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Safely Managed Sanitation: Introducing the new WHO learning package

06/06/2023



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WEBINAR INFORMATION



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- **‘Chat’ box:** please use this for general requests and for interactive activities.
- **‘Q&A’ box:** please use this to send questions to the panelists.
(We will answer these during the discussions and in post-webinar materials.)

Please Note: Attendees’ microphones are muted. We cannot respond to ‘Raise Hand’.

WHAT IS HAPPENING?

Inclusive Urban Sanitation



- Reshape the global urban sanitation agenda by focusing on inclusive sanitation service goals – and the service systems required to achieve them – beyond infrastructure and technology.
- Engage the public, private, and academic sectors to share their experiences and define global goals and fundamentals of a **public sector** approach to **service outcomes**.
- The initiative is being progressed through the **SanitAction** campaign – IWA’s global call to action on inclusive urban sanitation.
- **Advisory Board** and **Task Force** formed.

WHAT IS HAPPENING?

Safety, inclusivity, and multi-technology dimensions fully integrated into the urban sanitation concept worldwide

Urban sanitation concepts & norms defined for inclusivity, safety, and SDG 6

Urban sanitation safety, inclusivity, and multi-technology dimensions mainstreamed within IWA's knowledge creation instruments & dissemination channels

CWIS framework considered within the international sanitation community and beyond through IWA's communication channels

WHAT ACTIONS IS IWA PLANNING?

- IWA journal special issues on **inclusive urban sanitation** and other publications focusing on LMIC including **white paper/position papers**.
- **Webinar** series, and **learning sessions** including focused trainings, and MOOCs.
- **Blogs / Stories** series including podcasts and documentaries.
- Launch of **biennial Innovation Conference & Inclusive Urban Sanitation Champions Programme** at the Water & Development Congress & Exhibition in Kigali
- Consultative process – globally acceptable **CWIS framework** and **assessment guidelines**.

For more information on how you can help to reshape the global agenda on urban sanitation, contact:

Suresh Kumar Rohilla
Programme Lead
suresh.rohilla@iwahq.org



[www.iwa-network.org/
projects/
inclusive-sanitation](http://www.iwa-network.org/projects/inclusive-sanitation)



AGENDA

- Welcome, housekeeping rules, introduction (5mins)
Yvonne Magawa
- Part 1: Health rationale for safely managed sanitation (SMS) (8mins) *Kate Medicott*
- Part 2: Definitions for SMS (5mins)
Sophie Boisson
- Quiz 1 (2mins)
Yvonne Magawa
- Part 3: Four key recommendations of the WHO guidelines (8mins) *Sophie Boisson*
- Part 4: How to embed safely managed sanitation in national systems (10mins)
Batsirai Majuru
- Quiz 2 (2mins)
Yvonne Magawa
- Part 5: Risk-based tools to implement SMS – Sanitation Safety Planning (11mins)
Leonellha Barreto-Dillon
- Part 6: Risk-based tools to implement SMS – Sanitary inspection (11mins)
Sophie Boisson
- Quiz 3 (3mins)
Kate Medicott
- Q&A/ Panel discussion (20mins)
Speakers & Moderator
- Where to learn more, short poll and close (5mins)
Yvonne Magawa and Kate Medicott

MODERATOR & SPEAKERS



Moderator



Yvonne Magawa, ESAWAS, Zambia

WHO HQ team



Kate Medicott, Team Lead for Sanitation



Sophie Boisson, Technical Officer, Sanitation and Burden of Disease



Batsirai Majuru, Technical Officer for WASH Regulation



Leonellha Barreto-Dillon, Expert consultant trainer, Seecon

Panellists



Charlotte Adjei, MSWR, Ghana



Vijai Chaurasia, CPHEEO-MoHUA, India

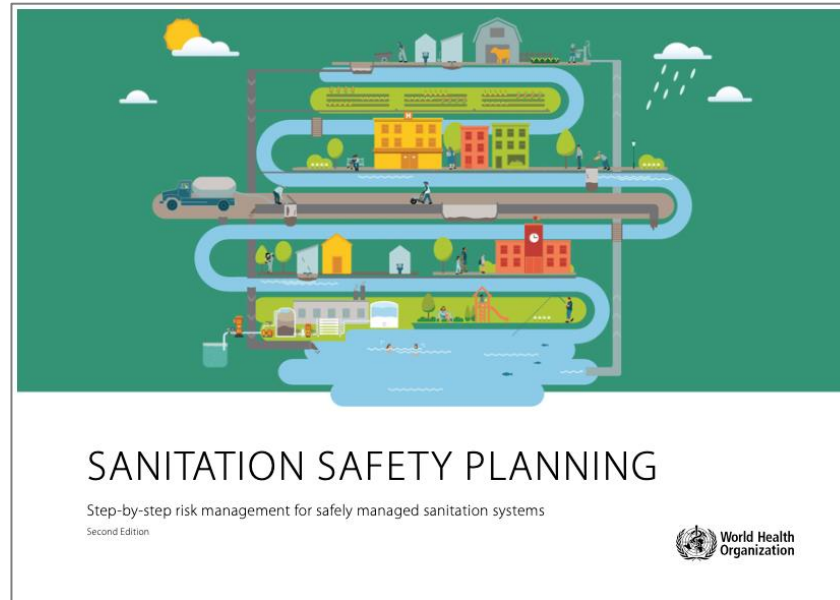
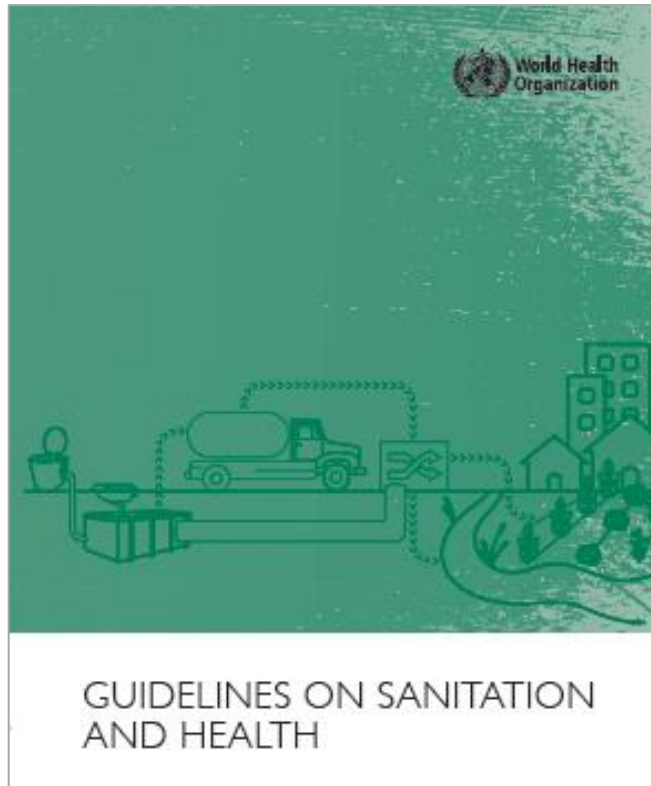


LEARNING OBJECTIVES

At the end of the session participants should:

- Know the health rationale for safely managed sanitation (SMS) (SDG6.2)
- Understand the key recommendations of the Guidelines on Sanitation and Health
- Know where to find monitoring and implementation definitions for SMS at each step of the sanitation chain
- Have a better understanding of where and how to embed definitions into national systems – particularly national targets and regulations
- Have an introductory understanding of risk-based tools to implement SMS
- **Know where to find more – guidelines, training and tools**

KEY RESOURCES

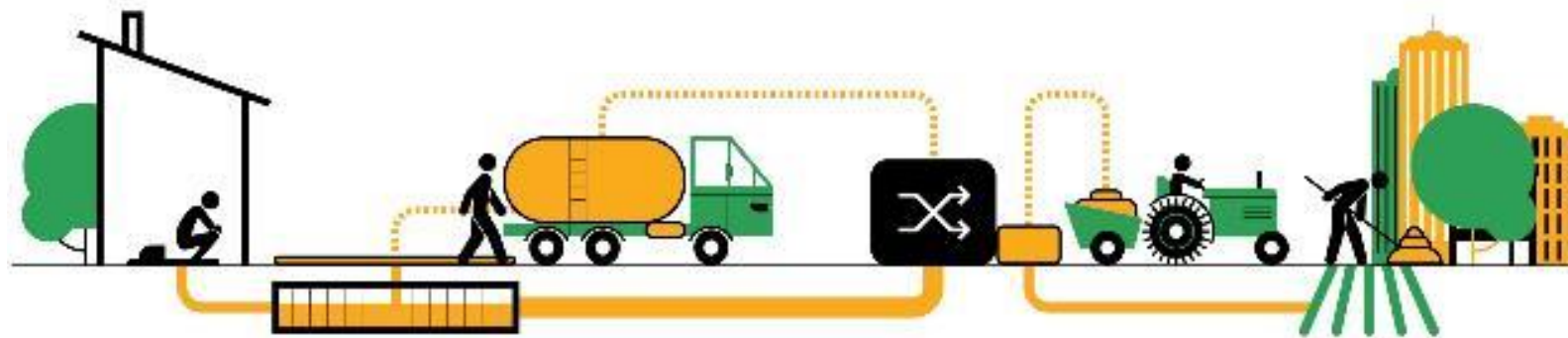


PART 1: THE HEALTH RATIONALE

KATE MEDLICOTT, WHO



WHY DO WE NEED SAFELY MANAGED SANITATION?



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HEALTH IMPACTS OF POOR SANITATION

Direct impact (infections)

Faecal-oral infections

- Diarrhoeas (incl. cholera)
- Dysenteries
- Poliomyelitis
- Typhoid

Helminth infections

- Ascariasis
- Trichuriasis
- Hookworm infection
- Cysticercosis (Taenia solium/ infection)
- Schistosomiasis
- Foodborne trematodes

Insect vector diseases

- (vectors breed in faeces or faecally-contaminated water)
- Lymphatic filariasis
 - West Nile Fever
 - Trachoma

Sequelae

(conditions caused by preceding infection)

Stunting/ growth faltering

(related to repeated diarrhea, helminth infections, environmental enteric dysfunction)

Consequences of stunting

(obstructed labour, low birthweight)

Impaired cognitive function

Pneumonia (related to repeated diarrhea in undernourished children)

Anaemia (related to hookworm infections)

Broader well-being

Immediate:

Anxiety (shame and embarrassment from open defecation, shared sanitation) and related consequences and not meeting gender specific needs

Sexual assault (and related consequences)

Adverse birth outcomes

(due to underuse of healthcare facilities with inadequate sanitation)

Long-term:

School absence

Poverty

Decreased economic productivity

Anti-microbial resistance



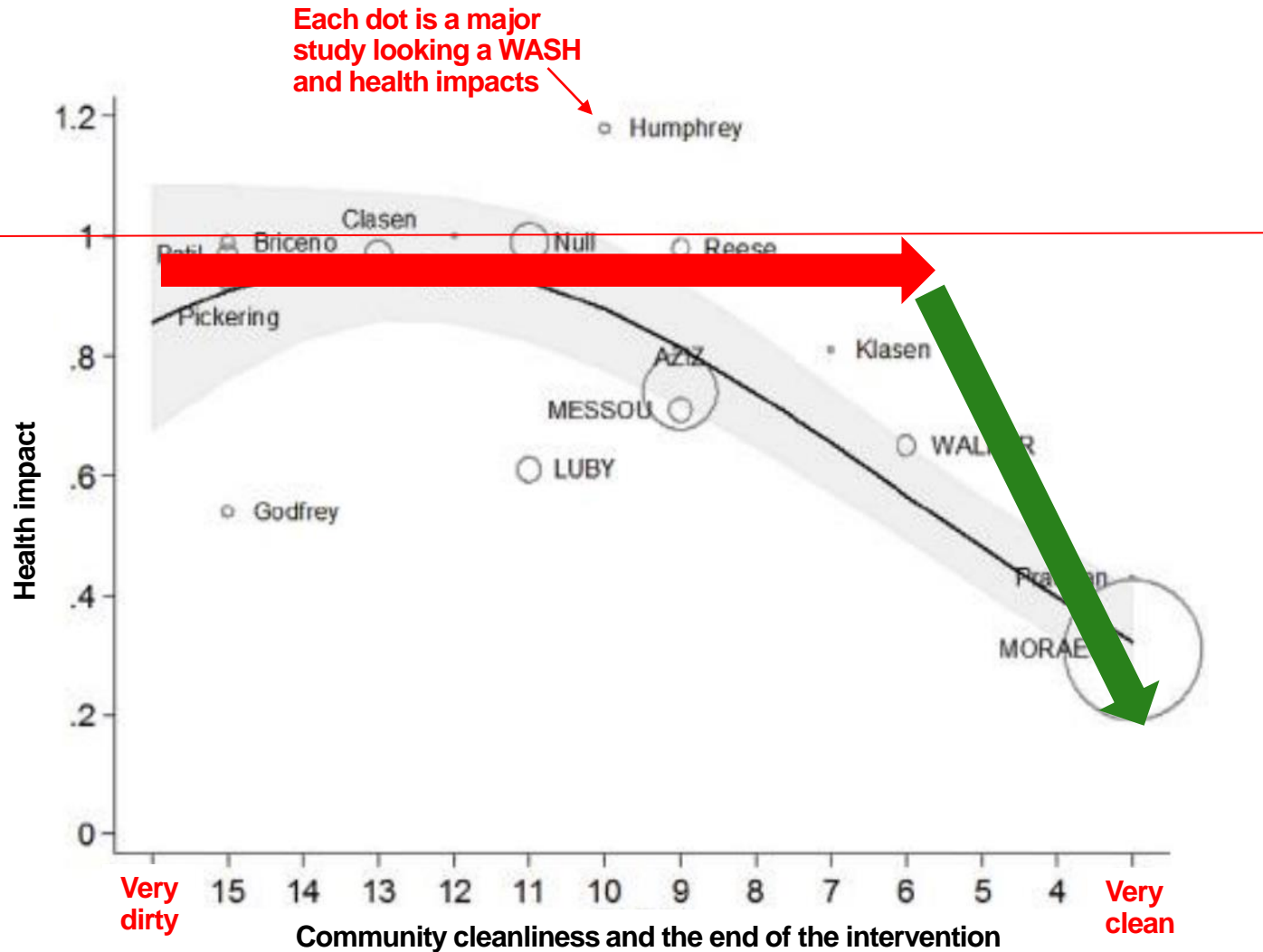
WHY HAVE GLOBAL TARGETS CHANGED TO SAFELY MANAGED SANITATION?



- Sanitation is meant to deliver cost-effective health and economic benefits
- But evidence has shown lower health impacts
- SMS is about reducing health risk to deliver impact from sanitation investments

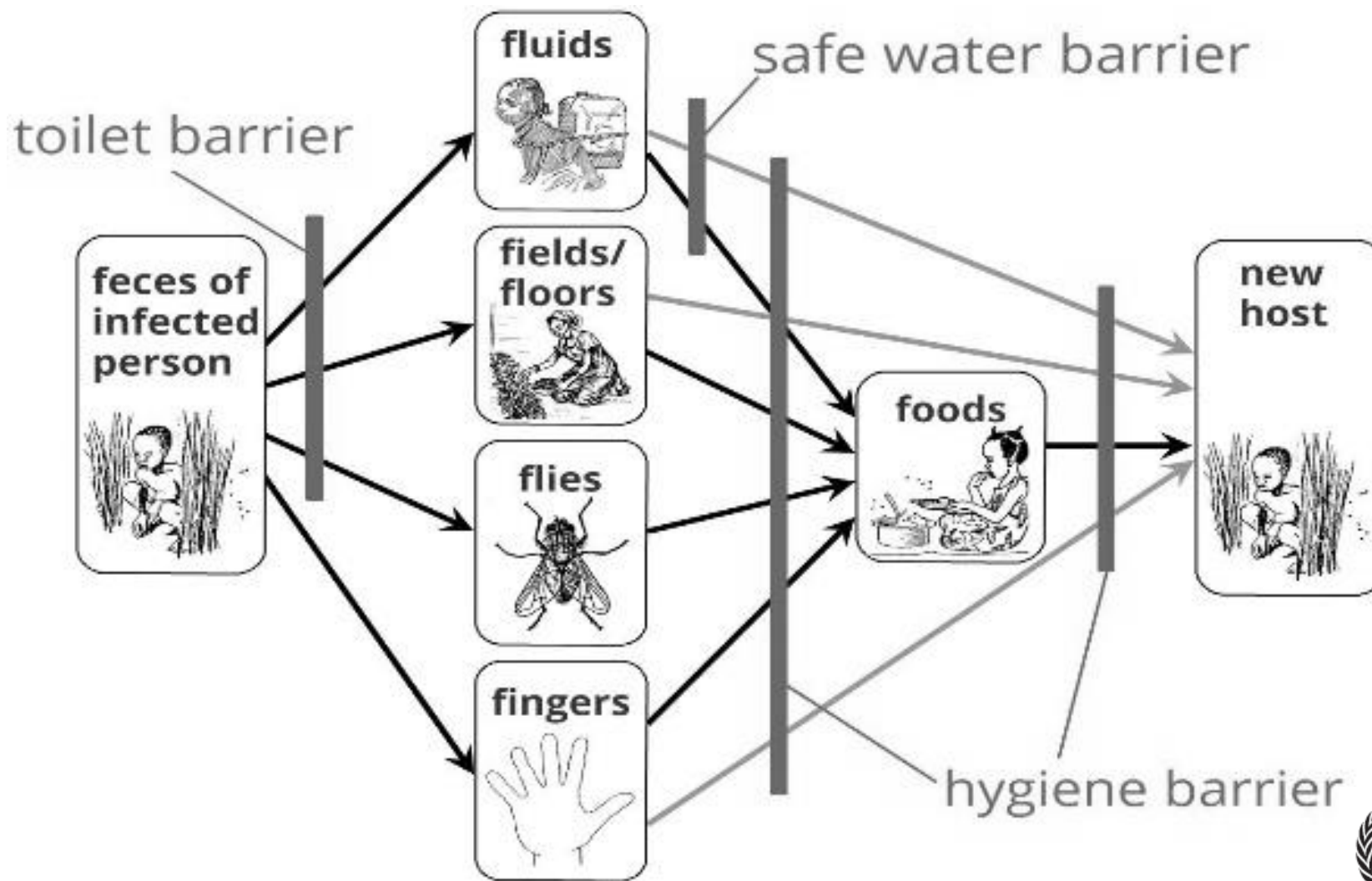


TO ACHIEVE HEALTH IMPACT WE NEED TO ACHIEVE A CLEAN ENVIRONMENT (I.E SHUTTING DOWN ALL TRANSMISSION PATHWAYS)

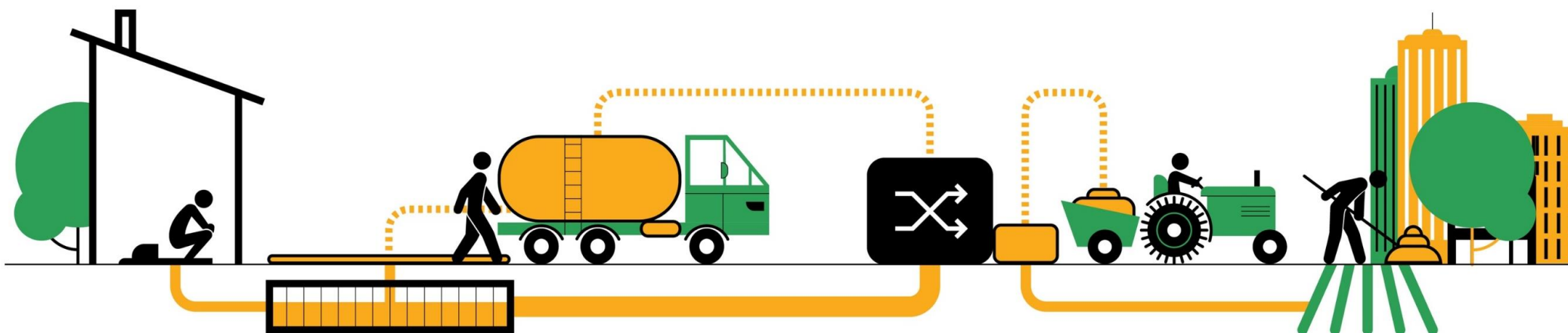


[A Faecal Contamination Index for interpreting heterogeneous diarrhoea impacts of water, sanitation and hygiene interventions and overall, regional and country estimates of community sanitation coverage with a focus on low- and middle-income countries - ScienceDirect](#)

OLD 'F-DIAGRAM'



IS AN IMPROVED TOILET ENOUGH?



