

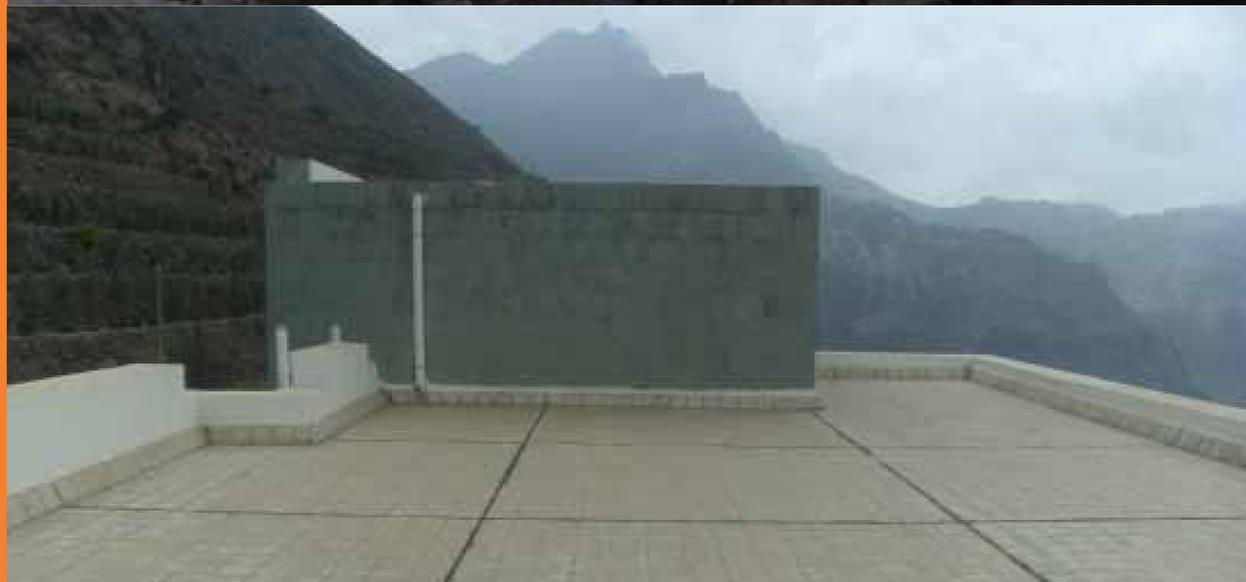


Water and  
Environment Centre

# Analyzing the Potential of Rooftop Rainwater Harvesting Systems

for Water Supply in Manakha town and Surrounding Area

Study By: Abdullah AlSaidi



## WHAT & WHY

This study was conducted to analyze the potential of Rooftop Rainwater Harvesting Systems to supply Manakha area with water; through assessing the technical, economic and social feasibility, and through introducing these systems there to meet domestic water needs and reduce the pressure on groundwater resources and household's financial resources.

## RESULTS

- Introducing Rooftop Rainwater Harvesting in Manakha area raised awareness among citizens and those interested in water issues.
- Most residents, 94%, are willing, and have accepted to participate and contribute to the implementation of water harvesting projects.
- The water collected from the existing (RTRWH) projects in Manakha region is used for all domestic purposes except drinking. However, when appropriate technologies and units of filters were applied, water quality was improved.
- The survey results have proven the possibility to implement rain water harvesting tanks in every neighborhood within the town according to the followed and required standards and conditions.
- Having (NWSA) agree to manage, operate and maintain such projects ensures their sustainability, control of water depletion and the pressure on ground water, and supply Manakha town with water.
- Improving household income.
- Applying (RTRWH) projects will result in time and effort saving and investment; and in reducing the residents' suffering from fetching water over long distances from the springs and surrounding ponds.

## MORE INFO

Water & Environment Centre (WEC)  
P.O. Box 13886 Sana'a University  
Ma'een Office  
[www.wec.edu.ye](http://www.wec.edu.ye)  
Sana'a Yemen