

ISSUES: 2

Information on Water and Sanitation: who needs it?

Despite the concern for improving information management in water and sanitation institutions in developing countries, most of the demand for information seems to come from users in the North.

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The Setting

The lack of safe water and sanitation is the primary reason why diseases transmitted via faeces are so common in developing countries. The most important of these diseases, diarrhoea and intestinal worm infections, account for 10 percent of the total disease burden in developing countries. In 1990 diarrhoea resulted in nearly 2.5 million deaths in children under five years of age, ten times the number of deaths by AIDS and still nearly 40 per cent more than the expected 1.8 million AIDS-related deaths in the year 2000. In addition, an inadequate water supply increases the risk of schistosomiasis, skin and eye infections, and guinea worm disease.¹

The water supply and sanitation sector encompasses more, however, than just public health engineering. Its scope has gradually expanded to include social welfare, environmental issues, behavioural and communication sciences, and most recently economics following the international meeting in Dublin² where water was declared to be an 'economic good'. Being a multidisciplinary sector, it follows that it also involves a multiplicity of institutions.

Consequences for Information Management

From this multidisciplinary nature and multiplicity of institutions it is not surprising that, in comparison with other sectors such as agriculture and health, the importance of developing information systems and services in the water and sanitation sector has been seriously neglected, by both national governments and donor agencies.³ Another constraint is the comparatively low level of investment in the sector, despite the Dublin statement, and the consequent lack of economic incentive to carry

out research, one the prime 'motors' for the generation of new information.

Sector investments in all developing countries were, on average, USD 13 billion per year from 1981–1990, 20 percent of which came from external loans and grants. Only USD 2.6 billion (20 percent) of this amount was spent in rural and low-income urban areas.⁴ This is a modest amount when compared to the annual defence budget of many developing countries: that of India, for instance, is USD 8.5 billion.⁵

Finally, the fact should be mentioned that much sector information is difficult to access because it is contained in 'grey' or unpublished literature. Even for the major sector meetings held in New Delhi (1990) and Dublin (1992), no formal proceedings were ever published. This makes literature reviews and synthesis studies of grey literature important. Good examples are the technical papers published by IRC,^{6,7} which together cover 1,400, mainly 'grey' documents, and IRC's annual abstract journal, *Woman, Water, Sanitation*.

The International Scene

International collaboration in the water supply and sanitation sector was initially restricted to external support agencies (ESAs) in the North, who formed the Collaborative Council which first met in 1984 in Koenigswinter. It took a further six years before organizations from developing countries were invited to join the Council, now officially called the Water Supply and Sanitation Collaborative Council (WSSCC).⁸ Their inclusion still does not imply full and equal participation, however, since all seven working groups established by the Council are chaired by organizations from the North.

Information Suppliers

The Northern bias at the international level is also reflected in the information field. Most information seems to be generated by external support agencies (ESAs), who appear to be major users of that same information. A quick-and-dirty review (see box) of information sources reveals that only in the case of sector-related information networks is the North-South bias reversed. This bias is even more pronounced if one looks at IRC's *List of Basic Publications*,⁹ where only eight of the 130 documents listed have been produced by organizations based in developing countries. The same pattern is evident in the number of institutes undertaking applied research in the sector.

Information Users

Information use is more difficult to assess, but a look at IRC's experience may provide an indication. An analysis of 1,135 clients of the IRC Documentation Unit's external information services was carried out for the period 1991–1993. These services included the use of the IRC library, document delivery, database searches and referral. Nearly two-thirds (64 percent) of the clients were from the North. It should be noted that this figure includes users of IRC library, who by nature of IRC's location are largely from the Netherlands (43 percent of all users).

The regional distribution of the *IRC Newsletter*, which is in its twenty-fifth year and therefore the longest existing medium for sector news, shows the exact reverse picture. Two-thirds (64 percent) of the 5,800 subscribers are based in developing countries. Nevertheless, it should be kept in mind that a significant number of them will be field offices of ESAs.