TOILET

Without quality toilets that everyone uses, families and communities are at increased risk of disease, anxiety and violence.



CONTAINMENT - STORAGE / TREATMENT

Without proper onsite containment or treatment, water used for drinking, recreation and agriculture can be contaminated.



CONVEYANCE

Workers without adequate protections face life-threatening risks when emptying pits and septic tanks and cleaning sewers. Waste spilled or dumped before treatment puts whole communities and food supplies at risk.



TREATMENT

Communities are put at risk when untreated wastewater and sludge pollute beaches, drinking water, and water sources used for irrigation of food crops.



END USE / DISPOSAL

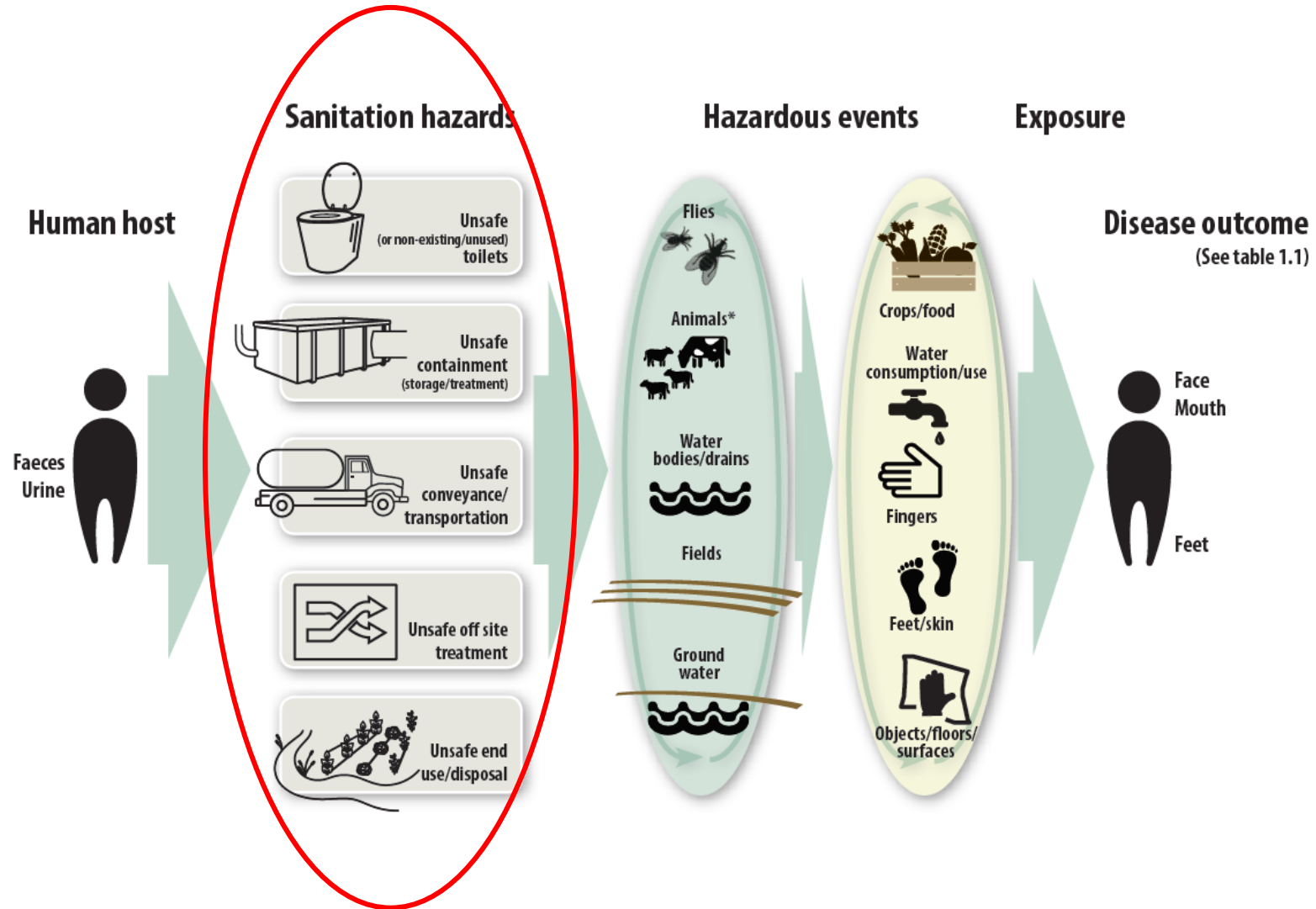
Drinking or coming into contact with untreated water perpetuates the cycle of infection – especially of intestinal worms and diarrhoea.

If wastewater and sludge are used safely, valuable water, nutrients and energy can be returned to the circular economy.

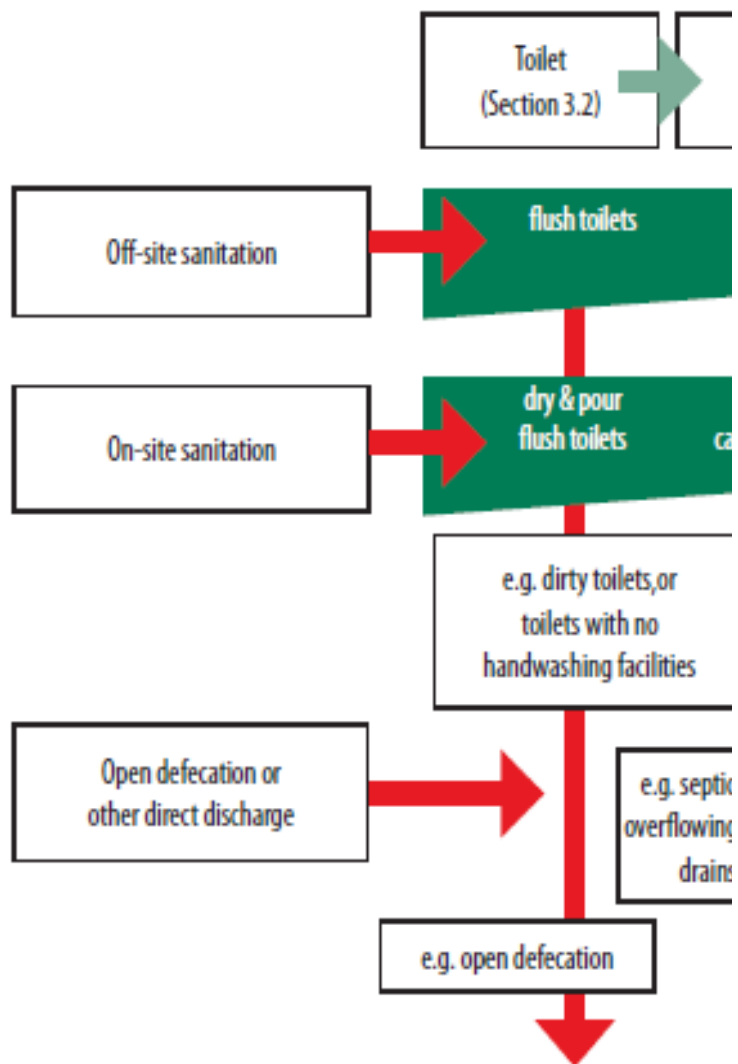


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A NEW 'F-DIAGRAM'

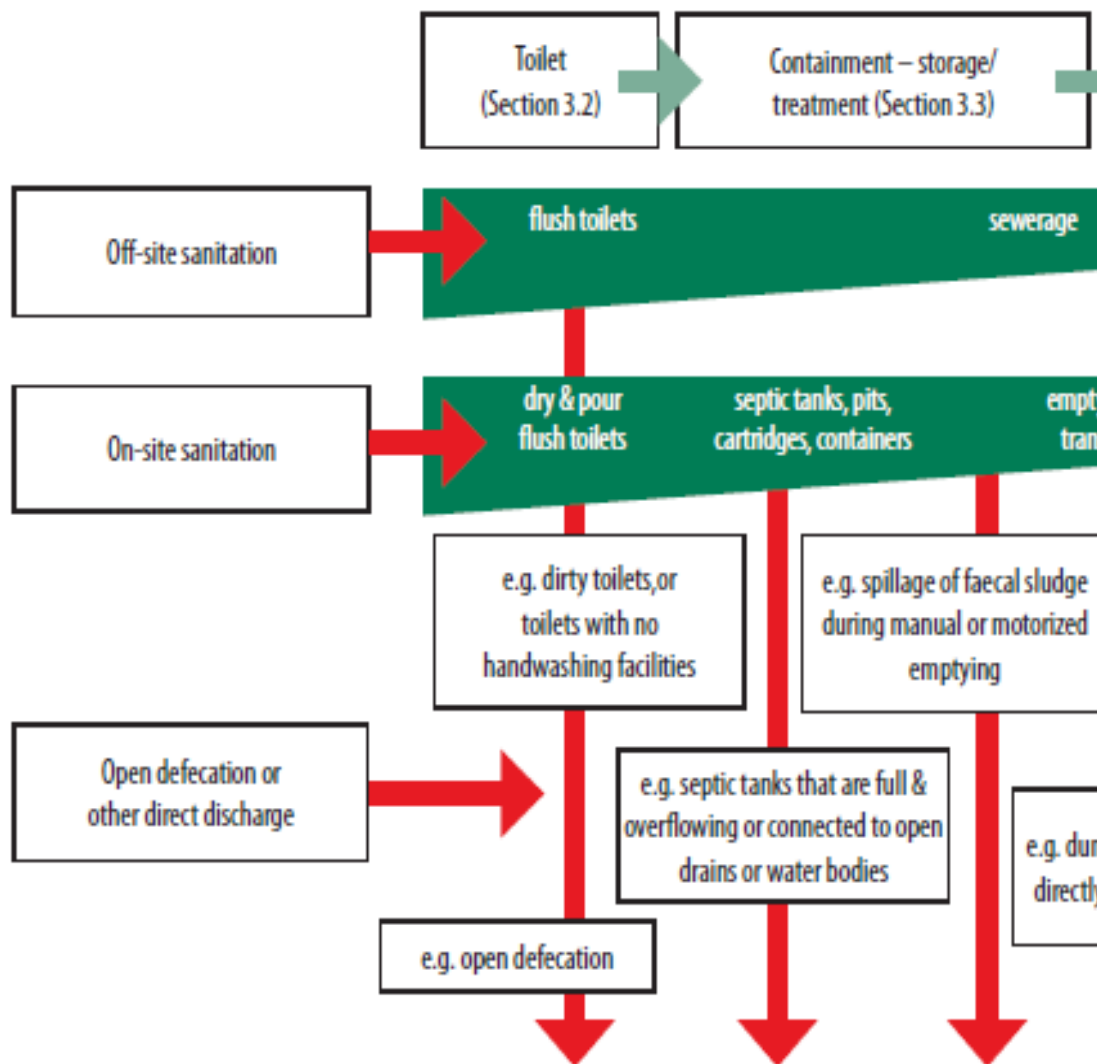


SMS MINIMIZES RISKS AT EACH STEP



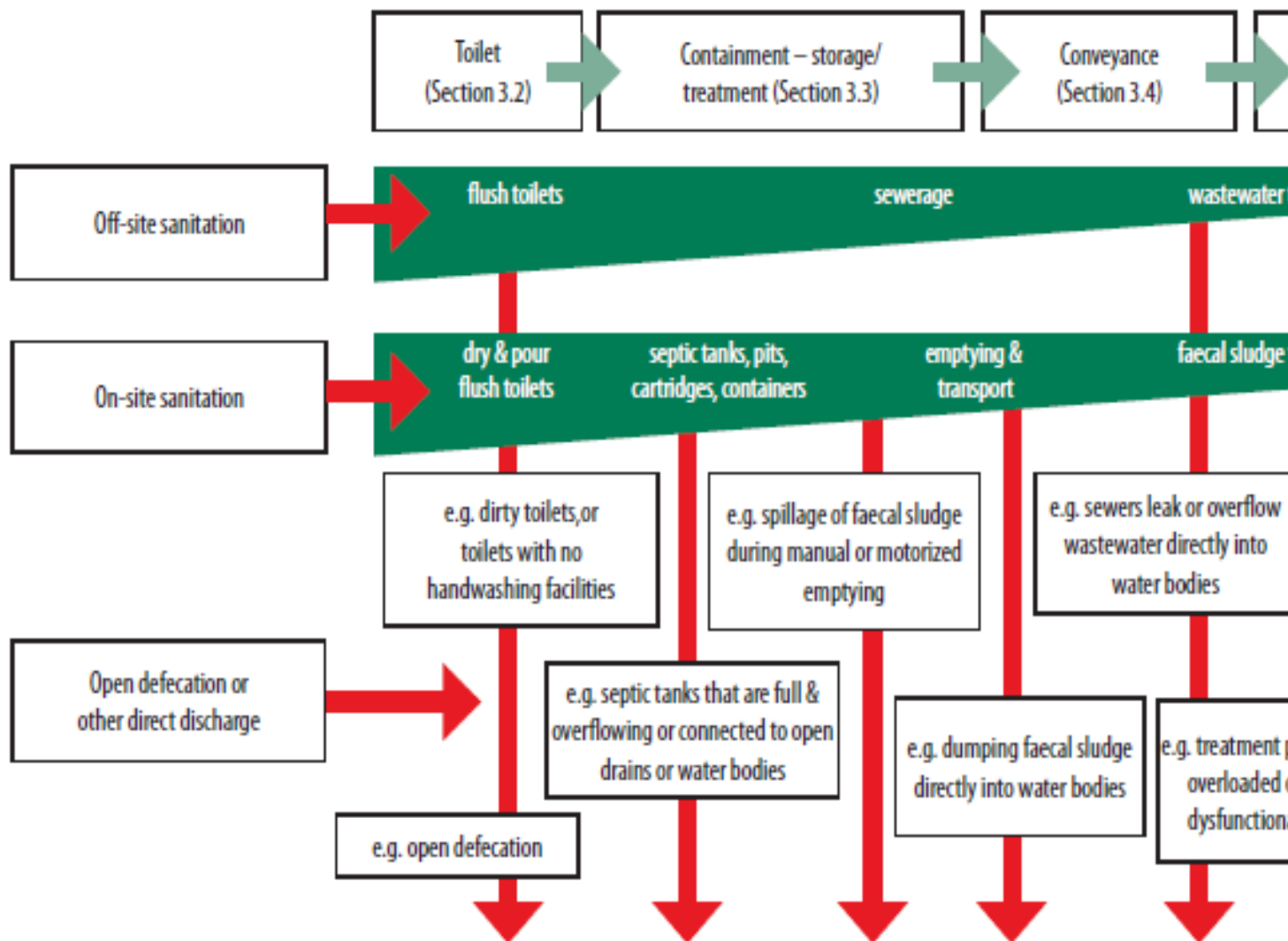
Exposure of humans to pathogens through unsafe sanitation management and/or unsafe discharges to the environment

SMS MINIMIZES RISKS AT EACH STEP



Exposure of humans to pathogens through unsafe sanitation management and/or unsafe discharges to the environment

SMS MINIMIZES RISKS AT EACH STEP

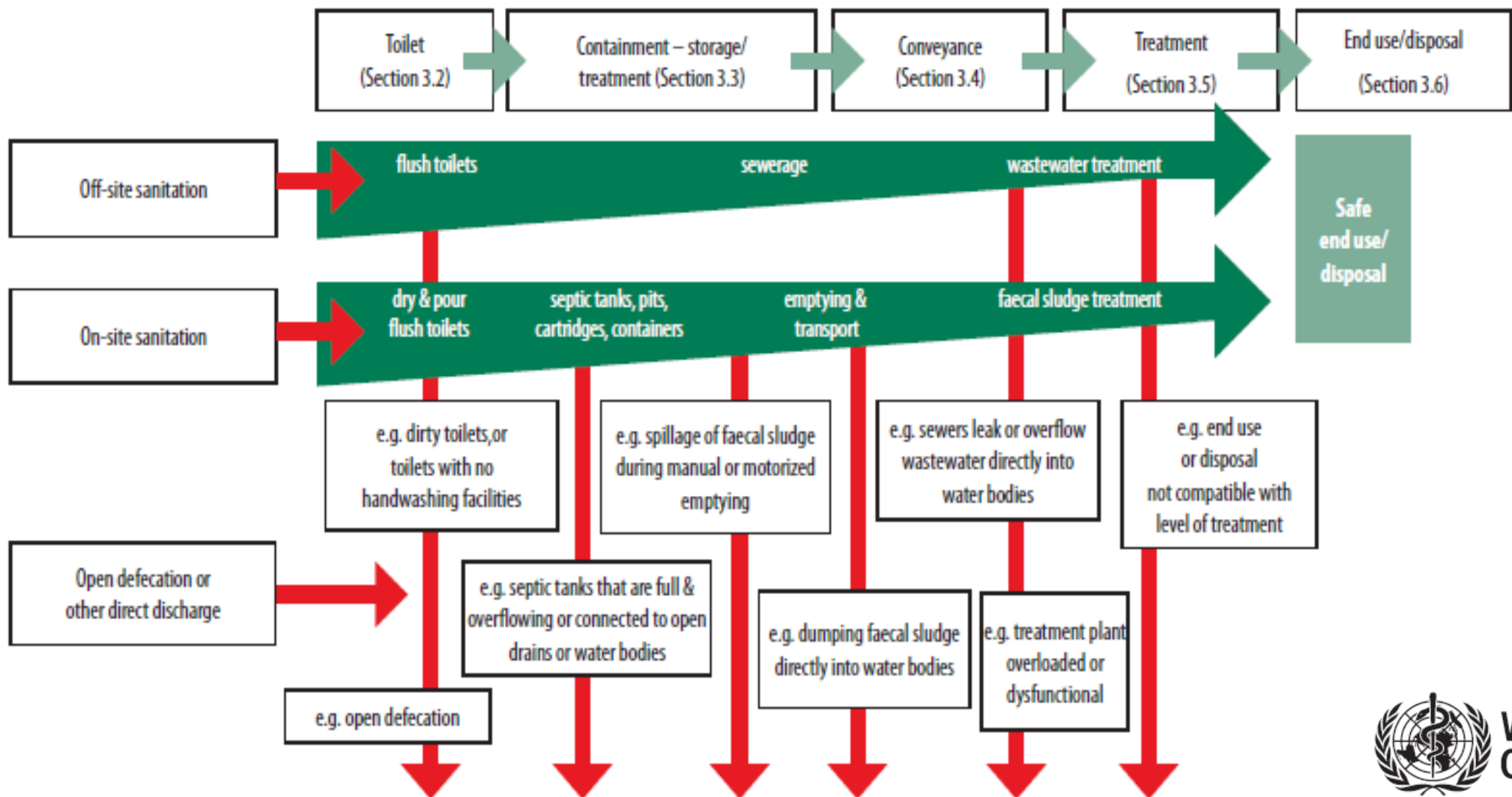


Exposure of humans to pathogens through unsafe sanitation management and/or unsafe discharges to the environment

