



Ministry of Water, Sanitation and Irrigation

Sanitation Priorities

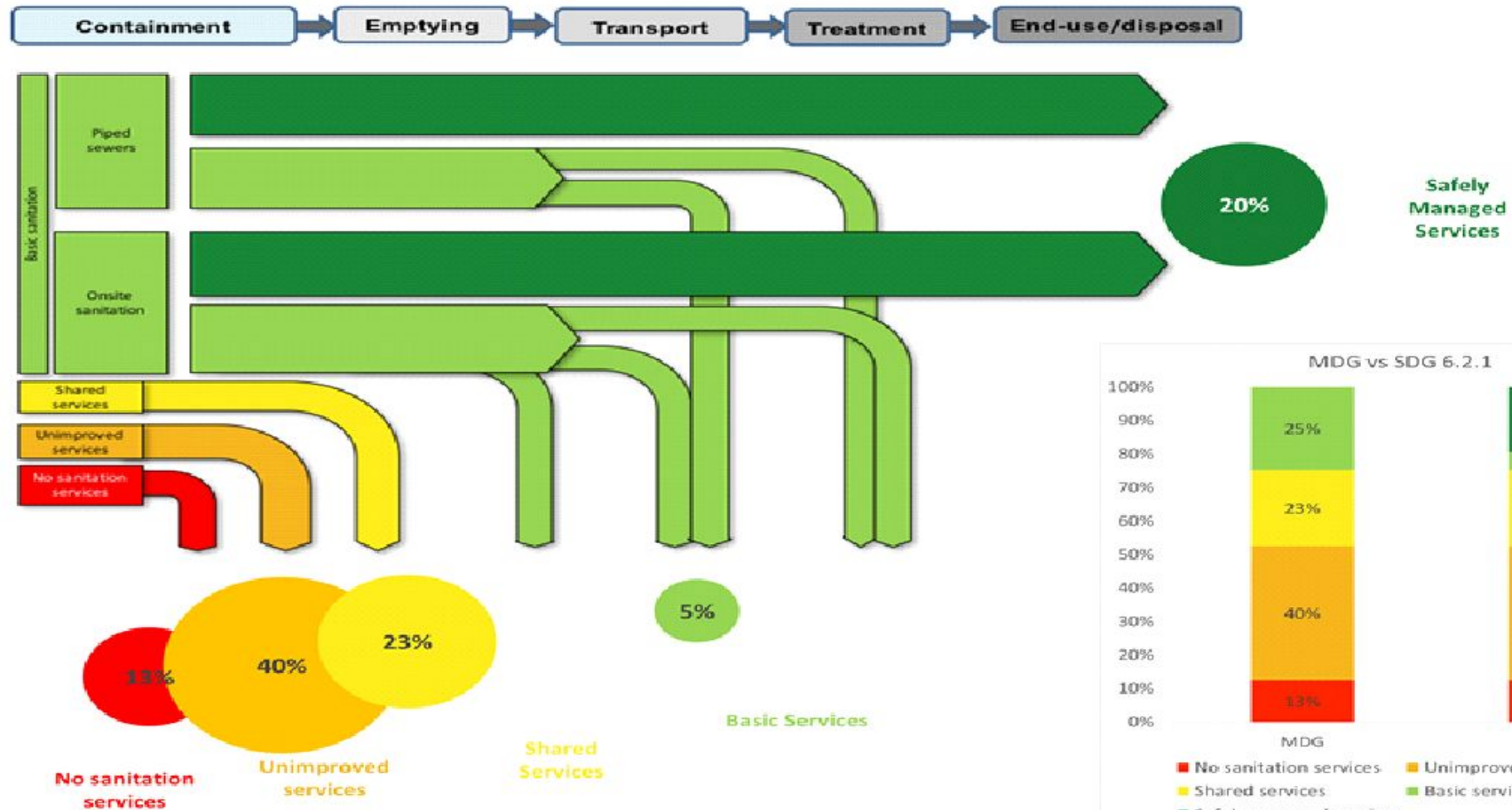
Eng. FK. Kyengo

**Director – Sanitation Management &
Head of Development Cooperation**

23th March 2023

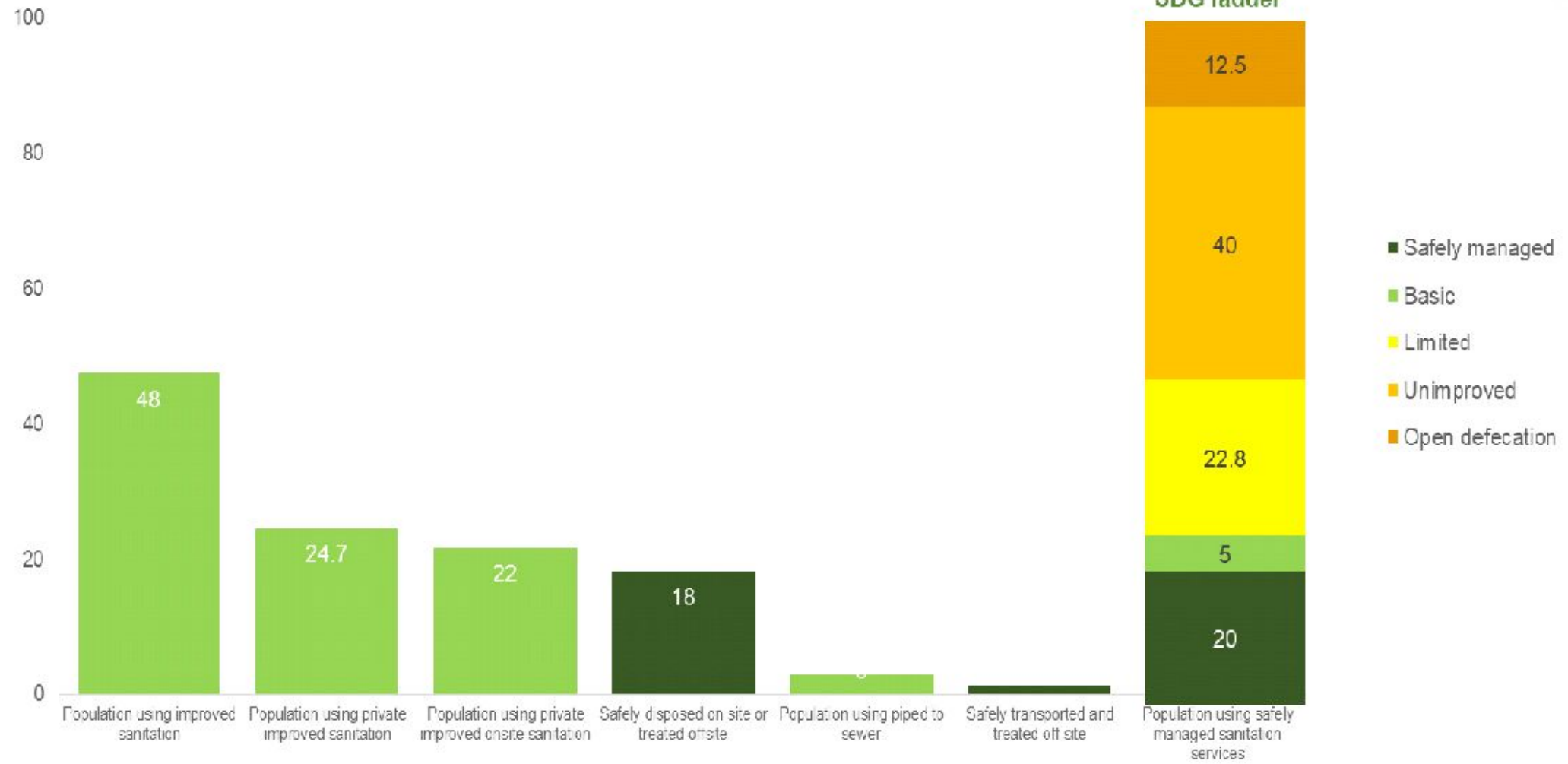


