

# The Sanitation Decision Support tool

Results of the Sanitation Decision Support Tool. The tool was created by WASTE (www.waste.nl) and the Akvo Foundation (www.akvo.org), in order to assist people in choosing sanitation technologies. We hope this tool proves useful, any comments can be send to [m.t.westra@akvo.org](mailto:m.t.westra@akvo.org).

Session information

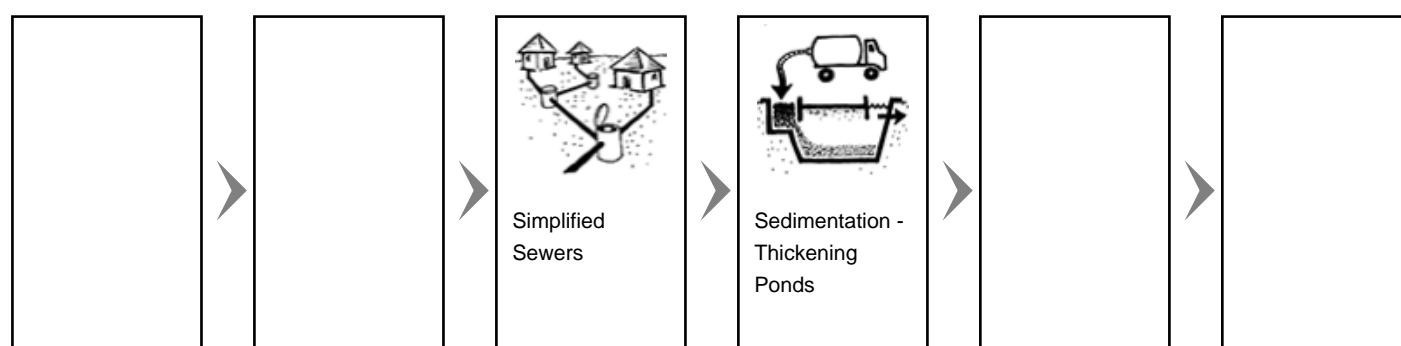
Date: Mon Nov 30, 2020

Time: 01:43:22

## Options chosen

<b>Water supply (one possible)</b> <ul style="list-style-type: none"><li>• none</li><li>• <u>fetch</u>ed / <u>hand-pump</u> / <u>standpipe</u> / <u>tanker</u></li><li>• connection</li></ul>	<b>Groundwater table (one possible)</b> <ul style="list-style-type: none"><li>• shallow</li><li>• medium</li><li>• <u>deep</u></li></ul>	<b>Soil type (one possible)</b> <ul style="list-style-type: none"><li>• clayey</li><li>• silty</li><li>• sandy / gravelly</li><li>• <u>rocky</u></li></ul>
<b>Space availability (one possible)</b> <ul style="list-style-type: none"><li>• large</li><li>• <u>medium</u>/<u>large</u></li><li>• medium</li><li>• small/medium</li><li>• small</li></ul>	<b>Terrain / Topography / Slope (one possible)</b> <ul style="list-style-type: none"><li>• <u>flat</u></li><li>• slope</li></ul>	<b>Anal cleansing method (more possible)</b> <ul style="list-style-type: none"><li>• <u>water</u></li><li>• soft paper</li><li>• hard or bulky</li></ul>
<b>Flood prone (one possible)</b> <ul style="list-style-type: none"><li>• <u>not affected</u></li><li>• frequent (low-lying area)</li></ul>	<b>Vehicular accessibility (one possible)</b> <ul style="list-style-type: none"><li>• no access</li><li>• limited / narrow access</li><li>• <u>full access</u></li></ul>	

## Selected technologies



## Links to Akvopedia articles

- Simplified Sewers:  
[http://www.akvo.org/wiki/index.php/Simplified\\_Sewers](http://www.akvo.org/wiki/index.php/Simplified_Sewers)
- Sedimentation - Thickening Ponds:  
[http://www.akvo.org/wiki/index.php/Sedimentation\\_-\\_Thickening\\_Ponds](http://www.akvo.org/wiki/index.php/Sedimentation_-_Thickening_Ponds)

## Short descriptions

### Simplified Sewers



Simplified Sewers describe a sewerage network that is constructed using smaller diameter pipes laid at a shallower depth and at a flatter gradient than conventional sewers. The Simplified Sewer allows for a more flexible design associated with lower costs and a higher number of connected households. Expensive manholes are replaced with simple inspection chambers. Each discharge point is connected to an interceptor tank to prevent settleable solids and trash from entering the sewer. As well, each household should have a grease trap before the sewer connection.

#### Relevant options

At option **Water supply (one possible)** you have selected **fetched / hand-pump / standpipe / tanker**. This means that in your situation, Simplified Sewers might be a suitable technology. This depends on: **Requires a considerable amount of water**

At option **Terrain / Topography / Slope (one possible)** you have selected **flat**. This means that in your situation, Simplified Sewers might be a suitable technology. This depends on: **Requires a minimum slope of 0.5 %. If long distances are required, a pumping station might be needed.**

At option **Soil type (one possible)** you have selected **rocky**. This means that in your situation, Simplified Sewers might be a suitable technology. This depends on: **Difficulties for excavation. Special attention to the costs**

### Sedimentation - Thickening Ponds



Sedimentation or Thickening Ponds are simple settling ponds that allow the sludge to thicken and dewater. The effluent is removed and treated, while the thickened sludge can be treated in a subsequent technology. Faecal sludge is not a uniform product and therefore, its treatment must be specific to the characteristics of the specific sludge. In general, there are two types of faecal sludges: high strength (originating from latrines and unsewered public toilets) and low strength (originating from Septic Tanks). High strength sludge is still rich in organics and has not undergone significant degradation, which makes it difficult to dewater. Low strength sludge has undergone significant anaerobic degradation and is more easily dewatered.

## Relevant options

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