SMS MINIMIZES RISKS AT EACH STEP



the international water association



Exposure of humans to pathogens through unsafe sanitation management and/or unsafe discharges to the environment

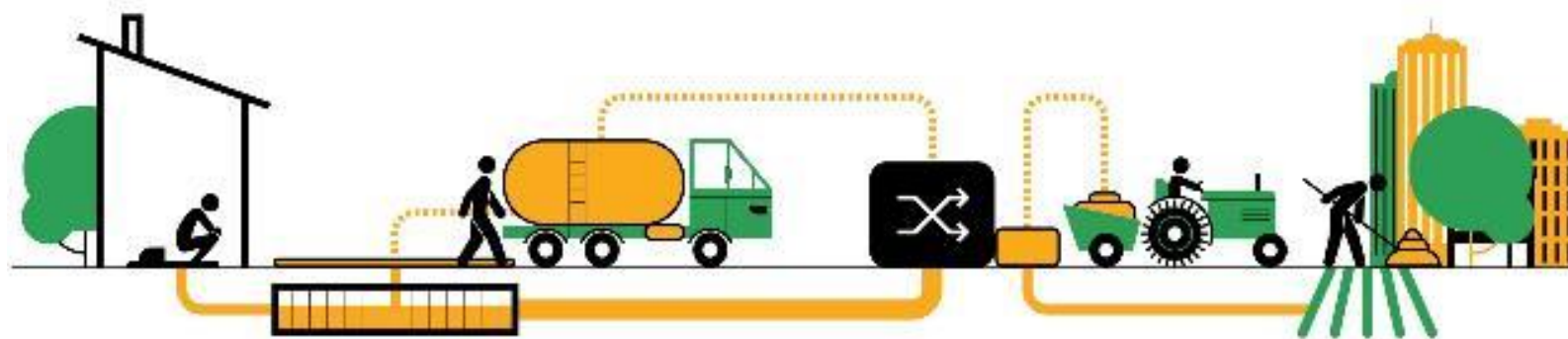


PART 2: DEFINITIONS FOR SAFELY MANAGED SANITATION

SOPHIE BOISSON, WHO



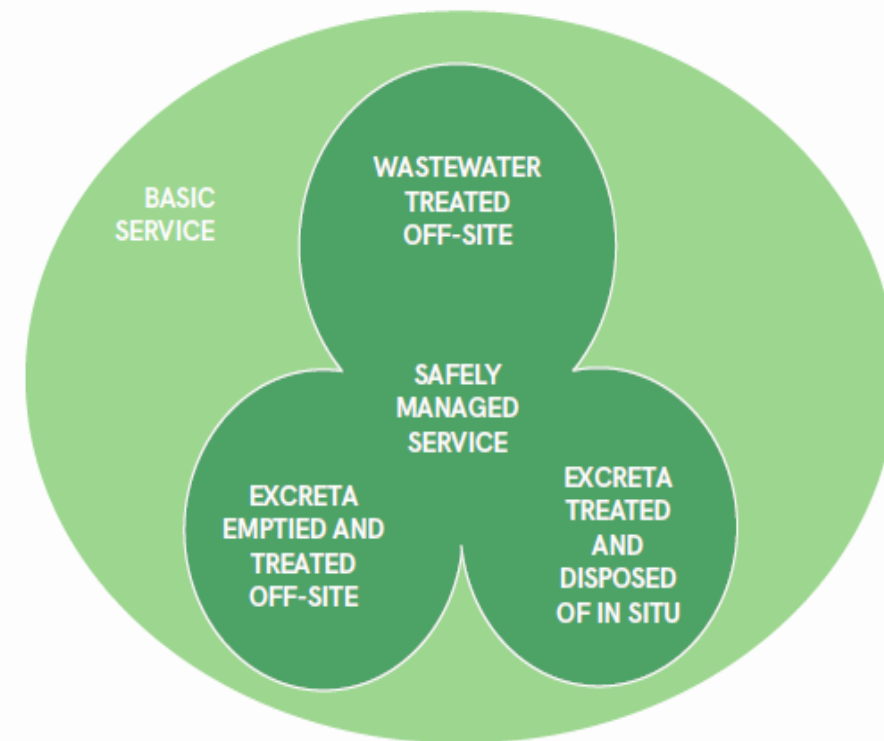
WHAT COUNTS AS SAFELY MANAGED SANITATION?



A NEW RUNG ON THE SANITATION SERVICE LADDER



| Service level | Definition |
|-----------------|---|
| Safely managed | Use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or removed and treated off-site |
| Basic | Use of improved facilities which are not shared with other households |
| Limited | Use of improved facilities shared between two or more households |
| Unimproved | Use of pit latrines without a slab or platform, hanging latrines or bucket latrines |
| Open defecation | Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste |



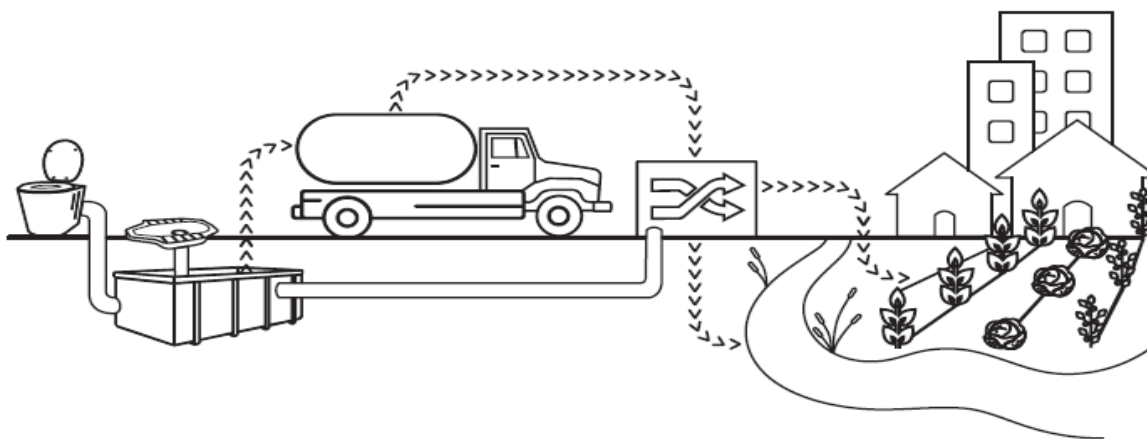
PLUS MORE DETAILED DEFINITIONS IN THE GUIDELINES ON SANITATION AND HEALTH (CHAPTER 3)

What does “safe” mean?

- Design & construction
- Operation & maintenance
- Incremental measures

Guideline definitions provide more detail to guide **program implementation**

Aligned with **measurable** definitions for SDG monitoring



QUIZ 1

MODERATOR: YVONNE MAGAWA

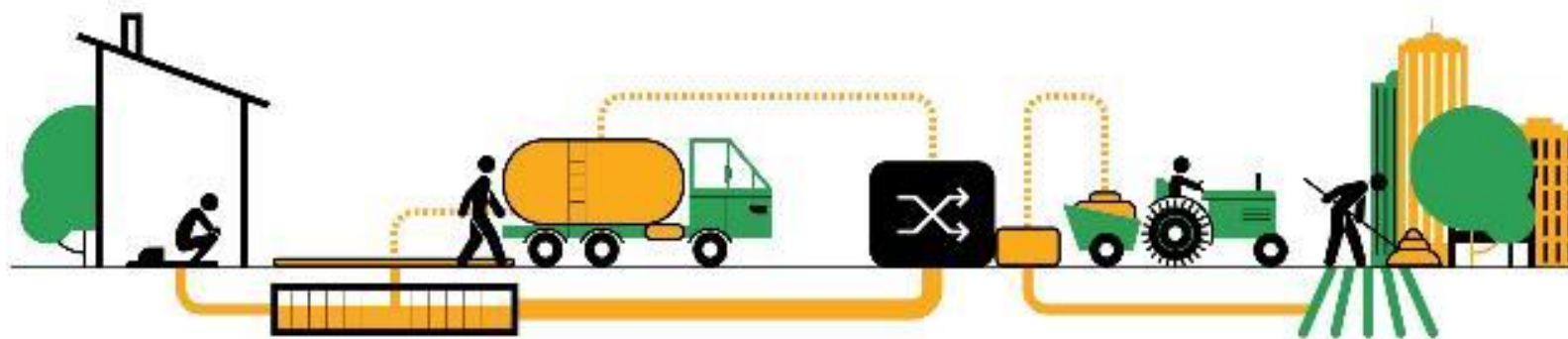
PART 3: FOUR RECOMMENDATIONS OF THE WHO GUIDELINES

SOPHIE BOISSON, WHO

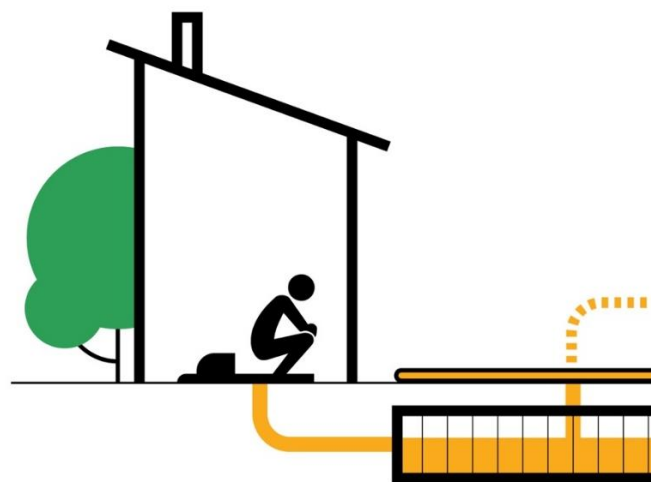


WHAT NEEDS TO CHANGE?

FOUR KEY RECOMMENDATIONS



FOUR KEY RECOMMENDATIONS



TOILET

⇒ CONTAINMENT -
STORAGE/
TREATMENT

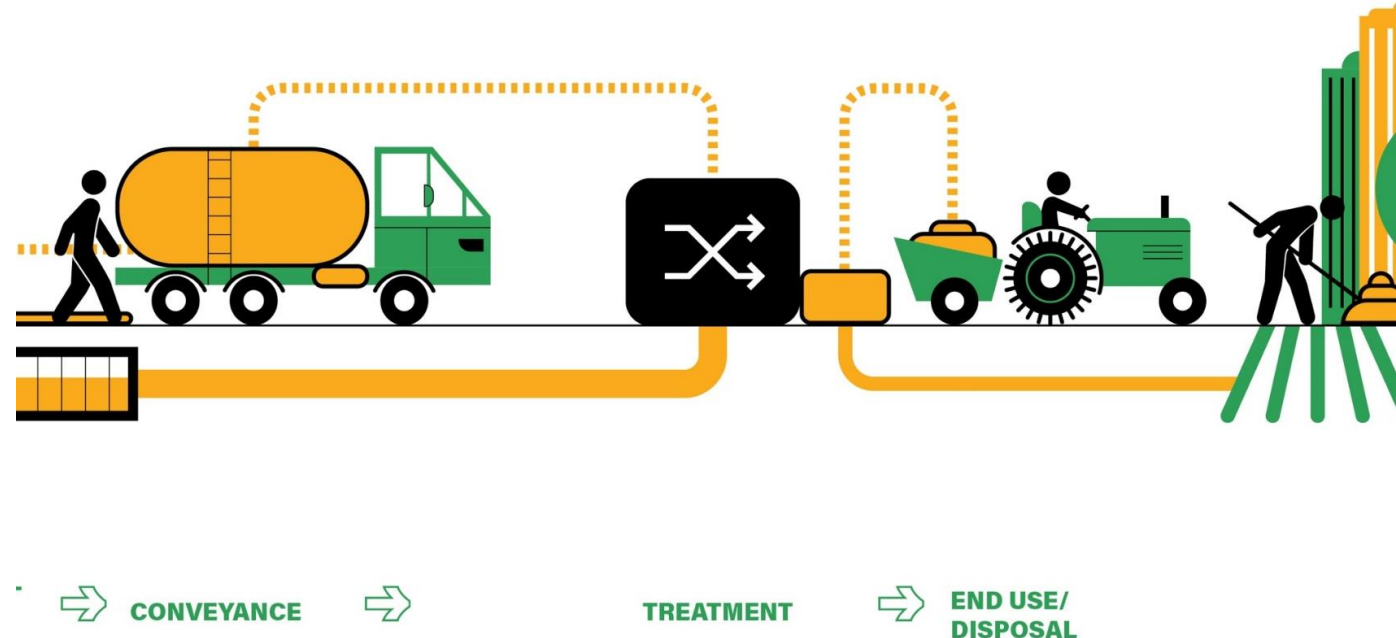
Recommendation 1: Safe Toilets

- For everyone in the community
- Using shared/public toilets if necessary
- Providing at least basic toilets & containment
- Working on demand for toilets & supply at the same time
- In all places where people need toilets in daily life

FOUR KEY RECOMMENDATIONS

Recommendation 2: A safe sanitation chain

- Households can't do it alone.
- Consider what happens after the toilet – who is responsible and what services?
- Remain technology agnostic – think about what works in your context.
- Work on the biggest risks first
- Remember to include the workers



FOUR KEY RECOMMENDATIONS

Recommendation 3: Sanitation as part of local services

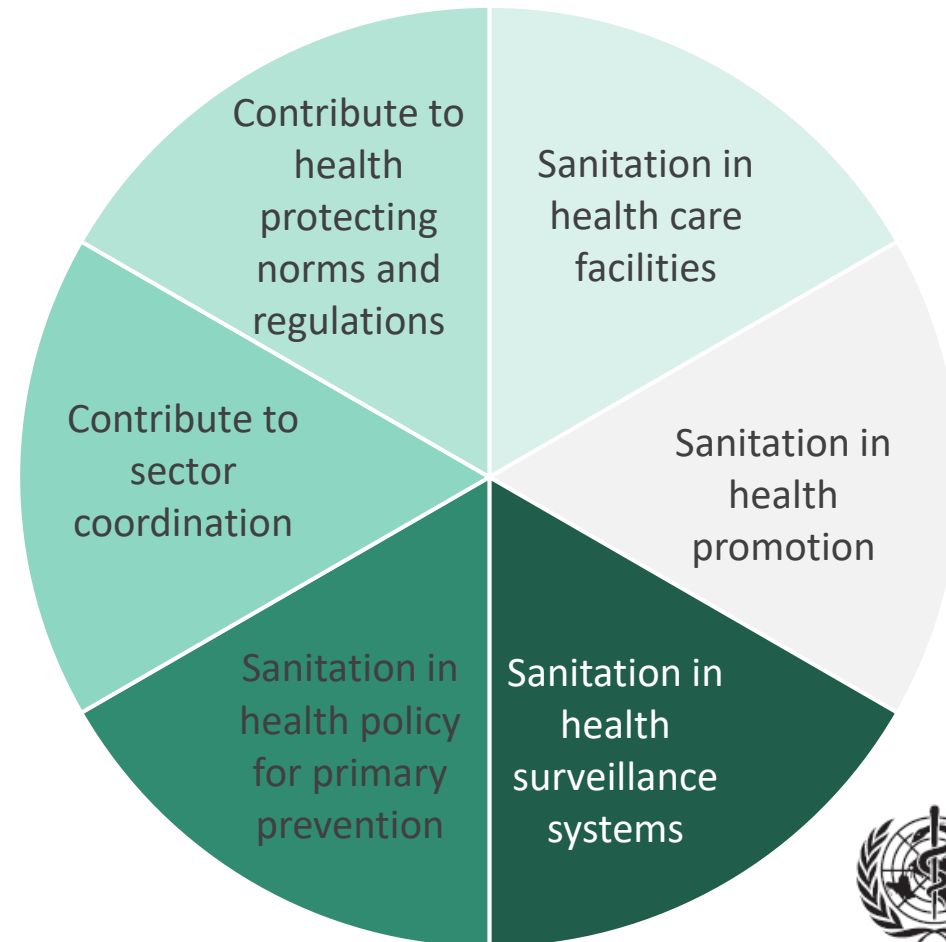
- Achieving **efficiency** by coordinating with other local services (housing, transport, solid waste, etc).
- **Sustainability and health impacts** through coordination with other interventions – e.g. water supply, hygiene



FOUR KEY RECOMMENDATIONS

Recommendation 4: The role of the health sector

- Increase health sector engagement in core functions (but not taking on functions that are better done by others)





**the international
water association**

PART 4: HOW TO EMBED SAFELY MANAGED SANITATION IN NATIONAL SYSTEMS (Chapter 4)

