Status of Faecal Sludge Management (FSM) in Kohalpur Municipality

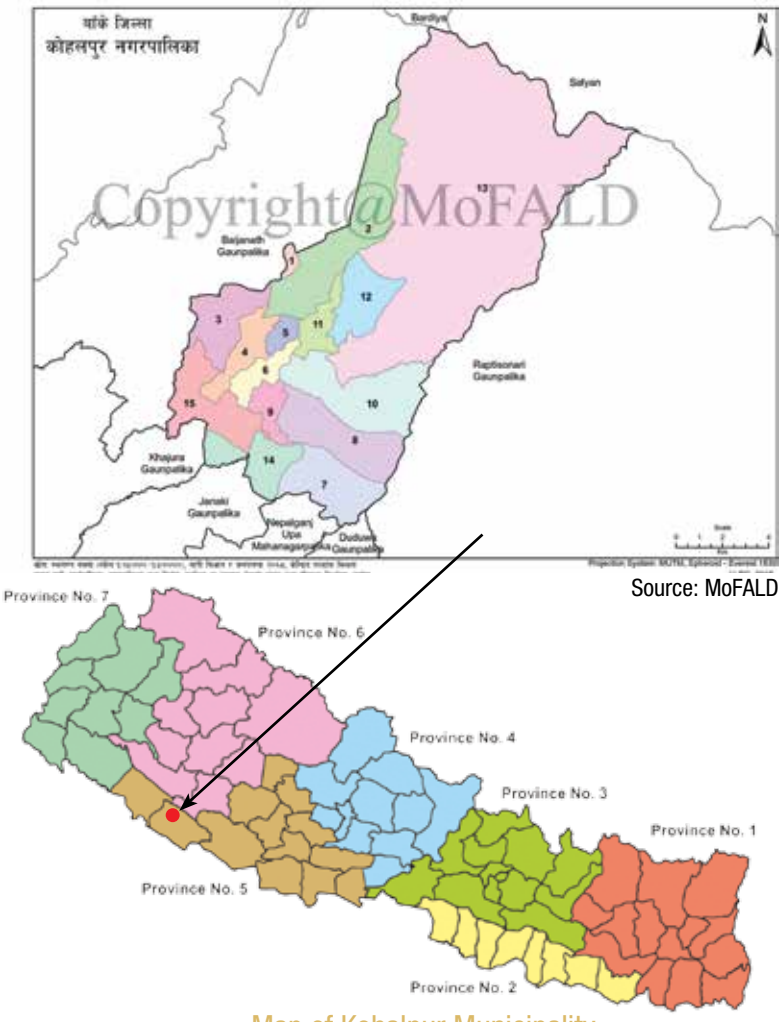
Introduction

Kohalpur municipality is located in Banke District of Bheri Zone in the Mid-Western Development Region of Nepal. The town is in East-West highway and is one of the fastest developing places in Nepal. There are 71,632 people with 15,493 households according to the latest data obtained from the municipality at the time of survey.

FSM Status

Majority (14,083) of the households (HHs) have a toilet within their premises. Out of the HHs having toilets, 3732 HHs have lined containments including biogas containers (555 HHs), 10238 HHs have unlined containments and 113 HHs have no containment. Considering the volume of these containments, volume of faecal sludge (FS) generated in the municipality is estimated to be 435 cum per year. So generated FS are being emptied by the private desludging service providers - manually (226 cum/year) and mechanically (46 cum/year).

There are two private desludging vehicles, which provides the desludging services charging Rs.4000 per trip, and one municipal desludging vehicle, which is not in operation. Though 62.5% of the containments are being emptied, there is no treatment plant or proper disposal site in the municipality, however 22% of HHs primarily apply the emptied sludge 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 Kohalpur Municipality

Recommendations

The data shows that Kohalpur 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, 50% of the FS generated are being emptied manually which are either being unsafely used or disposed haphazardly. This reflects the need of more mechanical desludging service providers and proper treatment facility.

