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GARNET

Global Applied Research Network in Water Supply and Sanitation

Collaborative Council Mandated Activity: GARNET

Report for consideration at the Manila meeting of the Council

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Volume 2: Main Report

Activity Co-ordinator
Dr Andrew Cotton, Water, Engineering and Development Centre

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What is GARNET?

The Global Applied Research Network in water supply and sanitation (GARNET) is a network of researchers, academics and fieldworkers interested in promoting current and proposed applied research in the water supply and sanitation sector. The method to achieve this is through informal, low-cost and decentralised networking links.

It was at the Oslo meeting in September 1991, that the Water Supply and Sanitation Collaborative Council (WSSCC) identified applied research as one of seven priority issues to be addressed by its working groups. The Working Group on Applied Research which was established after Oslo acted as the advisory committee to the Global Applied Research Network (GARNET), formulating terms of reference and guiding developments, until the Rabat meeting of the Council in 1993. In Rabat, a mandate was conferred on GARNET which expanded the existing activities to include GARNET as a focal point for the WSSCC's activities in applied research in the sector.

Following the expansion of its role, GARNET's terms of reference were revised to include the following:

- To continue to promote networking amongst researchers and field workers in the sector as per the original mandate and terms of reference;
- To act as a focal point for applied research in the WSSCC's activities in the water supply and sanitation sectors;
- To collate and publicise the existing research-related output from past and present Council working groups / activities and to act as a clearing house for enquiries;
- To promote increased levels of support for applied research;
- To liaise with other groups acting under mandate from the Council which are involved in applied research activities.

How does GARNET work?

The structure of GARNET comprises:

(i) **Global network centre (GNC):** the institution which has responsibility for promoting international networking, identifying and supporting TNC's where possible and evaluating the progress of GARNET for the WSSCC. An international advisory committee assists the GNC by reviewing its activities and setting priorities for both current and future developments. The GNC is presently the Water, Engineering & Development Centre (WEDC) at Loughborough University, UK, and operates with financial support from the Department for International Development of the United Kingdom government.

(ii) **Topic network centres (TNC):** a series of contact persons, categorised by subject area, which form the backbone of the system. TNC's are responsible for managing their network of contacts, a duty which involves responding to member's queries and keeping network members informed of new developments and research through newsletters, bulletins, etc. There are presently 16 topic networks which are active, split broadly between management and economic, health & social, and technical issues (See Appendices). New networks are added when sufficient interest is shown and when a suitably qualified individual or organisation is prepared to act as a TNC.

(iii) **Local network centres (LNC):** following the decentralisation of GARNET, local network centres are now in operation in West Africa, South Asia and Latin America. The core objectives and activities of these centres have been defined and agreed on at the local level by local stakeholders. However, as a guide, a centre may have some or all of the following objectives: enable greater involvement of researchers in solving everyday problems within the water supply and sanitation sector; identify applied research needs locally;

facilitate dissemination of applied research activities; identify guidelines for strengthening the quality of applied research and facilitate development of local research agendas. GARNET has an open policy towards the inclusion of further network centres in other regions.

What GARNET has accomplished

This section details the activities of the network since the last Global Forum in October 1995. GARNET's core activities can be listed under two sub-headings:

1. *Networking activities*: developments designed to promote and support the exchange and sharing of research-related information amongst professionals working in the WS&S sector;
2. *Promotional activities*: developments designed to promote applied research in general, including changes to the structure of the network, publications, workshops and other initiatives.

Networking activities

The main thrust of GARNET's activities between 1993-1995 had been to rationalise the networking framework, a process which involved removing inactive and ineffective topic networks and establishing minimum standards amongst topic network centres. Through these and other activities, new impetus was invested in GARNET, and the level of networking activity showed considerable improvement as a result. Both the reported activities of topic network co-ordinators and the volume of enquiries to the GNC grew significantly.

In the period leading up to the Manila Forum, much emphasis has been given to consolidating the progress that had been made with topic networks, decentralising the operations of the GNC to more locally appropriate units (i.e., LNC's), and strengthening electronic forms of networking.

Reported activities of topic network co-ordinators

There has been some fluidity in the topic network framework since the 3rd Global Forum meeting. Three networks, *suspended solids removal*, *chemical disinfection* and *groundwater pollution* were removed due to inactivity or an inability for the co-ordinator to continue with the duties of the network. By contrast, four new networks have been created: *gender issues*, *water quality monitoring*, *groundwater development* and *low cost sewerage*. Negotiations relating to a fifth, *wastewater management* are on-going. One country network (*Philippines*) has also been added to the framework.

Regular contact between GNC-TNC is achieved through quarterly topic network updates.

A brief review of the main activities of the topic networks are listed as follows:

- **Institutional development.** Richard Franceys at IHE Delft published two network newsletters (5 and 6). Newsletter 5 details research related information on a desk study of private sector participation in urban water supply around the world; a new DFID funded project on contracting out of services and declared benefits of water and sanitation utilities; and a review of WEDC postgraduate work ranging from the management of urban water and sanitation in Brazil to an institutional development overview of Kaduna State Water Board in Nigeria. Issue six was distributed in July 1997. Current network membership: 199
- **Hygiene behaviour** Astier Almedom at the London School of Hygiene and Tropical Medicine produced a third network newsletter in April 1996 before passing over co-ordination to Valerie Curtis at the School. Although limited in coverage, issue 3 carried information relating to research on a Hygiene Evaluation Procedures Handbook (designed for fieldworkers); a hygiene promotion programme in Lucknow, India and a water and sanitation evaluation in eleven centres in Ethiopia. Recent publications by network members

were also listed. Valerie Curtis has since contacted all network members and has received enough material for a fourth newsletter to be published later in 1997. Current network membership: 157

- **Participatory approaches.** Mary Judd at World Bank/UNDP stepped down from coordinating the network in early 1996 when she moved to another department in the Bank. After a dormant period, the RWSG-East Asia office agreed to take on co-ordination of the network for a trial six month period. Draft terms of reference are now in place and all network members have been contacted. Nilanjana Mukherjee (a hygiene education specialist) and Priya Tuli (a regional communications specialist) will share the duties involved in co-ordination, and the GNC will provide support and advice on developing the network over the coming months. Current membership: 114
- **Gender issues.** Originally a Council working group, gender issues formally became a network in late 1996. Initially co-ordinated by Wendy Wakeman, it is now managed by Christine van Wijk and Jennifer Francis at IRC. The network has issued four newsletters - September 1996, January 1997, April 1997 and July 1997. Current network membership: 54

Figure: Use of networks in operational research programmes

Sherehata Jolly, Senior Programme Officer, Department for International Development (DFID), New Delhi accessed the network in order to find out who to contact, and what information was available on gender issues and participatory approaches in projects conducted in urban areas. The network was able to suggest a series of contact persons who eventually helped in identifying a key individual in the World Bank who supplied documentation of relevant examples on request.