BATSIRAI MAJURU, WHO

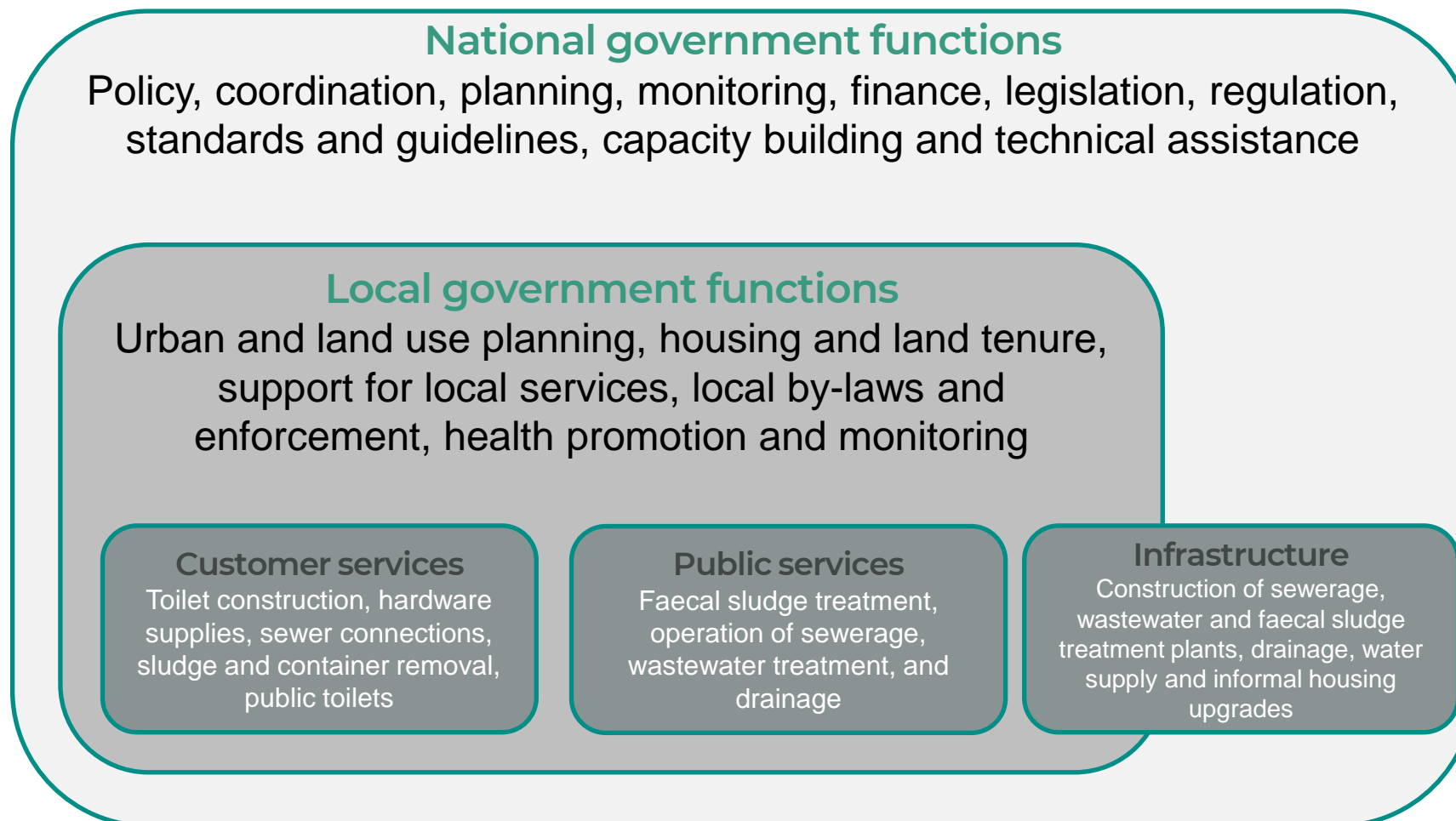


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INTRODUCTION – HOW SERVICES ARE DELIVERED?

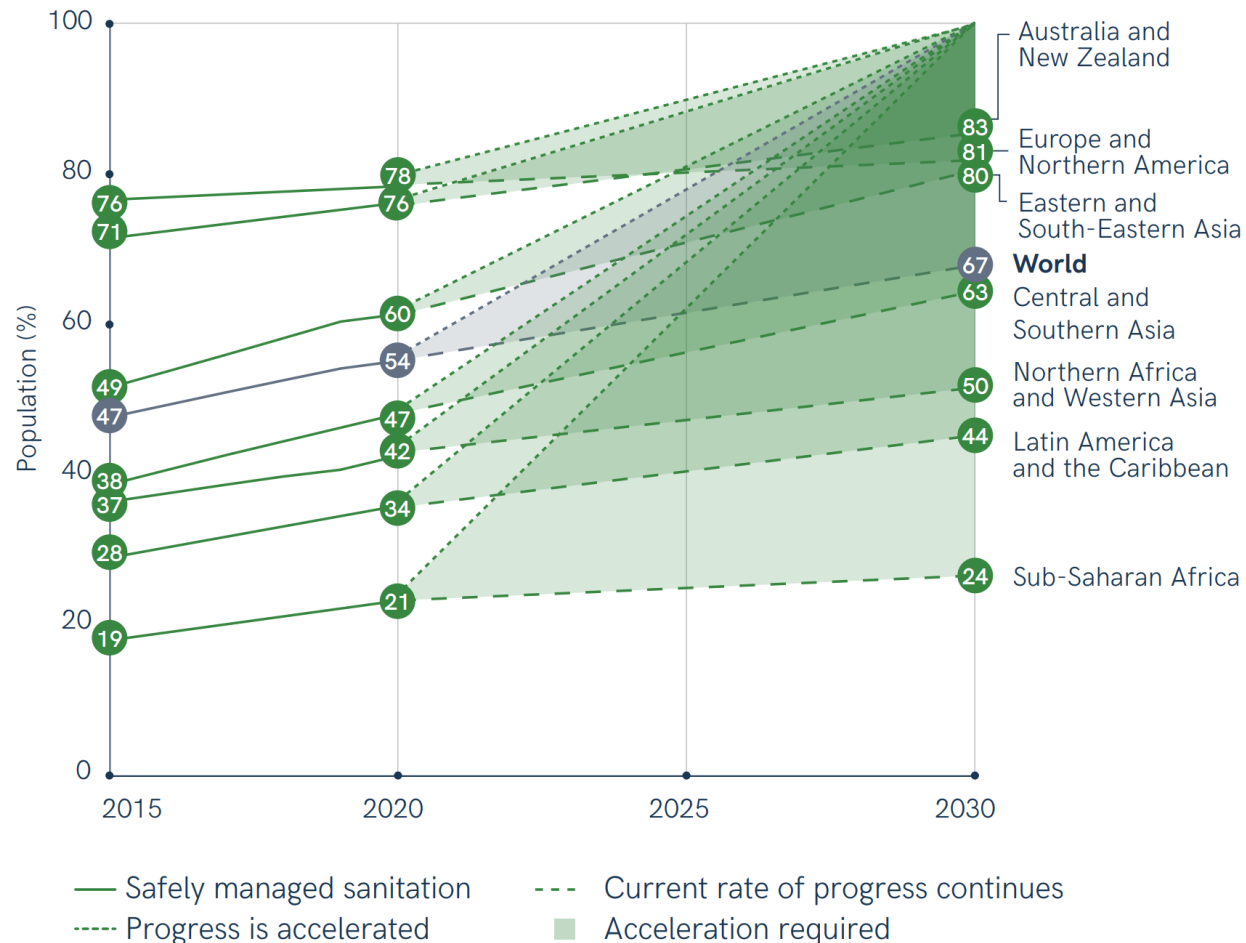
FIG 4.2 IMPLEMENTATION FRAMEWORK FOR SANITATION



A common challenge is sanitation functions are highly fragmented – among ministries, local government, and service providers along the chain.

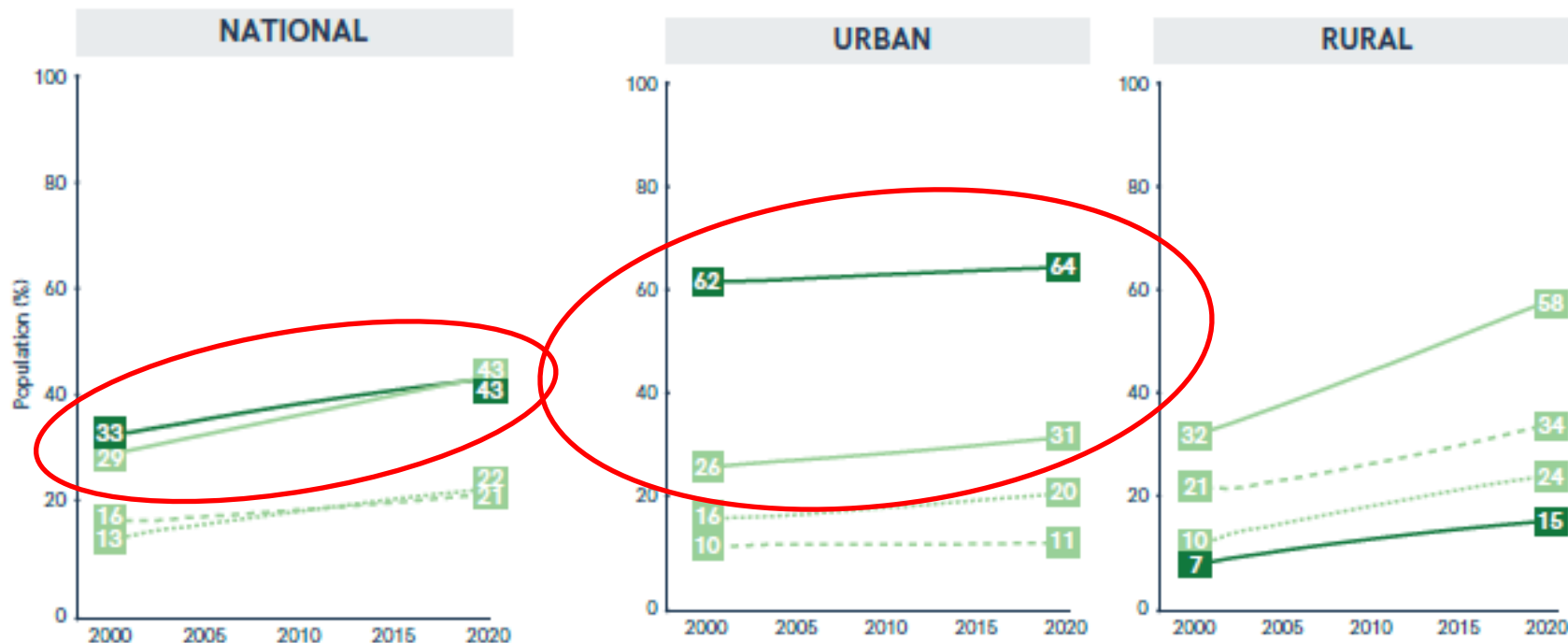
NATIONAL LEVEL: AMBITIOUS BUT REALISTIC NATIONAL TARGETS ARE NEEDED

- No SDG region is on track for Universal SMS by 2030



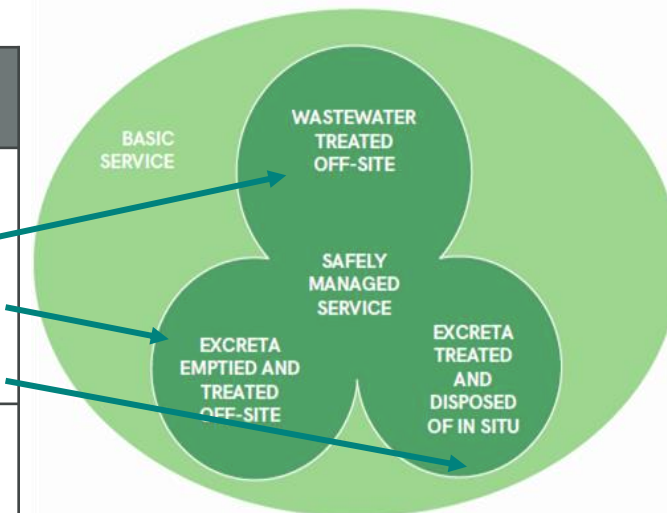
ON SITE SANITATION IS GROWING TWICE AS FAST AS SEWERS IN URBAN AREAS

- Sewered
- On-site sanitation (septic tanks + improved latrines)
- Septic tanks
- Improved latrines

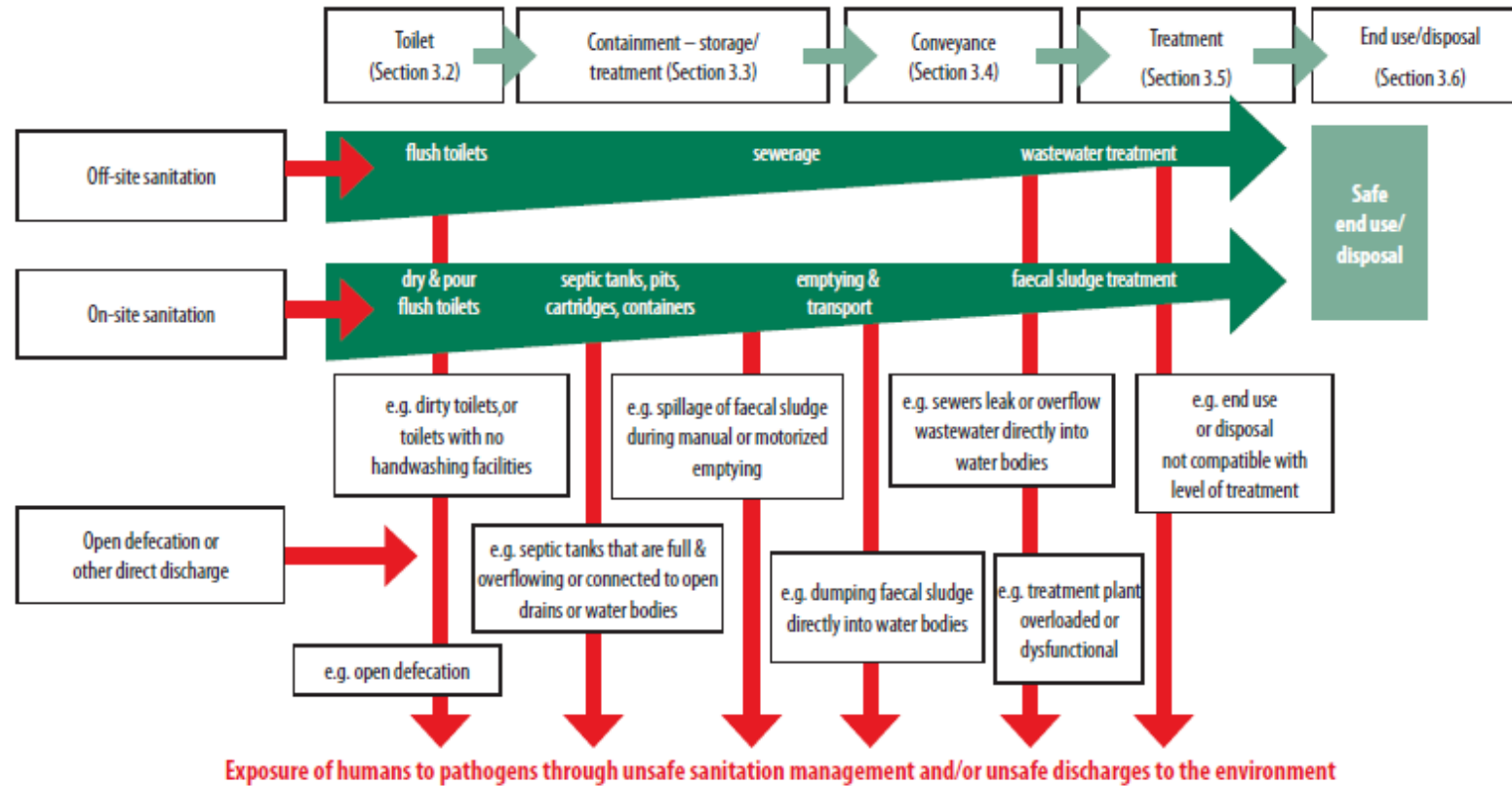


TARGET SETTING FOR SMS

| Service level | Definition | Example target |
|-----------------|---|--|
| Safely managed | Use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or removed and treated off-site | <ul style="list-style-type: none"> • X% percent SMS <ul style="list-style-type: none"> ➢ X% of people with sewer connections with WW treated off site ➢ X% with excreta emptied and treated off site ➢ X% safely disposed in-situ |
| Basic | Use of improved facilities which are not shared with other households | <ul style="list-style-type: none"> • At least X% with basic sanitation |
| Limited | Use of improved facilities shared between two or more households | <ul style="list-style-type: none"> • X% reduction in shared toilet facilities |
| Unimproved | Use of pit latrines without a slab or platform, hanging latrines or bucket latrines | <ul style="list-style-type: none"> • X% reduction in unimproved and shared toilet facilities |
| Open defecation | Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste | <ul style="list-style-type: none"> • eliminate of open defecation by 2030 |



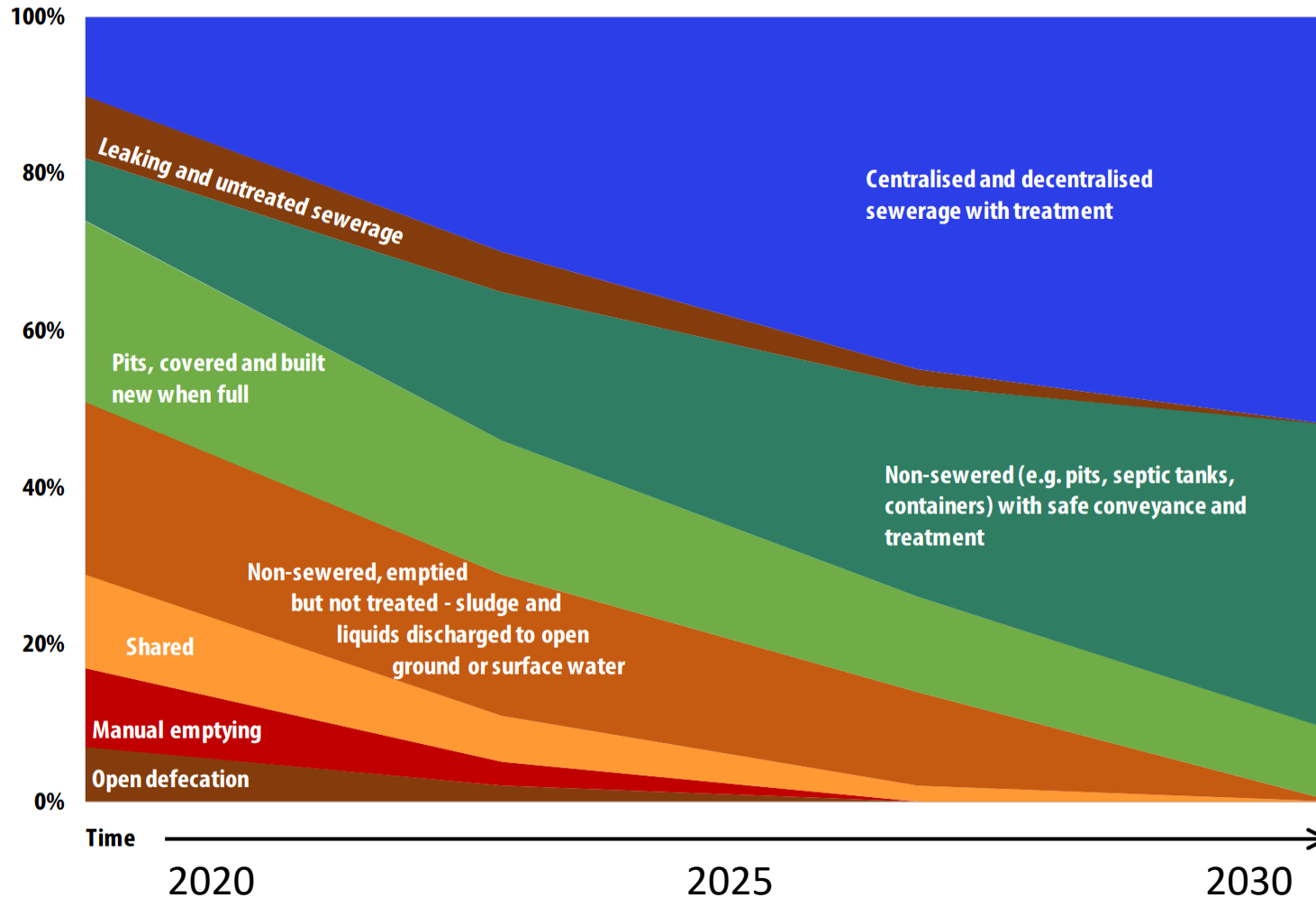
A RISK-BASED SITUATION ASSESSMENT INFORMS NATIONAL TARGETS



- Multi-stakeholder platform
- Analyses risk along the chain – all contexts
- Analysis of existing legislation, policies, practices, finance
- Target stepping stones for incremental improvement to universal SMS