SFD BASED ON THE VNR REPORT

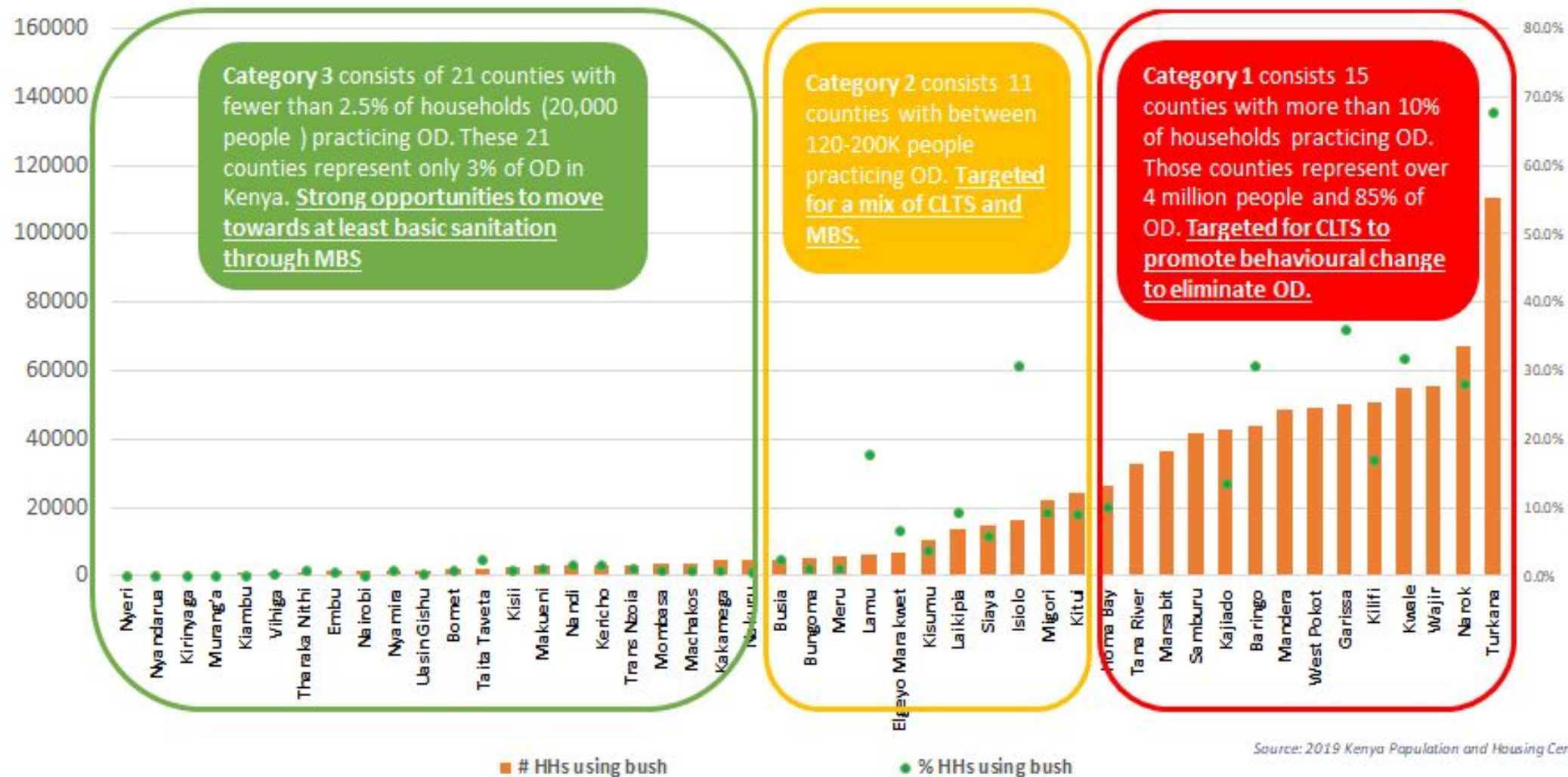




Kenya



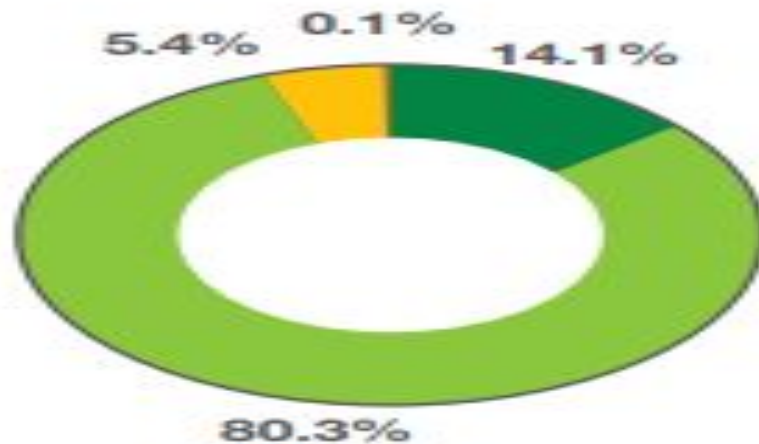
and % of Households Practicing Open Defecation (2019)



Source: 2019 Kenya Population and Housing Census

Nyeri County Sanitation Status

