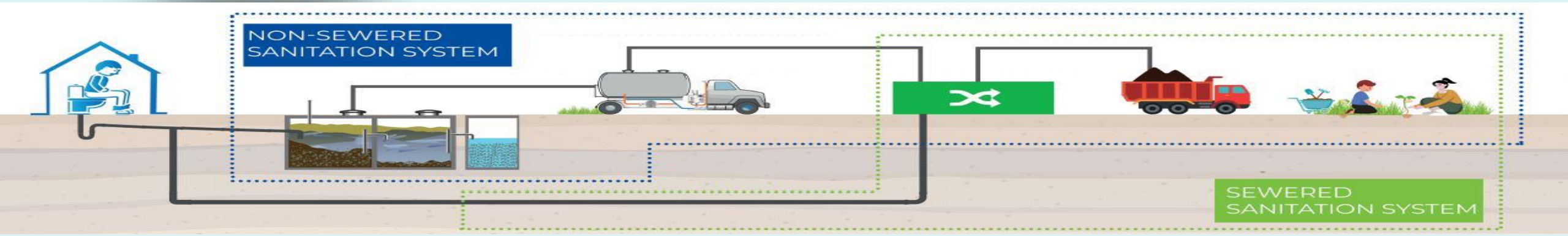
MuNASS II

Municipalities Network Advocacy on Sanitation in South Asia

दक्षिण एशियाका नगरपालिकाहरुको सञ्जालमा सरसफाइ पैरवी कार्यक्रम



Training on Introduction of Faecal Sludge Management (FSM)/City Wide Inclusive Sanitation (CWIS)

Venue: Gautam Hotel, Bardibas, Madhesh Province

Date: 8-10 January, 2024 | 23-25 Poush, 2080

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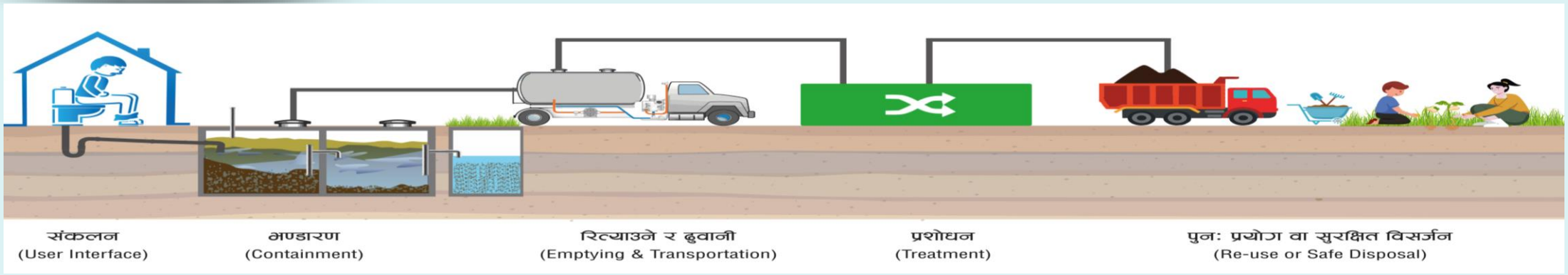

Introduction to Faecal Sludge Management (FSM)

