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Sanitation, Water and Solid Waste for Development

Sandec

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This presentation is used with Lesson Plan Collection and Transport in the Introduction to Faecal Sludge Management Trainer Manual

Available at www.cawst.org/resources and www.sandec.ch

Collection and Transport

2016 JULY





Sandec Sanitation, Water and Solid Waste for Development

Learning Outcomes

- Describe faecal sludge collection and transport process from a household to a treatment facility.
- Identify suitable faecal sludge collection and transport methods for the local context.
- Identify challenges and solutions for improving faecal sludge collection and transport.



Manual Collection

Dakar, Senegal

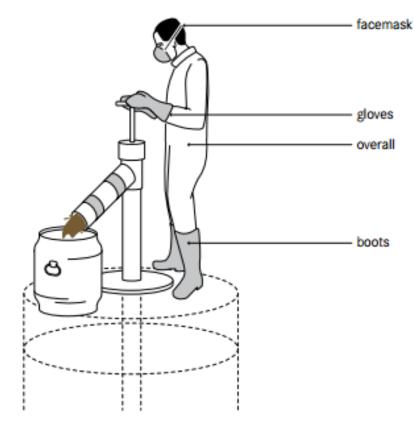




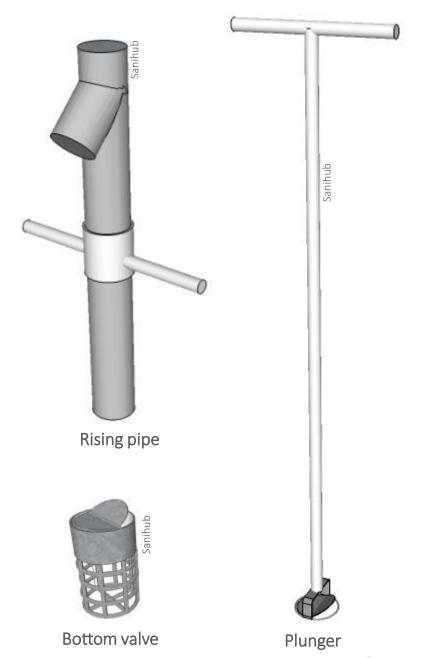


Manual Collection Technologies

The Gulper



(Credit: Tilley et al., 2014)





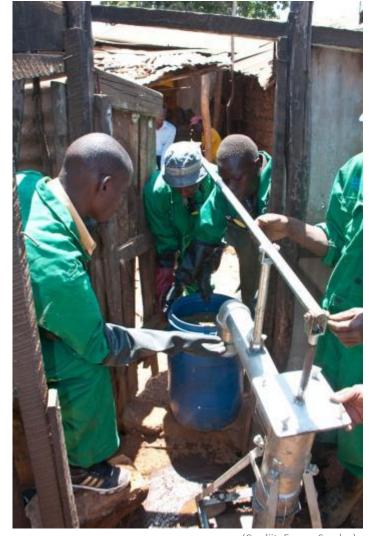


Manual Collection Technologies

Kenya



(Credit: Eawag-Sandec)



(Crediit: Eawag-Sandec)





Manual Transport

Lusaka, Zambia



(Credit: WSUP (2014): Faecal Sludge Management services in Lusaka: moving up the excreta management ladder)



(Credit: Research Triangle Institute)





Motorized Transport

Dar es Salaam, Tanzania





(Credit: Eawag-Sandec)

(Credit: Eawag-Sandec)

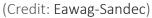




Motorized Collection and Transport

Vietnam









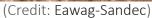
Motorized Collection and Transport

Senegal and Cameroon





(Credit: Eawag-Sandec)









(Credit: Eawag-Sandec)

Motorized Collection and Transport

Bangladesh



(Credit: Eawag-Sandec)







(Credit: Eawag-Sandec)





Vietnam





(Creidt: Eawag-Sandec))

(Credit: Lars Schoebitz)

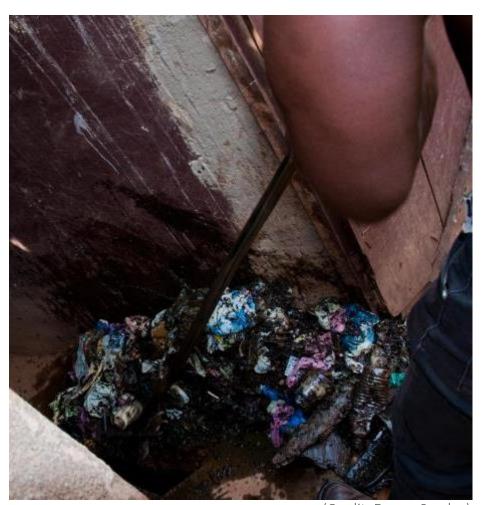




Kampala, Uganda



(Credit: Eawag-Sandec)



(Credit: Eawag-Sandec)





Kampala, Uganda







The household does not have enough money to pay for the emptying and transport service. Neighbours are complaining of the smell.





The feacal sludge is too thick for the collection and transport service to pump out. The on-site sanitation technology is close to overflowing.





There is too much solid waste in the onsite sanitation technology. The solid waste is likely to damage the emptying equipment. Therefore, service providers are hesitant to empty the on-site sanitation technology or charge a high fee.





The faecal sludge treatment facility (owned by the public sector) is charging a discharge fee. Private service providers cannot afford this fee. As a result, they illegally dump the faecal sludge into the street, nearby canal, river or lake. Sometimes they dump the faecal sludge into a sewer manhole, which is not a sustainable option as it can cause wastewater treatment facilities to fail.





The household is located far away from a faecal sludge treatment facility.

Households cannot afford the fee charged by the service providers because of their transport costs to the treatment facility.





The household is located in an informal settlement. The pathways are too narrow and not maintained. It is difficult for a vacuum truck to access the household.





How we can support you!

Contact CAWST and Eawag-Sandec for support on using and adapting our education and training resources for your work.

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Visit <u>www.cawst.org/resources</u> and <u>www.sandec.ch</u> for:

- Latest updates to this document
- Other workshop & training related resources
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