



# The Faecal Sludge Field Lab

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# Why?

Increased **NEED** for FS treatment because of increased number of disasters in urban environments and protracted crisis, but FS labs are often far away and expensive.



→ no opportunity to monitor the treatment process  
**TO ENSURE PUBLIC HEALTH!**



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# What?

A readily available FS field lab that fulfills following design criteria:



- ✓ Appropriateness → comparable results with a standard lab
- ✓ Applicability → must work in the field
- ✓ Affordability → cheaper than standard lab
- ✓ Mobility → must fit in a Toyota Landcruiser



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# The modules

## Principal Modules

## Resupply Packages

### Module 1 “Public Health”



Core module, consisting of equipment for two sets of parameters for Microbiology and Helminths

### Module 2 “Process Control”



Provides equipment for sets of parameters for different treatment processes

### Module 3 “End Use”



Provides equipment for sets of parameters depending on the end-use intention

## Support kits



### Support Kit 1 “Basic Lab Support”



### Support Kit 2 “Personal Protection”



### Supplement 3 “Power supply”



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## Camping meets lab

- Total solid determination
- Sample digestion
- Manual centrifuge + metronome



## Digital support

- Caddisfly
- Vernier



## New methods

- Helminth detection with Flotec



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# Lessons learnt

- Experienced and trained lab staff is needed to set-up and operate the lab
- Continuous refinement and contextualization required
- Lack of standard monitoring parameter
- Need for data management



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## Follow-ups



- Joint set-up and operation of FS field lab with MWE, Uganda
- Operationalisation of FS field lab in Bangladesh
- Data collection to provide a basis for informed decision-making on FS treatment
- Collection of evidence for continuous refinement and contextualization of lab equipment/methods and training
- Providing a smaller suitcase version of the lab
- Development of lab documentation software
- Providing training to interested stakeholders



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# Thank you for your attention.

Questions?


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