Training on Introduction of Faecal Sludge Management (FSM)/CWIS

Buddha Bajracharya, Program Coordinator

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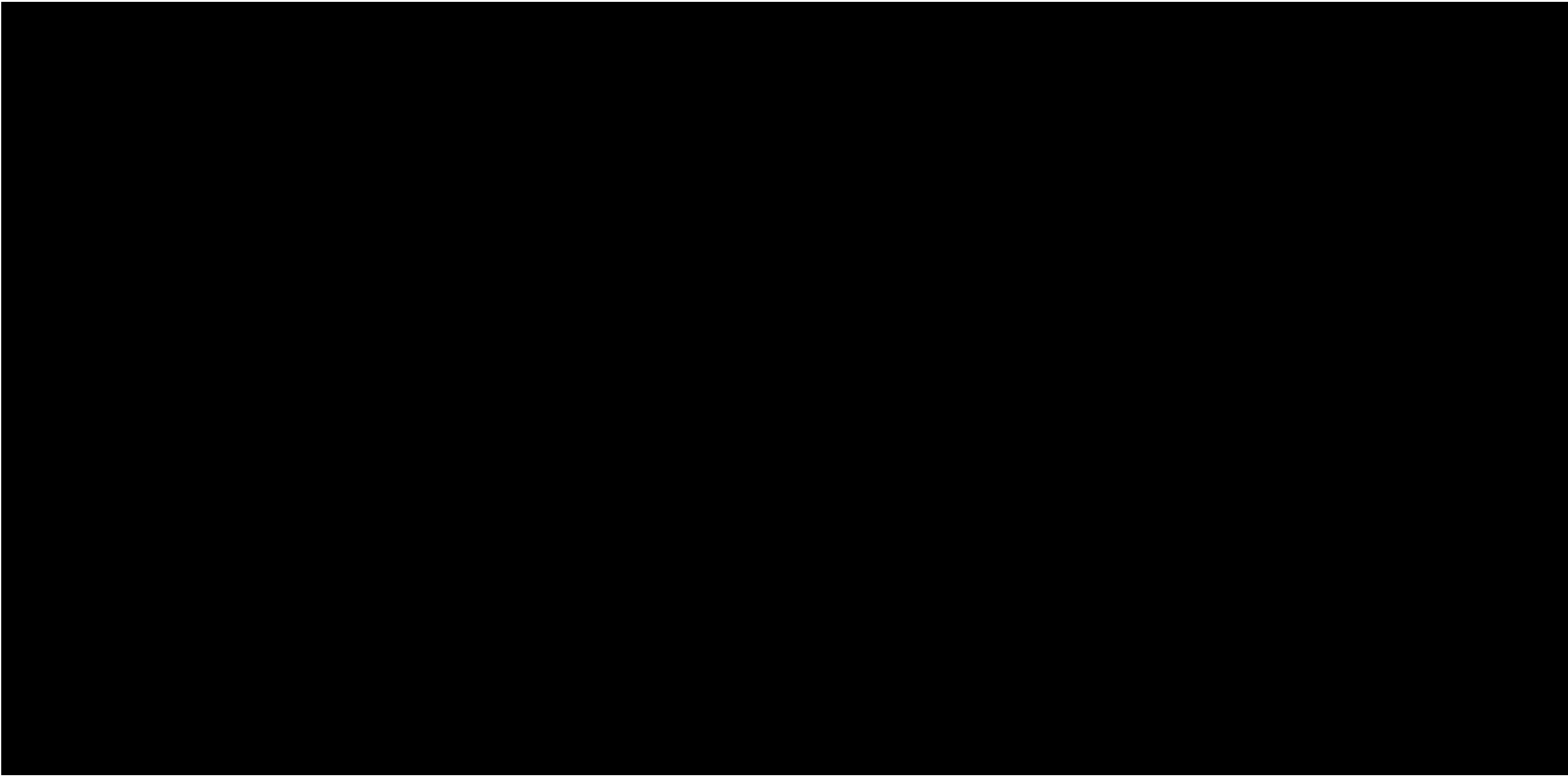
Learning Outcomes

- Understand Faecal Sludge Management and issues around Faecal Sludge Management

What is FSM ?