- **Urban environmental health.** Dan Campbell (based at the Environmental Health Project, USA) co-ordinates this network which is concerned with environmental health research in peri-urban areas. The network receives regular updates through a newsletter *Voices from the City*. The theme of issue 6 was the management of solid wastes, featuring articles detailing research on street sweeping in Karachi, Pakistan; waste collection and removal practices in Madras; community participation for effective Dengue control; results from research into the improvement of sanitary conditions in India; new Internet sites and a digest of news and publications relevant to the topic. Issue 7 focused on vector-borne diseases and included articles on the world-wide Rotary Against Malaria (RAM) project, a pilot project to help sewer workers in Ahmedabad, India receive health care; an NGO in the Philippines tackling the problems of solid waste in Metropolitan Manila; and the twinning of neighbourhoods to improve infrastructure in Tetonan, Morocco.

In addition to the newsletter, three informal e-mail bulletins are distributed weekly covering topics such as malaria, acute respiratory infection and environmental health. Current network membership stands at 984 of which 15-20 per cent are estimated to be involved in research. On average the network receives between 20-30 information requests per month from members. Future plans include increasing the publication of *Voices from* a biannual to a quarterly newsletter and editing the network's membership to ensure a more active network rather than an ever growing mailing list.

- **Rainwater harvesting network.** The Rainwater Harvesting Information Service (RHIS) was launched in August 1996. Its objective is to provide efficient, reliable and timely information on rainwater catchment systems, technologies and activities world-wide. RHIS is a project of the International Rainwater Catchment Systems Association (IRCSA) and is physically housed at the offices of the Africa Water Network (AWN), an umbrella organisation of African NGO's in the water and sanitation sector. The Information Service maintains two databases: one of members and the second of bibliographic sources. The network currently has members in 82 countries; comprising 1400 individuals and organisations, with an average of about 5 enquires per week. A newsletter dedicated to the topic, *Raindrop*, is released twice a year.
- **Groundwater development.** Dr. Andrew Mackenzie at British Geological Survey coordinates this network. Current network membership: 102

- **Water quality monitoring.** Dr. Giles Forget established the water quality monitoring network in 1996, with an interface on the Internet. The network offers a range of member services including: on-line subscription to the network; archives of waterQ (an e-mail listserv on the topic); papers and articles generated through the network; and a listing of all network members and their addresses. The network operates in both French and English languages, with all website pages having a French language parallel. Current network membership: **90**
- **Solar distillation and solar water disinfection.** Tom Lawand, co-ordinator at the Brace Research Institute, reports that the Institute has undertaken work in the following fields: to determine the synergetic effect of exposure to solar radiation and temperature for contaminated water placed in plastic bags; and that a guideline document on field conditions needed for the effective use of solar water disinfection has been prepared. This will be translated into French and Spanish. The Institute is planning a network newsletter to highlight recent activities and developments in the field.
- **Iron and manganese removal.** Co-ordination of this network moved on to Ousseynou Guene at CREPA in late 1995. Current network membership: **44**
- **Handpumps.** Eric Baumann of SKAT co-ordinates this topic, which incorporates the Handpump Technology Network. The network is open to all organisations and individuals who are active in the field of handpump development and promotion, and to agencies implementing rural water supply projects with handpumps. HTN published as a working paper the proceedings of the IDE workshop which took place in India in September 1995. Two new publications, 'Guidelines for Quality Control and Quality Assurance of Afridev Handpumps' and 'Afridev Handpump Installation and Maintenance Manual' were completed, printed and are now available. The Mangochi Workshop (17-21 March 1997), was held under the auspices of the HTN network, and was attended by 150 participants from over 40 countries. The Workshop issued a Declaration which summarises the key points to emerge from the event. The workshop recognised that the HTN - whose mandate was reaffirmed and future role expanded - can play a key role both as a nodal point for information exchange and as a facilitator of best practices throughout the world. The proceedings of the workshop have been published on the SKAT homepage at <http://www.skat.ch/>.

The specifications for the Malda pump were issued in March 1997, whilst the Afridev and India MarkII/III specifications are currently being revised with publication expected in June 1997. There are currently **150** network members, of which approximately 15 per cent are active in research projects. The co-ordinator receives about 3-4 enquiries each week.

- **Solar water pumping.** Eric Schiller at IWEC reports that a comprehensive manual relating to solar water pumping (in French) is being prepared for dissemination. Other activities include installation of a second solar water pumping system in Ouagadougou, Burkina Faso and the training of two graduate students in water solar pumping at the University of Ottawa. Current network membership: **47**
- **Pit latrines.** Darren Saywell at WEDC published his first network newsletter at the end of January 1996. The newsletter contained research related information on the use and management of pit latrines in a refugee context; pit latrines in high density, low income urban communities; and a digest of published information relating to latrine design, construction, management and maintenance. Issue 2 (September 1996) carried details of members queries; recent research work on infiltration of pit latrine effluent into groundwater and microbiological examination of composting latrines; notification of several new publications in the field and two workshops (collection of human excreta in low income urban neighbourhoods and appropriate sanitation in small islands). The newsletter also carries a full listing of all network members. A third newsletter is planned for late 1997. Current network membership **125**
- **Nightsoil/faecal sludge treatment.** Martin Strauss at SANDEC reports that there are currently **100** network members, of which approximately 15 are directly involved in research on faecal sludge treatment. Future plans include the issuing of a topic based newsletter; a project update in SANDEC News No.3 and the publication of the first of three discussion/guideline papers on faecal sludge treatment by solids-liquid separation and stabilisation ponds.

- **Low cost sewerage.** Duncan Mara at the University of Leeds reports that there are 125 network members with an estimated 10 per cent actively involved in research. The network is operating exclusively by e-mail and in recent months discussions have covered topics such as settled sewage in Namibia, pit latrine linings and the problem of sand in sewers. Future plans include an International Conference in 1999 and the creation of a website.
- **Solid waste management recycling.** Dr. Mansoor Ali at WEDC is co-ordinating this topic which focuses on aspects of waste management such as recycling, recovery, reuse, composting, and the informal sector within developing nations. He has published two network updates since October 1995 (numbers 3 and 4). The April 1996 edition (issue 3) details information on harbour waste; micro-enterprises for primary collection; network member requests on informal solid waste collection in low income Rio de Janeiro; and details of ISWA developing countries brochure. Issue 4 was published in August 1996 and details information on the Urban Waste Bulletin, micro-enterprises in SWM, waste management for economically developing countries, and the international source book on municipal solid waste. Two short case studies, supplied by network members, are included with the newsletter (detailing community based solid waste management in Metro Manila, and four Indonesian cities). In August 1997, an electronic conference on source separation of solid wastes was organised. The conference, which ran for 12 days, led to 105 messages being exchanged, with participation from 49 individuals worldwide. Representation from Southern based countries was good (42 per cent of all participants), and included information sharing from Argentina, Bolivia, Peru, Indonesia, India, Sri Lanka and Pakistan amongst other nations. Current network membership: 134.

Focus: Spreading examples of applied research and best practice

Members of the solid waste management recycling network helped to identify and contribute sufficient research related information to produce two short case studies highlighting best practice in the topic. The co-ordinator of the network was able to edit the information received and present it in the form of case studies, complete with selected references and suggestions for further reading. These were subsequently distributed to all network members, free of charge. The case studies highlighted examples of innovative approaches to the primary collection and recycling of household waste in Indonesia and the Philippines.

