
4. **Diverse and innovative technologies**-sewered and/or non-sewered-are deployed
5. Comprehensive long-term planning fosters innovation, pro-poor financing, improved performance
6. Demonstration of **strong political will**, accountability and technical and managerial **leadership** in the sector

INTRODUCE MULTIPLE SANITATION SCHEMES

1

Scheme

Centralize Sewerage Treatment
System Connected with Pipe
Network

2

Scheme

Centralize Sewerage Treatment
System Connected with
Decentralized Treatment Units

3

Scheme

Centralize Sewerage Treatment
System with
Schedule Deluging Scheme

4

Scheme

At source sanitation
transformative technology

5

Scheme

Special arrangement for Low
Income Community

Establishing Centralized Sewerage Treatment Plants

The total Core Dhaka city area divided into 5 sanitation catchments:

1. Pagla
2. Dasherbandi
3. Rayerbazar
4. Uttara
5. Mirpur



Dasherbandi STP under operation since April, 2022.

Reconstruction of Pagla catchment sewerage infrastructures ongoing





Demonstration of Sanitation Transformative Technology (NBS):

(1) Community based wastewater treatment and reuse for Household toilet flushing – *Asrayan slum Rajshahi city*

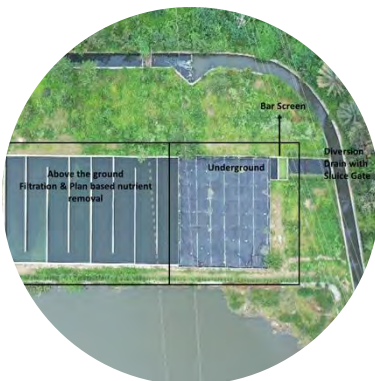
(2) Neervara – Protect city waterbody from fecal contamination from low-income communities – *Karail slum Dhaka*

(3) Wastewater treatment and Reuse for City Greening Zones – *Dhaka Gulshan Lake*

(4) Cluster Sewer with Wastewater treatment - *Khulna City Slum City*



1



2



3



4



Before



Neervara Treatment System



After

- **800,000** people live at Karail Slum
- **23,000** kg fecal matter/per day discharged into lakes/khals (water bodies)/low-lying areas

- **Implemented NBS connected 1000** Households with **50,000** Litres/day treatment capacity
- CAPX Around : **25,000** USD
- OPEX Around : **50** USD/Month



Truing to
Children
playing and
cultural place



Schedule Desludging Scheme

Oct 2023

Major Six steps to Protect Environment from Unsafe & Unregulated Sanitation Practices

(1) DNCC & DWASA is engaging private sector to execute schedule desludging in Zone 3

(2) Revision of Bangladesh Building National Building Code (BNBC) and Building plan approval process to category wise adaptation of at source sanitation treatment units

(3) Required expansion of Nature Based Solution (NBS) to protect environment from human sludge those dumping from slum

(4) Re-claiming water from wastewater could improve water scarcity in doubt prone areas

(5) Piloting unleashing carbon market (CH₄) from safe urban sanitation programming

(6) Institutional Capacity Development to adopt “schedule desludging” for Division city immediately

Ensure Sustainability and
Scale up of City-Wide
Inclusive Sanitation by
updating Dhaka Sewerage
Masterplan 2013

UPDATE DHAKA WASA SEWERAGE
MASTERPLAN-2013



Recap

Multiple Sanitation Schemes are required to address mega cities (Schedule Desludging, Sanitation Transformative Technology etc)

Co-Treatment facilities is found viable for highly densely city

Stakeholders' formal coordination can solve CWIS issues

Appropriate Strategy and Policy is must, e.g Institutional Regulatory Framework (IRF-FSM) and Sanitation Masterplan

Thanks

*Contribute to ensure
healthy and clean-living
environment specially for
child and women*



unicef  for every child



Questions & Answers



Summary and close

Francis Odhiambo

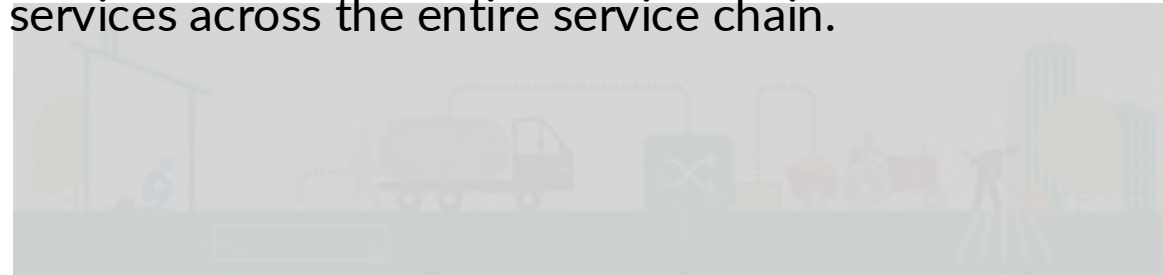
Regional WASH Adviser

UNICEF South Asia



4 takeaways for urban sanitation service delivery

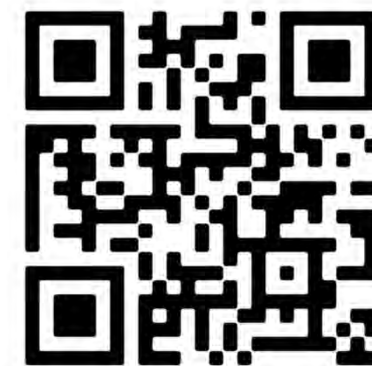
1. Move away from isolated and infrastructure-focused projects to comprehensive approaches and ensure continuity across urban areas.
2. As a public good, sanitation requires government leadership. For the urban context, this requires clarifying institutional responsibilities.
3. Coordination among actors—public and private--and accountability are key to delivering affordable, quality sanitation services, especially to marginalized populations.
4. A skilled workforce is essential for effective sanitation services across the entire service chain.



Upcoming webinars



Register here:



- | | | |
|----|--|----------------------|
| #1 | Strengthening sanitation governance and policy implementation | 25 February |
| #2 | Financing safely managed sanitation: accessing available resources | 25 March |
| #3 | Strengthening data systems for decision making | 15 April |
| #4 | Scaling up service delivery in rural settings | 13 May |
| #5 | Scaling up service delivery in urban settings | 03 June |
| #6 | Human resource capacity strengthening for safely managed sanitation | 17 June (tbc) |