Sustainability

Information on water supply and sanitation in developing countries at the international level thus seems to be largely the domain of agencies based in the North. Since most of these agencies are non-profit ESAs, they supply that information free of charge or at subsidized rates. This hampers the development of indigenous sector information services. Also, many existing sector information centres in developing countries rely heavily on support from external donor countries who cannot themselves expect any direct benefits from the information these centres collect. All these factors do

ORIGIN OF SECTOR PUBLICATIONS AND ORGANIZATIONS

	North-based	South-based	Total
	no. [%]	no. [%]	
Basic publs.¹			
– books	122 [94]	8 [6]	130
– book authors	191 [88]	26 [22]	217
Sources²			
– books	76 [64]	43 [36]	119
– book authors	76 [83]	16 [17]	92
– databases	35 [74]	12 [26]	47
– organizations	53 [68]	25 [32]	78
– networks	5 [33]	10 [67]	15
Research inst.^{3,4}	20 [67]	10 [33]	30

1. IRC International Water and Sanitation Centre. *List of basic publications on water supply and sanitation: a selected bibliography. 2nd ed.* The Hague, IRC, 1991. (Reference series, no. 6).
2. Browne, Nigel. *A guide to secondary sources of information on low-cost rural and urban water supply and sanitation for developing countries.* The Hague, IRC, 1993. (Reference series, no. 8).
3. Campbell, Dan, and others. *Status report on GARNET.* Paper presented at: Collaborative Council Global Forum, Oslo, September 18–20, 1991.
4. Schertenleib, Roland. *Report for consideration at the Rabat meeting of the Council, 7–10 September 1993. Vol. 2: Main report: applied research in water supply and sanitation.* Geneva, Water Supply and Sanitation Collaborative Council, World Health Organization, 1993.

not work in favour of sustainable information services.

Future Information Needs

Since information management is an important component of research, the six priority areas identified by the WSSCC Working Group on Applied Research can serve as a guide to future sector information needs:

- hygiene behaviour and mobilization of community support
- 'willingness to pay' studies
- alternative financing and cost recovery
- evaluation indicators
- public/private sector roles
- technology choice for urban areas.

The international water crisis, especially in the Middle East, should provide a boost for research on water resources management and water conservation.^{10,11} Further, attention is now also being directed towards the formerly socialist countries of Europe and Central Asia.

Besides the above trends, there are a number of information products which the sector still lacks or have not been updated for several years:

- a regular who's who or directory of the sector which includes developing countries' organizations
- a multilingual dictionary
- an annual review of sector developments
- a CD-ROM on low-cost water and sanitation
- an electronic sector bulletin board.

Again these needs are those expressed by ESAs and may not necessarily match the agenda for information management set by the South. As an expatriate adviser with extensive field experience remarked, to developing country nationals 'findings of international conferences seem "other worldly" and the link with the reality of the field and the necessary practical action steps, remote'.

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3. Heijnen, Han. *Report for consideration at the Rabat meeting of the Council, 7–10 September 1993. Vol. 2: Main report: information management in water supply and sanitation.* Geneva, Water Supply and Sanitation Collaborative Council, World Health Organization, 1993. p. 6–7.
4. Majumdar, J. *Policy/strategy for action: finance.* (Paper prepared for: Ministerial Conference on Drinking Water and Environmental Sanitation: Implementing

- UNCED Agenda 21, 19–23 March 1994, Noordwijk, Netherlands, 1994). p. 2–3.
5. World Bank, *op. cit.* p. 238, 258.
 6. Wijk-Sijbesma, Christine van. *Participation of women in water supply and sanitation: roles and realities*. The Hague, IRC, 1985. (Technical paper series, no. 22).
 7. Burgers, Lizette, and others. *Hygiene education in water supply and sanitation programmes: literature review with selected and annotated bibliography*. The Hague, IRC, 1988. (Technical paper series, no. 27).
 8. Rotival, Alexander H. *Institutions: the Water Supply and Sanitation Collaborative Council*. *Environment*, vol. 34, no. 8, 1992. p. 4–5, 45.
 9. Schertenleib, Roland. *Report for consideration at the Rabat meeting of the Council, 7–10 September 1993. Vol. 2: Main report: applied research in water supply and sanitation*. Geneva, Water Supply and Sanitation Collaborative Council, World Health Organization, 1993.
 10. Postel, Sandra. *The last oasis: facing water scarcity*. New York, W.W. Norton, 1992. (Worldwatch Environmental Alert series).
 11. Clarke, Robin. *Water: the international crisis*. London, Earthscan Publications, 1991.

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