TARGETS PHASE OUT UNSAFE PRACTICES

Figure 4.3 Example of phasing out unsafe sanitation over time



TARGETING TO HIGH DISEASE, LOW SANITATION AREAS



WaSH

WaSH & Worm overlays

WaSH & Trachoma overlays

Maps

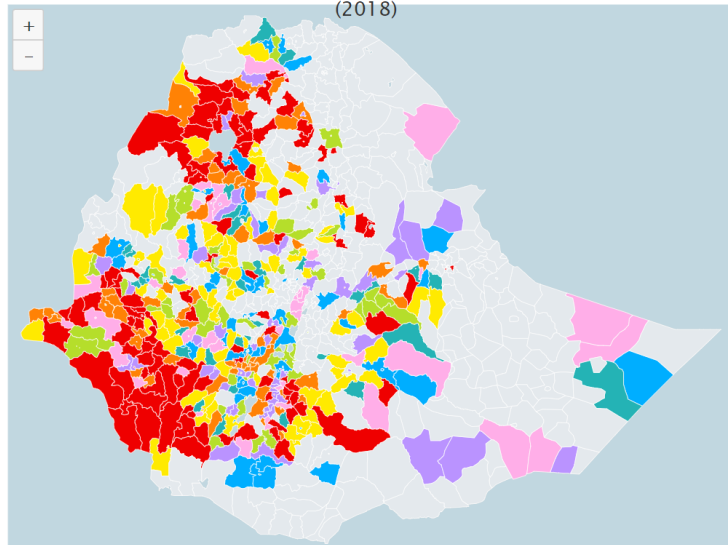
Data

WaSH and STH overlay

HOW TO USE ?

Access to Water & Sanitation Access to Water Access to Sanitation

Ethiopia - WaSH and Soil-transmitted helminthiasis overlay map (2018)



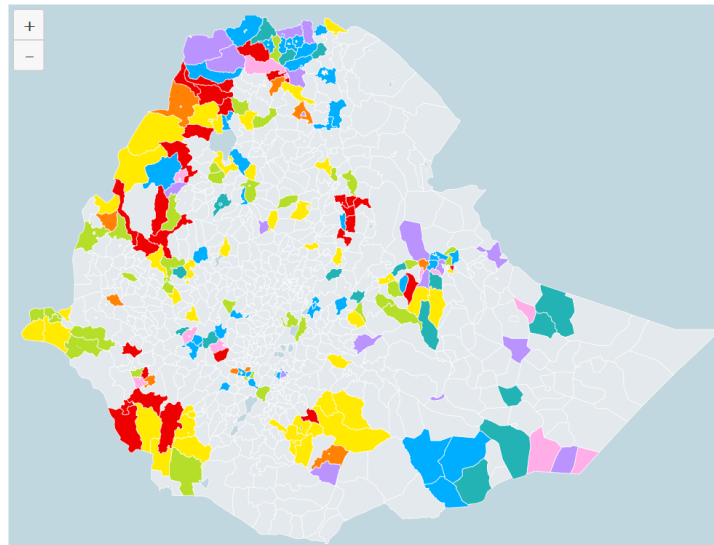
- Moderate prevalence | High water | High sanitation
- Moderate prevalence | Low water | High sanitation
- Moderate prevalence | High water | Low sanitation
- Moderate prevalence | Low water | Low sanitation
- High prevalence | High water | High sanitation
- High prevalence | Low water | High sanitation
- High prevalence | High water | Low sanitation
- High prevalence | Low water | Low sanitation
- PC not required or status unknown

WaSH and Schistosomiasis overlay

HOW TO USE ?

Access to Water & Sanitation Access to Water Access to Sanitation

Ethiopia - WaSH and Schistosomiasis overlay map (2018)



- Moderate prevalence | High water | High sanitation
- Moderate prevalence | Low water | High sanitation
- Moderate prevalence | High water | Low sanitation
- Moderate prevalence | Low water | Low sanitation
- High prevalence | High water | High sanitation
- High prevalence | Low water | High sanitation
- High prevalence | High water | Low sanitation
- High prevalence | Low water | Low sanitation
- PC not required or status unknown

Data source:
<https://espen.afro.who.int/countries/ethiopia>

NATIONAL LEVEL: REGULATION AND STANDARDS MECHANISMS



Overarching principles for legislations, regulations, standards and guidelines

- 1 National interpretation of SMS at each step of the chain – no blueprint
- 2 Explicitly recognize sewered and non-sewered sanitation systems
- 3 Regulate service quality based on public health risk assessment and management
- 4 Formulate sanitation technology standards including O&M – locally relevant, avoiding being prescriptive
- 5 Set out levels of performance criteria, but allow flexibility on how it can be achieved
- 6 Legislation and by-laws at national or local level

WHERE CAN SMS BE REFLECTED AT NATIONAL, LOCAL LEVEL? (I.E. WHAT MECHANISMS)

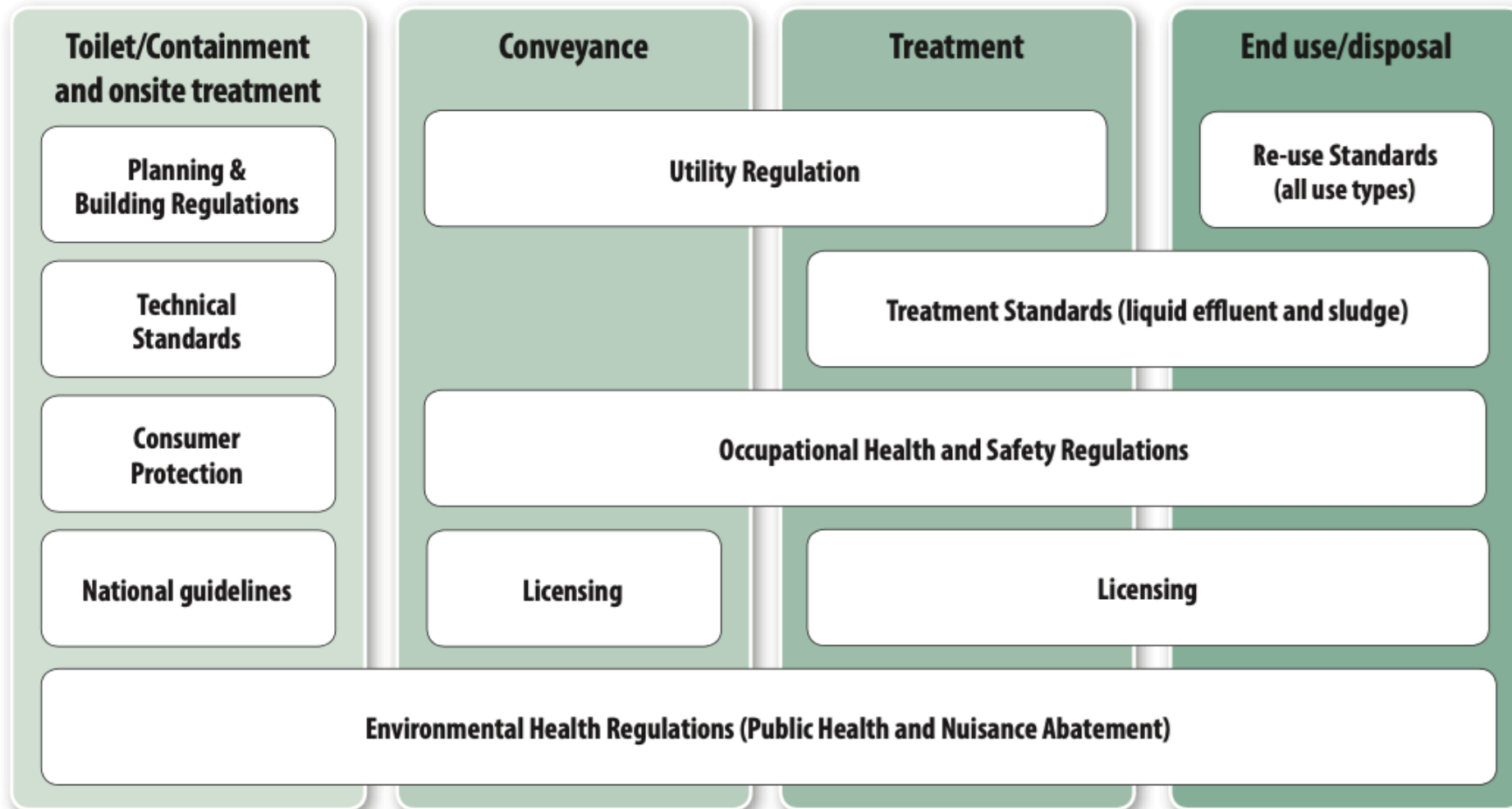


FIGURE 4.4 | SANITATION REGULATORY OPTIONS

WHAT CAN BE INCLUDED TO REDUCE RISK AND REACH SMS?

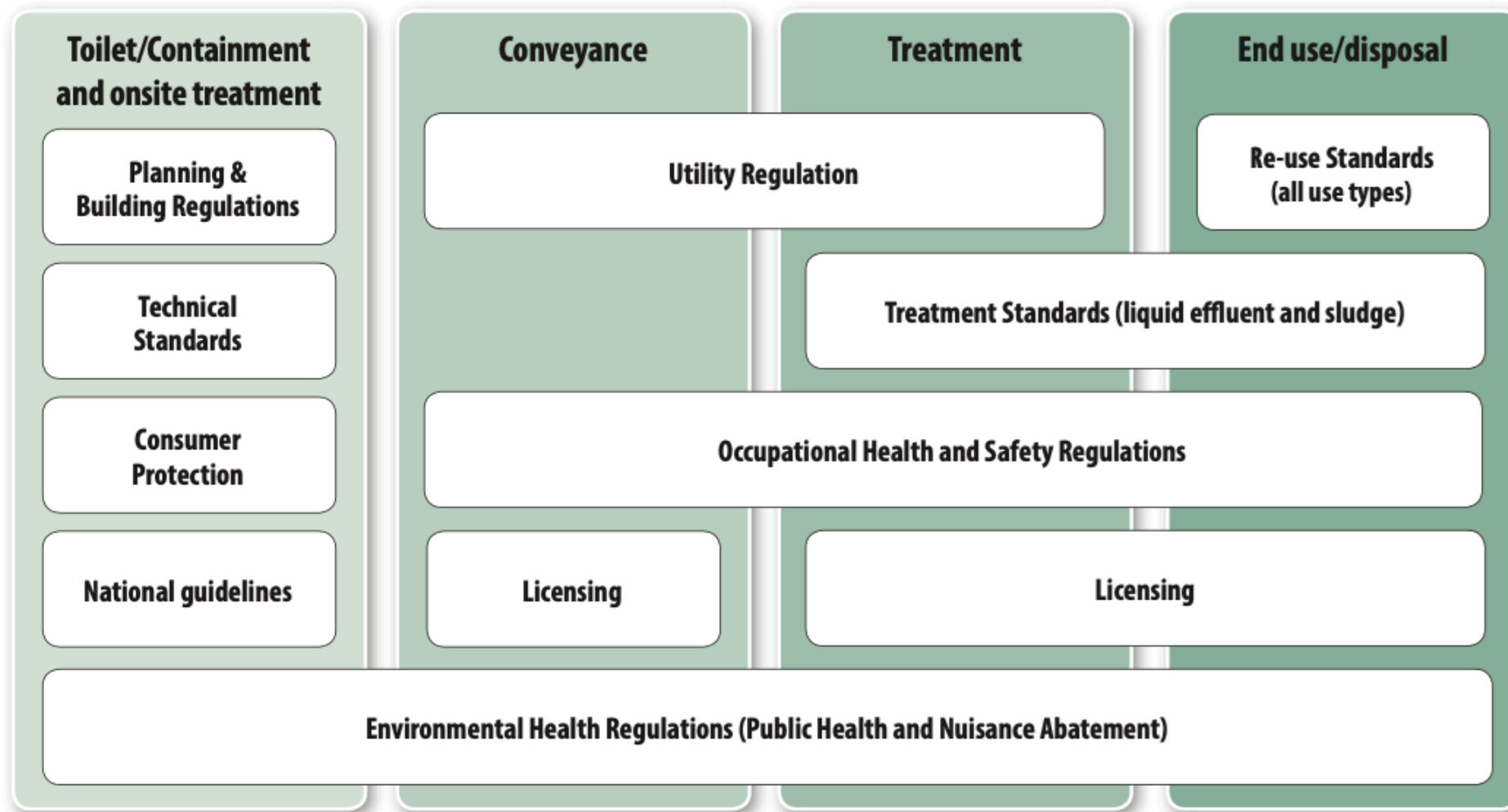
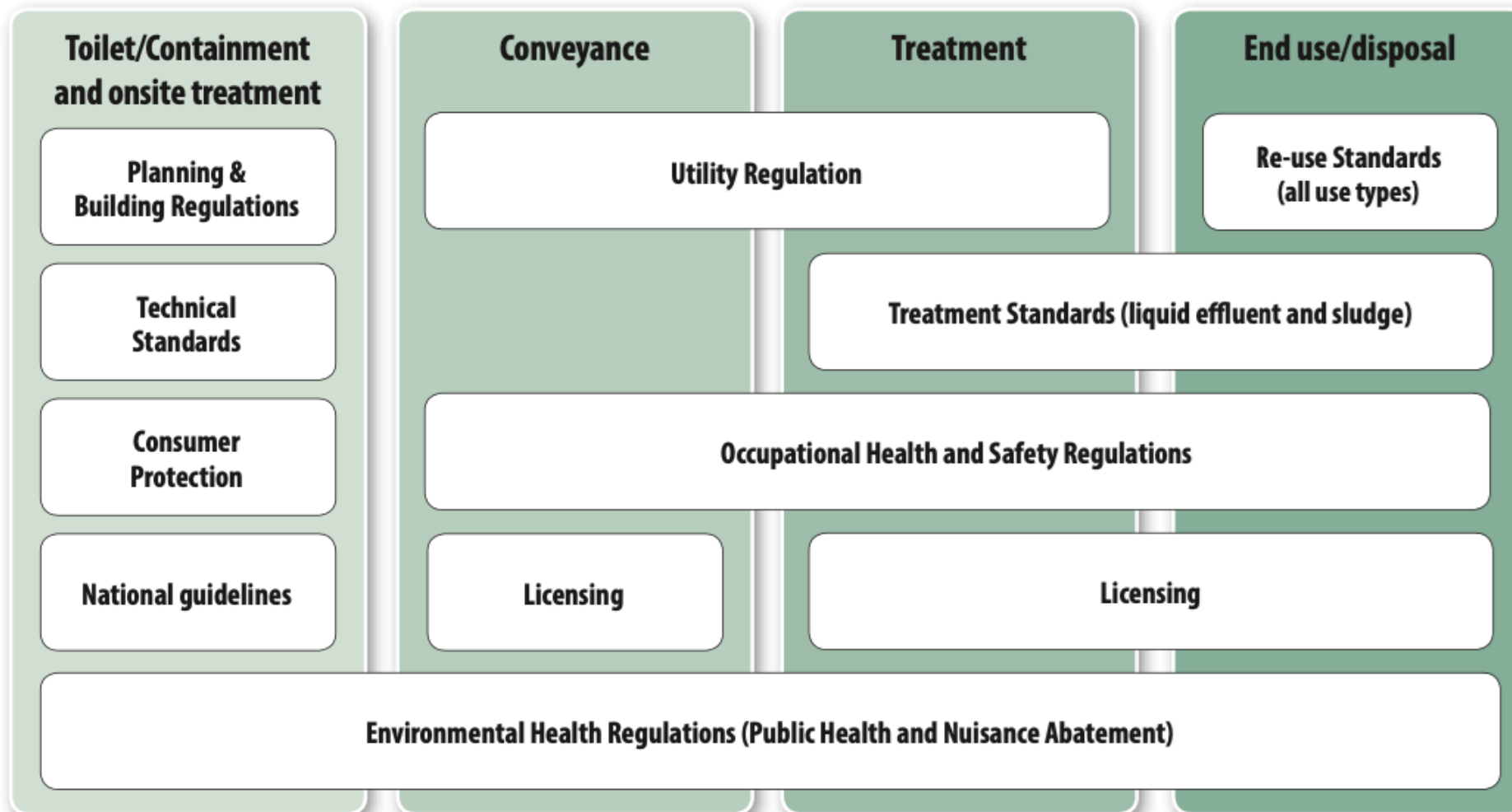


FIGURE 4.4 | SANITATION REGULATORY OPTIONS

WHO IS RESPONSIBLE? – REGULATION AND OVERSIGHT



Where are there gaps and overlaps in mandates and accountability for SMS along the chain?