Urban and Rural HH Access to Sanitation Facilities, Nyeri County

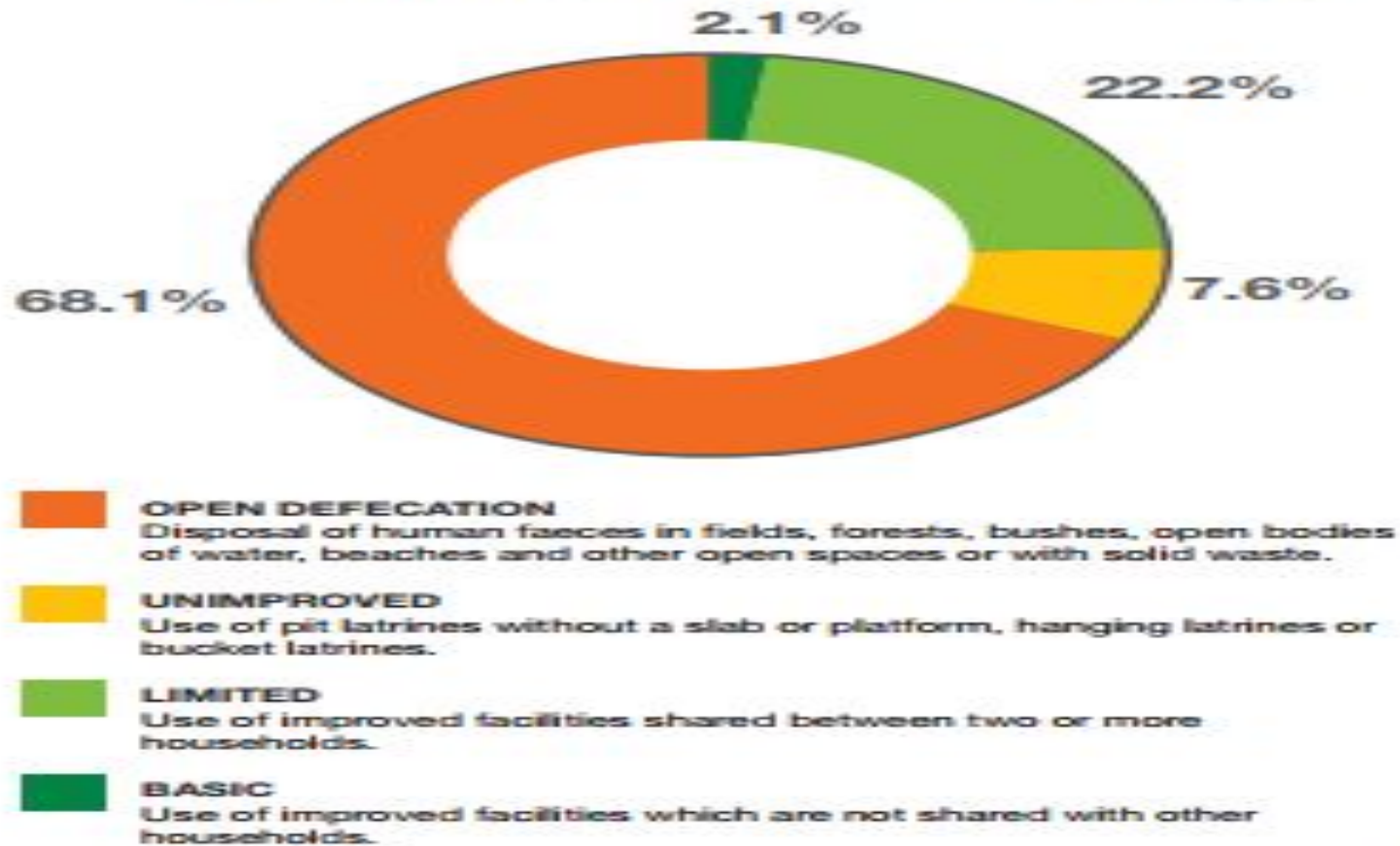


Despite low rates of open defecation, the quality of urban and rural sanitation services remains concerning 5.4% unimproved latrines and 80.3% of people having access to only limited services.