- **Country network - Philippines.** Rosario Aurora Villaluna, Network Centre Co-ordinator, ITN (Philippines) has co-ordinated this Philippines based country network under GARNET's auspices since late 1996. More recent developments include: ITN Philippines has been recognised as one of three private sector organisations working on the Presidential Task Force on Water Resources Development and Management (created to make policy recommendations for a more rationalised water resources development and management strategy); the network centre has been involved in documenting recent research on decentralised implementation of community managed water supply and sanitation projects; and the next issue of its newsletter, *Water Forum*, will concentrate on waste management in the Philippines.

There is a continuing policy of establishing new networks to supplement the current framework. Efforts are being made to identify new topics and suitably qualified co-ordinators to fill obvious gaps in this framework. Contact names and addresses for the co-ordinators can be found in the Appendices.

Enquiries to the Global Network Centre

In addition to co-ordinating networking activities, the global network centre acts as a clearing house for enquiries from existing network members and those new to GARNET. Procedures for monitoring these referrals were introduced in August 1994 as a means of building a profile of users.

Since October 1995, the number of enquiries concerning applied research networking received by the GNC has increased markedly. A breakdown of these requests (as at end July 1997) is listed in the Appendices.

Efforts to improve networking

Between the 2nd and 3rd Global Forums, much emphasis was placed on improving and consolidating the topic network framework and relationship between GNC-TNC respectively. With the good progress made on those issues at the time, the GNC has been able to focus elsewhere during the last biennium. In particular, GARNET has:

- **Sought to decentralise its operations through the creation of local network centres (LNC's).** The idea behind the creation of LNC's was the desire to reach out to a wider audience and better serve the community of researchers and users of research. The core objectives of these centres have in each case been defined and agreed on at the local level by local stakeholders, but in general, these might include: identifying applied research needs, facilitating the dissemination of applied research activities and identifying guidelines for strengthening the quality of applied research. Initially, it is anticipated that the geographical catchment area of each local network centre would coincide with the contacts that each centre already possesses. However, in time it would be expected that this catchment areas would expand.

GARNET has made good progress towards developing LNC's, with three nascent centres in operation in Latin America, West Africa and South Asia. An important feature of decentralisation is that it is a process, and not a change which can be implemented overnight. GARNET has embarked on this process and it hopes to see an increasing number of local networks developed in the future. In addition to the objectives and activities listed below, LNC's have played an important part in promoting and explaining the role of the Collaborative Council and its working groups at the local level.

Focus: Objectives and activities of Local Network Centres		
Priority: for objectives and activities defined by constituent body		
GARNET (Latin America)	GARNET (West Africa)	GARNET (South Asia)
<p>Objectives</p> <ul style="list-style-type: none"> • Establishment of network centres in Colombia, El Salvador • Identify applied research needs • Information dissemination 	<p>Objectives</p> <ul style="list-style-type: none"> • To enable greater involvement of researchers in solving everyday problems within the WFO region • Identify applied research needs locally • Facilitate dissemination of applied research activities • Identify guidelines for strengthening the quality of applied research locally. Take responsibility for promoting the improvement of the quality of research and research proposals • Facilitate local development of research agendas 	<p>Objectives</p> <ul style="list-style-type: none"> • Identify ARI needs • Facilitate dissemination of applied research activities • Enable use of research in solving everyday problems • Identify guidelines for strengthening applied research
<p>Activities</p> <ul style="list-style-type: none"> • Inventory of applied research institutions • Summary document identifying needs and gaps in sector • Library awareness service (monthly) • Quarterly GARNET newsletter • Translation of TNC newsletters 	<p>Activities</p> <ul style="list-style-type: none"> • Identification of applied research needs and target groups • Develop local mailing list • Collate research project listing • Monitor / respond to local queries • Local meetings and workshops • Translation of TNC newsletters • Regional newsletter already in place - <i>Info Crepe</i> 	<p>Activities</p> <ul style="list-style-type: none"> • Survey of member needs • GARNET workshops • Regional newsletter • Inventory of research institutions • Collection of dissemination materials • Training meetings/workshops on specific activities • Development of website • Organizational support monitoring and evaluation of NCC projects to improve applied research capacity

- **Developed opportunities for multi-lingual operation of the network.** Closely associated with the decentralisation of GARNET is the shift towards multi-lingual operation. It is anticipated that each LNC will operate in the language common to its region, and that it will seek to translate from English network outputs which are in high demand from local users. The first bi-lingual topic network, water quality monitoring, became fully operational in late 1996, with parallel French and language versions of all outputs.
- **GARNET electronic listserver** An electronic listserver through which researchers can exchange relevant applied research information on WS&S sector issues was first established in December 1994. The forum, designed for a range of individuals from engineers to social scientists, and from researchers to users of research has grown steadily over the last two years with membership rising to 331. Traffic on the listserver has also increased, with on average, one message being circulated to subscribers every 2 days. In general, the type of information exchanged is varied, and includes research results, project reports and general queries. The archives from the listserver for April 1997 list the following topics under discussion: medical waste, small rainwater harvesting systems in arid regions, on-plot sanitation in low income urban communities, latrines, shallow wells and tube wells, bamboo reinforced concrete for latrines, notices for newly created mailing lists on solid waste and courses on alternative wastewater treatment systems. Future plans include exploring the possibility of staging an electronic conference on a selected theme within the sector.

A brief review of subscribers' e-mail addresses (which could be identified) indicates that 59 possess e-mail accounts in developing nations and 76 are working within a higher education institutions. The remainder are unidentifiable, typically possessing numeric accounts.

Factor: Electronic Networking

Ed Maurer describes his experience of using GARNET's electronic listserver designed to facilitate information exchange amongst a wide range of sector professionals.

Regarding my use of the water and air applied research listserver, I will describe my experience. Working in Pune, Pune can seem to be fairly quite isolated, and when I needed assistance on a particular issue, I really didn't have many places to turn. I posted a general request for any contacts or references that might help with designing a basic hydraulics laboratory to help with developing local talent in hydraulics and hydrology at the University in Pune. I received a direct reply, all of which included at least an idea of people or organisations I might contact. I wrote directly to those contacts, and a couple have begun to inch me closer to receiving more specifically what I need, either on laboratory equipment using inexpensive design, or on where I might find funding for a project like this. I have also used the list of TMC Contacts published in the GARNET Newsletter, and I have been helped very much by Mr. Don Campbell in particular.

In general, I would have to say that I have found the list very helpful as a first step in finding contacts who may be involved in work related to my needs. Especially since I have very little access to direct references or easy communication, an email-based list like this has been of tremendous value to me, and I appreciate the service it provides.

Geoff Pearce of Overseas Development Unit at HR Wallingford, UK reports the following concerning the listserver.

'...we used your listserver to very good effect when we wanted to find out about field techniques for measuring heavy metals in water channels. We had some very relevant responses which helped us to identify exactly what we were looking for, and useful advice from some knowledgeable people around the world.'

