The WaterCompass



Results of the WaterCompass Tool. The tool was created by Practica Foundation (www.practicafoundation.nl) and the Akvo Foundation (www.akvo.org), in order to assist people in choosing water technologies. We hope this tool proves useful, any comments can be send to watercompass@practicafoundation.nl.

Session information

Date: Tue Dec 10, 2013

Time: 13:07:37

Options chosen

Water source

- Rainwater
- Surface water
- Groundwater

Location

• <u>Densely populated</u> <u>urban</u>

- Densely populated low-income urban
- Moderately populated urban
- Peri-urban, rural
- Remote rural

Preferred level of delivery

- Household
- Shared
- Small community
- School or institution
- Large user group

Preferred management level

- Household
- Shared
- Small community
- Municipal

Affordability

- User-financed
- Donor-financed

Intended system sophistication

- Labor-intensive
- Intermediate
- Technology-intensive

Intended use

- · Drinking only
- Domestic use
- Domestic small-scale
 reductive use

productive use

Contamination

- Pathogenic (micro)
- Pathogenic (macro)
- Arsenic
- Fluoride
- Iron
- Manganese
- · Heavy metals
- Sulphate
- Chlorine
- Salts
- Pesticides
- Nitrate
- Phosphate
- Odor and taste
- Turbidity suspended

solids

- Hardness
- Acidity
- · Lack of oxygen

Ground formation

- Sand gravel
- Clay formations
- Compacted formations
- Soft weathered rock
- Bedrock

Water lifting

- Not required
- 0-8 m
- 8-15 m
- 15-40 m
- >40 m

Annual precipitation

- less then 200 mm
- more then 200 mm;

seasonal

• more then 200 mm; year-round



Mechanized drilled wells

Short descriptions

Mechanized drilled wells



Well drilling is executed with machine mounted on truck or trailer and may be accompanied by large compressors or mud pumps. Key sub-methods include augering, jetting, down-the-hole (DTH) and cable tool. Each designed for specific geo-hydrological conditions with their own advantages and disadvantages.

Relevant remarks

Location - selection Densely populated urban

Most suitable in low population density areas with sufficient space for well and protection area.