WHO IS RESPONSIBLE? – SERVICE DELIVERY

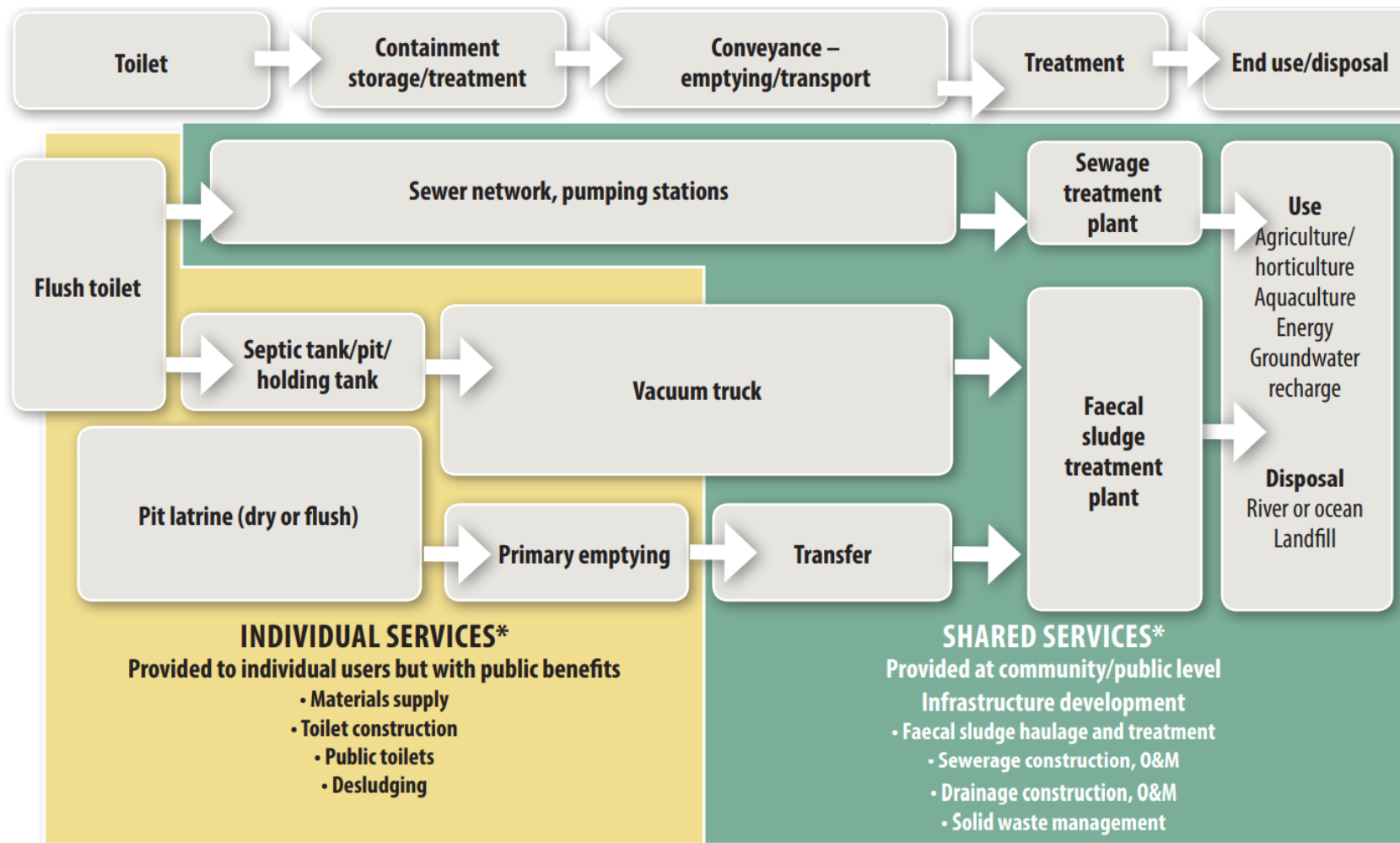


Figure 4.1 |
Categorization
of services

Where are there
gaps and
overlaps along
the chain?

QUIZ 2

MODERATOR: YVONNE MAGAWA

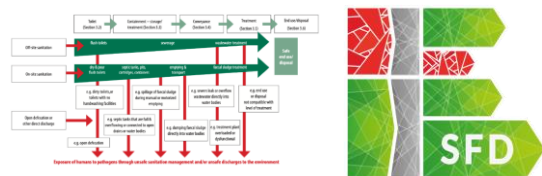
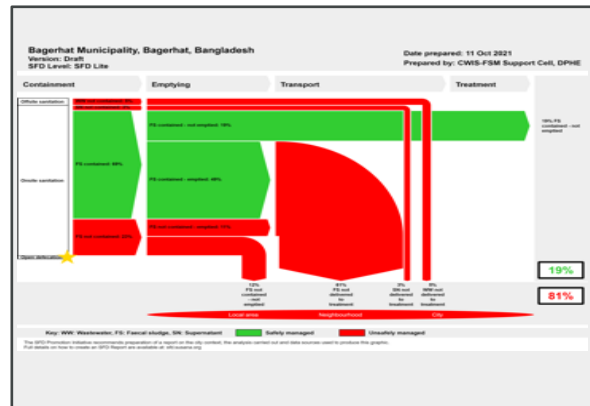
PART 5: RISK-BASED TOOLS – SANITATION SAFETY PLANNING

LEONELHA BARRETO-DILLON, SECON



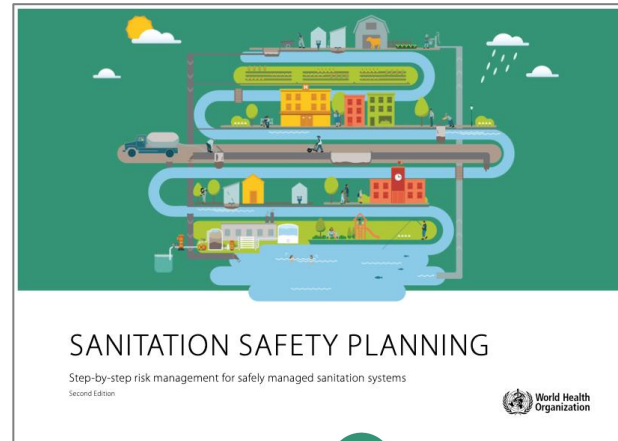
WHO GUIDELINES RECOMMEND RISK ASSESSMENT AND MANAGEMENT

Three types:

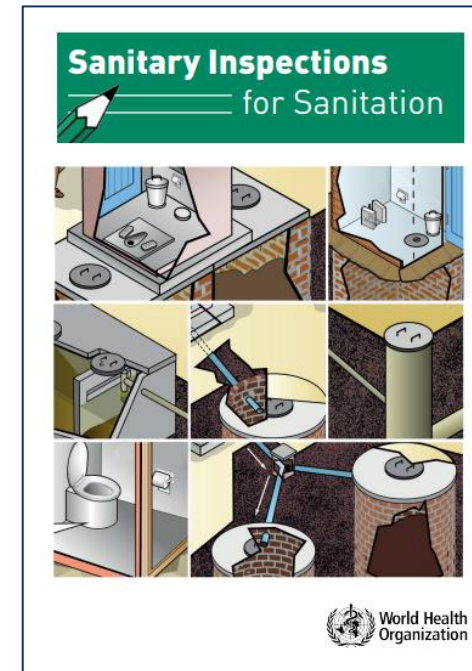


Best for:

Citywide rapid assessment & advocacy



In-depth assessment and management and investment planning



Simplified assessments of on-site facilities

SANITATION SAFETY PLANNING

- Step-by-step approach for local risk assessment and management along the entire sanitation chain.
- Identify and prioritize highest health risks to inform system improvements via a mix of control measures including regulatory measures.



SSP MODULES



OVERVIEW OF SANITATION SAFETY PLANNING (SSP) (VIDEO 8MINS)



WANT TO KNOW MORE ABOUT SSP?



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HOME

ONLINE TRAINING ▾

TRAINING PACKAGE

LIBRARY

WHAT IS SSP

↑
Training
videos

↑
PowerPoints,
Trainers guide,
worksheets

↑
Supporting
documents



SANITATION SAFETY PLANNING

Learning Hub

<https://ssp-learninghub.creation.camp/>

Welcome to the Sanitation Safety Planning Learning Hub!

PART 6: RISK-BASED TOOLS – SANITARY INSPECTION

SOPHIE BOISSON, WHO



WHO GUIDELINES RECOMMEND RISK ASSESSMENT AND MANAGEMENT

Sanitary inspection forms – simplified assessments



WHO Sanitary Inspections for Sanitation Systems

I. GENERAL INFORMATION

A. Location

Provide the following information on the location of the toilet facility.

- | | |
|------------------|--|
| A1. Village/town | A5. GPS coordinates |
| A2. District | A6. Additional location information |
| A3. Province | A7. Number of households served by this facility |
| A4. State | |

B. Setting

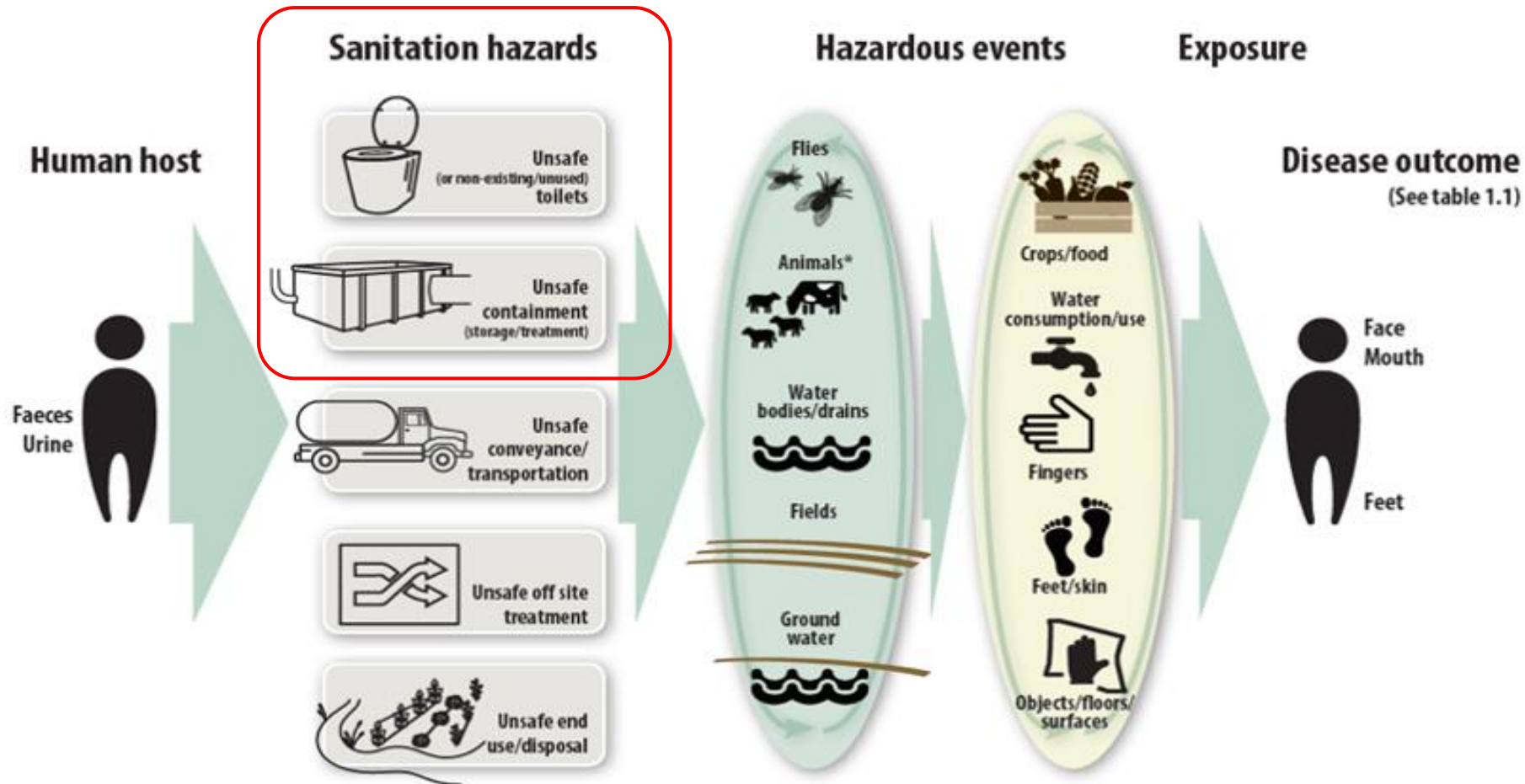
The following factors describe the potential for risks or challenges to be present in the local area surrounding the toilet. Select the appropriate level for each setting factor based on the descriptions provided.

- B1. Population density** – Density of people living in the immediate area
- **Low** – Rural or low-density settlements where significant open space exists between houses
 - **Medium** – suburban or peri-urban neighborhoods, small towns or village centers
 - **High** – urban areas with multistory buildings and houses with minimal open land between them
- B2. Difficulty accessing the toilet** – How difficult is it for a service provider to access the toilet to remove sludge using a manual or motorized emptying method
- **Low** – the pit / septic tank is easy to reach by truck or gulper device; access is available through a removable cover
 - **Medium** – the pit / septic tank can be reached but with some degree of difficulty due to the location or the design of the tank
 - **High** – household is difficult to reach by truck due to high density or narrow streets; or, the pit / septic tank itself is difficult to access due to its location on the property or lack of a removable cover
- B3. Reliance on groundwater used for drinking** – the potential for local groundwater sources to be contaminated by inadequate sanitation and fecal sludge management practices
- **Low** – households in this area do not use groundwater for drinking
 - **Medium** – groundwater is used in the area but the sources used for drinking and bathing are located far away and are well-protected
 - **High** – households in this area use shallow groundwater (dug wells, tube wells, springs)

SANITARY INSPECTION FORMS



World Health Organization



Source: Guidelines on sanitation and health. Geneva: World Health Organization, 2018

Sanitation system
fact sheets

Sanitary inspections

Management advice
in system fact sheets

- Applicability
- Design considerations
- Operation and maintenance
- Measures to protect public health

Factsheet 1

Dry or flush toilet with onsite disposal



Summary

This system is based on the use of a single pit technology to collect and store excreta. The system can be used with or without flushwater, depending on the toilet. Inputs to the system can include urine, faeces, cleaning water, flushwater and dry cleaning materials. The use of flushwater, cleaning water and cleaning agents will depend on water availability and local habit. The toilet for this system can either be a dry toilet or a pour flush toilet. A urinal could additionally be used. The toilet is directly connected to a single pit or a single ventilated improved pit (VIP) for containment. As the pit fills up, leachate permeates from the pit into the surrounding soil.

When the pit is full, it can be backfilled with soil and a fruit or ornamental tree can be planted. The sludge acts as a soil conditioner with the increase in organic matter resulting in improved water holding capacity and providing additional nutrients, which are slowly reduced over time. A new pit has to be dug and this is generally only possible when the existing superstructure is mobile.

Applicability

When it is not possible to dig a deep pit or the ground-water level is too high, a shallow, raised pit can be a viable alternative: the shallow pit can be extended by building the pit upwards with the use of concrete rings or blocks. A raised pit can also be constructed in an area where flooding is frequent. In order to keep water from flowing into the pit during heavy rain¹.

Cost: This system is one of the least expensive to construct in terms of capital cost and maintenance cost, especially if the superstructure is mobile and can be reused^{2,3}.

Design considerations

Toilet: The toilet should be made from concrete, fibreglass, porcelain or stainless steel for ease of cleaning and designed to prevent stormwater from infiltrating or entering the pit^{1,4}.

Containment: On average, solids accumulate at a rate of 40 to 60, per person/year and up to 90, per person/year if dry cleaning materials such as leaves or paper



**World Health
Organization**

Sanitation system fact sheets

Sanitary inspections

Management advice in system fact sheets

Sanitary Inspections

for Sanitation



WHO Sanitary Inspections for Sanitation Systems

I. GENERAL INFORMATION

A. Location

Provide the following information on the location of the toilet facility.






- | | |
|------------------|--|
| A1. Village/town | A5. GPS coordinates |
| A2. District | A6. Additional location information |
| A3. Province | A7. Number of households served by this facility |
| A4. State | |

B. Setting





The following factors describe the potential for risks or challenges to be present in the local area surrounding the toilet. Select the appropriate level for each setting factor based on the descriptions provided.

- B1. Population density – Density of people living in the immediate area**
- Low** – Rural or low-density settlements where significant open space exists between houses
 - Medium** – suburban or peri-urban neighborhoods, small towns or village centers
 - High** – urban areas with multistory buildings and houses with minimal open land between them
- B2. Difficulty accessing the toilet – How difficult is it for a service provider to access the toilet to remove sludge using a manual or motorized emptying method**
- Low** – the pit / septic tank is easy to reach by truck or gulper device; access is available through a removable cover
 - Medium** – the pit / septic tank can be reached but with some degree of difficulty due to the location or the design of the tank
 - High** – household is difficult to reach by truck due to high density or narrow streets; or, the pit / septic tank itself is difficult to access due to its location on the property or lack of a removable cover
- B3. Reliance on groundwater used for drinking – the potential for local groundwater sources to be contaminated by inadequate sanitation and fecal sludge management practices**
- Low** – households in this area do not use groundwater for drinking
 - Medium** – groundwater is used in the area but the sources used for drinking and bathing are located far away and are well-protected
 - High** – households in this area use shallow groundwater (dug wells, kille wells, springs)

