

# FSM Programme in Southern Bangladesh



**18 January 2015**

**Netherlands**

**Development**

**Organisation**



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**SMART DEVELOPMENT WORKS**

## The Project ...

Project Name: **Demonstration of pro-poor market-based solutions for Faecal Sludge Management in urban centers of Southern Bangladesh**

Project duration: 2014-17

Project area: Khulna City Corporation, Jhenaidah and Kushtia Paurashavas

Funded by: Bill and Melinda Gates Foundation (& DFID)

Implemented by: SNV Netherlands Development Organisation

Implemented under leadership of City Corporation, Jhenaidah and Kushtia Paurashavas



**SNV**



**WaterAid**



# Four implementing components engaging different stakeholders

1. Awareness and demand for services in different areas of the city

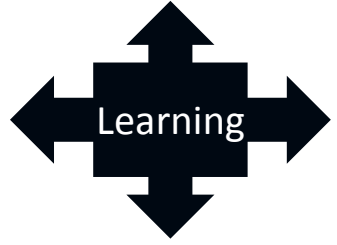


Work with People Community, Schools and Businesses

3. City wide service delivery, regulation, planning



Different Government Departments



2. Safe and affordable sanitation services for toilet construction and emptying



Emptyers and Toilet Builders

4. Informed choice of treatment and re-use solutions, good operation and maintenance

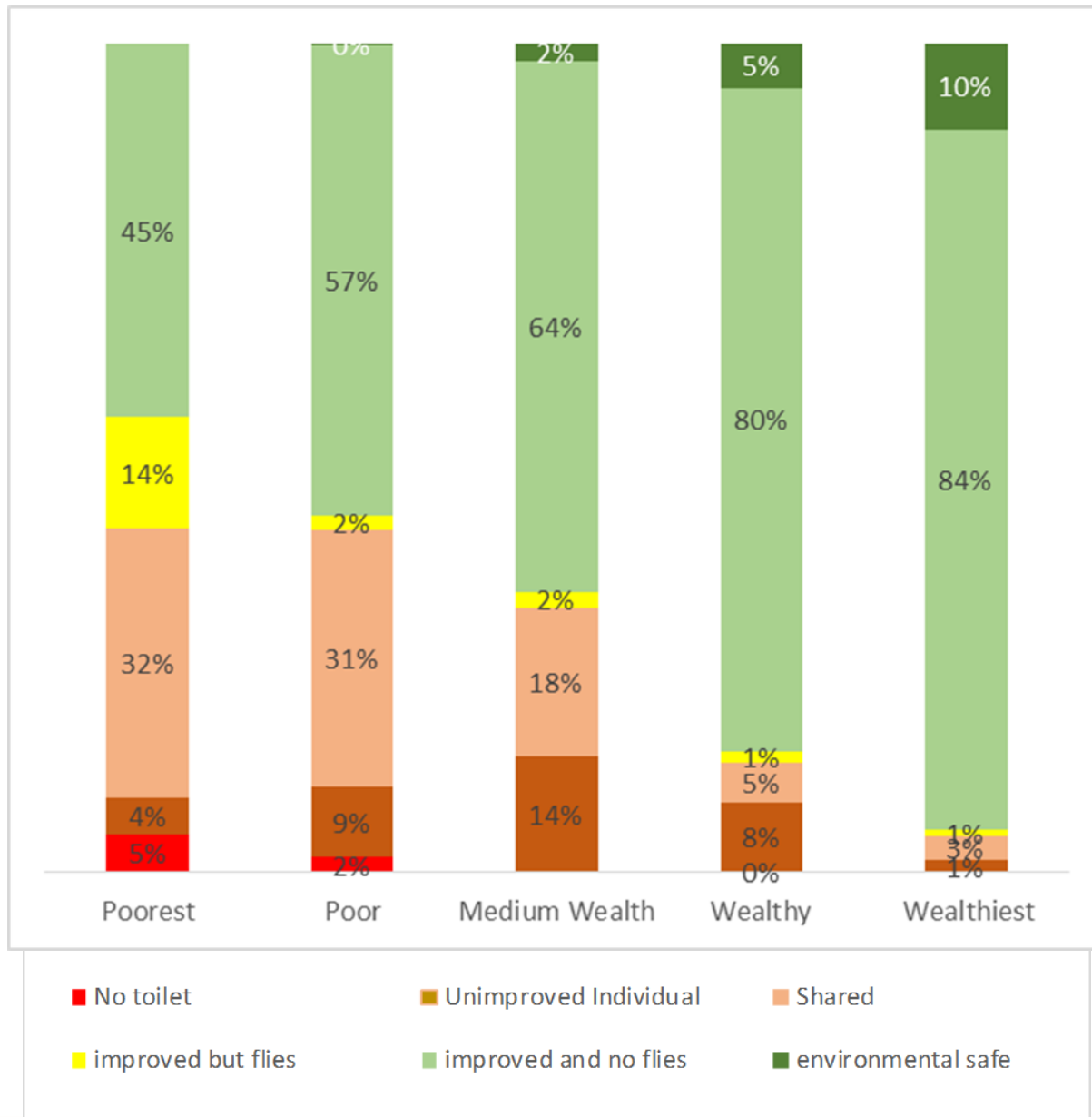


Investors, KWSA

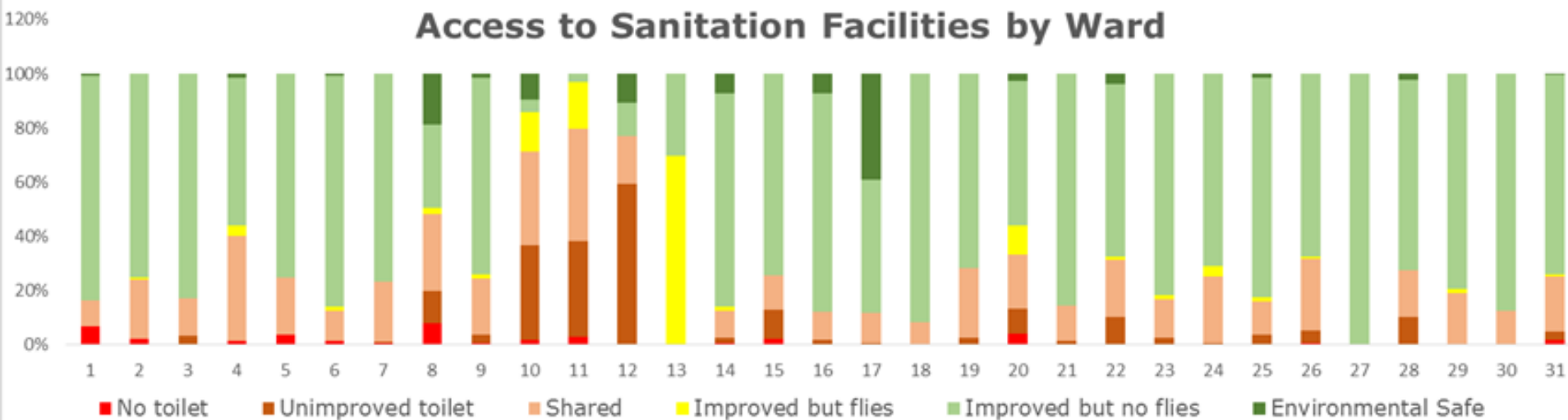


# Indicator 1: Progress in access to sanitation facilities

QIS Ladder: Indicator 1	4	Environmentally safe toilet (septic tank with soak well)
	3	Improved individual toilet without access by flies (with water seal); Septic tank without soak-well
	2	Improved individual toilet but accessible by flies (no or broken water seal)
	1b	Shared Toilet (more than 1 household)
	1a	Unimproved toilet (as per JMP)
	0	No toilet/ Open Defecation / Use Niebuhr's one