In addition to queries of this kind, the listserver also offers a mechanism for automated document delivery, which has been particularly valuable in downloading lengthy text documents (including working papers and network newsletters) to many individuals.

- **GARNET and the World Wide Web:** GARNET's homepage on the Internet was created in early 1995. During the last two years much work has gone into updating and consolidating the pages. During the last major revision the following was added to the site:
- French and Spanish language introductions;

- For selected networks, development and expansion of topic related information;
- Publication of checklists on how to establish networks; factsheets on types of networking activity and conditions applied to prospective topic network co-ordinators under GARNET;
- Links to the newly launched IRC and INTERWATER sites (reciprocal links have been established);
- 'Archive' section carrying links to newsletters, journals and glossaries on-line;
- A 'feedback' page that allows browsers to comment on the contents of the website;
- Profiles of current research projects;
- Listing of 'partners' associated with the initiative.

Access figures for the site have peaked at between 1000-2000 'hits' per month. As a way of widening knowledge about the initiative, GARNET's homepage was added to OneWorld Online's website in early May 1997. OneWorld Online's brief is to publish information on the Internet about global issues at low cost for development NGO's and others whose remit it is to get such material into the wider development community. Notable partners include organisations such as Oxfam, Wateraid, IRC, IISD, DFID, and UNICEF. An estimated 2 million hits are recorded every month, which at best estimates translates into a readership of 250,000 individuals. After IISD joined OneWorld Online they found that Internet access for their site increased 20 per cent.

It is important to stress that the development of electronic forms of networking are intended to **supplement**, not replace, the normal methods of research networking.

- **Newsletters:** GARNET's newsletters have been a valuable means by which sector professionals can keep abreast of research developments. Issues 4, 5 and 6 have been published since October 1995 and issue 7 will go to press immediately prior to the Manila Global Forum. In November 1996, the advisory committee of GARNET recommended that the newsletter move from bi-annual to annual publication, and that more frequent, informal updates be provided periodically during the year.

Focus: GARNET's response to the Council's cross-cutting issues

The Council has identified three cross-cutting issues (amongst a longer list) which require special attention. These are: **communicating gender and capacity building.** GARNET has addressed these three issues as follows:

Communications - GARNET has facilitated information exchange through an electronic listserve set up specifically for working group co-ordinators, and by publishing highlights of relevant outputs arising from these groups. More generally, GARNET's remit is to bring together disparate groups to share knowledge, and it has worked to develop a strong global and local network to achieve this goal.

Gender - the Gender Issues Network falls under GARNET's framework. The discussions of the advisory committee are informed by two members in particular with an interest in gender issues.

Capacity building - by its very nature, GARNET is adding to capacity building through the exchange of information and knowledge via its network newsletters, workshops and conferences.

Promotional activities

- **Promotion of other activities within the Collaborative Council.** In line with its terms of reference, GARNET has sought to promote the research related output that has been generated by the Council's working groups and mandated activities. Accordingly, a section entitled 'Council Working Groups: highlights' forms a permanent feature of the global network newsletter.
- **Outputs.**

Guide to applied research: Following the demand for the four working group papers, the GNC decided to combine the papers into a single publication and has made these outputs available through the global network newsletter. The number of requests received for this guide totals 154.

Directory of UK-based research in WS&S, 1992-95. This updated directory is a compilation of applied research project details covering broad subject categories, keywords, countries, researchers, research organisations and sponsors. A full text, on-line version was made available via GARNET's Internet site in early 1997.

Directory of donor agencies funding applied research in the WS&S sector. This publication addresses the information gap that exists in relation to the funding priorities and criteria which the major funding agencies apply to research in the WS&S sector. During 1997 it has been updated and the revised version will be made available in both printed and electronic format at the Manila Forum.

Network newsletters: Selected topic network newsletters are now available on request from the GNC.

The future for GARNET?

GARNET has been successful in its two main areas of endeavour following the recommendations made at the Collaborative Council meeting in Barbados in 1995, namely:

- Decentralise GARNET's operations to locally appropriate units;
- To consolidate the topic network framework and to seek to develop new areas of research networking where possible.

The principal recommendation of the advisory committee is that GARNET continue during the next biennium, and that WEDC continue to act as the global network centre. An evaluation of the initiative to assess its impact, effectiveness and future direction will be scheduled for completion in early 1998.

Provisionally, GARNET's activities during the next biennium will seek to:

- Consolidate the activities of its local network centres;
- Assist topic network centres to expand their activities wherever possible;
- Strengthen and develop electronic forms of networking and document delivery (such as electronic conferencing, electronic listservers, automated document delivery, interactive web site).

Future activities can only be determined and prioritized once funding has been secured. GARNET has to seek a level of funding to meet a critical minimal level of activity, and this will require support from donor agencies in addition to those who have generously supported the activities to date.

Acknowledgments

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Appendices

- 1. Network framework and contact addresses**
- 2. Breakdown of requests for information received at GNC**
- 3. Advisory committee membership**
- 4. Advisory committee updates VI-VIII (January 1996-February 1997)**

