



## Networking in the WS&S sector

Darren Saywell, WEDC

INFORMATION IS A tool that can be used to enable education and development in both the North and South. Access to such resources is a critical factor in this process, but the reality is that information is typically unavailable to users when it is required, or is available in a format which is difficult to interpret and apply. When it is available, it may be at a cost that is prohibitive for the user to bear. Mechanisms need to be identified which permit users to participate in and benefit from information exchange on an equal basis, which is low-cost and which can deliver subject or problem-specific answers. Fortunately, such a mechanism exists: networking.

Networking is a recent term that describes an age old activity: people meeting to exchange information, knowledge and skills which are of mutual benefit. In the water supply and sanitation sector, networking was given considerable impetus by the International Decade which acted as a stimulus for sector professionals to build on the gains made during that period. The development of the Global Applied Research Network (GARNET), the Network for Water and Sanitation International (NETWAS), and the International Training Networks (ITN) are testament to this fact.

The apparent popularity of networking can be explained by examining the benefits that it offers to the sector's key stakeholders. Funders, practitioners and users gain significantly from networking and have an incentive to nurture and encourage its development. Funders advocate their use because it facilitates dissemination across country and regional boundaries and permits resource sharing which may deliver cost savings; practitioners support networks because they reduce professional isolation and deliver insights into the discipline which may otherwise be lost; and users gain from higher quality and more appropriate research.

Networks have much to offer, and the sector can at times seem awash with them. But do we fully understand what they are for, what they mean and where their value lies? In the rush to be part of the latest network, are we sure we know why we are joining and what the likely benefit will be? This paper will examine what is meant by 'networking', describes the basic types of research networks, presents GARNET as a case study and draws on some lessons learnt from WEDC's co-ordination of this initiative as a guide to those thinking about setting up or joining a network.

### Networking: a brief overview

Networking is difficult to explain simply and clearly. It is frequently used in conjunction with other terms (research -, information exchange -, co-operative -) which may breed confusion about the general purpose of networks. In addition, common usage implies widely divergent meanings - to some it refers to exchanging business cards and talking informally at conferences, for others it is a formal mechanism by which opportunities within a given field can be tapped and exploited. Networking can mean all things to all people - a fact which may have diminished its value as a tool for education and communication.

This lack of clarity is compounded when examining the way in which the concept has been defined. Wesley (1993) sees networking as the transfer, and promoting the transfer of information; Parker (1979) considers networks as the organisational structure which facilitates information resource sharing; whereas Plucknett et al (1990) define networks according to criteria which include participants, purposes and mechanisms. Despite this divergence, certain common features are recognisable. Typically, networks include *associations* (formal/informal; individuals/institutions), who share a *common goal or purpose* (open-ended/task specific); and who *contribute resources or time in two way exchange or communication*.

Accepting that these common elements provide a baseline to our understanding of networks, this paper will consider networks and networking with regard to research in the sector.

### Networking typologies

There are three basic typologies of research networks:

- **Information exchange:** Rely on the sharing of information between members and a co-ordinator, and are normally either passive or active. With the former, a co-ordinator distributes information to all network members, usually through a newsletter and there is minimal communication between co-ordinator and members. Active information exchange networks attempt to collate comprehensive information from members and encourage frequent communication between members and co-ordinator. Active networks are based on a healthy two way exchange of information, views and practice. The rise of information technologies such as electronic mail, the Internet, and CD-Roms have transformed the experiences of this type of network.

- **Consultation:** rely on face to face meetings of members in order to share information and ideas, normally through workshops or conferences organised periodically. Such networks can be established quickly and are unencumbered by the bureaucracy and hierarchical structures which can hinder the effectiveness of other networks.
- **Collaboration:** conducts activities which are jointly planned and implemented. Typically, they share resources, participate in design and planning and work together. In developing countries, collaboration networks offer the greatest opportunities for building the capacity of personnel, and as such are looked on favourably by the stakeholders in the research process. However, not all networks necessarily evolve into collaborative ventures, nor should they since the degree of co-ordination and management required makes this type of network relatively rare.

### Case study: The Global Applied Research Network (GARNET)

In March 1989, a temporary working group on Applied Research met to discuss research priorities and issues in the sector. One of the conclusions of the working group was that, 'a decentralised, informal approach to facilitate the exchange of information on applied research' should be implemented. The Water and Sanitation for Health project (WASH) agreed to begin the initiative, acting as the Global Network Co-ordinator (GNC) with an initial remit to identify and promote applied research networks in the sector. The current goals and structure of GARNET were agreed and clarified at the Rabat Global Forum in 1993. WASH acted as GNC until November 1993 when the Water, Engineering and Development Centre took over this key role.

The key elements to GARNET are that it is primarily an active information exchange network, focusing on **applied research** within the sector. Consultation networks do exist, but are primarily country rather than topic based. Its purpose is **NOT** to function as a general information centre in the sector since this is a role that several institutions including IRC, ENSIC, CEPIS and CEHANET already possess. GARNET is a mechanism, or an activity which is designed to promote, facilitate and strengthen the modes of information exchange with the aim of supporting the timely exchange of applied research among network members internationally.

