The Sanitation Decision Support tool

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See it happen

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.

Session information
Date: Sun May 16, 2021
Time: 22:40:42

Options chosen

Water supply (one possible)
- none
- fetched / hand-pump / standpipe / tanker
- **connection**

Space availability (one possible)
- **large**
- medium/large
- medium
- small/medium
- small

Flood prone (one possible)
- **not affected**
- frequent (low-lying area)

Groundwater table (one possible)
- shallow
- medium
- **deep**

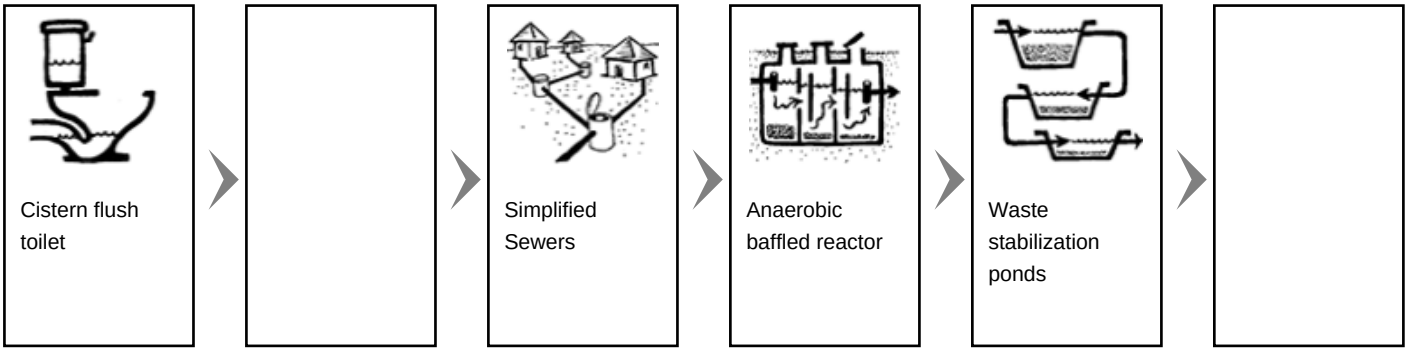
Terrain / Topography / Slope (one possible)
- **flat**
- slope

Vehicular accessibility (one possible)
- no access
- limited / narrow access
- **full access**

Soil type (one possible)
- clayey
- silty
- **sandy / gravelly**
- rocky

Anal cleansing method (more possible)
- water
- **soft paper**
- hard or bulky

Selected technologies



Links to Akvopedia articles

- Cistern flush toilet:
  http://www.akvo.org/wiki/index.php/Cistern_Flush_Toilet
- Simplified Sewers:
  http://www.akvo.org/wiki/index.php/Simplified_Sewers
- Anaerobic baffled reactor:
  http://www.akvo.org/wiki/index.php/Anaerobic_Baffled_Reactor
- Waste stabilization ponds:
  http://www.akvo.org/wiki/index.php/Waste_Stabilization_Pond

Short descriptions

Cistern flush toilet

The Cistern Flush Toilet is usually porcelain and is a mass-produced, factory made User Interface. The Flush Toilet consists of a water tank that supplies the water for flushing the excreta and a bowl into which the excreta are deposited. The attractive feature of the Flush Toilet is that it incorporates a sophisticated water seal to prevent odours from coming back up through the plumbing. Depending on the age and design of the toilet, approximately 3 to 20L of water may be used per flush.

Relevant options

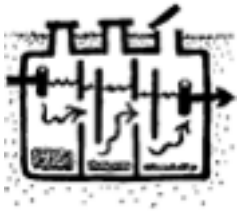
Simplified Sewers

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 **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.**

Anaerobic baffled reactor



An Anaerobic Baffled Reactor (ABR) is an improved septic tank because of the series of baffles over which the incoming wastewater is forced to flow. The increased contact time with the active biomass (sludge) results in improved treatment.

Relevant options

Waste stabilization ponds

Waste Stabilization Ponds (WSPs) are large, manmade water bodies. The ponds are filled with wastewater that is then treated by naturally occurring processes. The ponds can be used individually, or linked in a series for improved treatment. There are three types of ponds, (1) anaerobic, (2) facultative and (3) aerobic (maturation), each with different treatment and design characteristics. For the most effective treatment, WSPs should be linked in a series of three of more with effluent being transferred from the anaerobic pond to the facultative pond and finally the aerobic pond.

Relevant options