Wastewater VS Feacal Sludge

Feacal Sludge

Liquid waste that contained in any type of containment

Septage

Feacal sludge that produced/removed from a septic tank

Terminologies related to Sanitation

Sewage

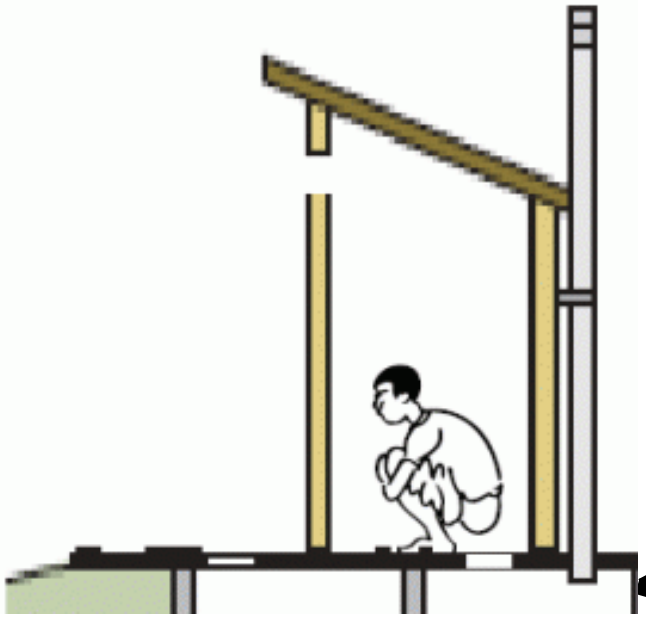
wastewater including feaces and urine produced from various sources

Sullage

Wastewater without faeces and urine produced from various sources

Faecal Sludge

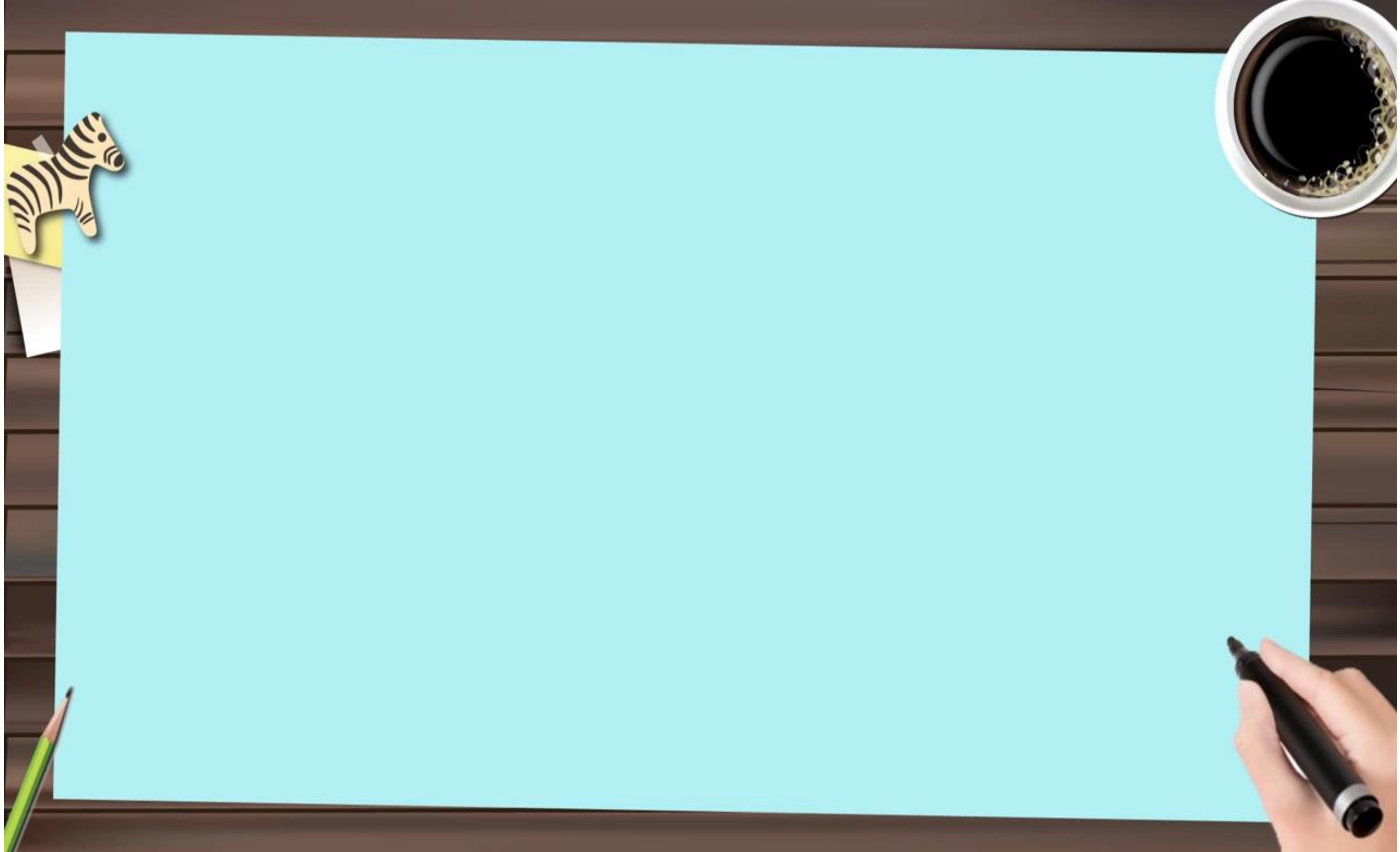
IN:
- Faeces
- Urine
- Water
- Anal cleansing water/materials