Network Contact Names and Addresses

Topic Network	Name and Address
Institutional development	Dr Richard Franceys, IHE Delft, Westvest 7, PO Box 3015, 2601 DA Delft, THE NETHERLANDS. Tel: +31 015 151715; Fax: +31 015 122921; E-mail: rwf@ihe.nl
Hygiene behaviour	Dr Valerie Curtis, The Environmental Health Programme, London School of Hygiene and Tropical Medicine, Keppel Street, London, WC1E7H UK. Tel: +44 171 927 2211, Fax: +44 171 636 7843; E-mail: 113144.3721@compuserve.com.
Participatory approaches	Nilanjana Mukherjee / Priya Tuli, Regional Water & Sanitation Group for East Asia and Pacific, UNDP/World Bank Water and Sanitation Program, P.O. BOX 1324 /JKT, Jakarta 12940, INDONESIA. Fax: 62-21-252 0432, E-mail: nmukherjee@worldbank.org
Gender Issues	IRC International Water and Sanitation Centre, PO Box 93190, 2509 AD The Hague, The Netherlands. Tel: +31 (0)70 30 689 30. Fax: +31 (0)70 35 899 64. E-Mail: general@irc.nl
Urban environmental health	Mr Dan Campbell, Environmental Health Project, 1611 N. Kent Street, Suite 300, Arlington, Virginia 22209, USA. Tel: +703 247 8730, Fax: +703 243 9004; E-mail: CampbellDB@cdm.com
Rainwater harvesting	Rainwater Harvesting Information Service, International Rainwater Catchment Systems Association, PO Box 38638, Nairobi, KENYA. Tel: +254 2 556943/506363, Fax: +254 2 605909/556943; E-mail: Africa.WaterNetwork@elci.sasa.unon.org
Groundwater development	Dr Andrew Mackenzie, British Geological Survey (BGS), Maclean Building, Crowmarsh Gifford, Wallingford, Oxfordshire OX10 8BB. UK. Tel: +44 1491 838800; Fax: +44 1491 692345; E-mail: amckenzie@bgs.ac.uk
Water quality monitoring	Dr. Gilles Forget, Senior Scientist (Toxicology), Programs Branch, IDRC, 250 Albert St., P.O. Box 8500 Ottawa, Ontario, CANADA K1G 3H9 Tel: +613 236-6163 ext. 2545; Fax: +613 567-7748; E-mail: Gforget@idrc.ca
Solar disinfection & distillation	Mr T A Lawand, Brace Research Institute, Macdonald Campus, PO Box 900, Stee Anne-de-Bellevue, Quebec H9X 1C0, CANADA. Tel: +514 398 7833, Fax: +514 398 7767; E-mail: AE12@MUSICA.MCGILL.CA
Iron and manganese removal	Mr O Guene, Centre Regional pour L'Eau Potable et L'assainissement a Faible Cout (CREPA), 03 BP 7112, Ouagadougou 03, BURKINA FASO. Tel: +226 31 03 59, Fax: +226 31 03 61
Handpumps	Mr Eric Baumann, Head of Department, SKAT, Vadianstrasse 42, CH-9000, St Gallen, SWITZERLAND Tel: +41 71 23 74 15; Fax: +41 71 23 75 45; E-mail: erich.baumann@skat.ch
Solar water pumping	Mr Eric Schiller, International Water Engineering Centre, University of Ottawa, Civil Engineering Department, Ottawa, Ontario K1N 6N5, CANADA Tel: +1 613 562 5800 ext 6128, Fax: +1 613 562 5173; E-mail: schiller@genie.uottawa.ca
Plt latrines	Mr Darren Saywell, WEDC, Loughborough University, Leicestershire LE11 3TU. UNITED KINGDOM. Tel: +44 1509 222885; Fax: +44 1509 211079; E-mail: d.l.saywell@lboro.ac.uk
Nightsoil/sludge treatment	Mr Martin Strauss, SANDEC, Ueberlandstrasse 133, CH-8600, Duebendorf, SWITZERLAND. Tel: +41 1 823 50 20, Fax: +41 1 823 53 99; E-mail: strauss@eawag.ch
Low cost sewerage	Professor Duncan Mara, Civil Engineering Department, University of Leeds, Leeds LS2 9JT, UK. Tel: +44 113 233 2276; Fax: +44 113 233 2308; E-mail: d.d.mara@leeds.ac.uk
SWM recycling	Dr Mansoor Ali, WEDC, Loughborough University, Leicestershire LE11 3TU. UNITED KINGDOM. Tel: +44 1509 222885; Fax: +44 1509 211079; E-mail: s.m.ali@lboro.ac.uk

LNC Contact Names and Addresses

Local network	Address
South Asia	Dr Bilqis Amin Hoque, Environmental Health Programme, International Centre for Diarrhoeal Disease Research, Bangladesh, GPO Box 128, Dhaka 1000, BANGLADESH. Tel:+880 2 600171; Fax:+880 2 883116; E-mail: bilqis%cholera@external.ait.ac.th
West Africa	Mr O Guene, Centre Regional pour L'Eau Potable et L'assainissement a Faible Cout (CREPA), 03 BP 7112, Ouagadougou 03. BURKINA FASO. Tel: +226 31 03 59, Fax: +226 31 03 61
Latin America	Ines Restrepo Tarquino, CINARA, Universidad del Valle, Facultad de Ingenieria A.A. 25157, Cali, COLOMBIA. Tel:+572 330 8961; Fax: +572 3393289; E-mail: cinara@cinara.univalle.edu.co

Country Network Contact Name and Address

Country network	Address
Philippines	Rosario Aurora Villaluna, ITN (Phils) Centre for Water Supply and Sanitation, 4th Floor, LWUA Bldg, LWUA-MVSS Compound, Katipunan Avenue, Balara, Quezon City, PHILIPPINES E-mail: itnphil@compass.com.ph

Breakdown of requests for information received at GNC

	AUG94- MAR95	MAR95- SEPT95	SEPT95- JUL96	JUL96-APR97	APR97-	TOTAL
TOTAL NUMBER OF REQUESTS	81	145	88	267	98	680
POSITION						
Director	8	16	13	35	13	85
Management	14	16	10	45	13	98
Engineer	14	24	12	30	9	89
Officer (Technical/admin)	23	28	9	51	15	126
Lecturer	14	29	11	25	4	83
Researcher	8	8	14	20	10	60
Other	8	8	18	60	6	100
ORGANISATION						
NGO	37	42	21	102	25	227
Consultancy / private sector	6	19	11	40	13	89
Government dept. / ministry	26	44	8	59	22	159
International Organisations	0	0	2	19	0	21
Higher education	22	37	21	46	10	136
LOCATION						
Africa	29	48	13	94	28	212
West	12	21	4	29	9	75
East	14	33	6	38	10	101
Southern	4	12	3	23	8	50
North	2	4	0	4	1	11
Asia	41	38	11	96	19	205
India	27	23	6	63	9	128
Pakistan	5	4	0	8	1	18
Bangladesh	2	2	1	5	2	12
Indonesia	3	1	1	2	1	8
Philippines	0	2	1	6	2	11
Thailand	1	5	0	5	0	11
Sri Lanka	1	1	2	4	2	10
Nepal	2	0	0	3	2	7
Europe	10	18	19	43	7	97
North America	0	7	3	5	3	18
South America	3	6	0	10	0	19
Colombia	1	2	0	2	0	5
Peru	2	4	0	1	0	7
Brazil	0	0	0	3	0	3
Argentina	0	0	0	2	0	2
Chile	0	0	0	2	0	2
Other	2	0	17	18	14	51
REQUEST						
Working paper 1	57	20	1	5	3	86
Working paper 2	57	23	1	4	2	87
Working paper 3	57	22	2	7	3	91
Working paper 4	53	22	1	4	1	81
Directory of research 86-92	68	24	2	5	1	100
Applied research fact sheets	57	22	1	2	0	82

Council WG output	0	68	5	0	0	73
Research advocacy projects	0	73	5	1	0	79
Electronic listservs	0	22	6	51	5	84
Cairo workshop	0	49	19	41	2	111
Directory of research 92-95	0	56	29	78	0	163
GARNET's 3rd GF submission	0	0	21	4	3	28
Directory of Donor Agencies	0	0	27	8	4	39
Inst. D newsletter	0	0	0	105	2	107
Hyg B newsletter	0	0	0	72	2	74
Low cost S newsletter	0	0	0	80	5	85
Pit Latrine newsletter	0	0	0	86	3	89
SWM newsletter	0	0	0	76	28	104
WSSCC 3rd Forum report	0	0	0	58	0	58
Guide to AR	0	0	0	119	35	154
PS treatment update	0	0	0	0	14	14
Gender issues newsletter	0	0	0	0	27	27
Listing of WSSCC coordinators	0	0	0	0	23	23
Information re: TNC	23	37	28	188	46	322
Information re: GARNET	8	23	15	30	25	101
Supplied research related information	26	68	20	108	30	252
LNC request for information					2	2

Advisory committee membership

Dr Samiha El-Katsha
Social Research Centre
The American University in Cairo
113 Sharia Kaar El Aini
PO Box 2511
Cairo
Egypt