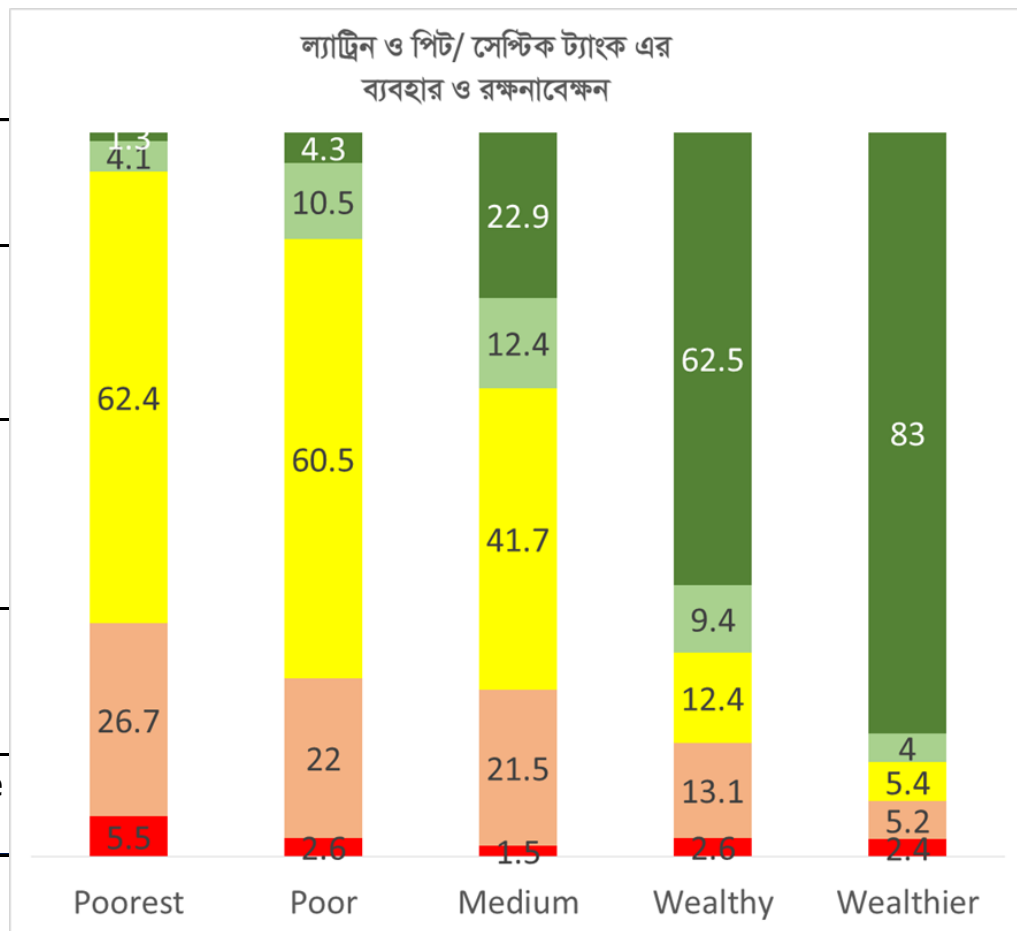


## Access to Sanitation Facilities by Ward



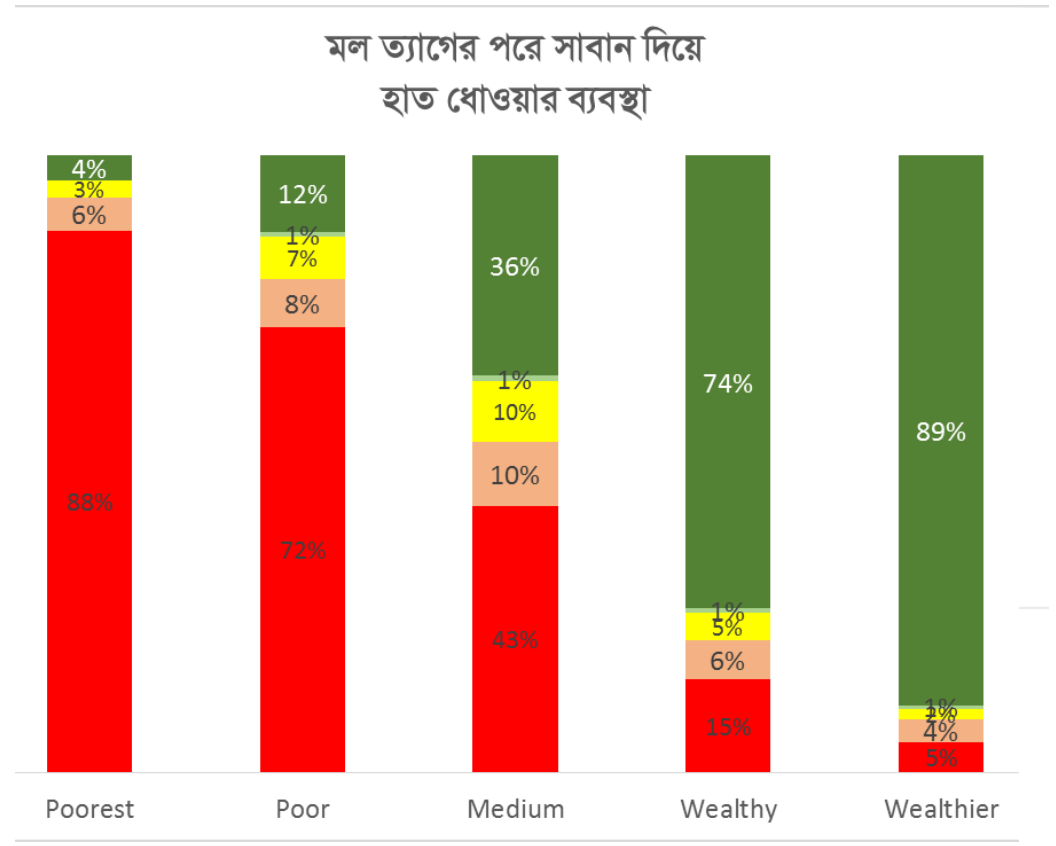
# Indicator 2: Progress in hygienic use & maintenance of sanitation facilities

QIS Ladder: Indicator 2	4	Used, functional, clean toilet with running water and privacy
	3	Used, functional & clean toilet, but no running water and lack of privacy (e.g. no light inside, door lock not functional)
	2	Used & functional, but not clean (e.g. faecal smears are visible on pan/ floor), no water inside toilet, doors/ walls are not in place
	1	Toilet is in use as a toilet but not functional (no, broken or blocked water seal)