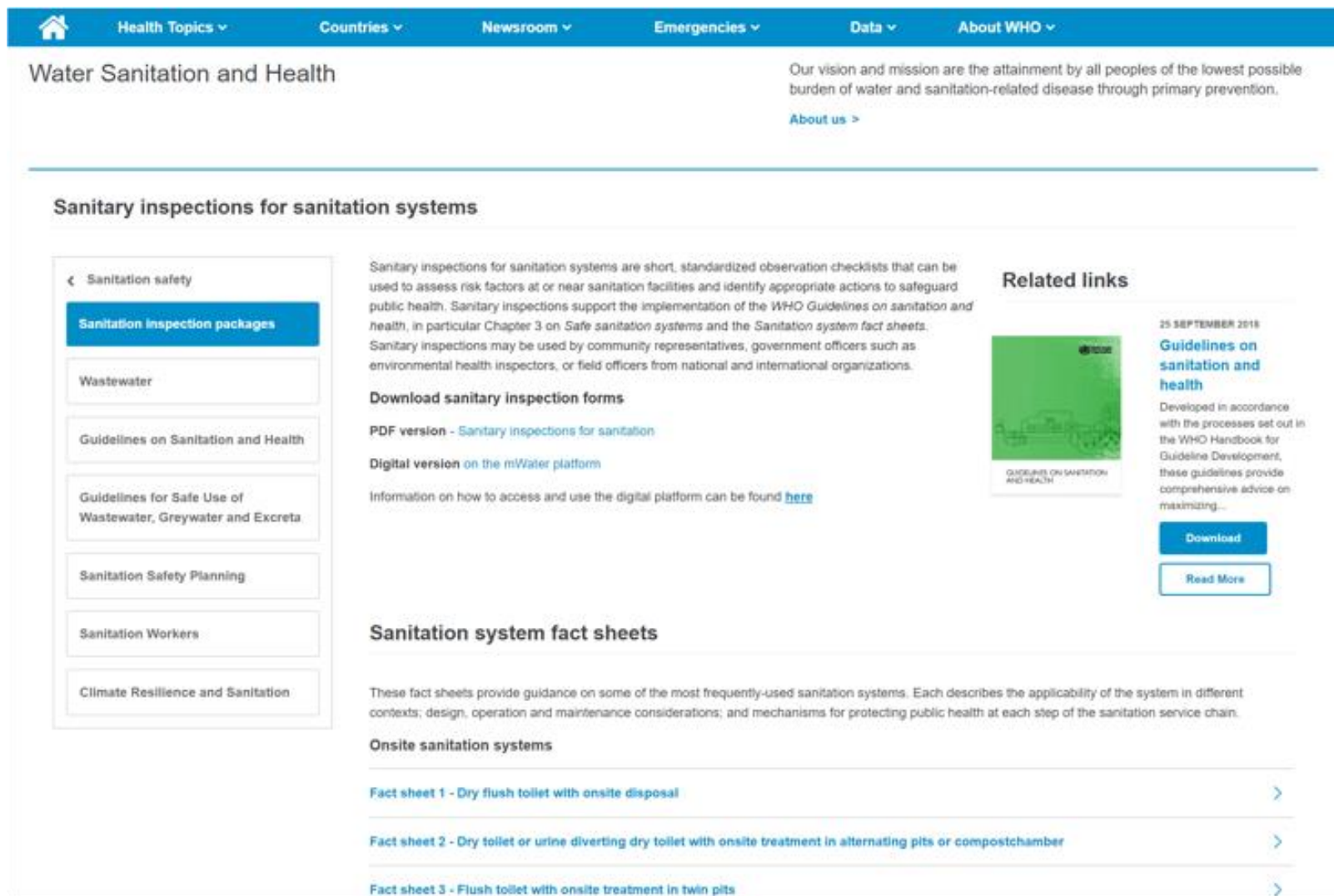
BENEFITS

-  User friendly – can be used by non-specialists
-  Easy and quick hazard identification
-  Suitable with limited amount of time and resources
-  Can be easily adapted to different contexts
-  Can be aggregated to report on SMS in-situ (SDG6.2)

LIMITATIONS

-  Limited number of questions
-  Risks below ground and inside containment are not easily observed
-  Assumes every risk has an equal value
-  Requires adaptation to local context





FORMS AVAILABLE IN PDF AND ONLINE (M-WATER)

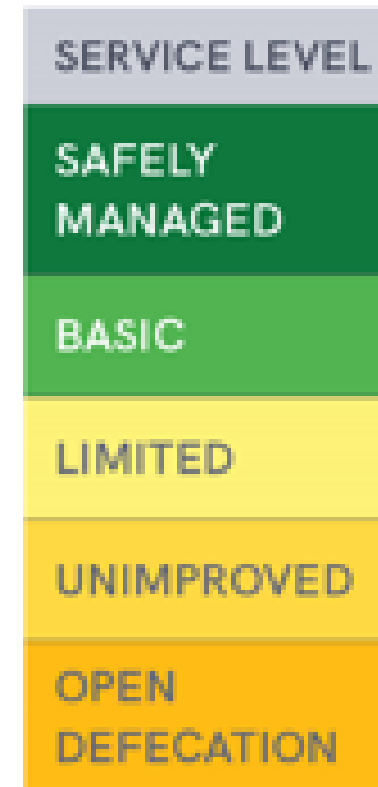


The screenshot shows a WHO website page with a blue navigation bar at the top containing links for Home, Health Topics, Countries, Newsroom, Emergencies, Data, and About WHO. The main heading is "Water Sanitation and Health" with a mission statement: "Our vision and mission are the attainment by all peoples of the lowest possible burden of water and sanitation-related disease through primary prevention." Below this is a section titled "Sanitary inspections for sanitation systems". On the left is a sidebar menu with "Sanitation safety" selected, containing sub-items like "Sanitation inspection packages", "Wastewater", "Guidelines on Sanitation and Health", "Guidelines for Safe Use of Wastewater, Greywater and Excreta", "Sanitation Safety Planning", "Sanitation Workers", and "Climate Resilience and Sanitation". The main content area includes a paragraph about sanitary inspections, a "Download sanitary inspection forms" section with links for PDF and digital versions, and a "Sanitation system fact sheets" section with three fact sheets listed: "Fact sheet 1 - Dry flush toilet with onsite disposal", "Fact sheet 2 - Dry toilet or urine diverting dry toilet with onsite treatment in alternating pits or compostchamber", and "Fact sheet 3 - Flush toilet with onsite treatment in twin pits". A "Related links" section on the right features a link for "Guidelines on sanitation and health" dated 25 September 2018, with a "Download" button and a "Read More" button.

A COMMON CHALLENGE: HOW TO SUSTAIN ODF STATUS AND MOVE TO SAFELY MANAGED?

Local government needs to:

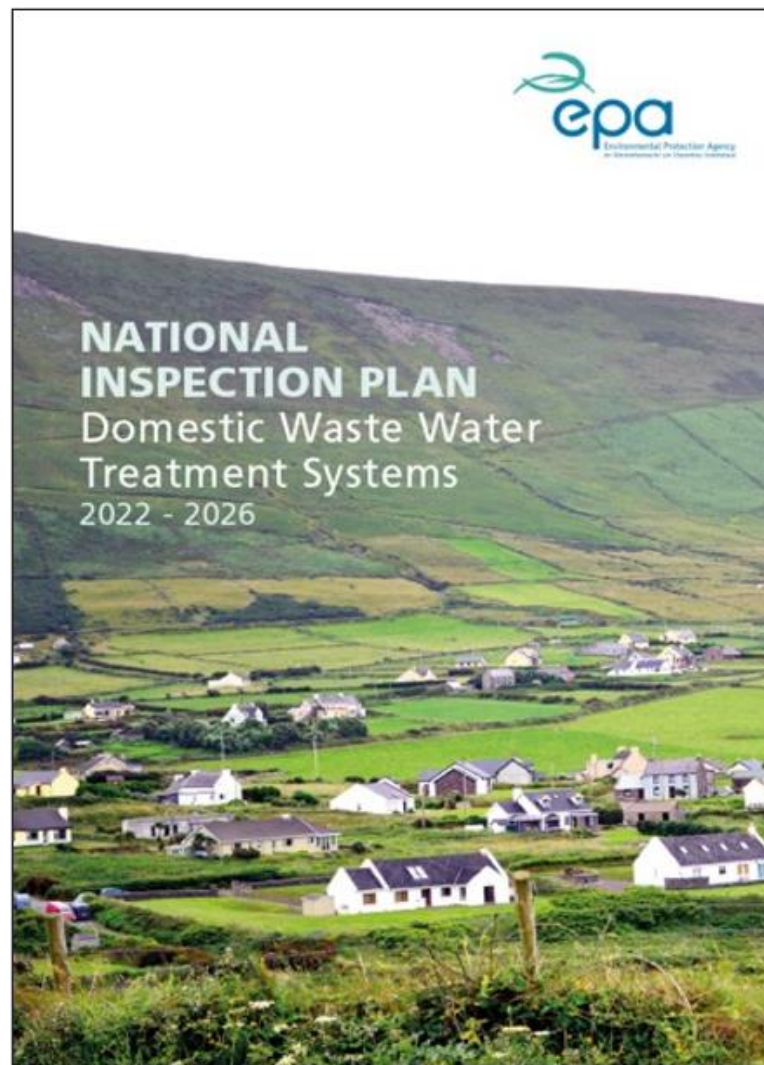
-  Prevent backsliding to open defecation
-  Upgrade unimproved toilets to at least a basic
-  Wherever possible achieve SMS – on-site or with faecal sludge emptying and treatment
-  Monitor status and aggregate data to national level for regulatory and SDG6.2 reporting










**the international
water association**

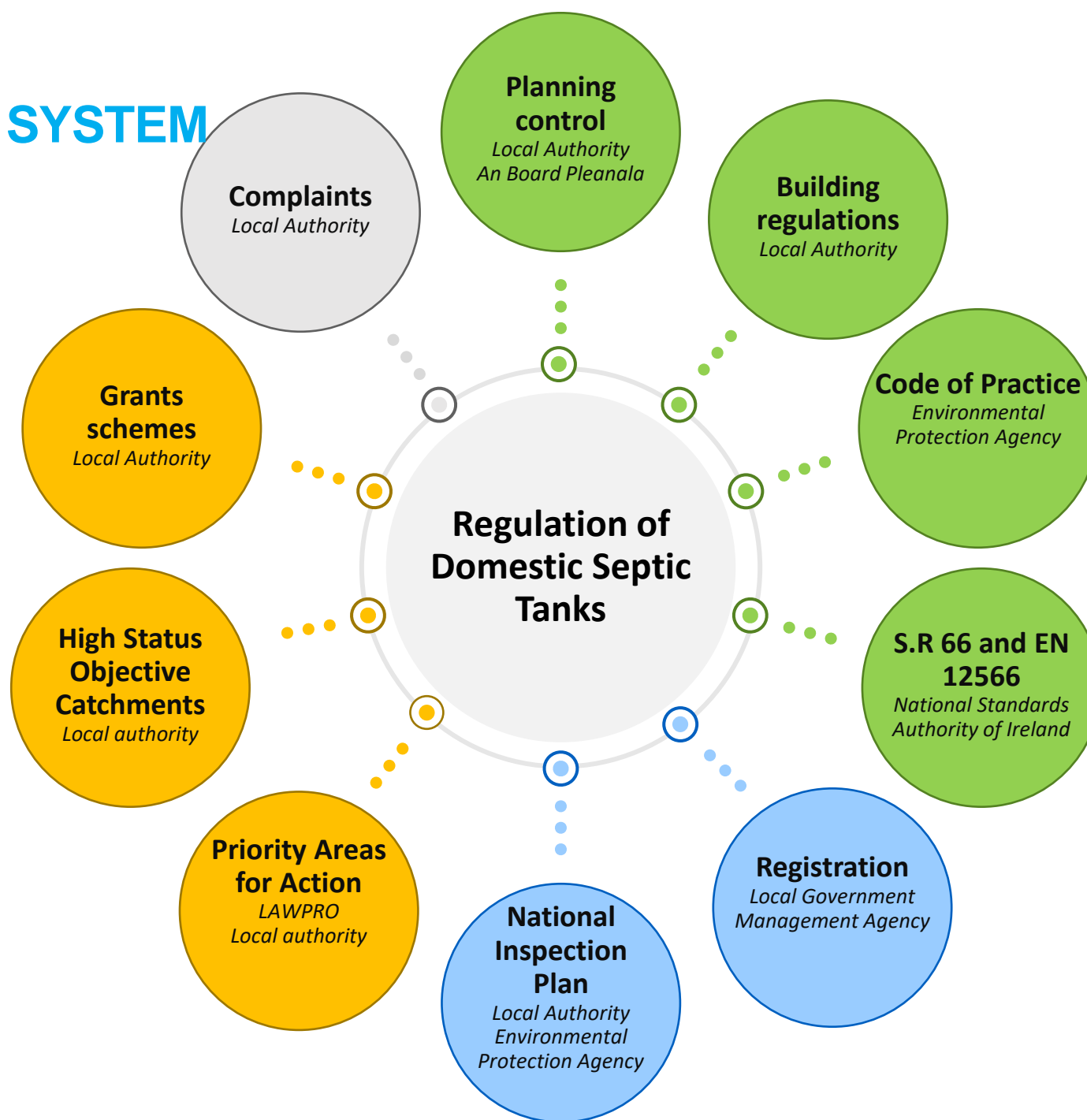
AN EXAMPLE OF REGULATORY USE OF SANITARY INSPECTIONS IN IRELAND



MULTIPLE BENEFITS AND USES OF SANITARY INSPECTION

-  Risk based approach to selection households for inspection
-  Small but nationally representative sample
-  Links to follow up improvement by households and municipalities
-  Deploys information, incentives and enforcement to support system upgrades
-  Strengthens national and local data governance and accountability to national and regional regulator

REGULATORY SYSTEM



LEGISLATION



- **Water Services (Amendment) Act 2012**
- Registration Regulations (S.I. No. 220 of 2012)
- Registration (Amendment) Regulations (S.I. No. 180 of 2013)
- **Domestic Waste Water Treatment Systems Regulations (S.I. No. 223 of 2012)**
- Domestic Waste Water Treatment Systems (Financial Assistance) Regulations (S.I. No. 222 of 2013)
- Appointment Regulations (S.I. No. 384 of 2012)
- Reinspection Regulations (S.I. No. 189 of 2013)
- Commencement Order (S.I. No. 219 of 2012)
- **Housing Financial Assistance Regulations (S.I. No. 184 of 2020)**
- **Housing Financial Assistance for Prioritised Areas for Action Regulations 2020 (S.I. No. 185 of 2020)**
- **Housing Financial Assistance for High Status Objective Catchment Areas Regulations 2020 (S.I. No. 186 of 2020)**



INSPECTIONS - RESPONSIBILITIES

Owner

- Register by 01/02/2013.
- Comply with regulations.
- Ensure system is not a risk to 'human health or the environment'.
- Don't refuse, obstruct, impede, mislead, fail to comply.

Water Services Authority (i.e. Council)

- Take and maintain registrations (protectourwater.ie).
- WSA inspectors conduct inspections.
- Enforce findings, advisory notices etc.

EPA

- Appoints inspectors.
- Issues the National Inspection Plan.
- Supervises WSAs.

INSPECTIONS - KEY TECHNICAL REQUIREMENTS

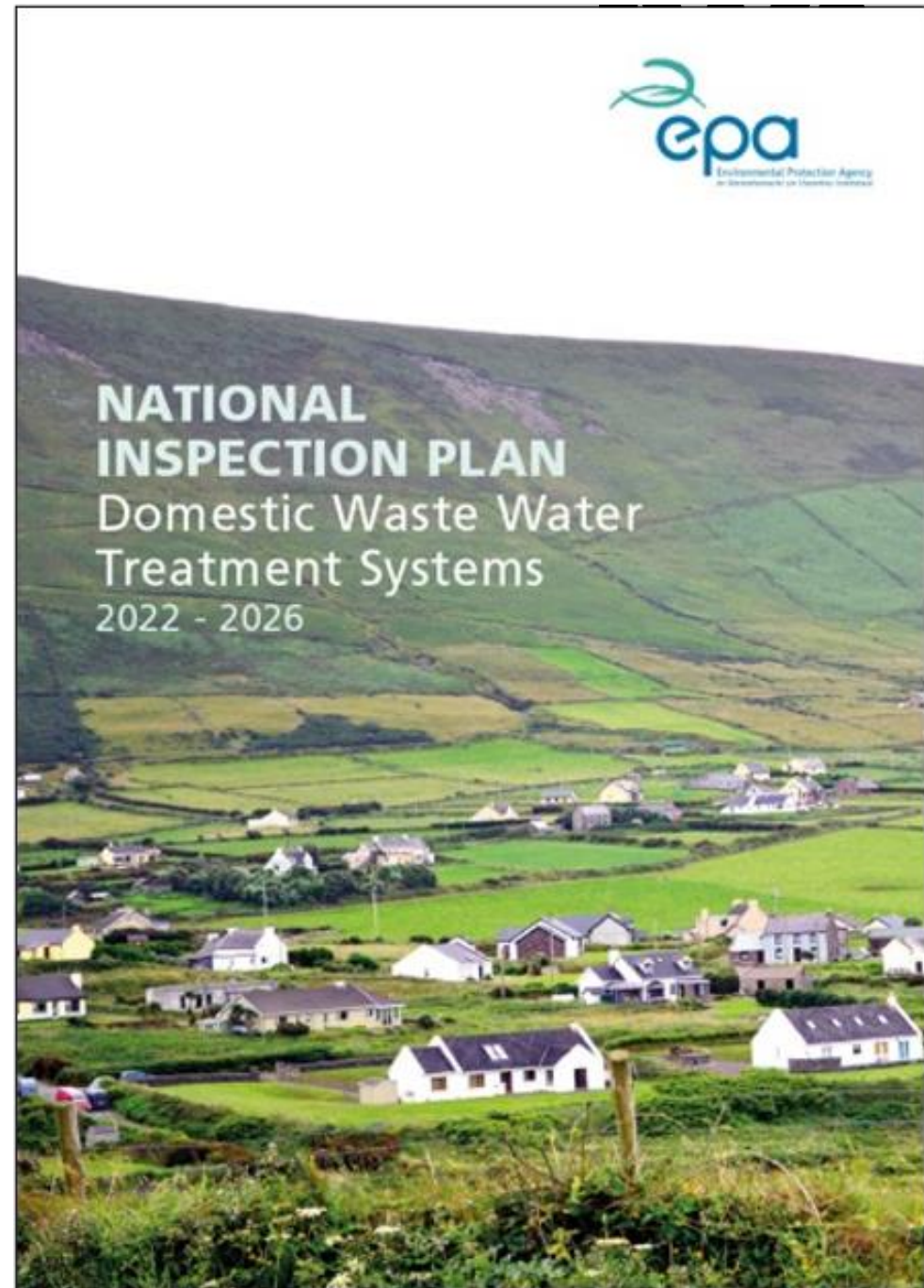
- Regulation 2(1) Not emit, discharge, seep, **leak** or escape...other than as designed/intended, or under discharge licence, or on to the ground.
- Regulation 2(2) **Roof water** or surface water run-off shall not enter...
- Regulation 2(3) **Parts and components** are fit for purpose, operational where appropriate and kept in good order and repair...
- Regulation 3(1) **De-sludged** at intervals appropriate to the tank capacity and the number of persons resident...or as recommended by manufacturer.
- Regulation 3(2) De-sludging...by an **authorised contractor**.
- Regulation 3(3) **Keep receipt** for five years.
- Section 70C(b) Ensure the system is **not a risk to human health or the environment**...does not:
 - Create a risk to water, air or soil, or to plants and animals,
 - Create a nuisance through noise or odours, or
 - Adversely affect the countryside or places of special interest.

