

# Equipping local governments with the skills to implement scheduled desludging

#### Freya Mills, Rajeev Munankami

With support from Juliet Willetts and Kumi Abeysuriya (ISF) Antoinette Kome, Nadira Khawaja and Maria Carreiro (SNV)

#### Institute for Sustainable Futures-UTS and SNV







#### **Presentation outline**

- ✓ SNV's support to develop scheduled desludging programs in Bangladesh, Indonesia and Nepal
- ✓ Key program features of SNV's approach to build local government capacity through experiential learning
- ✓ **Lessons** applicable for donor or national government
- ✓ **Outstanding research** to progress desludging





#### Need to support local government Ultimately responsible for FSM

- a) Practical responsibility for FSM typically falls on local governments
- b) FSM is complex and current management capacity is limited
- c) In developing a regular desludging program, government gains skills **applicable to broader sanitation management**.



This **synthesis** by ISF-UTS of SNV's participatory approach to develop a scheduled desludging program



### Situating the findings: four cities in Asia

| City                | Inhabitants | Prior Emptying  | Treatment             |
|---------------------|-------------|---|-----------------------|
| Khulna Bangladesh   | 1.5 million | Vacuum truck (government and community organisation) and manual emptying. | Formal dumpsite       |
| Kushtia Bangladesh  | 238,000     |   | Co-composting         |
| Kalianda Indonesia  | 121,000     | Government vacuum truck, <10% emptied in past 5 years                     | Upgraded<br>treatment |
| Birendranagar Nepal | 106,557     | Private vacuum truck, only 25% systems previously emptied                 | Official dumpsite     |



Features in all cities:
Predominately pour flush toilet to pit latrine or septic tank.
Existing (informal) on-demand emptying service



# Building local government capacity through experiential learning

Part of Urban Sanitation and Hygiene for All program (SSH4A–U) SNV provided guidance to **develop scheduled desludging programs** 

Features of SNV's approach:

- 1. Rapid data collection
- 2. Develop options with stakeholders
- 3. Small early pilots
- 4. Assess the legal landscape





### **Approach 1 - Rapid Data Collection**

#### Early, fast, appropriate preliminary data



- Rapid Technical Assessment (RTA) a FSM
   specific data collection approach early, small
   sample, instant data.
- Local government involved increase knowledge of sanitation issues and skills to survey and manage in future.



- Cost and time effective Small sample but sufficient for preliminary program design, next assessment targeted.
- ✓ Government develops skills but lacked motivation for conducting further surveys independently.



#### **Approach 2 - Develop options together**

#### **Stakeholder preferences vary**

- Participatory approach to use the Septage Management Decision Support Toolkit
- Intensive stakeholder involvement to input local data (cost, time, technical)



- ✓ Stakeholder preferences varied between cities (ie. private sector inclusion, recovery of costs, market coverage).
- ✓ Achieved locally appropriate and acceptable models
- ✓ Increased government understanding of FSM complexities but also the realisation FSM could recover costs.



#### **Approach 3 - Small Early Pilots**

**Understand gaps and course correct** 

Two 2-4 day pilots early in program in Khulna Bangladesh

Aim to test assumptions :

- Technical logistics of emptying
- Consumer preferences and willingness to pay
- Operator capacity to manage scheduled emptying



 Early pilots allowed for change in approach before institutional aspects were finalised and highlighted capacity gaps



### Approach 4 - Understanding the legal landscape

**Upfront legal and institutional assessment** 

- Upfront legal review to understand national and local regulations and policies on urban sanitation
- Support government design compliant programs and develop new regulations



- ✓ Ensure institutional changes and regulations were started early. Take time and could delay the program.
- ✓ SNV engaged with national government towards strengthening national coordination and



# Key Lesson 1: Rapid data collection appropriate for preliminary design



FSM is **not a 'one-size-fits-all'** solution, approach varied between cities



- **Rapid assessment** approaches were found to hold value
- Septage management toolkit was useful, however its embedded assumptions need consideration
  - Small 1-2 day pilots in Khulna early in the program tested key assumptions and allowed for course correction







#### Key Lesson 2: Local government involved from outset



- "Learning while doing" builds capacity for ongoing management - planning, finance, database, technical and customer skills
- Higher level government support needed for regulatory and institutional changes
- Data provided basis to trigger commitment

#### A conducive environment is important for

- increase political will,
- private sector interest and
- consumer demand.



# Key lesson 3: Desludging must be considered as one part of a bigger sanitation challenge

• One part of sanitation service chain and within the broader citywide urban sanitation context, otherwise benefits are limited and institutional aspects remain fragmented.



- **Contextualised solutions** should be based on local drivers and towards incremental improvement
- Is this the best use of time and investment? How to prioritize achieving a city's environmental and health objectives.



#### Way forward: Addressing key outstanding areas

- ✓ Planning around FSM investment and prioritization coordinate tools for health, environment, investment
- ✓ FSM "black box" need to build up the evidence base of tested desludging options to support decision makers
- ✓ Technical challenges still exist dense urban areas, effective transfer station, containment and treatment options



### Summary of key lessons



**Complex decisions** require information, tools and support



FSM is not "one size fits all" - rapid, early data collection and stakeholder engagement valuable.



Learning through doing provides government with **knowledge and experience** but an enabling environment is needed to motivate action.



Consider desludging programs within broader citywide urban sanitation context



Progress was made and research and planning tools were developed and applied, there is still a **long way to go**.





### Thank-you

## For further information please contact us at www.snvworld.org or www.isf.uts.edu.au