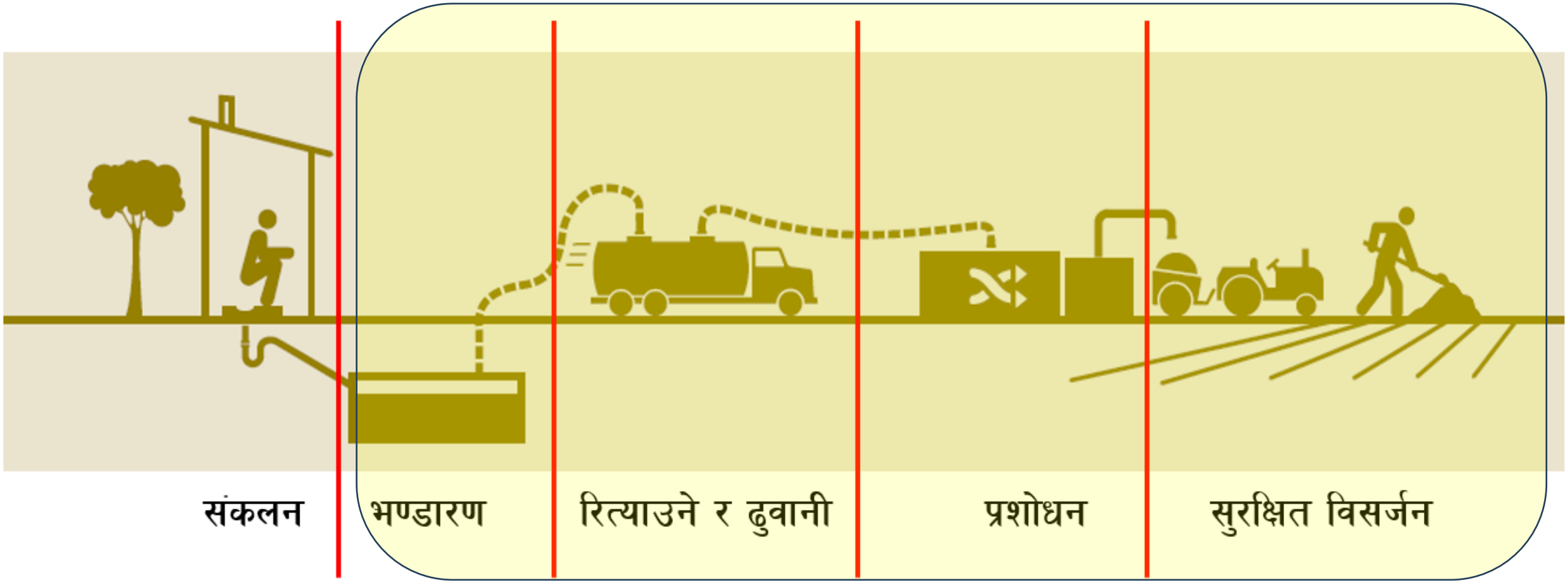
OUT:
- Waste Water

Septic Tank

OUT:
- Faecal Sludge

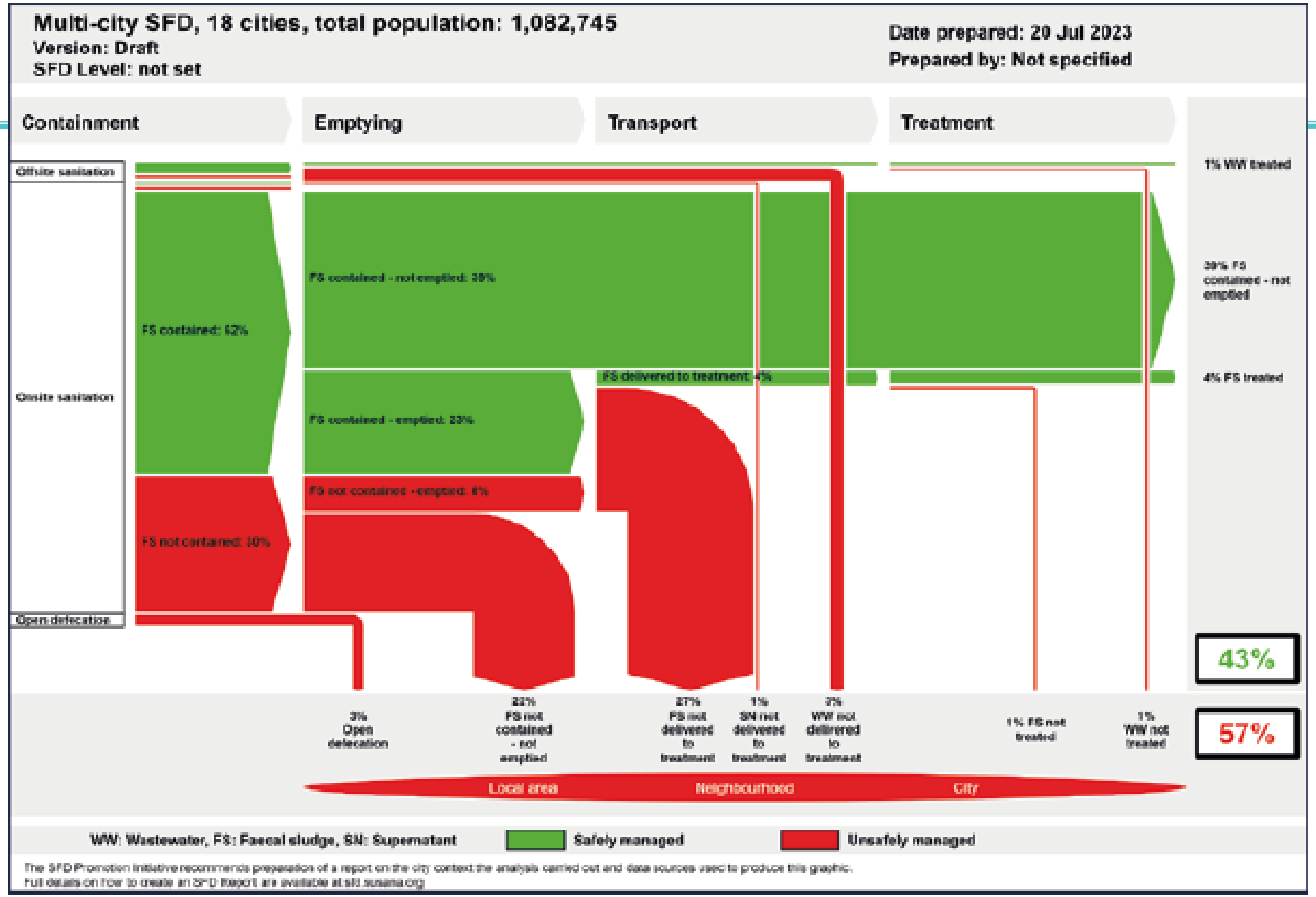


Faecal sludge management value chain



Faecal Sludge Management

The safe emptying, transportation, treatment and reuse/disposal of product of onsite sanitation technology (eg. septic tank/pit) is termed as Faecal Sludge Management.



