gender and water — six years on

are replenished from the 6 per cent interest. It is now possible to envisage collective investment projects.

Management problems

Naturally, even this successful watermanagement initiative experiences problems. For example, the finance available is inadequate for supplying water to all parts of the village, because rain erosion has created deep ravines, making it expensive to pipe water from one place to another. The occasional conflict breaks out at waterpoints, showing that more are needed; and, disturbingly, water is lost from some of the waterpoints. In addition, the pump is fairly weak (1hp) which, together with the limited capacity of the reservoir (30m³), means that parts of the village go without. Finally, some of the pastoralists do not pay on time.

New perspectives

In spite of these difficulties, progress is being made. With the interest earned

from the loans and the revenue from the sale of the water, an extension to the network is under construction, and waterpoints are being added in four more village zones — Sakirak, Garage, Ndiorokh and Ndiefun — the trenches have already been completed. What *is* important is the sustainable management of the borehole, both in terms of finance and maintenance.

This is a beautiful story about women: water finances business which finances water! This is a profitable circuit because it allows the time that is saved in fetching water to be reinvested in money-making activities; the women have been able to develop small business initiatives. Their living conditions have improved as well as their buying power. Women sit on the management committee, which gives them power over the use of water — leading to more equitable relations between the sexes. And last, but definitely not least, water-borne diseases have practically disappeared from the villages involved.



The mechanic and the 1hp pump motor for the borehole at Diass.

about the author Yanflé Touré teaches home economics at the CER (Rural Development Centre), Nguekokh, BP 337, Mbour, Senegal, and is responsible for socio-economic activities in 19 villages in the Diass area. Tel: +221 957 7709/7741/956 4797.

resources guide

Gender and water

There are many more resources on the topic — the ones cited below are the most commonly used and /or recommended by experts. Further, most publications contain an extensive bibliography.

Rights

Gender and Property Rights: Proceedings Volume of Gender-Prop International E-mail Conference, IFPRI, Washington, 1997.

116pp. Pbk. First copy free. IFPRI, 1200 17th Street, NW, Washington 20036, USA. Fax: +1 202 467 4439.

Gender, Property Rights and Natural Resources Ruth Meinzen-Dick *et al* IFPRI, Washington, 1997. 46pp. Pbk. First copy free. How shift from customary tenure systems to private property has affected women; effect of gender differences in property on collective action; and implications for project design.

Rights of Women to the Natural Resources Land and Water NEDA, Ministry of Foreign Affairs, The Hague. 59pp. FREE. ISBN 9 05328 150 9. Copies from Information Desk. Fax +31 70 348 4418. Women and Water Resources: Continued marginalization and new policies Frances Cleaver and Diane Elson, IIED, London, 1995. 18pp. Pbk. £6.00. ISSN 1357 9258.

Irrigation

Women and Waterpumps in Bangladesh: The impact of participation in irrigation groups on women's status Barbara van Koppen and Simeen Mahmud, IT Publications, London, 1996. 256pp. Pbk. £9.95. ISBN 1 85339 336 3. Women's participation and the impact on their status is studied in 35 female and mixed-sex irrigation groups. Backgound, methodologies and conclusions, with summaries of policy implications.

Women and water management

The Community-Managed Sanitation Programme in Kerala: Learning from experience





K. Balachandra Kurup *et al*, IRC, The Hague, 1996. 80pp. Pbk. US\$10.50 (developing countries US\$7.40). Contact: SEU Foundation, Postbag 6519, Vikas Bhavan PO, Trivandrum 695 033, Kerala, India. Fax : +91 471 433094. E-mail: seuf@md2.vsnl.net.in

The Contribution of People's Participation: Evidence from 121 rural water supply projects ESD Occasional Paper Series No. 1 Deepa Nayaran, World Bank, Washington, 1995.108pp. Pbk. ISBN 0 8213 3043 8.

Gender Issues. Water Issues. A gender perspective to irrigation management

Margreet Zwarteveen, IIMI, Colombo, 1995. 62pp. Pbk. Free. ISBN 92 9090 312 0. Contact Nimal Fernando, IIMI, 127 Sunil Mawatha, Pelawatte via Colombo, Sri Lanka. Fax: +94 1 866854. E-mail: iimi@cgnet.com

A Gender Perspective on Water Resources Management SIDA, Sweden. http://www.sida.se/eng/bistand/wat er/gender/general.html

Gender in Water Resources Management, Water Supply and Sanitation: Roles and realities revisited

Technical Papers Series 33-E Christine van Wijk-Sijbesma, IRC, The Hague, 1998.199pp. Pbk. US\$25 (developing countries \$18.40). ISBN 9 06687 027 3.