	0	No toilet or Toilet exists but not in use as toilet



# Indicator 3: Progress in access to Hand Washing With Soap after defecation

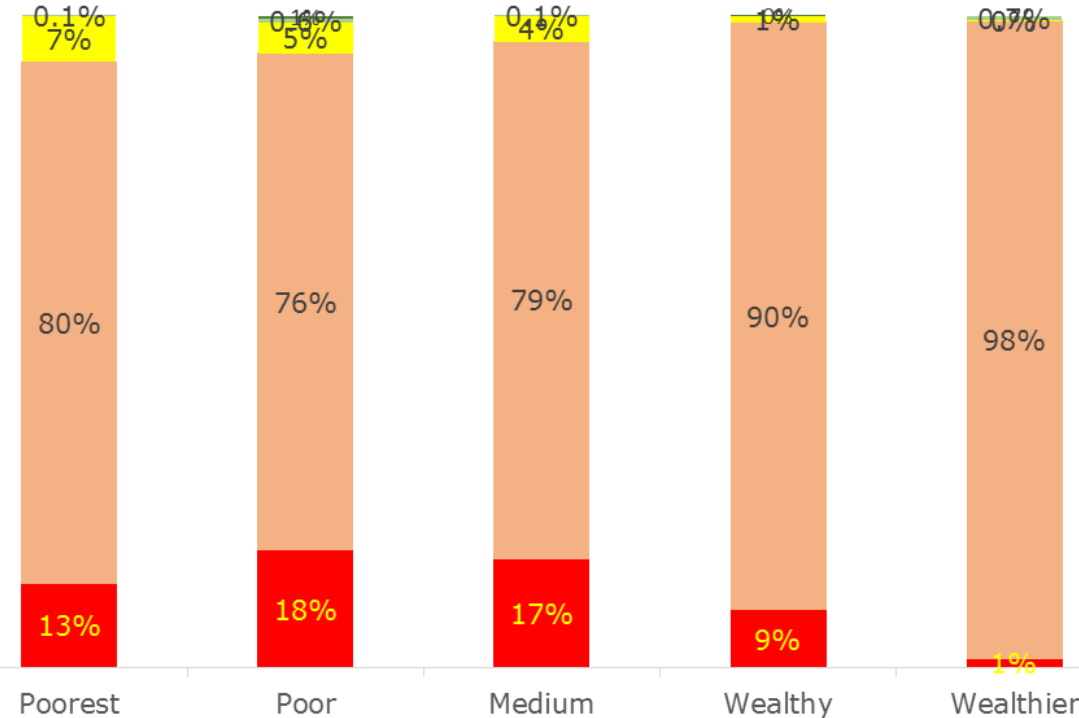
QIS Ladder: Indicator 3	4	Hand Washing Station with Soap and running water
	3	Hand Washing Station with Soap & without potential contamination of water (e.g. tippy tap)
	2	Hand Washing Station with Soap, but potential contamination of water (stored in container or bowl)
	1	Hand Washing Station at accessible distance and water available, but no soap
	0	No Hand Washing Station (HWS) within accessible distance (10 ft)



