

Bheemdatt Municipality Sanitation Profile

Bheemdatt Municipality is located in Kanchanpur District of Sudurpashchim Province, Nepal. The municipality was named Mahendranagar in honour of late King Mahendra which was changed to Bheemdatt after the reformation of the country as the Federal Republic of Nepal in 2008. The municipality is divided into 19 wards and cover an area of 171.63 square kilometers. The census in 2011 reported 104599 population resides in 20684 households. The indigenous Rana-Tharus and migrated populations from districts like Baitadi, Darchula and Dadeldhura have made a unique combination of ethnic groups within diverse groups. The people in the municipality have diversified their occupation from agriculture to business and trade favored by close proximity to the border with India.



Location Map of Bheemdatt Municipality

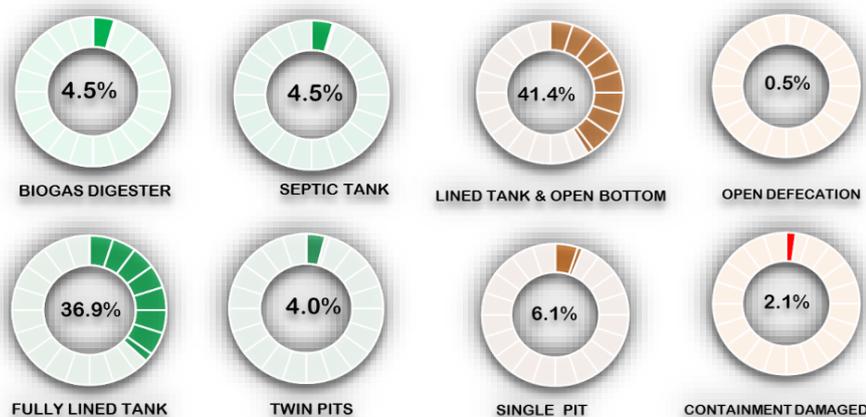
Sanitation Status

The municipality was declared Open Defecation Free Zone on November 2017 indicating all the populations has access to the toilet. However, it was observed few households do not have owned toilet.

Containment

Rectangular containment either fully sealed or unsealed base are mostly installed in the households to collect faeces from the toilet. Anaerobic biogas digester, designed for the integrated treatment of human faeces, animal manure and organic waste at household have been installed in ward numbers 3, 15, 16 and 19.

Similarly, a septic tank which functioned as collection and primary treatment unit was installed at ward number 4 and 7. Whereas, a concrete ring pits were widely installed in a rural area of the municipality.



Types of Household Containment

Emptying and Transportation

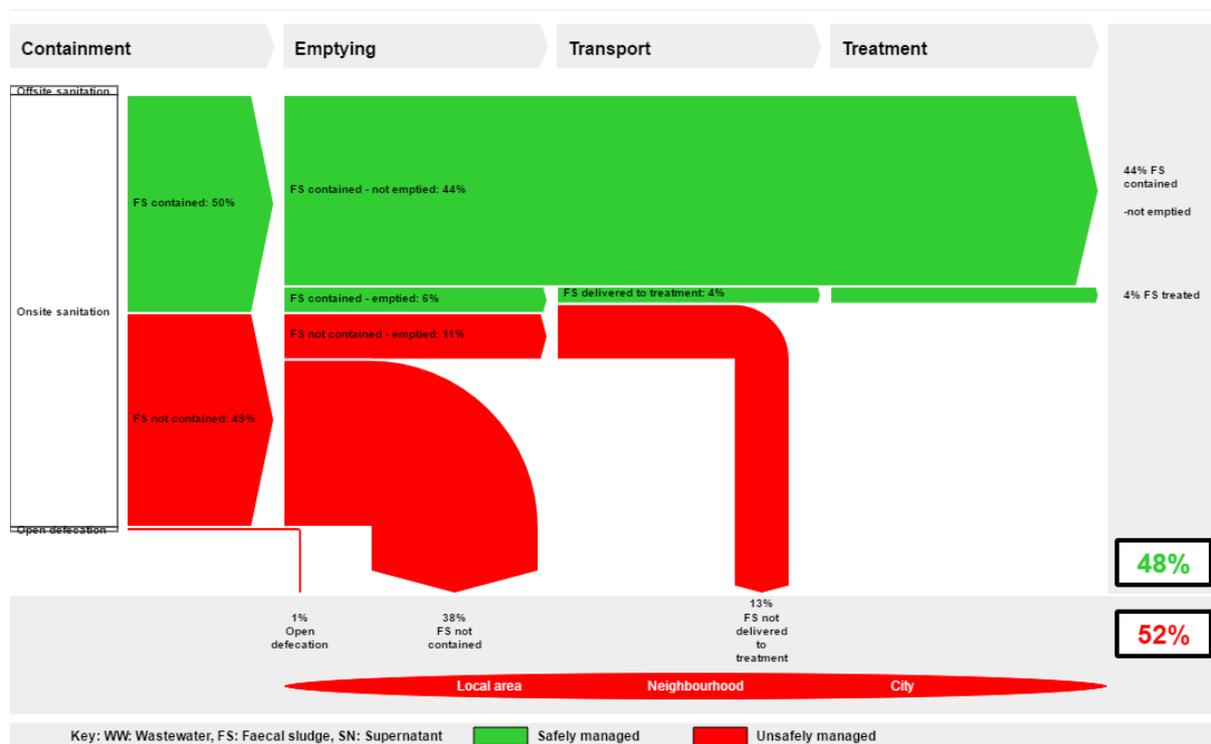
Prevention of groundwater contamination from overflow or seepage of faecal sludge requires proper installation of the containment and regular emptying. The data revealed only 83% of the households have never emptied their containment since installation. It indicates a high rate of seepages from the containment into open environment polluting groundwater resources. Also, a sole private desludging entrepreneur has been providing mechanical emptying services since 2017 while manual emptying has been traditional practices. In an average 10 m³ of FS a day is being manually emptied and dumped onsite and 20 m³ of FS a day is being emptied, collected and transported mechanically.

Treatment and Disposal

The municipality has initiated the installation of piloting a large scale anaerobic biogas digester to treat organic solid waste in the municipal building compound. It has yet to operate fully, thus currently the private desludging entrepreneur has been disposing the FS into customers own farmland.

Overview of Faecal Sludge Flow Status

The overall status of faecal sludge is represented by the Shit Flow Diagram (SFD). Only 4% of FS collected in an anaerobic biogas digester has been treated while 44% of FS collected in the fully lined tank is considered safely managed until it is emptied and rest being disposed of haphazardly to the environment. It increased threat on groundwater contamination resulting degradation of human health upon consumption of contaminated water.



The Shit Flow Diagram of Bheemdatt Municipality