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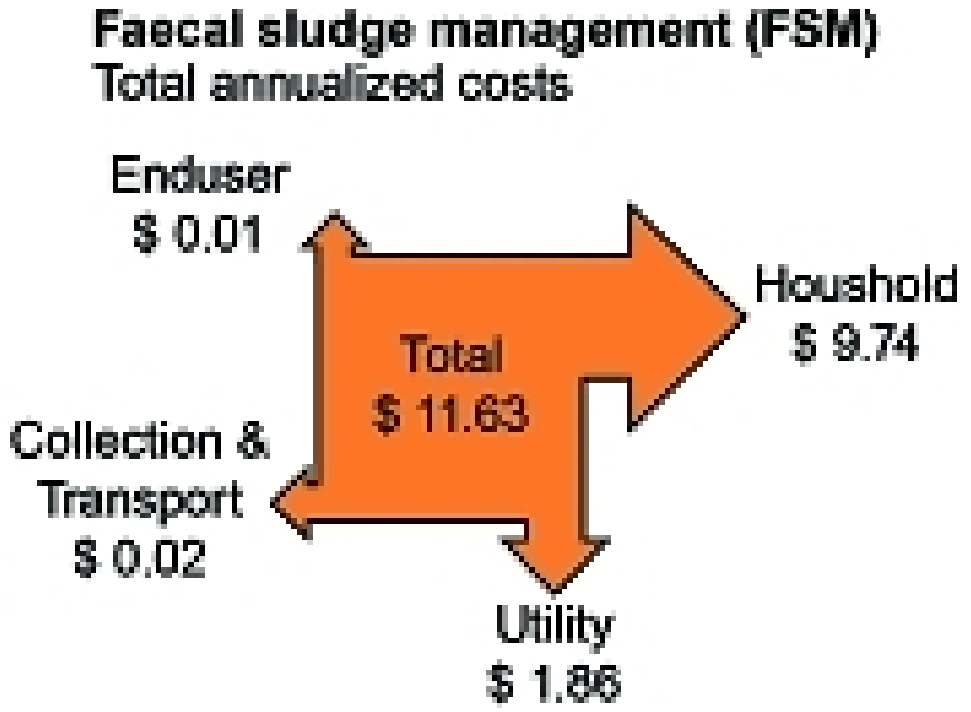
Why Faecal Sludge Management

Sewer system : Financially Expensive



Source:
Capital and Operating Costs of Full-Scale Fecal Sludge Management and Wastewater Treatment Systems in Dakar, Senegal
Pierre-Henri Dodane,[†] Mbaye Mbéguéré,[‡§] Ousmane Sow,[§] and Linda Strande[*‡]

Why Faecal Sludge Management

Sewer system : Technically Difficult

- Gradient - Need Pumping system in plain terrain
- Scatter community : Not possible to collect wastewater from all the communities
- Coverage : Not possible to provide service to 100% people
- Engagement : engagement of people, private and public sector

Applicability of Sanitation Systems

Sewered Sanitation

- Dense settlement
- Flood-prone areas
- Areas having high water table
- low infiltration capacity of soil
- Highly Sloped terrain
- Higher availability of water
- Land available as site for treatment plant at a lower elevation than surroundings

Non-Sewered Sanitation

- Area with low population density
- Settlement with scattered houses
- Rural and outskirt of urban centers
- Plain terrain or geography with low gradient
- Water-scarce areas
- Land available as site for treatment plant at a higher elevation than surroundings