- OPEN DEFECTION**
Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste.
- UNIMPROVED**
Use of pit latrines without a slab or platform, hanging latrines or bucket latrines.
- LIMITED**
Use of improved facilities shared between two or more households.
- BASIC**
Use of improved facilities which are not shared with other households.

Turkana County Sanitation Status

Urban and Rural HH Access to Sanitation Facilities, Turkana County



Source: 2019 census

Low sanitation coverage leading to increased pollution and reduced economic growth

70 % of urban dwellers rely on Non-Sewered Sanitation solutions

Only 25 % have a connection to the sewer network

Poorly managed, thus ending up in the Open environment and in freshwater sources

>80% of untreated wastewater is released to the environment

Polluted waters can limit economic growth by up to a 33%



Sanitation options

Sewer: networks, treatment; and onsite systems



Urban - Planned



Sewerage networks -
Improvement of
operation and
treatment

Urban-slums



Ablution blocks combined with
water Kiosks - bio-digester,
baffle reactor, wetland

Public + Institutional



Combined public toilet,
bathrooms, digester,
water kiosk -

Bio-digester &
baffle reactor -
schools and
prisons

Productive Sanitation: Bio-gas, fertiliser, irrigation

Up-scaling needs more focus on onsite treatment systems (Non sewer and decentralised treatment systems)

Sanitation Options



Old



New



Benefits



- ❖ Separation urine/feaces = convenience (no smell)
- ❖ Rain water harvested for hand washing
- ❖ Economic benefits: bio-gas/saving firewood, manure
- ❖ Low cost over time – no need to dig new pit every time

- ❖ Employment of youth – self help
- ❖ Willingness to share (up to 5 households) due to economic benefits
- ❖ Environmental sustainability - No pollution of surface and ground water

Productive sanitation = protection of environment and water resources, reduction of costs, improvement of food security + health