Mr Ousseynou Guene
CREPA
03 BP 7112
Ouagadougou 03
Burkina Faso

Dr. Bilqis Amin Hoque
Senior Scientist and Head
Environmental Health Program
ICDDR, B
Mohakhali, GPO Box 128
Dhaka-1000
Bangladesh

Mr Peter Kolsky
London School of Hygiene and Tropical Medicine
Keppel Street
London WC1E 7HT
UK

Ms Ines Restrepo-Tarquino
CINARA
Universidad del Valle
Facultad de Ingenieria
A.A. 25157 Cali
Colombia

Mr Roland Schertenleib
Director
EAWAG/SANDEC
Ueberlandstrasse 133
CH-8600 Duebendorf
Switzerland

Mr Alistair Wray
Senior Water Resources Adviser
Department for International Development (DFID)
94 Victoria Street
LONDON SW1E 5JL
UK

Mr Andrew Cotton (Activity co-ordinator)
Water, Engineering and Development Centre
Loughborough University
Leicestershire LE11 3TU
UK

Mr Darren Saywell (GARNET Secretary)
Water, Engineering and Development Centre
(address as above)



GARNET

Global Applied Research Network in Water Supply and Sanitation

GARNET advisory committee: Update of activities No. VI, January - April 1996

In the past, I have tried to keep updates short. This issue is longer than normal because of a series of developments arising from the last meeting which need to be reported back to all committee members. I have also combined the update with requests for comments on publicity material which has been drafted.

I see the updates as a valuable way in which to keep advisory committee members informed of new developments arising with GARNET. I would be grateful for your comments on the issues raised in this briefing which can be returned to me at: Fax: +44 1509 211079; E-mail: D.L.Saywell@lboro.ac.uk or at the usual WEDC address.

Thank you

The main developments during this period can be summarised in the following points:

1. Funding

The GNC are pleased to announce that the ODA have agreed to fund GARNET over the course of the next biennium (1996-98). At the end of that period, ODA have clearly defined exit policy, whereby funding will pass to another (as yet unconfirmed) donor agency.

With regard to the identification of funding for GARNET (both for decentralisation and in the longer term), the GNC with Ranjith Wirasinha at the Collaborative Council will be actively pursuing other donor agencies (possibly FINNIDA).

2. Decentralisation / Operating Languages

Decentralisation:

- The GARNET Secretary visited CREPA in March to explore the possibility of establishing a RNC in West Africa. It was agreed that some reciprocal arrangements could be undertaken at the current time which would enable mutual objectives to be achieved (see Appendix I for details);
- Dr Bilqis Hoque recently indicated that interest had been expressed by an Asian-based regional representative of The World Bank in GARNET. The GNC and Dr Hoque will pursue this contact.
- Contact made with Rose Lidonde, UNDP-RWSG Nairobi to further promote GARNET amongst existing networks in East Africa;
- An approach to CEPIS to explore the possibility of a RNC role has been made. The GNC is currently awaiting a response.

Operating Languages:

- It is anticipated that through collaboration with CREPA that the GNC newsletter and selected TNC newsletters (demand-led) will in future be made available in French;
- Draft publicity material for GARNET is attached which, following comments from the advisory committee, is planned for translation into French, Spanish and Portuguese. I would seek to make this publicity information available over the course of the summer, to be combined with possible technical press releases. I would be grateful if committee members could return their comments on the leaflet to me by 31st May;

- Ranjith Wirasinha reports that GARNET's Working Papers 1-4 were not, as believed, translated into the main international languages following the Rabat Global Forum. The GNC has explored the possibility of paying for translation in the UK but the quotations received fall outside current budgetary limits.

3. Networking activity

Referrals to GNC

In my last update I noted that the number of requests recorded at the GNC had fallen and that this may have been explained by the delay in distribution of the October newsletter. Although numbers did subsequently increase, they are still significantly lower than the previous reporting period (see Appendix II). It may in part be a function of the increase in on-line access that the GARNET website has experienced (see below); it may be that the current outputs offered are not valued as highly as those previously available. I would welcome comments and thoughts from all committee members on this point. Is it a matter of major concern? If so, what do you think the GNC can do about it?

Internet/electronic networking

There has been a marked improvement in the number of requests for information received from the website, as the table below indicates (a two to three fold increase over the last reporting period). It is difficult to say why this improvement has occurred but it may be attributable to recent publicity gained through ODA's WATER newsletter, the Environmental Health Project's WWW site and via WEDC's Internet site.

As with the last update, these figures must be interpreted with caution, since they do not imply individual, separate users.

		Dec	Jan	Feb	Mar	Apr	Av/month
WWW site	No. requests	740	909	1019	1024	1658	1070
Mailing list	Messages exchanged	18	13	23	11	28	18

Consolidating and strengthening the website is a medium-term priority. Plans for the summer include concentrating on the revision of pages which are currently available for each topic network, ideally including information about other, relevant websites in the field and more complete summary information of the network's activities and recent reports. Again, I would be grateful if you could visit the site and feedback your comments and criticisms.

The electronic mailing list has gradually begun to operate independently (as seen from figures listed above). Current membership stands at 227 subscribers. During April it was noted that for the first time, the list succumbed to a common problem - messages were posted which fell outside of the list's terms of reference or target audience needs. I hope to have rectified this problem by posting information which restates the original purpose of the list and by providing relevant points of contact elsewhere.

If you wish to review archives of the mailing list and have access to the Internet, you can do so at:
<http://info.lboro.ac.uk/departments/cv/wedc/garnet/actiele1.html>

Stop Press!!

GARNET is one of the partners of the INTERWATER initiative (the new name for WENDY), which is designed to establish a major global presence on the Internet in the WS&S sector. A meeting was held recently at WEDC at which developments for the coming six months were agreed and planned. It is anticipated that co-operation on this initiative will significantly benefit GARNET's worldwide presence on the Internet.

4. Topic Networks

I have received the following notifications from network coordinators as to recent activities. Some coordinators were unable to meet the deadline for this update, so I hope to include their news in the global network newsletter planned for June.

Institutional development

Richard Franceys at WEDC has issued his fifth network newsletter which details limited amounts of research related information on the following issues: a desk study of private sector participation in urban water supply around the world; a new ODA funded project on contracting out of services and declared benefits of water and sanitation utilities; and a review of WEDC postgraduate work ranging from the management of urban water and sanitation in Brazil to an institutional development overview of Kaduna State Water Board in Nigeria.

Participatory approach

Karen Jacobs at UNDP/World Bank RWSG Philippines is planning her activities designed to reactivate this network following Mary Judd's departure at the end of 1995.

Hygiene behaviour

Astier Almedom and Caroline Smart at the London School of Hygiene and Tropical Medicine have issued their third topic network newsletter. Although limited in coverage, the newsletter does carry information relating to research on a Hygiene Evaluation Procedures Handbook (designed for fieldworkers); a hygiene promotion programme in Lucknow, India and a water and sanitation evaluation in eleven centres in Ethiopia. Recent publications by network members are listed.