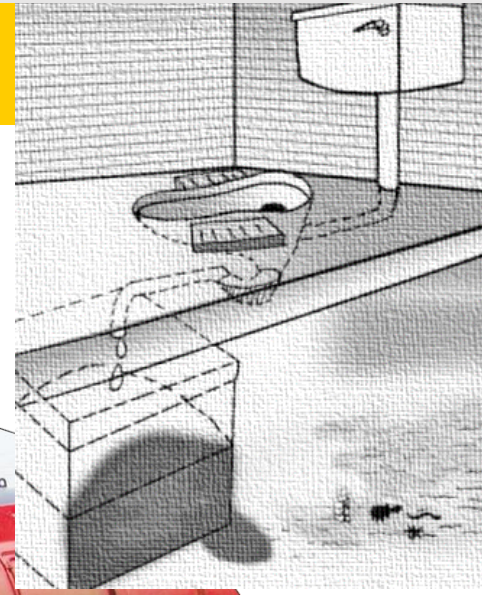
Current Sanitation Practices

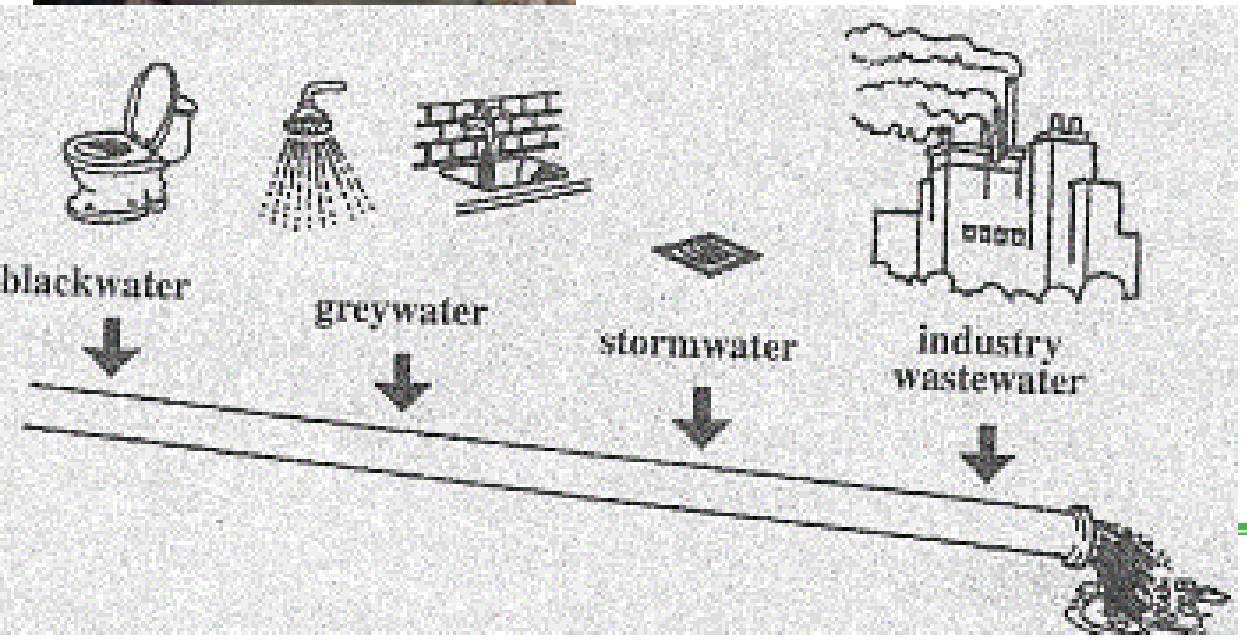
Sewerage system

Flush & Forget

Non sewerage system

Store & Dispose





Any Meaningful Difference / कुनै तात्विक भिन्नता छ ?

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Believe that FSM is serious issue

Thank you

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Urban Sanitation ?

Sanitation :
Formed from sanitary (1823) and figurative use from 1934 from Latin word *Sanitas*
Urban : Characteristic of city life, pertaining to cities or towns and is from Latin *Urbanus*

Urban Sanitation ?

Sanitation Oxford dictionary :

Condition relating to public health, especially the provision of clean drinking water and adequate sewage disposal.

Sanitation Cambridge dictionary :

The systems for taking dirty water and other waste products away from building in order to protect people's health