INSPECTIONS: NATIONAL INSPECTION PLAN

- 2013-2014
- More where evidence DWWTs are causing an issue
- 2005-2020 inspections/annum minimum (1,200 from 2023)
- 2018-2021
- 2022-2026
- Focused close to rivers and areas with shallow soils and drinking water wells

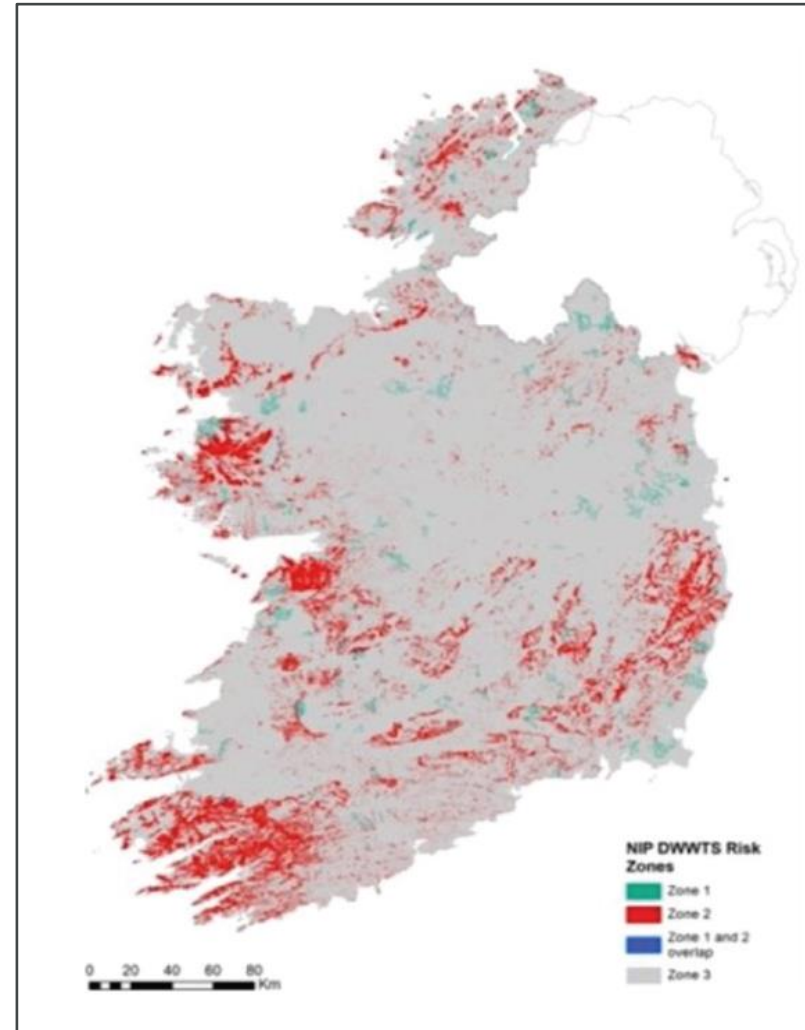


NATIONAL INSPECTION PLAN Domestic Waste Water Treatment Systems 2022 - 2026



INSPECTIONS - NATIONAL INSPECTION PLAN

| | Inspections 2022-2026 | | | | Minimum in 2022 | Minimum per annum 2023-2026 |
|------------------------|-----------------------|-------------|-------------|-------------|--------------------|-----------------------------------|
| | Zone 1 | Zone 2 | Zone 3 | Total | | |
| Carlow | 0 | 72 | 15 | 87 | 15 | 18 |
| Cavan | 62 | 68 | 30 | 160 | 28 | 33 |
| Clare | 158 | 259 | 40 | 457 | 77 | 95 |
| Cork City | 34 | 9 | 5 | 48 | 8 | 10 |
| Cork County | 106 | 446 | 105 | 657 | 113 | 136 |
| Donegal | 379 | 54 | 85 | 518 | 90 | 107 |
| Dún Laoghaire-Rathdown | 0 | 9 | 0 | 9 | 1 | 2 |
| Fingal | 53 | 0 | 10 | 63 | 11 | 13 |
| Galway City | 0 | 5 | 0 | 5 | 1 | 1 |
| Galway County | 202 | 216 | 90 | 508 | 88 | 105 |
| Kerry | 110 | 115 | 60 | 285 | 49 | 59 |
| Kildare | 67 | 14 | 40 | 121 | 21 | 25 |
| Kilkenny | 43 | 178 | 25 | 246 | 42 | 51 |
| Laois | 0 | 29 | 20 | 49 | 9 | 10 |
| Longford | 0 | 5 | 15 | 20 | 4 | 4 |
| Louth | 0 | 34 | 25 | 59 | 11 | 12 |
| Mayo | 139 | 58 | 60 | 257 | 45 | 53 |
| Meath | 183 | 77 | 45 | 305 | 53 | 63 |
| Monaghan | 149 | 28 | 20 | 197 | 33 | 41 |
| Offaly | 14 | 5 | 20 | 39 | 7 | 8 |
| Roscommon | 30 | 5 | 30 | 65 | 13 | 13 |
| Sligo | 5 | 9 | 20 | 34 | 6 | 7 |
| South Dublin | 0 | 15 | 5 | 20 | 4 | 4 |
| Tipperary | 87 | 57 | 50 | 194 | 34 | 40 |
| Waterford | 14 | 77 | 25 | 116 | 20 | 24 |
| Westmeath | 5 | 5 | 25 | 35 | 7 | 7 |
| Wexford | 350 | 221 | 55 | 626 | 106 | 130 |
| Wicklow | 62 | 177 | 25 | 264 | 44 | 55 |
| Total | 2400 | 2400 | 1000 | 5800 | 1000 | 1200 |



INSPECTIONS – INSPECTION PROCESS



AFTER THE INSPECTION

- If the inspector shows that the treatment system is working correctly, you will receive a copy of a report confirming compliance in the past.
- If this is the case, keep up the good work in operating and maintaining your treatment system.
- If the inspector finds problems, the inspector will tell you immediately.
- You will receive a copy of a report with an Advisory Notice within 27 days of the inspection (if it will):
 - advise you that the DWYDTS is not in full compliance with the Environment Act
 - advise you that your DWYDTS is not in full compliance with the regulations
 - advise you of the reasons for that opinion
 - advise you to remedy the matters specified in the notice by a specified date.
- You may be required to seek expert technical advice in order to comply with the Advisory Notice.
- Remember to have your DWYDTS inspected by a list of CEC. This may result in the Advisory Notice being confirmed (amended or cancelled).
- In certain circumstances, and for valid reasons, you may be granted a final extension by the local authority for completion of remedial works.
- Nothing is illegal for a party to interfere with the goal of being in compliance with the regulations during the inspection.

FURTHER INFO

- For more information on how to maintain your wastewater treatment system from the local authority, visit the local authority website or contact your local authority or local government (www.local.gov.uk).
- For information on how to ensure your drinking water is safe, visit the local authority website or contact your local authority or local government (www.local.gov.uk).
- Keep a record of any works carried out for your system as a result of an inspection or otherwise that is required and complete the work as soon as possible.
- If you are concerned that you will not be able to maintain or improve your DWYDTS, contact the local authority or local government (www.local.gov.uk).
- For more information about any of the issues in this notice, contact your local authority or local government.

WHAT TO EXPECT FROM A SEPTIC TANK INSPECTION

What to expect

- No rainwater or clean surface water entering

- No leaks

Inspectors

- No in-house staff

- No appointments in person

- Proper maintenance and operation

- De-sludging

- Not a risk to human health or the environment

INSPECTIONS – REMEDIATION AND GRANTS



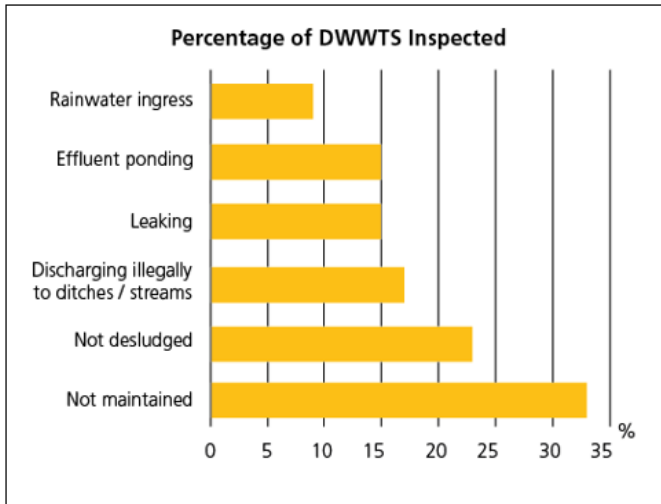
Advisory notice with actions and timeframes

Grants

- High Status Objective Areas
- National Inspection Plan
- Priority Areas for Action

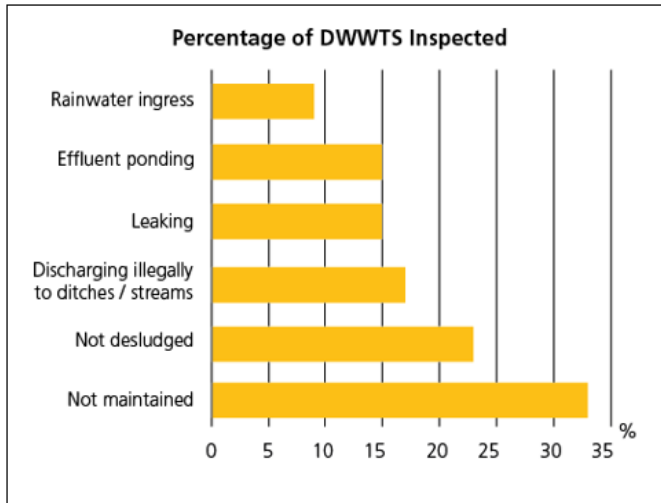
| Year | Grants | € |
|-------|--------|-------------|
| 2014 | 29 | € 98,575 |
| 2015 | 85 | € 256,559 |
| 2016 | 72 | € 212,000 |
| 2017 | 56 | € 179,433 |
| 2018 | 83 | € 289,499 |
| 2019 | 160 | € 497,719 |
| 2020 | 112 | € 388,983 |
| Total | 597 | € 1,922,768 |

INSPECTIONS - 2021 FINDINGS



- [Domestic Waste Water Treatment Systems](#)
- [3,386 \(75%\) failing by systems \(53% \(2019\) \(2021\) report](#)

INSPECTIONS - 2021 FINDINGS



- 36 legal actions (2013-2021)

ENGAGEMENT

Half of septic tank systems fail inspection

What should householders do?

- ✓ Mobile check for obvious problems from the septic tank
- ✓ Clean out your septic tank regularly
- ✓ Fix septic tanks that fail inspection
- ✓ Test your drinking water well at least annually

What assistance is available to householders?

Grants of up to €5,000 are available to fix septic tanks & for improvements to household wells.

Contact your local authority for details.

Fast information on-line at the following links:

- Septic tank grants
- Household well grants
- Septic tank maintenance

How to safely spread sludge from your septic tank

Information for farmers who want to spread sludge from their own septic tanks or wastewater treatment systems on their own agricultural land.

systemsafe
check | maintain | protect

Have you completed a septic tank system check?

Maintain your wastewater system and you will help to protect your health and local environment.

systemsafe
check | maintain | protect

WHAT TO EXPECT FROM A SEPTIC TANK INSPECTION

AFTER THE INSPECTION

FURTHER INFO

epa
Environmental Protection Agency

WHAT YOU NEED TO KNOW ABOUT YOUR SEPTIC TANK

BE AWARE OF INSTANCES

RECOGNISING PROBLEMS

FURTHER INFO

epa
Environmental Protection Agency

IS YOUR WELL AT RISK FROM YOUR SEPTIC TANK?

HOW TO ENSURE YOUR DRINKING WATER IS SAFE

FURTHER INFO

epa
Environmental Protection Agency

QUIZ 3

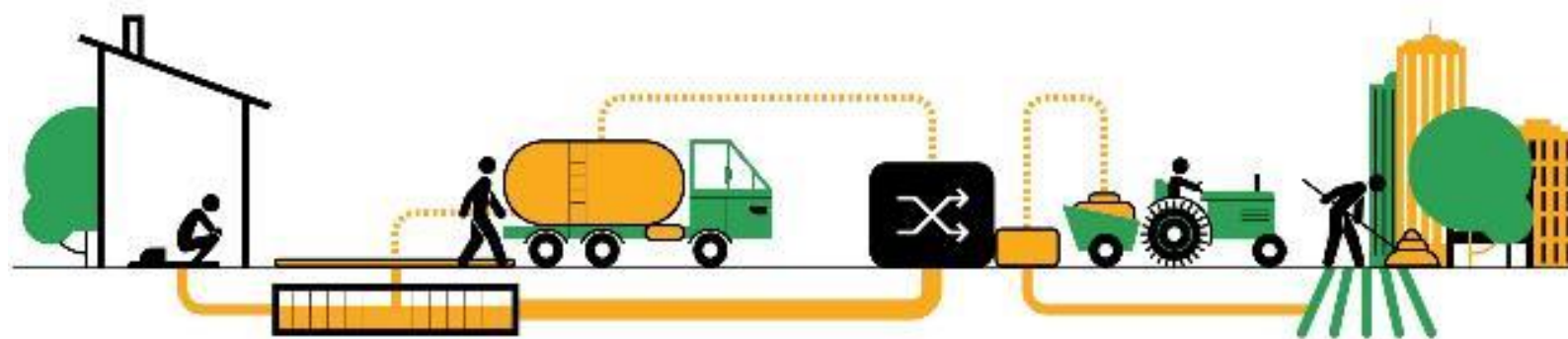
WHAT CAN WE LEARN FROM THIS EXAMPLE?

MODERATOR: YVONNE MAGAWA



Q&A DISCUSSION

MODERATOR & SPEAKERS



WHERE TO FIND MORE

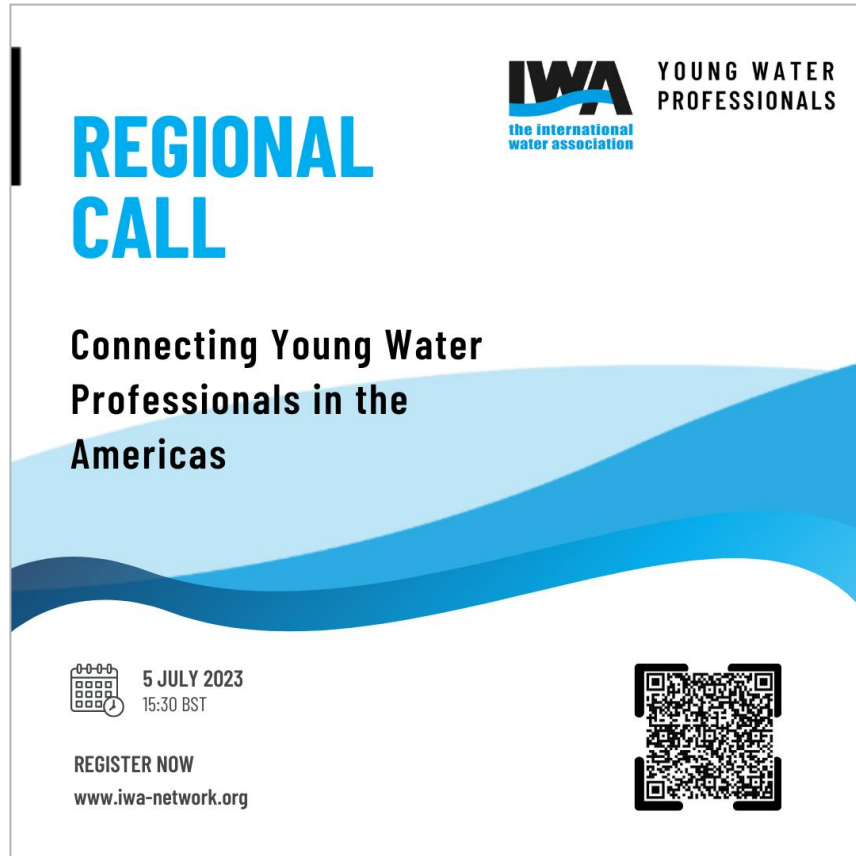
- **State of the world's sanitation:** An urgent call to transform sanitation for better health, environments, economies and societies <https://apps.who.int/iris/handle/10665/336688>
- **OpenWHO course:** For a healthier world: safely managed sanitation <https://openwho.org/courses/wash-safely-managed-sanitation>
- **Guidelines on Sanitation and Health** <https://apps.who.int/iris/handle/10665/274939>
- **Sanitation Safety Planning** <https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/sanitation-safety/sanitation-safety-planning>
- **Sanitation Safety Planning online training platform** <https://ssp-learninghub.creation.camp/>
- **Sanitary inspection forms** <https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/sanitation-safety/sanitation-inspection-packages>
- mWater platform <https://www.mwater.co>
- **Excreta flow diagrams (SFDs)** <https://sfd.susana.org/about/the-sfd>
- **ESPEN – WASH and disease overlay maps** <https://espen.afro.who.int>

FINAL POLL

WHAT TOPIC(S) WOULD YOU LIKE TO LEARN MORE ABOUT
IN ANOTHER WEBINAR?

KATE MEDLICOTT

UPCOMING LEARNING OPPORTUNITIES




REGIONAL CALL

Connecting Young Water Professionals in the Americas

IWA YOUNG WATER PROFESSIONALS
the international water association

5 JULY 2023
15:30 BST

REGISTER NOW
www.iwa-network.org



WEBINAR

Embracing indigenous perspectives to achieve Sustainable Development Goals

IWA
the international water association

9 AUGUST 2023
14:00-15:30 BST

REGISTER NOW
www.iwa-network.org/webinars

International Day of the World's Indigenous Peoples



Learn more about future online events at
<http://www.iwa-network.org/iwa-learn/>

UPCOMING EVENTS



IWA
the international
water association

WATER AND DEVELOPMENT CONGRESS & EXHIBITION

WATER, SANITATION, AND CLIMATE RESILIENCE – KEYS TO A WATER-WISE FUTURE

10-14 DECEMBER 2023 KIGALI RWANDA
WWW.WATERDEVELOPMENTCONGRESS.ORG

Learn more at
<https://iwa-network.org/events/water-development-congress-exhibition-2023/>

JOIN OUR NETWORK OF WATER PROFESSIONALS!



IWA brings professionals from many disciplines together to accelerate the science, innovation and practice that can make a difference in addressing water challenges.

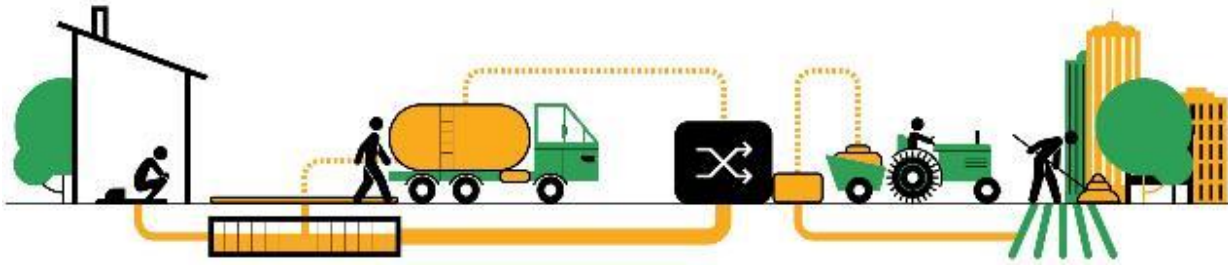
Use code **WEB23RECRUIT**

for a **20% discount off**
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Join before 31 December 2023 at:

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inspiring change



Thank you

6 JUNE 2023