Peri-urban issues

The Peri-Urban Network issued its sixth edition of *Voices in the City* in March. The theme of the issue was devoted to the management of solid wastes, and featured articles detailing research on street sweeping in Karachi, Pakistan; waste collection and removal practices in Madras; community participation for effective Dengue control; results from research into the improvement of sanitary conditions in India; new Internet sites and a digest of news and publications relevant to the topic.

Rainwater harvesting

No network news to report.

Solar disinfection & distillation

Tom Lawand at Brace Research Institute reports on work undertaken by the Institute to determine the synergetic effect of exposure to solar radiation and temperature for contaminated water placed in plastic bags. The Institute is planning a network newsletter to highlight recent activities and developments in the field.

Iron and manganese removal

No network news to report.

Chemical disinfection

The GNC proposes that an alternative coordinator for this network should be found. There does not seem to be the required levels of commitment necessary to maintain the topic network under current arrangements. It is suggested that the GNC contact Peter Odendaal in an attempt to find another coordinator within WRC.

Suspended solids removal

This network continues to remain inactive. The GNC suggest that the June edition of GARNET's network newsletter ask network members to suggest possible candidates for those networks currently without coordinators. If no response is forthcoming, the GNC suggest that the network is removed from the framework.

Handpumps

Eric Baumann, co-ordinator of the Handpump Technology Network (at SKAT) reports on recent missions to Uganda and India to collect the data necessary for the compilation of the Network's case studies on the

respective water supply policies of both countries. The case studies should be made available shortly. HTN published as a working paper the proceedings of the IDE workshop which took place in India in September 1995. Two new publications, 'Guidelines for Quality Control and Quality Assurance of Afridev Handpumps' and 'Afridev Handpump Installation and Maintenance Manual' were completed, printed and are now available. A workshop focusing on institutional aspects, standardisation, O&M and local capacity building is in preparation for November 1996 and will be held in Malawi.

Solar water pumping

Eric Schiller at IWEC reports that a comprehensive manual relating to solar water pumping (in French) is being prepared for dissemination. Other activities include installation of a second solar water pumping system in Ouagadougou, Burkina Faso and the training of two graduate students in water solar pumping at the University of Ottawa.

Pit latrines

Darren Saywell at WEDC published his first network newsletter at the end of January 1996. The newsletter contained research related information on the use and management of pit latrines in a refugee context; Gunnar Jacks; pit latrines in high density, low income urban communities; and a digest of published information relating to latrine design, construction, management and maintenance. Network membership currently stands at 38.

Nightsoil/sludge treatment

No network news to report.

Low cost sewerage

No network news to report.

Solid waste management (recycling)

Mansoor Ali at WEDC has published his third topic network newsletter. The April 1996 edition details information on harbour waste; micro-enterprises for primary collection; network member requests on informal solid waste collection in low income Rio de Janeiro; and details of ISWA developing countries brochure. Current network membership stands at 70, of which active members account for between 10-15. Mansoor Ali reports that in the last quarter there have been an estimated 10-12 requests for information, many from countries not previously covered in the network.

New Networks!!

GARNET is happy to announce that the British Geological Survey will be taking on the responsibility of coordinating a new network on groundwater development. Andrew Mackenzie will act as co-ordinator. The network should be launched in time to coincide with the next global network newsletter.

Following my recent correspondence with you concerning the International Development Research Centre (IDRC) offer to coordinate a network on water quality monitoring, I can report that no objections were raised from any committee members. The GNC has subsequently informed the IDRC that the water quality monitoring network can be established when convenient. They have indicated their willingness to launch the network in June.

5. GARNET newsletter

Issue 5 of the Global Network Newsletter was due for release in April, but has been delayed to incorporate research related information contained in *People and Water: Partners in for Life* - the meeting report from the Collaborative Council's Third Global Forum. It is anticipated that the next edition should be completed before end June.

If there are any comments on this update, or any further information you wish to communicate, please do not hesitate to contact me on the usual fax or telephone numbers. I shall circulate another update to committee members in September.

With best wishes,

Appendix I - Discussions at CREPA re: GARNET and possible RNC role, 12/3/96

Present: Ousseynou Guene, Tandia Cheick Tidiane, Darren Saywell

Summary

1. Presentation covered key points of GARNET's recent history, purpose and ToR, current structure, identifiable constraints and recommendations for coming biennium (1996-98)
2. In response, CREPA gave a presentation outlining their current network, activities and the context in which applied research (AR) is found in the region. Some points to note include:
 - There is an identifiable demand for AR in the sub-region, but the main constraints to further expansion for GARNET were confirmed as focusing on operating language(s) and the centralised nature of GARNET;
 - Although CREPA is conscious of a demand for better and greater AR, it was difficult to establish in exactly which disciplines that demand existed, since no formal evaluation of the needs of their network members had been undertaken. Informally, however, the main areas of AR demand in the sub-region were thought to include: iron and manganese removal; pit latrines; chlorination; participatory approaches; SWM and hygiene education
 - CREPA's main network members include relevant government units, engineering schools and NGO's in member countries. There are plans to decentralise the network in five countries (Cote D'Ivoire, Mali, Burkina, Benin and Guinea); autonomously operating networks being the objective of this initiative;
 - CREPA viewed the role of a hypothetical RNC in the region as being: fundseeker, documentation (i.e., IRC-type), co-ordination of existing networks, and promotion of AR
3. Options and constraining factors to further collaboration and achievement of mutual goals were explored. Key points include:
 - To undertake an RNC role, CREPA felt that the *minimum* level of resources required included: funding for a new staff member full time; reinforcement of existing e-mail link (to overcome existing problems with ORSTOM and to facilitate networking); and correspondence and communication costs implied by the new post. It was not possible to put an actual figure to these resources at the time, but it is clear that several thousand dollars are implied
 - CREPA agreed (in principle) that if funding were available they would assume the responsibilities necessary to operate as an RNC (with the role mutually defined between CREPA and GARNET)
 - CREPA is willing to enter into reciprocal arrangements with GARNET whereby mutual goals can be achieved
4. The following roles and responsibilities were proposed:

CREPA	GARNET
1. Selected translation of TNC outputs (demand-led)	1. Selected translation of CREPA outputs
2. Translation of GNC newsletter and promotion via 'Info CREPA'	2. Bandwidth on GARNET's WWW site
3. Evaluation of need for AR in sub-region throughout network	3. Access to GARNET's e-mail forum
4. Promotion of GARNET to regional offices of key players, donors, stakeholders	4. GARNET to explore possibility of pursuing funding for RNC role (SDC and DANIDA)

Next steps

1. Confirm and clarify arrangements by letter;
2. Establish and agree time frame for activities;
3. Request CREPA to monitor and report on these arrangements to the GNC