# Indicator 4: Progress in FSM- emptying and collection

QIS Ladder: Indicator 4	4	Safe emptying and collection: Mechanical emptying, no entering into pit, used protective gear; compost storage more than 6 mths
	3	Partially safe emptying: Manual emptying with protective gear; Compost disposed before 6 mths of storage
	2	Unsafe emptying: Someone enters pit and/or did not use protection gear
	1	On-site storage but no emptying for last 3 years
	0	No toilet or no on-site storage (unimproved toilet)

Emptying and conveyance against wealth quintiles in Khulna



- Safe FSM emptying or conveyance
- Partially safe FSM emptying or conveyance
- Mostly safe FSM emptying or conveyance
- Unsafe FSM emptying or conveyance
- No practice of FSM emptying or conveyance

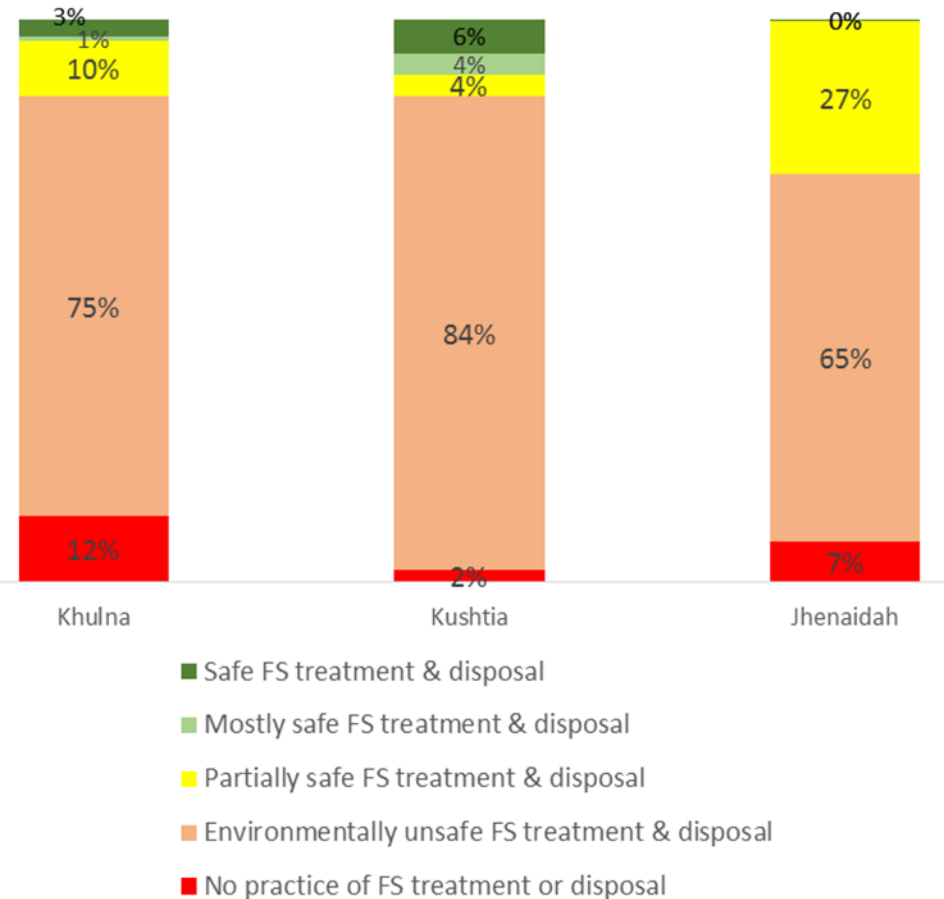




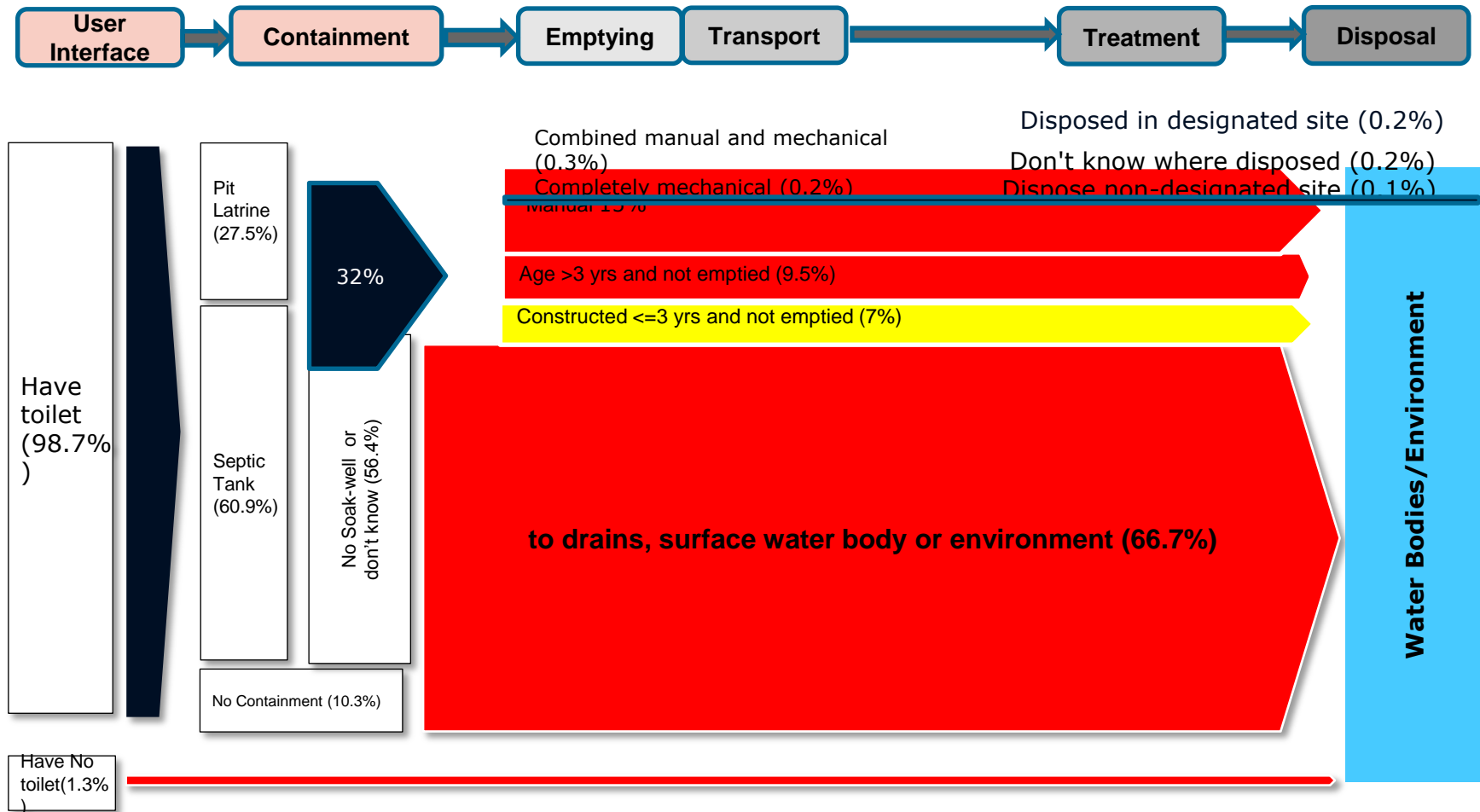
# Indicator 5: Progress in FSM- treatment, re-use and disposal

