

to be built annually. Currently, the crux of the problem lies in the high cost of the tanks and low incomes in rural Africa, which mean they will never be affordable to householders without donor subsidy. In order for tank construction programmes to really take off they need to be self-replicating and not depend on large external handouts. Even if there is a case, especially amongst the most vulnerable communities, for some external subsidy, if this is extended too widely to incorporate the whole community it quickly creates a donor dependency.

The challenge for Africa is to develop an affordable equivalent to the Thai jar which typically costs around \$12–16 per cubic metre of storage in Southeast Asia. While it is unlikely that the costs will ever get as low as in Asia, due to the higher cost of labour, transport, cement and other materials, they could probably be made significantly more cheaply than at present. They could also be made much more affordable if implementation programmes included a mixture of revolving funds, credit and savings schemes and income-generating activities.

Finding workable ways to finance household rainwater tanks is a key to encouraging their widespread implementation in Africa. In the article by Hans Hartung, some successful case studies of financing mechanisms for household rainwater tanks in the Oruchinga Valley region of Uganda are outlined.

In rural Africa millions of women still face the daily chore of collecting their family's water from distant and/or unsafe sources. Over a year this task involves clocking up hundreds even thousands of kilometres typically moving up to 10 tons of water or more. This is a huge waste of time and energy, which could be put to far more productive purposes, and would be saved simply by installing a rainwater tank and gutters under a corrugated iron or tiled roof. If household rainwater tanks can be successful and replicated in their millions in Asia, why not in Africa?

About the author

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webwatch

Rainwater harvesting

■ Rainwaterharvesting.org

The Centre for Science and Environment, India, has a rainwater harvesting web page, featuring a number of different research tools, FAQs on implementation and techniques, newsletters, case studies and current news. WATER LINKS-2 is a contact directory of individuals and organizations involved in water harvesting in India and abroad, to which users can submit their details.

<http://www.rainwaterharvesting.org/>

■ The Domestic Roofwater Harvesting Research Programme

Based at the Development Technology Unit, Warwick University, the Domestic Roofwater Harvesting Research Programme offers a useful introduction to the technology and styles of RWH, as well as links to specific related project pages and reports, conference papers and references.

<http://www.eng.warwick.ac.uk/DTU/rwh/index.html>

■ RWH electronic discussion list

A list to promote information exchange between academics, NGOs, government agencies and others on applied research relating to the subject of roofwater harvesting. Archives of discussions and documentation dating back to 2000 are available.

<http://www.jiscmail.ac.uk/lists/rwh.html>

■ International Rainwater Catchment Systems Association (IRCSA)

The IRCSA aims to promote rainwater catchment systems technology, establish an international forum for those working in this field, disseminate information and support international programmes. The IRCSA brings together researcher and practitioner members from over 70 countries to share experience and form policy, with the aim of mainstreaming RWH. Membership offers access to Raindrop, a newsletter covering recent activities in rainwater catchment worldwide, reduced conference fees and full copies of proceedings.

<http://www.ircsa.org>

■ Texas Manual on Rainwater Harvesting

A comprehensive rainwater harvesting guide by the Texas Water Development Board, covering all aspects including components, water quality and treatment, water balance and system sizing and costs.

http://www.twdb.state.tx.us/assistance/conservation/Alternative_technologies/Rainwater_Harvesting/Rain.asp

■ Rainwater harvesting systems

A selection on rainwater harvesting of some of the documentation available through IRC's online library database (IRCDOC). For more titles go to <http://www.irc.nl/docsearch/search>

<http://www.irc.nl/page/14666>

■ Rainwater Harvesting

This site is by the Tamilnadu Water Supply and Drainage (TWAD) Board outlines both traditional and modern methods of rainwater harvesting. Several examples of successful initiatives are given, with information on the history of RWH, costs and benefits, regional rainfall statistics and a government implementation programme.

<http://www.aboutrainwaterharvesting.com/>

Compiled by Julie Fisher, Water, Engineering and Development Centre, UK for WELL. WELL is a resource centre network providing access to information and support in water, sanitation and environmental health for the Department for International Development (DFID) of the British Government.