# resources guide



## **Rainwater harvesting**

#### **General Texts**

Rainwater Catchment Systems for Nairobi Kenya. Domestic Supply: Design, Construction and Implementation Gould, J and Nissen-Petersen, E. IT Journals and Articles Publications, London, 1999, 335pp. 'Always the bridesmaid? Includes useful appendicies to help readers access other information.

Guidance on the Use of Rainwater October 1995 Texts

Cunliffe, D, NEH Forum Monograph, Public and Environment Health Service, Australia, 1998, 28p

Dying Wisdom: the Rise, Fall and Potential of India's Traditional Water Harvesting Systems Agarwal A and Narain S, State of India's Environment4, CSE, New Delhi, 1997, 404pp.

Water Harvesting: A Guide for Planners and Project Managers Lee M. and Visscher J, Technical Series Paper 30, IRC, Netherlands, 1992, 102pp

Rainwater Reservoirs: above ground structures for roof catchment Hasse R, Gate, Germany, 1989, 102 pp

Rainwater Harvesting: the Collection of Rainfall and Runoff in Rural Areas

Pacey, A and Cullis A, IT Publications, London, 1986, 216pp

#### **Manuals and Directories**

Waterlinks: Water Harvesting Directory

CSE, New Delhi, 1999, 404pp

Affordable Water Supply Manuals A series of construction manuals are available from ASAL Consultants of Roof, Ground and Rock Catchment Systems and including details for the construction of rainwater tanks from 2 to 90 cublic metres. Other topics covered include the construction of Earth Dams, Hand-dug Well and Sand and Sub-surface River Dams as well as the Repair Various Types of Water Tanks and how to Install Gutters and Splash Guard. ASAL

Consultants, PO Box 24219,

Rainwater Catchment systems in the spotlight' John Gould, Waterlines, Vol 14. 2,

'A Lifeblood transfusion: Gansu's new rainwater catchment systems' Qiang Zhu and Fxue Wu, Waterlines, Vol 14 2, October 1995

Waterlines Back issues Vols 17 (3), 16 (4), 15 (3), 14 (2)\*, 11(4), 11 (1), 8 (3), 7 (4), 5 (4), 5(3), 4(4), 4(3), 3(3), 3(2), 3(1), 2(4), 2(1),

\*Special issue of Rainwater Catchment Systems

'Water Scarcities in Sri Lanka and Implications for Integrated Water Resources Management' Amarasinghe, U.A and Sally H. IVMI Colombo, 1999

'Water Supply Demand for Household, Agriculture and Industrial Purposes: Future Scenarios' Wijesekera, R.S., Economic Review, People's Bank Publication, Vol 23, No.12, 1998

'Towards Effective Water Policy in the Asian and Pacific Region" Arriens W.L et al, Report, Asian Development Bank, Manila, 1996

#### **Videos**

Construction of Water Tanks for Rainwater Harvesting English/Kiswahili, 42 min, \$US25

Rock Catchment Dams and Tanks SIDA. Nairobi

Mvua ni Maii - Rain is Water: Rainwater Harvesting by Women's Groups in Kenya FAKT, Germany, 27 min

#### Websites

CSE (Centre for Science and Environment)

www.cseindia.org

GARNET (Global Applied Research Network) www.lboro.ac.uk/departments/cv/ wedc/garnet

GWP (Global Water Partnership) www.gwp.sida.se

IDRC (International Development Research Centre) www.idrc.ca

Interwater Guide to Databases www.wsscc.org

IRC (International Water and Sanitation Centre) www.oneworld.org/ircwater

IRCSA (International Rainwater Catchment Systems Association) http://ms2.pccu.edu.tW~ q8710704

IWRA (International Water Resources Association) www.iwra.siu.edu

RHRG (Rainwater Harvesting Research Group) www.rainwaterharvesting.com

AJIT Foundation (Sim Tanka Software) www.geocities.com/rainforest/ canopy/4805

UNDP-World Bank Water and Sanitation Program www.wsp.org

**UNICEF** www.wsp.org

WaterAid www.oneworld.org/wateraid

www.lboro.ac.uk/departments/cv/

#### Contact Addresses

DALTECH (Centre for Water Resources Studies) Centre Water Resources Studies Dal Tech, Dalhousie University PO Box 1000, Halifax, Nova Scotia, Canada B3J 2X4 Email: < scottrs@ newton.ccs.tuns.ca>

DTU (Development Technology

School of Engineering, Warwick University, Coventry, CV4 7AL, UK Email: < dtu@ eng.warwick.ac.uk>

FAKT (Association for Appropriate Technologies) Gansheidstrase 43, d-70184, Stuttgart, Germany

Email: < info@ fakt-consult.de>

GWP, Sida, s-105 25, Stockholm, Sweden.

Email: < gwp@ sida.se>

PO Box 8500 Email: < info@idrc.ca>

Dept of Natural Resources,

Chinese Cultural University, Hwa Kang, Yang Ming Shan, Tapei, Taiwan

Email: < ufab0043@ ms5hinet.net>

IRC

PO Box 93190, 2509 AD, The Hague, Netherlands Email: < general@irc.nl>

IFIC (International Ferrocement Information Centre) Asian Institute of Technology, PO Box 4, Klong Luang, Pathumthani 12120, Thailand

Email: < geoferro@ait.ac.th

People for Promoting Rainwater Utilisation

1-8-1 Higashi-Mukojima, Sumida City, Tokyo, Japan Fmail:

< murase-m@tc4.so-net.ne.jp>

RHRG (Rainwater Harvesting Research Group)

School of Engineering, Warwick University, Coventry CV4 7AL, UK Email: < dtu@eng.warwick.ac.uk>

RWH Forum (Rain Water Harvesting Forum Secretariat) c/- ITDG, 5 Lionel Edirisinghe Mawatha, Kirilapone, Colombo 5, Sri Lanka

Email: < tanujaa@itdq.lanka.net>

### **International Rainwater Catchment Systems Association Update** Andrew Lo. IRSCA President

The IRCSA is currently involved in several activities related to promoting the use and development of rainwater catchment system technologies worldwide. These include:

- attendance and representations at a variety of regional and international water conferences.
- representation in the Water Supply and Sanitation Collaborative Council.
- IRCSA's publication RAINDROP has helped to spread the word about IRSCA and its activites to every corner of

In order for IRCSA to more effectively achieve its key objectives of helping to promote, coordinate, support and disseminate rainwater catchment technologies through encouraging exchange of information between all those working in this field, national IRCSA organizations need to be established from which activities can be effectively coordinated at the grass roots level. So far, national IRCSA organizations have been set up in Kenya, Japan, Sri Lanka, USA and Brazil and preparations are underway for setting up national rainwater catchment systems societies in China and Taiwan.

The challenges for the new century are considerable and include the need to:

- enhance communication and interaction among all members. A web site for IRCSA http://ms2.pccu.edu.tw/~ g8710794 has been established.
- revive membership drive: although the current membership exceeds 400, more active support and participation are needed to improve and strengthen the IRCSA in future
- promote IRCSA mission: through for example more active participation in related International Conferences, Regional Seminars and National Workshops and developing links with other international organizations.

#### The 10th International Rainwater Catchment Systems Conference

The 10th IRCSA Conference will be held at Darmstadt, Germany in September 2001. It is the first time the conference will be held in Europe. Further details will be forthcoming or contact Dr Hans Hartung at < HansHartung@ compuserve.com>

### Rope Pump Technology Transfer



The rope pump has proven to be a sustainable option for rural water supply, used at family and community level and delivering water to already more than 10 % of the rural population in Nicaragua with over 12.000 units installed. It is the national standard for the rural water and sanitation sector.

Favorable characteristics of this technology are:

- High social acceptance.
- High efficiency and availability.
- Easv installation, repair maintenance.
- Local production and availability of spare parts.
- Applicable up to 60 meters depth in hand dug wells or boreholes.
- Low cost, starting at 75 US\$ for the family rope pump.

The Technology Transfer Division of the Rope Pump Company (Bombas de Mecate S.A.), the Nicaraguan Institute for Aqueducts and Sewage System (INAA), and the Swiss Development Agency (COSUDE) have joined efforts.

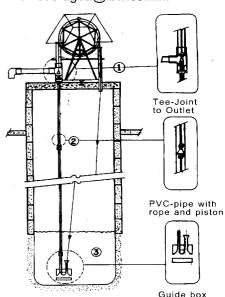
A series of documents are made available related to the requirements and strategy for the introduction of the rope pump and related to the production, such as the production photo manual, technical drawings, installation manual and a video.

For further information you are invited to contact us at:

**Technology Transfer Division** Bombas de Mecate S.A.

P.O.Box 3352, Managua, Nicaragua. Fax: 505-2784045,

E-Mail:sdc-agua@ibw.com.ni



Cross-section of a rope-pump on a well.