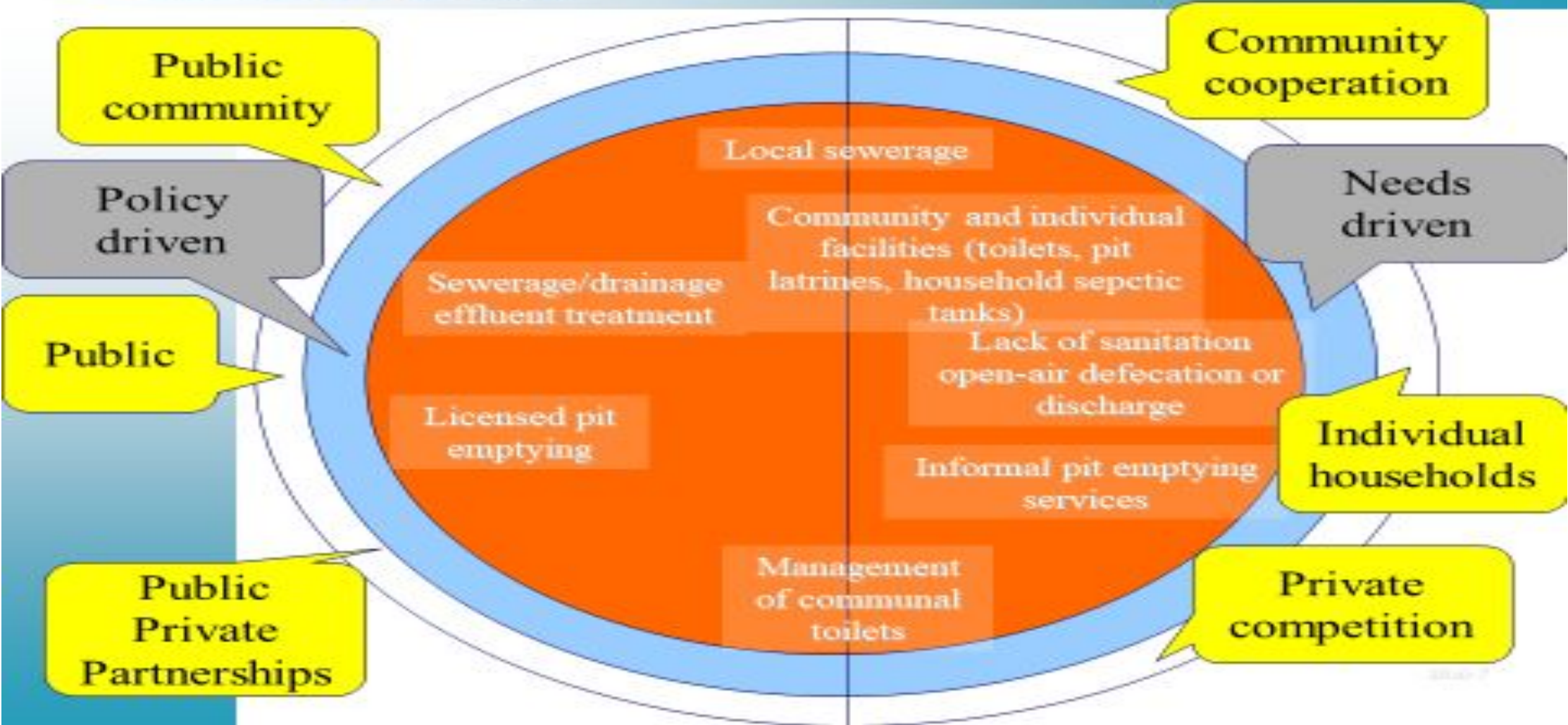
Sanitation Options



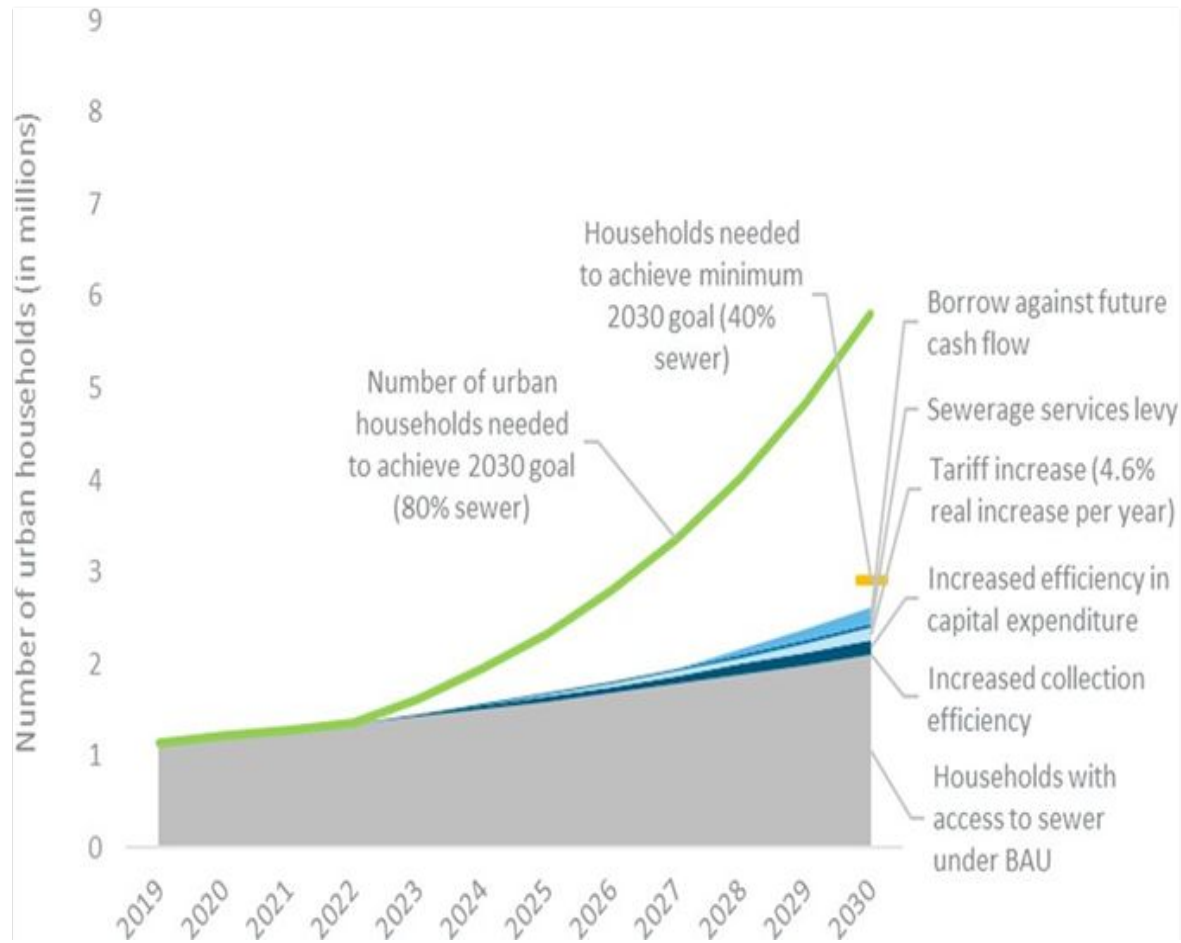
Sanitation Practices... Promotion..



Policy driven and needs driven practices in the 'sanitation wheel'



Urban sanitation: Progress towards goal after improvement options implemented, without additional government finance above BAU

