

# The WaterCompass

Results of the WaterCompass Tool. The tool was created by Practica Foundation ([www.practicafoundation.nl](http://www.practicafoundation.nl)) and the Akvo Foundation ([www.akvo.org](http://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](mailto:watercompass@practicafoundation.nl).

Session information

Date: Tue Dec 10, 2013

Time: 12:30:59

## Options chosen

### Water source

- Rainwater
- Surface water
- Groundwater

### Location

- Densely populated urban
- 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

- Mechanized drilled wells
- User-financed
- Donor-financed

### Intended system sophistication

- Labor-intensive
- Intermediate
- Technology-intensive

### Intended use

- Drinking only
- Domestic use
- Domestic small-scale 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

- 
- >200 mm; seasonal
- >200 mm; year-round



## Selected technologies

### 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 options

At option **Location** you have selected **Densely populated urban**. This means that in your situation, Mechanized drilled wells might be a suitable technology. This depends on: **Most suitable in low population density areas with sufficient space for well and protection area.**

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