Water and Environment Centre

# WHAT & WHY

In this study the roof water harvesting from urban areas in the Sana'a city, especially from the roofs of schools, was evaluated qualitatively and quantitatively to meet the minimum requirements of water demands for drinking and hygiene. The primary goal in this search was to estimate the amount of water that can be collected from the roofs at the household level, as well as in the entire Sana'a city as an additional source for drinking water.

# RESULTS

- The main factors directly affecting the water harvesting process are the rainfall availability, and the costs that could be incurred during the construction process. Other parameters such as water quality, hygiene and maintenance are also important issues.
- It is estimated that the amount of water that can be collected from the entire Sana'a city's roofs as well as from households is less than the water demand by 67%.
- Good quality rainwater could be harvested in sufficient quantities to adequately supply the water needs for students in the AL-Tayyar School.
- For all quality parameters, harvested rainwater from rooftops have better quality than water collected from the catchment areas or even from some sources of groundwater.

# MORE INFO

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# *Potential of Rainwater Harvesting from Rooftop In Urban Areas Case study: Sana'a City*

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