## The WaterCompass



akvo.org

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: 12:18:20

## **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

#### 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**

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• >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.**