

# Status of Faecal Sludge Management (FSM) in Shuklagandaki Municipality

## Introduction

Shuklagandaki municipality is located in Tanahu District of Gandaki Zone in the Western Development Region of Nepal. This municipality has a high religious value. Dhorbarahi, one of the most famous goddess temples, is located here. There are 48,380 people with 9676 households according to the latest data obtained from the municipality at the time of survey.

## FSM Status

Majority (9,560) of the households (HHs) have a toilet within their premises. Out of the HHs having toilets, 4,570 HHs have lined containments including biogas containers (4,235 HHs), 4,627 HHs have unlined containments and 363 HHs have no containment. Considering the volume of these containments, volume of faecal sludge (FS) generated in the municipality is estimated to be 153 cum per year. The generated FS are being self-emptied manually (0.8 cum/year).

There are neither private nor municipal desludging vehicles within the municipality. However, the households contact available nearby service providers from other municipalities, whose rates vary from Rs.10,000 -15,000 based on whether or not the ultimate disposal site of sludge is known. As only 0.5% of the containments are being emptied, there is no treatment plant or proper disposal site in the municipality. 50% of the emptied sludge is being applied into the farmland indicating unsafe use. Also, those containments which are not emptied, do not necessarily represent to be safe as majority of them are unlined, so could be threat to ground water pollution.



Map of Shuklagandaki Municipality

## Recommendation

The data shows that Shuklagandaki municipality has no full sanitation coverage. In addition, the existing containments are not properly designed, which are collectively polluting the ambient environment and ground water. So, standard toilet and containment construction should be prioritized.

Furthermore, as the FS generated are being emptied mechanically getting the service from nearby municipalities paying high charges, facilities of mechanical desludging service providers and proper treatment facility should be emphasized in the Shuklagandaki municipality.

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# Shuklagandaki Municipality

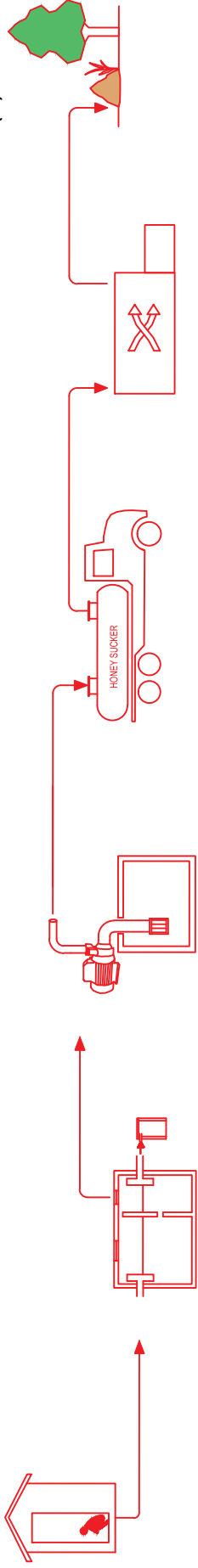
**Population Size**  
48,380

**No. of Household**  
9,676

**No. of Toilets**  
9,560

**Faecal Sludge Generation**  
3,696 cum/year

**Unsafe Disposal (FS)**  
1,804 cum/year



### USER INTERFACE

- HYGIENIC SEPARATION OF HUMAN EXCRETA PREVENTING EXPOSURE TO FAECAL MATTERS.
- THE COLLECTION OF FAECAL MATTERS IS DONE UNDER USER INTERFACE VIA DIFFERENT KINDS OF TOILETS.

### CONTAINMENT

- COLLECTION AND STORAGE OF HUMAN EXCRETA INTO THE CONTAINER.
- FAECAL SLUDGE IS SETTLED AT THE BOTTOM OF THE CONTAINER WHILE THE EFFLUENT FLOWS AWAY FROM THE CONTAINER.

### EMPTYING

- REMOVING OF FAECAL SLUDGE FROM THE CONTAINER.
- HYGIENIC REMOVAL OF THE SLUDGE IS THE MAJOR CONCERN.

### TRANSPORT

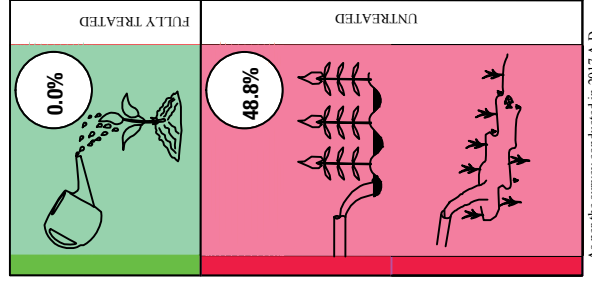
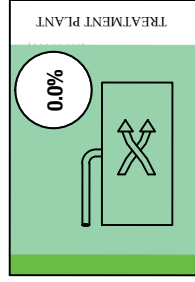
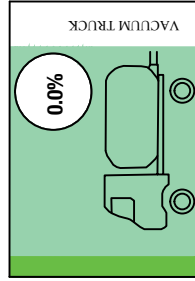
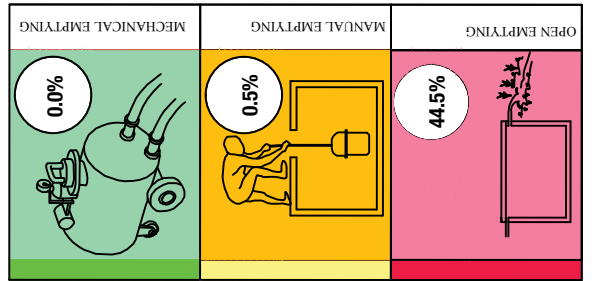
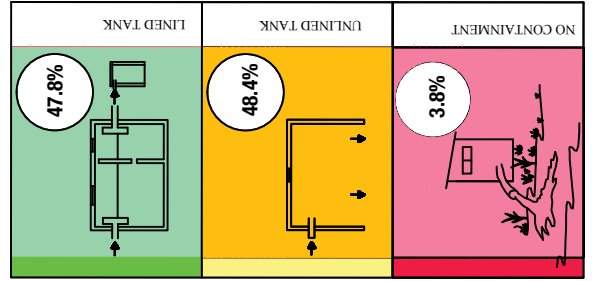
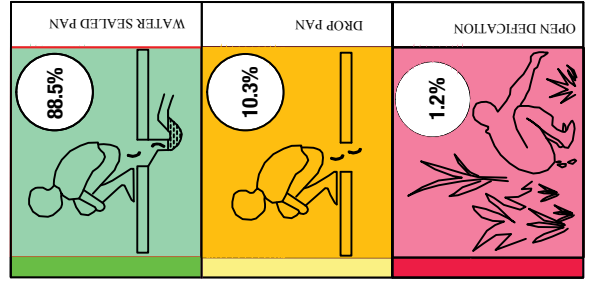
- CONVEYANCE OF FAECAL SLUDGE FROM THE CONTAINER TO THE TREATMENT PLANT
- VACUUM TRUCK ARE THE MAIN MEANS FOR THE TRANSPORTATION OF THE FAECAL SLUDGE.

### TREATMENT

- REDUCTION OF POLLUTANTS FROM THE FAECAL SLUDGE TO THE SET STANDARD BY USING DIFFERENT KIND OF TREATMENT TECHNOLOGIES

### DISPOSAL/REUSE

- DISCHARGE OF FAECAL SLUDGE INTO THE ENVIRONMENT FOR DRAINING OR REUSE PURPOSE



**LEGEND:**

- Acceptable (Green)
- Need improvements (Yellow)
- Unacceptable (Red)