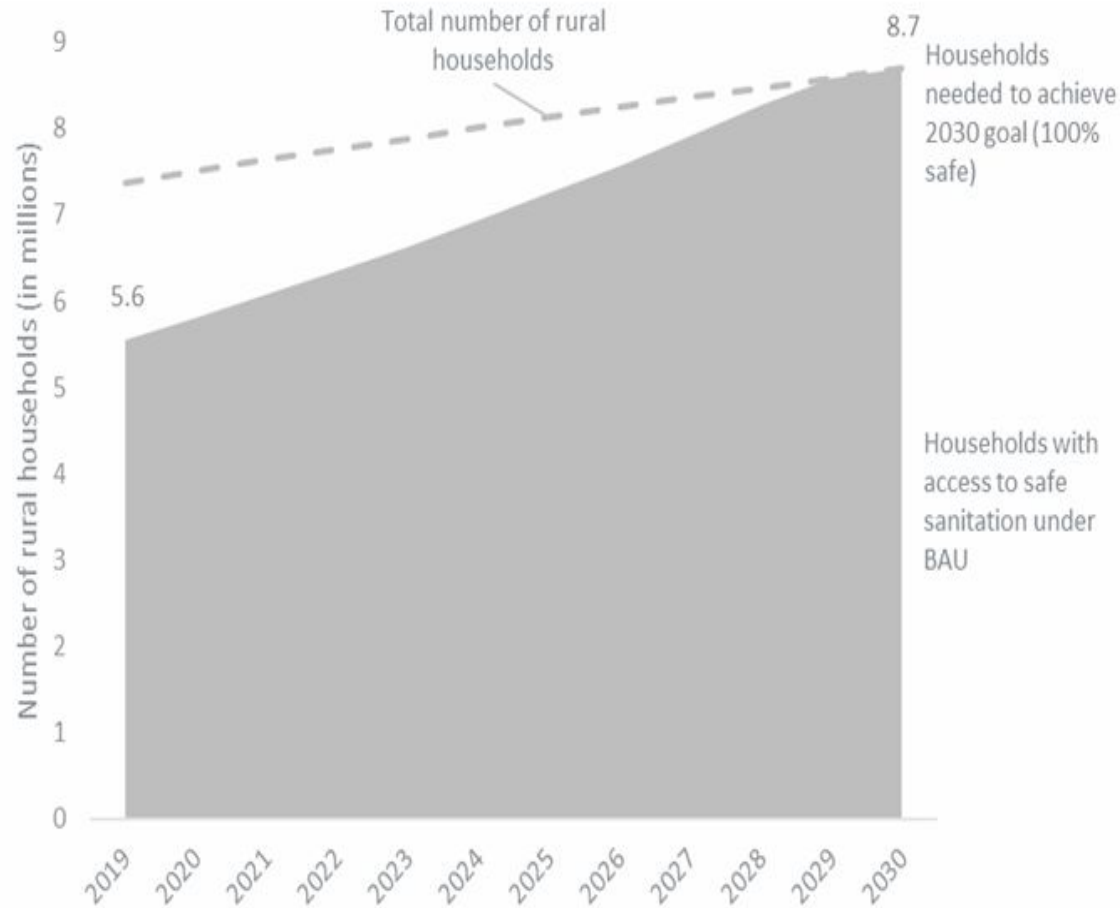


Reform Options

Why this is an important investment approach for the GoK?

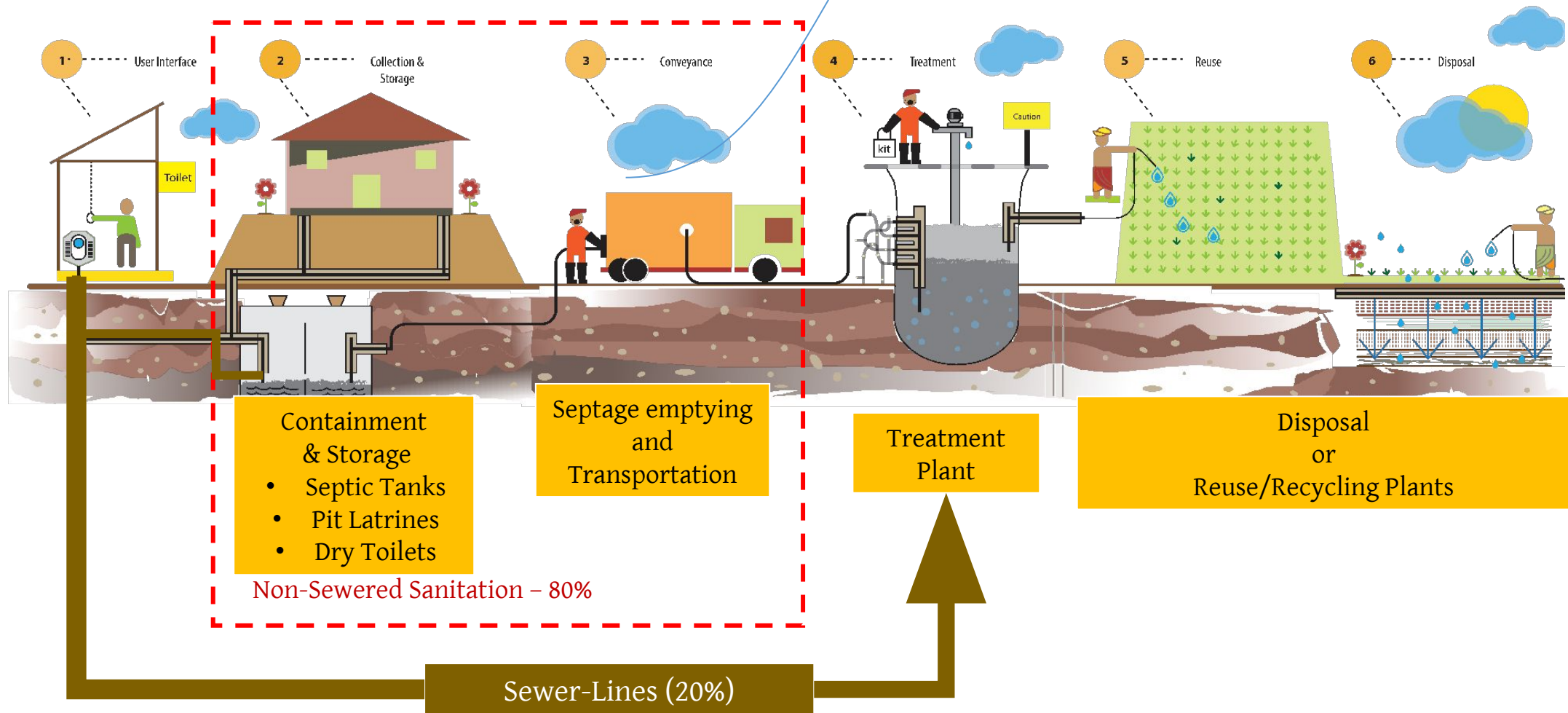
- GoK's sewerage target of 80% cannot be achieved under business as usual (BAU) assumptions
- Under the reforms scenario, the maximum sewer coverage possible is 40% by 2030.
- Hence the need for a mixed approach (i.e., sewerred +non-sewerred sanitation options).
- As part of the national water and sanitation investment program (NAWASIP), MoWSI is recalibrating the urban sanitation investment mix through a CWIS approach that integrates NSS investments with Sewerlines expansions