Women, Water, Sanitation IRC, The Hague.75pp. US\$13.70 (developing countries \$9.50.) Annual abstract journal.

WOMEN AND DEVELOPMENT general

Human Development Report 1995 OUP, Oxford, 1995. 230pp. Pbk. £13.99. ISBN 0 1951 0023 9. Focuses on gender inequality and formulation of 'engendered' development paradigm. Measures countries' gender equality; fivepoint strategy for equalizing opportunities.

Platform for Action and the Beijing Declaration Available at:

http://www.un.org/womenwatch/da w/beijing/platform/

GENDER, TECHNOLOGY AND SUSTAINABLE DEVELOPMENT

Do It Herself: Women and technical innovation Edited by Helen Appleton, IT Publications, London, 1995. 310pp. Pbk. £14.95. ISBN 1 85339 287 1. Contributions of women to technical innovation at the grassroots, using 22 international case studies.

Missing Links: Gender equity in science and technology for development

Geoffrey Oldham, IT Publications, London, 1995. 200pp. Pbk. £15.95. ISBN 1 85339 289 8. Collection of essays illustrating differential gender impact of science and technology developments.

Women, Environmental Management and Sustainable Development

INSTRAW/ILO, Turin, 1995. 550pp. Multi-media training pack (100 transparencies, 5 videos). Contact: INSTRAW, PO Box 21747, Santo Domingo, Dominican Republic.

Women's Responses to Environmental Degradation: Poverty and demographic constraint Micheal Paolisso and Sarah Gammage, ICRW, Washington DC, 1996. Pbk. Free from ICRW, 1717 Massachusetts Avenue, NW, Suite 302, Washington 20036-2056, USA. Fax: +1 202 7970020.

GENDER TRAINING AND ANALYSIS

GAP Matters Gender and policy newsletter. ABANTU for Development, 1 Winchester House, 11 Cranmer Road, London SW9 6EJ, UK. Fax: +44 171 820 0088. E-mail: people@abantu.org

Gender Planning and Development: Theory, practice and training Edited by C. Moser, Routledge, London, 1994. 240pp. Pbk. £15.99. ISBN 0 4150 5621 7.

Oxfam Gender Training Manual

Suzanne Williams *et al*, Oxfam, Oxford, 1995. 634pp. £30.00. ISBN 0 85598 267 5. Over 100 activities with participatory methodologies, each companied by objectives, methods, facilitator notes. Available in Spanish.

Socio-economic and Gender Analysis Programme (SEAGA) FAO programme provides development specialists with practical methods and tools. URL: http://193.43.36.7/waicent/faoinfo/s ustdev/WPdirect/WPdoe003.htm

Speaking Out: Women's economic empowerment in South Asia Edited by Marilyn Carr et al, IT Publications, London, 1996. 252pp. Pbk. £9.95. ISBN 1 8533 9382 7.

MANUALS/SOURCE-BOOKS ON GENDER, WATER AND SANITATION

Gender Considerations for Technical Personnel Working in Development and Relief (coming) Practical guide for engineers and managers. Contact: WEDC. Fax: +44 1509 211079. E-mail: wedc@lboro.ac.uk

Gender Issues Sourcebook for Water and Sanitation Projects Wendy Wakeman World Bank, Washington, 1995. 116pp. Pbk. Free from Mari Dhokai, World Bank, Room S4-001, 1818 H Street NW, Washington 20433, USA. Fax: +1 202 477 0164.

Handbook for Mainstreaming a Gender Perspective in the Water Resources Management Sector SIDA, Sweden. http://www.sida.se/eng/bistand/wat er/gender/general.html

Mainstreaming Gender in Water, Environment and Sanitation (WES) Programming Unicef, New York, 1998. 65pp. Pbk. Free. Contact: T.V. Luong, WES, Unicef, 3 United Nations Plaza, TA-26A, New York NY 10017, USA. Fax: +1 212 824 6480/2. E-mail: wesinfo@unicef.org

Pan-Commonwealth Training Manual on Women and Natural Resource Management Commonwealth Secretariat, London. 1996. 68pp. £5.95. ISBN 0 8509 2489 8. A Manual for the Africa Region 176pp. £6.95. ISBN 0 8509 2 465 0. A Manual for the Asia Region 144pp. £6.95. ISBN 0 8509 2 481 2. A Manual for the South Pacific Region 141pp. £6.95. ISBN 0 85092 464 2. A Manual for the Caribbean Region 116pp. £6.95. ISBN 0 8509 2486 3.