



Photo: PATH/Robyn Wilmouth

The Technical Assistance Team

WHO: A non-governmental or academic partner responsible for landscaping and recommending sanitation technologies for evaluation.

CONTEXT: You are a partner on a large-scale project that has received funding to provide improved sanitation and fecal sludge management in a country with low coverage of improved sanitation and fecal sludge management. As the technical assistance team/researcher, your role is to identify sanitation and FSM technologies that might be appropriate for households and communities in the project area.

PROBLEM: Formative research has identified that improving sanitation and FSM in urban and peri-urban areas is particularly challenging. Improving sanitation is particularly challenging in urban slums/informal settlements where there is limited space and lack of formal infrastructure. FSM is also a challenge. Recent shit flow diagrams developed for two of the key cities in the project area, show that only a small percentage of fecal waste is safely treated, and the single treatment plant has already exceeded its capacity.

INSTRUCTIONS: Using the Sanitation Technology Filtering Tool, work through the following challenges. Prior to moving on to the next challenge, please clear all filters from the previous challenge. To summarize the results of each challenge, you can use the [Eawag System Template](#).

Challenge 1: High-density areas (limited space)

Many households in your project area live in crowded informal settlements with very limited space. While there are some communal/public toilets available, there are complaints about smell and cleanliness of the shared facilities. In addition, some of the facilities are not safely containing and disposing of fecal waste.

- Please use the *Storage & Containment* tab to identify three technologies that you would recommend the project team consider piloting for community/multi-household use in project areas. In identifying technologies, please include a technology options that provide (2) onsite treatment; (2) offsite treatment; and (3) outputs for reuse.
- Please use the *Sanitation Technology Profiles* to learn more about the technologies you have selected.

REMINDER: please clear all filters from the previous challenge.

Challenge 2: Options for tenants

Many households in urban areas are renters and do not have access to improved sanitation. Based on initial landscaping, property owners (landlords) have other priorities and limited interest in providing better toilets for their tenants. As a result, tenants who either do not have access to or do not want to use public toilets are responsible for buying and installing their own toilets.

- Please use the Sanitation Technology Filtering tool to identify up to three technologies that might be suitable for tenants (individual household, limited space, and available for purchase).
- Please include the following types of technologies in your selection:
 - Container based;
 - Above ground (onsite treatment); and
 - Above ground (offsite treatment).
- Please use the Summary tab and System Template to describe each of these technologies. (HINT: create a separate summary tab for each of the technology options.)

REMINDER: If the technology of interest has an output for reuse, please select that option on the *Use & Disposal* tab to build a full sanitation system. The “outputs for reuse” filter also can help to further down select technology options.

REMINDER: please clear all filters from the previous challenge.

Challenge 3: Expanding product/technology choice

The project includes funding to evaluate innovative sanitation solutions (new and/or improved) that may be appropriate for households and contribute to improving sanitation in your project area.

Formative research has provided the following information about the local context:

- Pit latrines with squat plates are common.
 - The water table is low and there is limited to no flooding in the area.
 - Current treatment options are not sufficient, so identifying options that provide onsite treatment of waste is desirable. There is an interest in the value of waste byproducts (such as biogas or compost).
- Please use the Sanitation Technology Filtering tool to identify up to three new and/or improved technologies in *User Interface* and/or *Storage & Containment* and that might be appropriate to evaluate for use in the local context.
 - Please use the *Summary* tab and the System Template to document your results. Also, identify additional questions that the field team/engineer would need to consider.

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