Rural Sanitation : Progress towards Goal



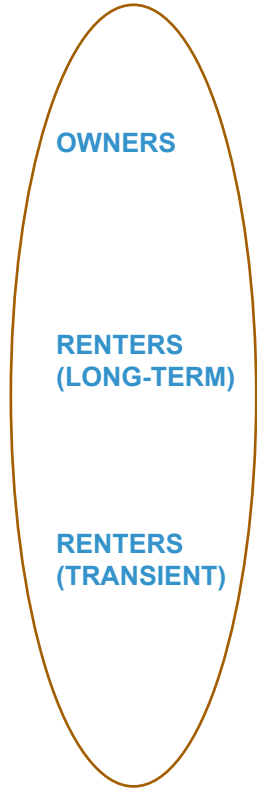
- As Kenya nears 100% access, pace of progress under BAU may slow down
- Access to improved facilities is correlated with income levels – greater subsidies may be required in the future to expand access to very poor
- Under BAU measures, Kenya may not achieve open defecation free (ODF) status until 2053
- The Government should: •
 - Implement measures targeted to the poor, such as targeted subsidies and means-tested grants, to ensure that no households are left behind •
 - Redirect some of the BAU funding (estimated USD 10 million or KSh 1 billion) to focus on achieving ODF status by 2030, by targeting 13 counties that account for 79% of open defecation

What is NSS?



Addressing the Key challenges across the NSS value chain

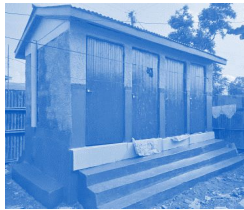
CONTAINMENT



AFFORDABILITY to last mile HHs



JOINT FACILITIES



EMPTIABILITY of existing Latrines

EMPTYING AND TRANSPORT

INFORMAL PIT EMPTYING SERVICE



SAFE DIPOSAL

FORMAL PIT EMPTYING SERVICE



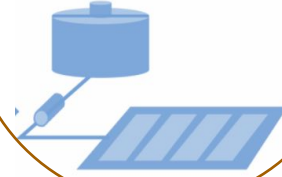
VACUUM TANKER SERVICE



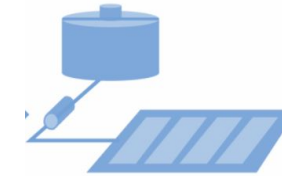
VIABILITY of the Emptying and Transportation Business for Private Operators

DISPOSAL AND RE-USE

TREATMENT (FSTP)



TREATMENT (WWTP)



AVAILABILITY of adequate Fecal Sludge Treatment facilities

Strategic need for Public- Private Partnerships at scale for sanitation services

Current level of access to safe sanitation in the 5 cities

	Unit	Kisumu	Malindi	Nairobi (East lands)	Naivasha	Wajir
No. using NSS	People	467,093	177,862	1,490,886	157,897	118,994
Proportion using onsite	%	80%	100%	80%	85%	100%
Volume of faecal sludge generated	m ³ /day	1,401	534	4,473	474	357
Faecal Sludge Treatment Capacity	m ³ /day	0 specific to faecal sludge	0 specific to faecal sludge	10	10	0 specific to faecal sludge

2030 projections	Kisumu	Malindi	Nairobi (Eastlands)	Naivasha	Wajir*
FS treatment deficit (m3/year)	40,683	20,429	46,350	13,518	4,951

Market-based business models for NSS identified

CONTAINMENT

INDIVIDUAL FACILITIES JOINT FACILITIES



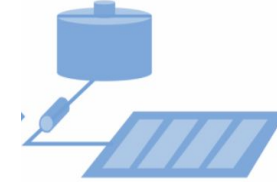
1. Contracts to private companies to build individual Improved OSS based on standard designs with predefined fixed payment
2. Contracts to build and Operate Public Toilets improved NSS services in unserved public areas

EMPTYING AND TRANSPORT

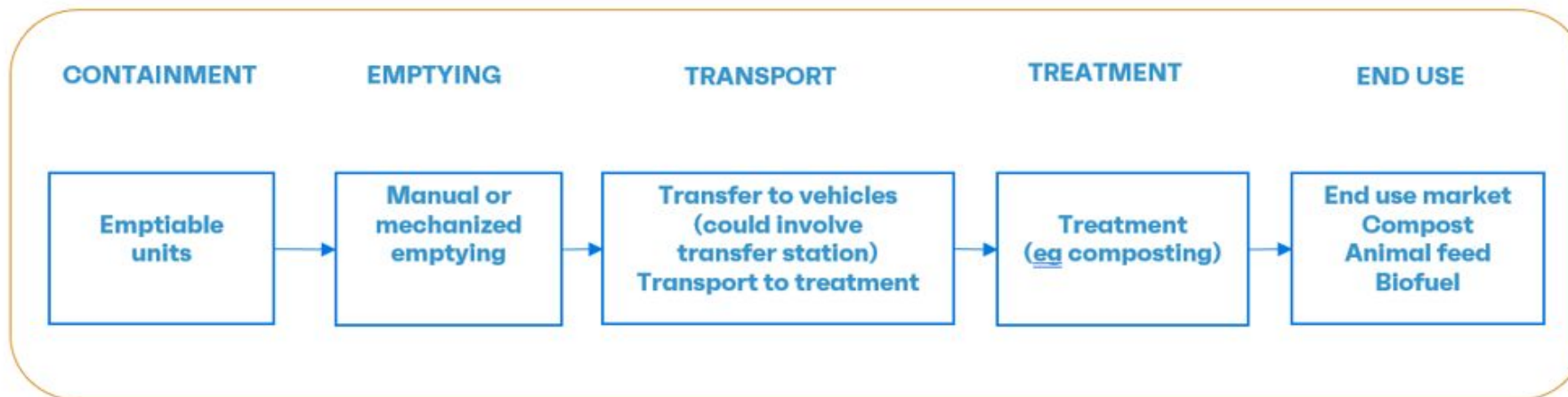


3. Zone the City/Town into Concessional Service areas, Tender and Contract out emptying and Transport to Private Operators at a regulated performance payment per m³/ton/barrel safely emptied and disposed