Supported By:

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Published By:
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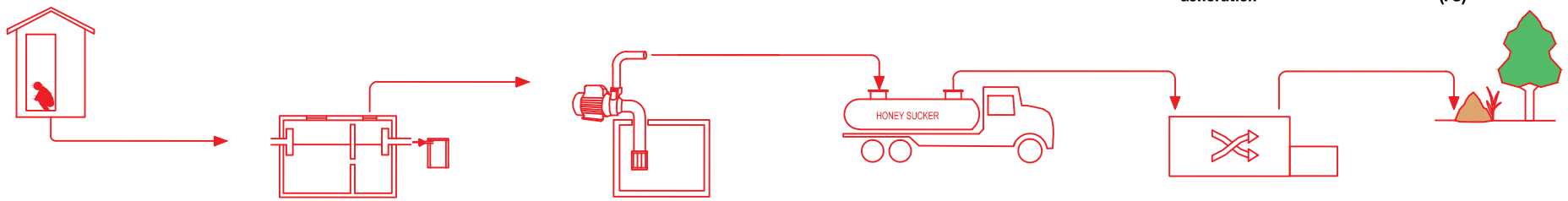
Kohalpur Municipality

Population Size	No. of Household	No. of Toilets
71,632	15,493	14,083

Faecal Sludge Generation	Unsafe Disposal (FS)
435 cum/year	292 cum/year



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

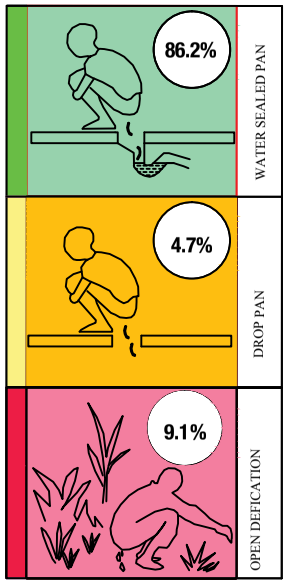
- CONVEYANCE OF FAECAL SLUDGE FROM THE CONTAINER TO THE TREATMENT PLANT
- VACUUM TRUCK ARE THE MAIN MEANS FOR THE TRANSPORTATION OF THE FAECAL SLUDGE.

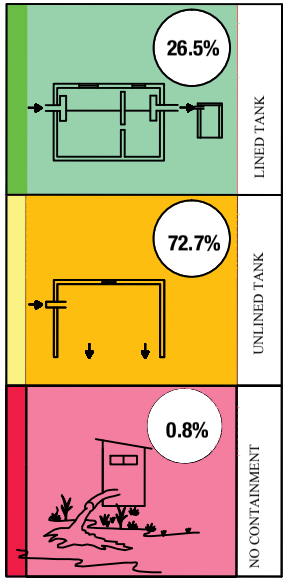
TREATMENT

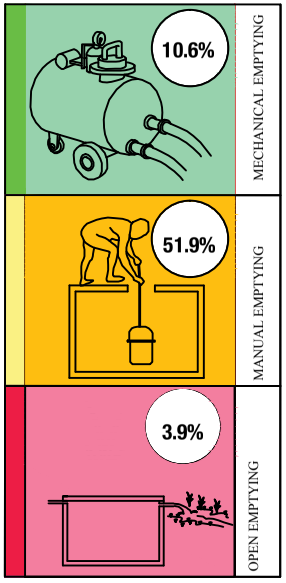
- REDUCTION OF POLLUTANTS FROM THE FAECAL SLUDGE TO THE SET STANDARD BY BY USING DIFFERENT KIND OF TREATMENT TECHNOLOGIES

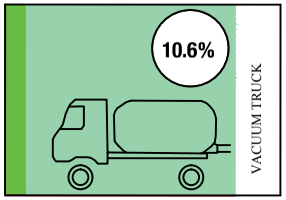
DISPOSAL/REUSE

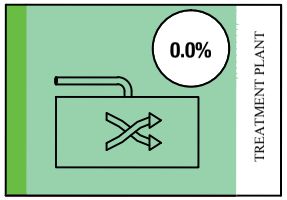
- DISCHARGE OF FAECAL SLUDGE INTO THE ENVIRONMENT FOR DRAINING OR REUSE PURPOSE

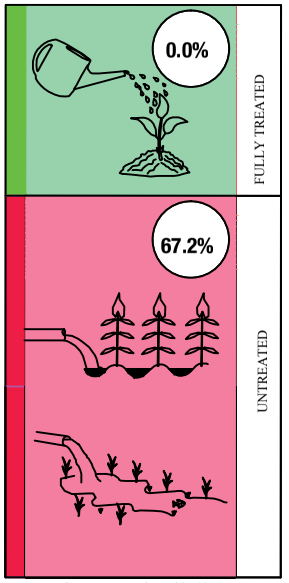












LEGEND:

- Acceptable
- Need improvements
- Unacceptable

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As per the survey conducted in 2017 A.D.