

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

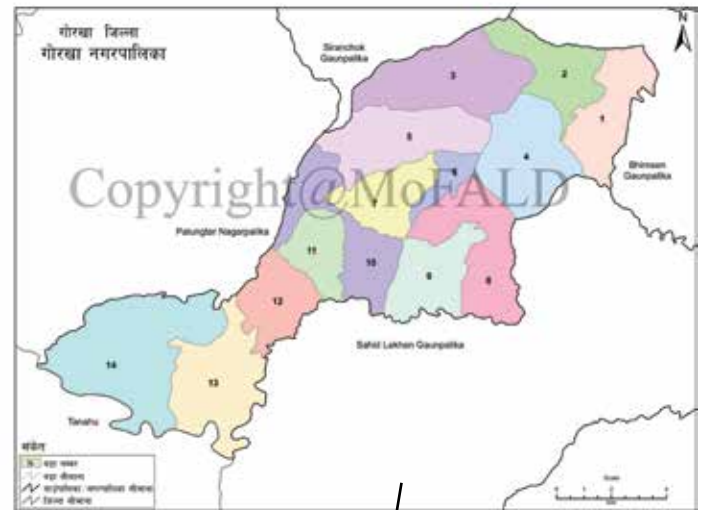
## Introduction:

Gorkha municipality is located in Gorkha District of Gandaki Zone in the Western Development Region of Nepal. This used to be the Gorkha Kingdom from where modern Nepal was created by late king Prithivi Narayan Shah and also connected with the name of legendary Gorkha soldiers. There are 49,272 people with 13,127 households according to the latest data obtained from the municipality at the time of survey.

## FSM Status

Majority (13,061) of the households (HHs) have a toilet within their premises. Out of the HHs having toilets, 6283 HHs have lined containments including biogas containers (3226 HHs), 6648 HHs have unlined containments and 131 HHs have no containment. Considering the volume of these containments, volume of faecal sludge (FS) generated in the municipality is estimated to be 398 cum per year. The generated FS are being emptied by the private desludging service providers - manually (22 cum/year) and mechanically (25 cum/year).

The municipality owns a desludging vehicle which provides desludging services at Rs.2500 per trip. However, there is no treatment plant or proper disposal site in the municipality, so out of 12% containments which are being emptied, mechanically emptied FS are being disposed near solid waste dumping site and 0.24% of manually emptied FS are used 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 a threat to ground water pollution.



Source: MoFALD



Map of Gorkha Municipality

## Recommendations

The data shows that Gorkha 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, in this municipality, about 6% of the FS generated are being emptied manually which are either being unsafely used or disposed haphazardly. This reflects the need of sufficient mechanical desludging service providers and proper treatment facility.

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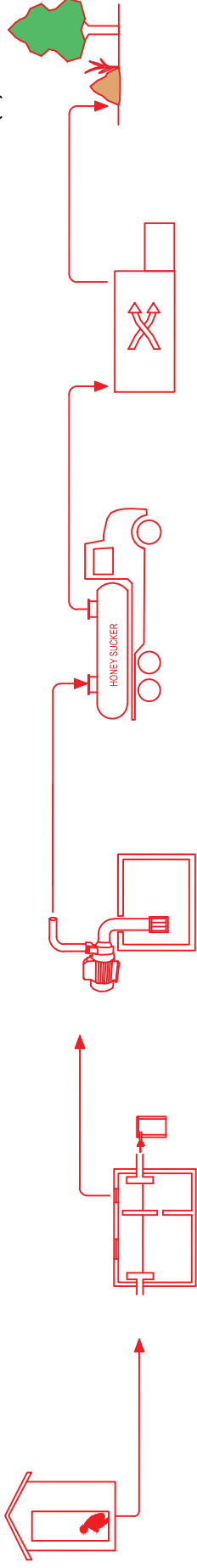
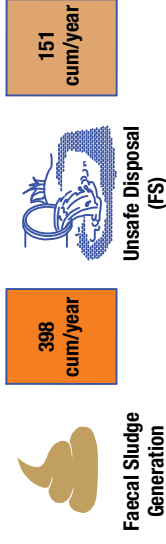
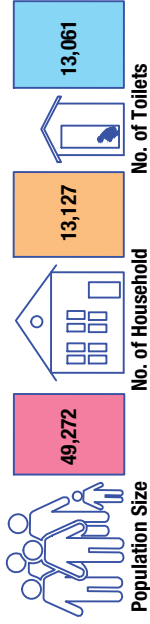
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# Gorkha Municipality



**USER INTERFACE**

- USER INTERACTION WITH DIFFERENT KIND OF TOILETS
- 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**

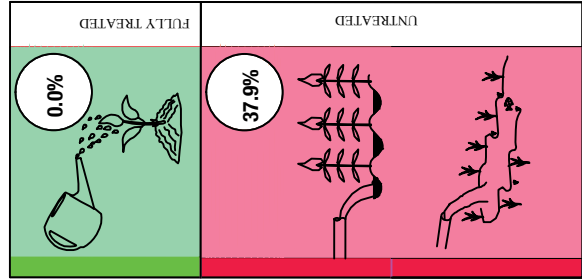
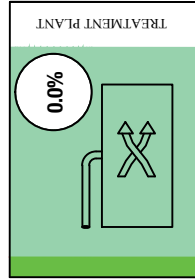
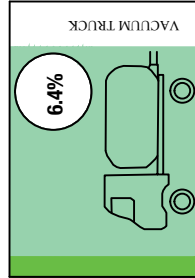
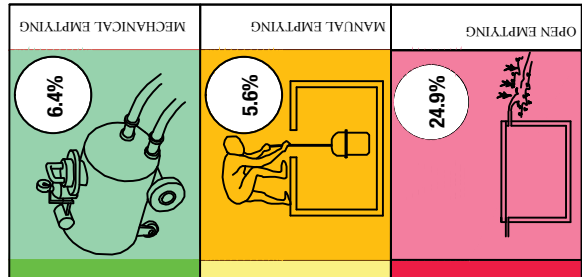
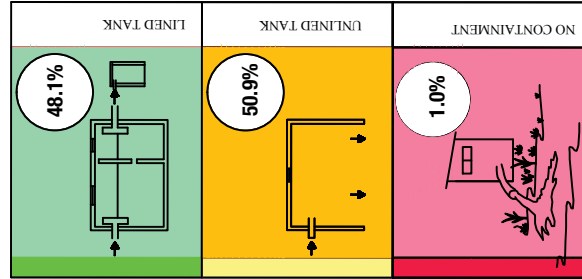
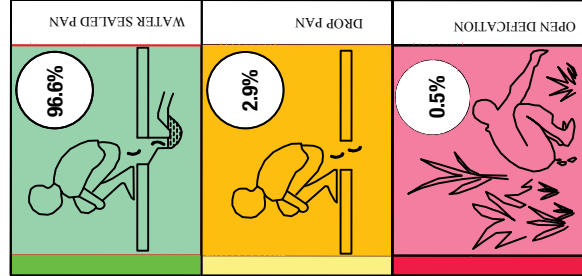
- CONVEYANCE OF FAECAL SLUDGE FROM THE CONTAINER TO THE TREATMENT PLANT
- VACUUM TRUCK ARE THE MAIN MEANS FOR THE TRANSPORTATION OF THE FAECAL SLUDGE.

**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)

**BORDA**

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