TREATMENT DISPOSAL AND RE-USE

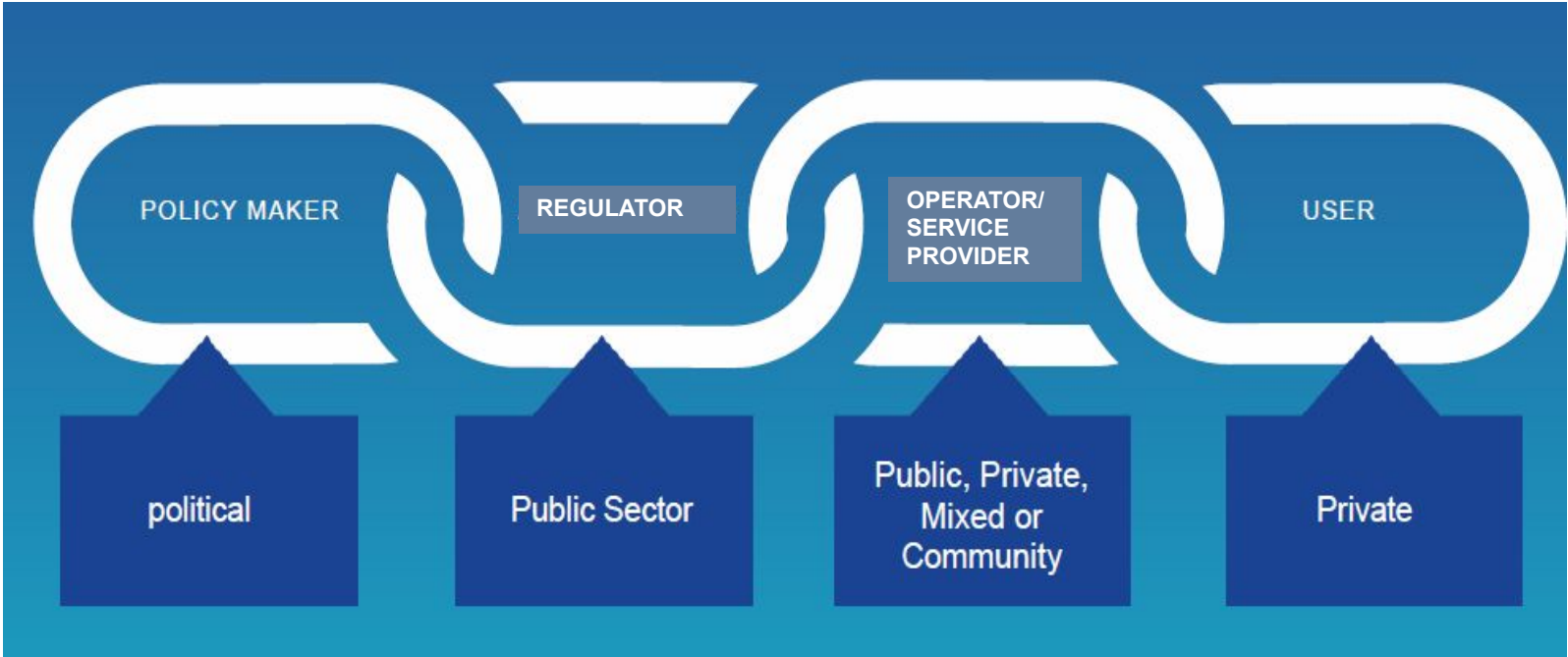


4. Public Construction of FSTP with Delegated Operation & Maintenance to private sector
In the long-term Design Build Operate contract for the FSTP



5. Integrated services Contract to a Private Operator across market segments

Levers for Change/Market interventions In Summary.....



- Decides Public Policy & Strategy Objectives on Sanitation
- **Sets clear Policy on NSS**
- Sets Investments Roadmap and Allocates Public Resources

- Policy Enforcement / Compliance
- Standards and Guidelines for services
- Tariffs & cost recovery
- Monitoring & Data

- Package Products + Services
- Routine Operations
- Customer relations
- Repair/replace facilities
- **Financing Services Improvements**

- Pays the Tariff
- Engages in public interest issues



On-going Scaling Up initiatives



1. **Water and Sanitation Utilities - Sanitation focus**
2. **Kenya Sanitation Alliance - LNB**
3. **Creation of sanitation budget – NG and CGs**
4. **Scaling up countywide/citywide sanitation planning**
5. Inclusion of **sanitation KPI in utility performance** monitoring framework
6. Support utilities to develop inclusive **sanitation business plans**
7. Initial investment **model condominal sewer system** in selected cities
8. Development and/or Review of **national inclusive sanitation guidelines, manuals and standards** under the MWSI



Next steps

A1	Draft Sanitation management Policy and Strategy	i. Sanitation Policy ii. Sanitation Management Strategy
A2	Increasing Sanitation Budget in the Ministry & full analysis of sector investments/efforts	Sanitation budget line and specific Sanitation Programme
A3	Development of Sanitation Masterplans	National and County masterplans
A4	Develop schools WASH curriculum	WASH Curriculum
A5	Strengthen Multi- stakeholder Coordination mechanisms	Functional Coordination Forum

Next steps



Capacity Building.		
B1	Engage top National and County leadership on Sanitation matters	Informed Government Leadership
B2	Promote Education scholarships on Sanitation	Increased Sanitation Capacity
Communication and Advocacy		
C1	Develop and implement the Kenya Sanitation Campaign - Iko Safi Campaign	Culturization of Sanitation

State of Sanitation		
D1	Development of state of Sanitation Atlas	Sanitation Atlas
D2	Carry out appropriate research of Sanitation matters	Actionable Research findings
D3	Development of a Sanitation Programme	National Sanitation Program

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