GARNET's structure can be visualised as an integrated mesh (see Figure 1), with interdependency between elements a key factor. **Network members** (NGO's, government agencies and research institutes) associate with subject-specific topics (in total 15) which are arranged by three sub-themes: institutional development; health and social and technical issues. Members join networks directly through the co-ordinator or via the GNC. **Topic Network Co-ordinators** (TNC) are experts within their

chosen field, with a proven track record of research and a willingness to manage the network. Their responsibilities include receiving and disseminating information; referring queries to members; fostering co-operation and reporting back to the GNC about activities within the network. TNC's are the linchpin of the initiative and its success is dependent on their enthusiasm and commitment. The **Global Network Centre** has two main functions: to *promote* applied research in the sector (linking with existing networks; providing guidance to practitioners about the research process and enabling co-operation through workshops) and by *co-ordinating* the activities of TNC's (recording network activities and projects; enabling dissemination of network outputs).

GARNET's structure has been criticised for being overly centralised and for excluding non-English speaking regions. In response to this, efforts are being made to devolve the functions of the GNC to regional centres (via partner agencies GARNET currently works with) in Africa, Asia and Latin America. It is anticipated that such decentralisation will help bring about the wider promotion of applied research and secure a multi-lingual operational structure.

What value is there in joining networks? What benefits can accrue to stakeholders which they cannot gain by other means? The main advantages can be grouped under three headings:

#### Resource sharing

Networks make use of existing facilities or personnel and as such do not require additional investments.

#### Capacity building

Networking allows practitioners to learn from other's experiences and to develop insights into a chosen subject which could not otherwise be gained. Collaborative projects allow practitioners to learn by doing and to exchange skills, techniques and practices during the implementation of shared projects.

#### Efficiency gains

networks prevent the duplication of research and reduce the isolation of developing country researchers by disseminating information and by consultation at workshops and conferences. Networks permit more research to be undertaken at lower cost, and allow for research results to benefit a number of countries and regions.

### Lessons to learn from GARNET

In the period that GARNET has been co-ordinated by WEDC, a series of lessons have been learnt about the planning, implementation and management of research networks.

- **Member participation:** network members should be involved in the planning, goal setting and work plan for networks. A sense of ownership is crucial if the

network is to be vibrant, dynamic and meet the needs of its members.

- **Membership is not participation:** although a network may list hundreds of members, in reality a small core group may be driving and shaping the network's agenda - if these individuals are transferred or leave, the network may flounder. Fostering comprehensive participation and providing a sufficient incentive for participation is a major (and problematic task) of any network;
- **Networks need to be user driven:** networks should arise (naturally) from a felt need within the sector which individuals or institutions have identified as needing to be addressed. Creating networks without

establishing the need is an empty exercise and commonly ends in failure;

- **Think holistically:** networks should not restrict membership only to those who are *perceived* as its natural target audience. GARNET, for instance, endeavours to include all the key stakeholders in the research process including the funders and users of research, in addition to practitioners. An inclusive network is one which may develop greater long-term sustainability and achieve higher quality outputs through the insights that such inclusion can bring;
- **Evaluate, monitor and reflect:** evaluation and feedback from network members needs to be constantly sought and incorporated into network activities and

KEY  
M Network Members  
TNC Topic Network Coordinators  
GNC Global Network Centre

Figure 1. Simplified structure to the Global Applied Research Network

terms of reference. Networks do not exist in a vacuum - but will shift their emphasis over time. Networks need to be able to identify such shifts and know how to respond to changing needs.

- **Clear focus and remit:** a clearly stated problem or subject will help define the network's purpose and objectives. This will reduce confusion among network members and enable all to work towards common goals.
- **Operating languages:** if networks are to draw on the experiences of members drawn from diverse regions internationally, some provision must be made to allow for different operating languages other than English. There is a danger of raising expectations within a sub-region if network outputs or dialogues are offered in several languages. Crucially, networks must avoid tokenism and possess a mechanism with which to operate multi-lingually.
- **Specific funding:** network co-ordination takes time and resources if it is to be effective. Funding (or assistance in kind) is a crucial part of enabling the work of co-ordinators. Ideally, co-ordinators should receive some form of incentive for the work that they undertake (this simply represents the reality of co-ordination - which is frequently voluntary and additional to existing workloads). Networks which rely on surplus funds and voluntary labour will suffer as a result.
- **Flexibility and openness to new ideas:** Networks need to be prepared to adopt new practices and to adapt to change, otherwise they are likely to become locked into obsolete ideas and practices which do not serve anyone's interest.
- **Communication channels:** Do not assume that the medium by which you communicate exists or operates reliably in other countries where network members are resident. New developments offered through information technologies may not be available to the

NGO network member working in rural Tanzania, for instance.

### Research networks: opportunities and challenges

The changes which have taken place in information communication technologies in the last five years have significantly altered the ability of networks to operate and develop. Looking to the future over the same time frame, the same technology, gradually integrated into Southern communication infrastructures may bring new opportunities for research networks. Perhaps for the first time, a truly decentralised, low cost communication infrastructure will be in place to permit efficient and effective information exchange.

Academia is characterised by a protectionist attitude towards intellectual property rights which hinders the exchange of research related information. As a result, network members may be reluctant to publish in fora which does not offer academic kudos, or are seen as vital to career progression in the same way as others. A mechanism by which network members can feel free to contribute and for which there are clear incentives to do so, is both a major priority and challenge for future research networks.

### References and further reading

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