QIS Ladder: Indicator 5	4	Pre-treatment with safe final disposal; Composted using Twin-pit latrine but withdrawn after 6 months
	3	Pre-treatment with partially safe disposal; [Composted using Twin-pit latrine but withdrawn before 6 months]
	2	Pre-treatment with unsafe disposal (known where Faecal sludge is disposed off)
	1	Not emptied; Unsafe treatment and don't know where Faecal Sludge disposed off
	0	No toilet or no on-site storage (unimproved toilet)

PROVISION OF FAECAL SLUDGE TREATMENT AND DISPOSAL OR REUSE



# Shit Flow Diagram: Khulna





### Occupational Safety and Health in Faecal Sludge Management

A Study in Khulna City Corporation,  
Kushtia and Jenaldah Pourashava

for

SNV



Study Conducted by  
Bangladesh Occupational Safety, Health and Environment Foundation OSHEJ  
www.oshej.org

# Research and Studies

- Baseline to assess the current FSM situation in the cities (URP, KU)
- Review of existing policies, laws and strategies for use of fecal sludge in aquaculture (DFMR, KU)
- Action research for upgrading technology (containment at household level) (EAWAG)
- MDA: Market driven approach to FSM (treatment plant end-products) (EAWAG)
- Quick Demand scan in vulnerable areas (BOP Inc)



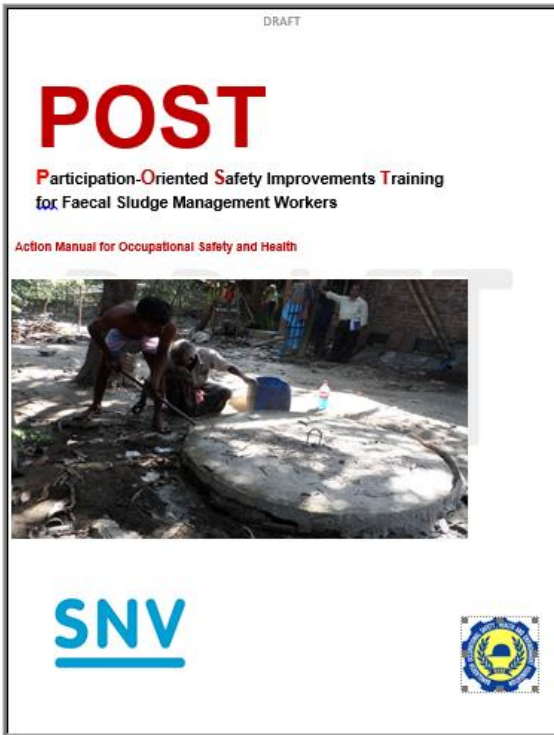
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# Capacity building and development of tools/manuals



- Development of Guidelines/Standards for occupational health and safety for FS emptying and transportation (*Bangladesh Occupational Safety, Health and Environment Foundation*)
- Vacutug Operation & Basic Maintenance for MK-II - MK-VII (MAWTS)
- establishing a methodology for Shit Flow Diagrams (SFD) (EAWAG)



# Implementation, coaching, demonstration projects

- Contract for supporting the selection, design, construction and operation of Short term Treatment Options and documentation of the same in 3 towns) (AIT & KUET)
- Pilot FSM value chain in particular ward (WAB)
- Inclusion of FS within SW/MW STS being planned in Khulna (KCC & ADB)
- Pilot D-bag and Geobag for dewatering Faecal sludge as immediate solution (TenCate)



# Program management and monitoring

- Performance Monitoring Indicators
- Baseline (Impact and Outcome Indicators)
- Programme Monitoring and Evaluation Tool



