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!**

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
# The modules

<table>
<thead>
<tr>
<th>Principal Modules</th>
<th>Resupply Packages</th>
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| **Module 1**  
“Public Health” | Core module, consisting of equipment for two sets of parameters for Microbiology and Helminths |
| ![M1](image1) | ![R1](image2) |

| **Module 2**  
“Process Control” | Provides equipment for sets of parameters for different treatment processes |
| ![M2](image3) | ![R2](image4) |

| **Module 3**  
“End Use” | Provides equipment for sets of parameters depending on the end-use intention |
| ![M3](image5) | ![R3](image6) |

<table>
<thead>
<tr>
<th>Support kits</th>
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| **Support Kit 1**  
“Basic Lab Support” |
| ![S1](image7) |

| **Support Kit 2**  
“Personal Protection” |
| ![S2](image8) |

| **Supplement 3**  
“Power supply” |
| ![S3](image9) |

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<table>
<thead>
<tr>
<th>Camping meets lab</th>
<th>Digital support</th>
<th>New methods</th>
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<tbody>
<tr>
<td>• Total solid determination</td>
<td>• Caddisfly</td>
<td>• Helminth detection with Flotec</td>
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<td>• Sample digestion</td>
<td>• Vernier</td>
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<td>• Manual centrifuge + metronome</td>
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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
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
Thank you for your attention.

Questions?
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Developed in partnership with: