



Supportive Environments for Healthy Communities

## Issue 34 December 2, 2011 | Focus on Rainwater Harvesting

This *WASHplus Weekly* contains studies and guidelines on rainwater harvesting (RWH) as a source of drinking water and for other domestic uses. A recent review states that small-scale rainwater harvesting is one sustainable approach that is proving increasingly effective in both rural and urban settings in the developing world. Included are RWH fact sheets, studies on the economic and health impacts of RWH, and country reports. Please contact WASHplus if you have additional information on this topic or to suggest topics for future issues of the *Weekly*.

### FACT SHEETS/OVERVIEWS

- **A Different Path: The Global Water Crisis and Rainwater Harvesting**, 2010. N Cain, Colombia University. ([Full-text](#))

The global water crisis is predicted to kill 34 to 76 million people by 2020. Large-scale infrastructure projects can provide water, but construction of these projects has not kept pace with growing populations. Even where construction is feasible, large-scale projects have significant social, economic, and environmental impacts. A range of scholars and activists have mapped a different path to solving the global water crisis that emphasizes efficiency and sustainable, community-scale projects in addition to centralized infrastructure. Small-scale rainwater harvesting is identified as an increasingly effective approach in both rural and urban settings in the developing world.

- **New Ideas for Rainwater Harvesting at Home**, 2011. M Burt, Tearfund. ([Full-text](#))

In rural areas, the main water sources are normally groundwater bore wells or surface water—rivers and lakes. However, an often overlooked, easily accessible, and sustainable source of safe drinking water during the wet season is rain. In tropical and sub-tropical climates the quantity of water collected from rainfall can be substantial. This article explains and illustrates several methods for home collection of rainwater.

- **Promoting Rainwater Harvesting in the Urban Settings of Africa**, 2011. T Tsige,

UN-HABITAT. ([Presentation](#))

UN-HABITAT's Water for African Cities Program is operating in 14 African countries. One of the project activities is promoting RWH by collecting and storing rainwater from rooftops using simple techniques such as ferro-cement or plastic tanks. This presentation covers the impacts, challenges, and lessons learned at three rainwater collection demonstration sites.

- **Rainwater Harvesting from Rooftops: Technology Fact Sheet**, 2011. UNEP. ([Full-text](#))

This fact sheet was published for a workshop on capacity building in Kenya. It provides information on planning, implementing, and maintaining rainwater harvesting systems.

## ECONOMIC ASPECTS

- **The Effect of Rainwater Harvesting on Reducing Poverty**, 2011. C Lehmann, Paris School of Economics. ([Full-text](#))

This paper explores the potential of rainwater harvesting as an instrument to reduce poverty in areas without immediate access to an improved water source. Using a unique Brazilian dataset, the authors found that building rainwater harvesting infrastructure at the homestead does reduce household poverty through three channels: a time allocation effect, an agricultural production effect, and a livestock production effect.

- **Life-cycle Costs of Rainwater Harvesting Systems**, 2011. C Batchelor, IRC. ([Full-text](#))

This study discusses the comparative utility and benefits of RWH from a life-cycle costs perspective. In addition, the study looks into historical trends and drivers of RWH adoption, and the life-cycle costs of RWH systems compared to life-cycle costs of other water supply systems.

- **Micro-credit and Rainwater Harvesting in Nepal**, *IRC Symposium 2010 Pumps, Pipes and Promises*. S Nijhof, RAIN Foundation. ([Full-text](#))

The RAIN Foundation is currently conducting a three-year pilot research project exploring the combination of rainwater harvesting and microcredit in rural areas of Nepal. The purpose of this pilot is to field-test a procedure for microcredit services that should result in access to water, adapted to