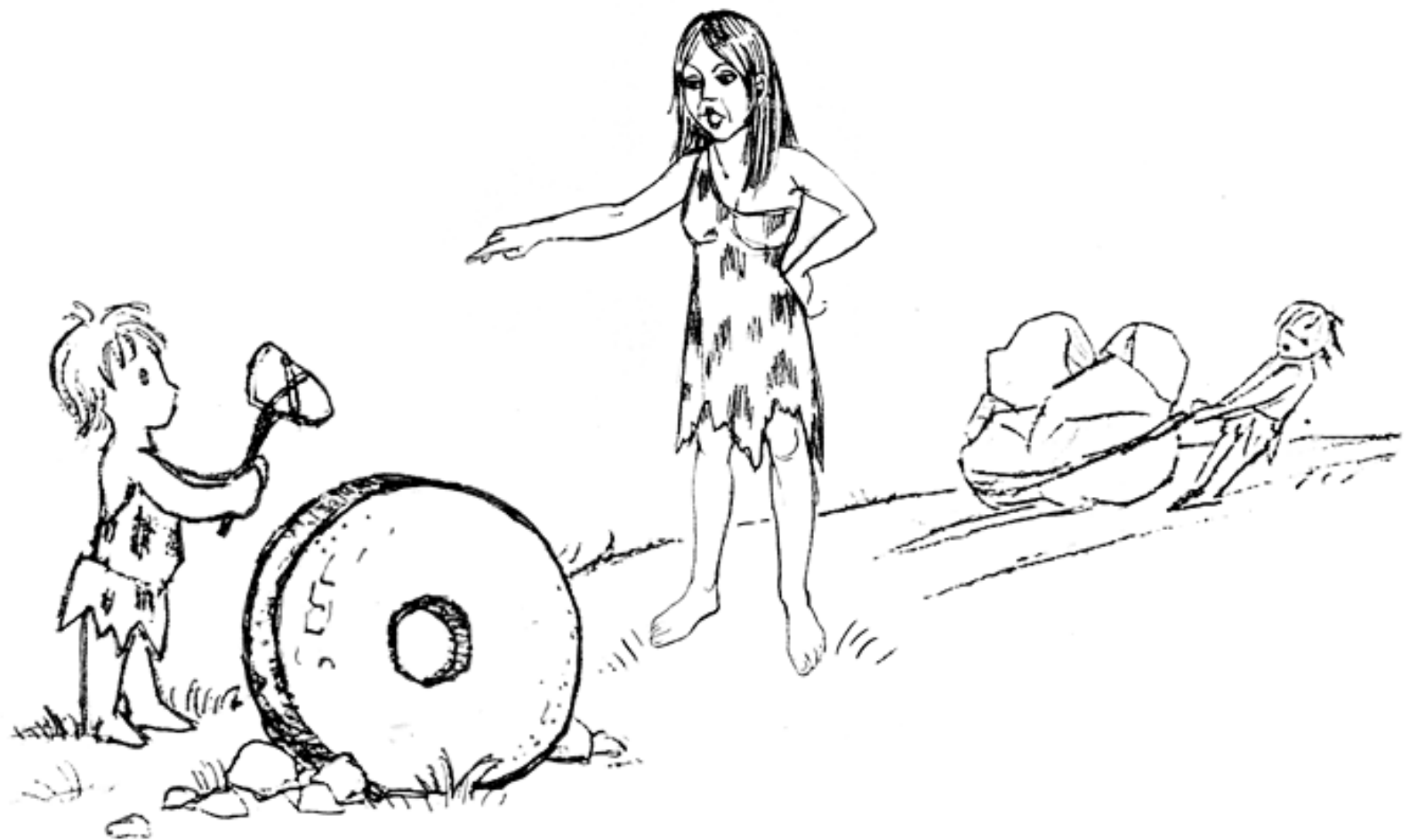
# Led World Toilet Day celebration in 3 towns



# Hosted Regional Learning Event on FS emptying and transportation (Dec 7-10)







All you've done is chisel all day! Do something useful,  
like helping your brother drag those rocks up the hill.

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