Appendix II - Breakdown of referrals to GNC

	AUG94- MAR95		MAR95 - SEPT95		SEPT95- MAR96		TOTAL		
TOTAL NUMBER OF REQUESTS	91		142		77		310		
POSITION									
Director	8		16		11		35	12%	
Management	14		16		9		39	13%	
Engineer	14		24		10		48	16%	
Officer (Technical/admin)	23		28		7		58	20%	
Lecturer	14		29		11		54	18%	
Researcher	8		8		12		28	9%	
Other	8		8		17		33	11%	
ORGANISATION									
NGO	37	41%	42	30%	21		100	34%	
Consultancy / private sector	6	7%	19	13%	11		36	12%	
Government dept. / ministry	26	29%	44	31%	8		78	26%	
International Organisations	0	0%	0	0%	2		2	1%	
Higher education	22	24%	37	26%	21		80	27%	
LOCATION									
Africa	29		48		13		90		34%
West	12	38%	21	30%	4		37	32%	
East	14	44%	33	47%	6		53	46%	
Southern	4	13%	12	17%	3		19	17%	
North	2	6%	4	6%	0		6	5%	
Asia	41		38		11		90		34%
India	27	66%	23	61%	6		56	62%	
Pakistan	5	12%	4	11%	0		9	10%	
Bangladesh	2	5%	2	5%	1		5	6%	
Indonesia	3	7%	1	3%	1		5	6%	
Philippines	0	0%	2	5%	1		3	3%	
Thailand	1	2%	5	13%	0		6	7%	
Sri Lanka	1	2%	1	3%	2		4	4%	
Nepal	2	5%	0	0%	0		2	2%	
Europe	10		18		19		47		18%
North America	0		7		3		10		4%
South America	3		6		0		9		3%
Colombia	1	33%	2	33%	0		3	33%	
Peru	2	67%	4	67%	0		6	67%	
Other	2		0		17		19		7%
REQUEST									
Working paper 1	57	16%	20	5%	1		78	9%	
Working paper 2	57	16%	23	6%	1		81	9%	
Working paper 3	57	16%	22	5%	2		81	9%	
Working paper 4	53	15%	22	5%	1		76	9%	
Directory of research 86-92	68	19%	24	6%	2		94	11%	
Applied research fact sheets	57	16%	22	5%	1		80	9%	
Council WG output	0	0%	68	17%	5		73	8%	
Research advocacy projects	0	0%	73	18%	5		78	9%	
Electronic mailing list	0	0%	22	5%	6		28	3%	
Workshop proceedings	0	0%	49	12%	19		68	8%	
Directory of research 92-95	0	0%	56	14%	29		85	10%	
3rd Global Forum Report					21		21	2%	
Directory of Donor Agencies					27		27	3%	
Information re TNC	23		37		28		88		
Information re GARNET	8		23		15		46		
Supplied research related information	26		68		20		114		



GARNET

Global Applied Research Network in Water Supply and Sanitation

GARNET advisory committee: Update of activities No. VII, May - September 1996

For those who responded to my request for comments on the last update, many thanks. I would appreciate further feedback to the points raised in this update.

The main developments during this period can be summarised in the following sections:

1. Funding

The GNC has forwarded a package of information including indicative budgets for financial years 1996-97 and 1997-98 to Ranjith Wirasinha to facilitate negotiations with potential funding agencies for GARNET post April 1998. Ranjith reports that efforts have been made to discuss this issue with FINNIDA although no direct contact has as yet been arranged. My understanding is that FINNIDA wish to contribute in some way to the WSSCC, and may be looking for a suitable entry point during 1997.

The GARNET Secretary met with Ranjith Wirasinha during WEDC's conference in New Delhi, and stressed the need to identify potential funding agencies for fledgling regional network centres as soon as possible. Committee members may want to consider possible options that GARNET can explore with respect to this issue prior to the next meeting in November.

2. Decentralisation / Operating Languages

Decentralisation:

- A dialogue has been established between Dr Charles Pendley, Dr Bilqis Hoque, Gayle Gibbons (Dissemination officer, World Bank HQ) and the GNC regarding possible collaboration between the Bank and GARNET in the SE Asian region. Initially, the following forms of collaboration were suggested:

1. Cross linking web sites;
2. Reciprocal publications arrangement via Internet (i.e., case studies, issue papers, etc.);
3. Access to the Bank's regional mailing list of contacts and links to the regions' country level activities;
4. A proposed 'switchboard' (the Bank to receive material from GARNET and distribute regionally; organisation of e-mail fora or global electronic meetings).

The GARNET Secretary subsequently met Dr Pendley in New Delhi to develop these ideas further, and it seems clear that points 1 and 3 above can be achieved in the short term. Points 2 and 4 will take longer to bring about, and it was agreed that:

- a) World Bank HQ (via Gayle Gibbons) send out a message to all RWSG offices requesting co-operation and collaboration with GARNET. The GNC then to make contact and seek promotion and publicity within the sub-region (these details to be worked out on a region-by-region basis);
- b) That GARNET work with soon to be appointed IEC officer at RWSG Delhi in order to achieve the type of networking suggested by a 'switchboard' agreement.

- CEPIS (Peru) have replied to GARNET's approach regarding the feasibility of acting as regional RNC in Latin America. Although they have provisionally indicated a willingness to take on the responsibilities involved, it was made clear that GARNET would have to co-finance the cost of establishing a dedicated line to the Internet (estimated at US\$ 12000). The GNC suggests delaying further action on this point until it has been discussed at the November advisory committee meeting.
- An approach was also made to CINARA (Colombia) following CEPIS' initial failure to respond. Following a meeting at WEDC on 26th September between Andrew Cotton and CINARA's director, the following points were provisionally agreed :
 - [a] CINARA are prepared to act as RNC for the Latin American sub-region. No mode of operation to be prescribed; CINARA will develop their own ideas on how to manage these matters
 - [b] GNC to forward basic information about GARNET for CINARA's next newsletter
 - [c] CINARA to develop a short proposal with workplan for the RNCs activities. GNC to comment on these plans.
 - [d] CINARA / GNC to consider the possibility of producing a regional newsletter sometime in 1997

The GNC recommends that this issue is tabled at the next committee meeting for discussion.

- Following on from the inclusion of an article on GARNET in 'Water and Sanitation News', and 'NETWAS update', NETWAS International, Kenya have responded positively to the idea of further collaboration with the GNC. In particular, NETWAS are prepared to provide access to their directory of key stakeholders in Kenya and East Africa, and to promote GARNET more widely through the planned NETWAS country branches within the region. NETWAS are currently preparing a comprehensive proposition on networking for GARNET. Discussions have to date been conducted with Paul Saka Chikombe, Senior Documentalist and Editor of 'Water and Sanitation News'.
- The arrangement with CREPA continues to be constrained by [1] The lack of funding available for the tasks which GARNET and CREPA have agreed to, and [2] the absence of dedicated personnel for these tasks. Ousseynou Guene has informed the GNC that an article on GARNET and partial translation of the July Newsletter will feature in *InfoCrepa* later in 1996 - I hope that a questionnaire relating to network members' applied research interests will also be included. Clearly, the experience with CREPA underlines the priority that must be given to securing adequate funding and personnel for the responsibilities envisaged with RNCs.

Operating Languages:

- To my knowledge, no newsletters forwarded to CREPA have yet been translated into French. Translation remains one of the most intractable problems with regard to promotion of multi-lingual networking. This issue will need to be revisited at the next committee meeting.
- Draft publicity material will be printed in September (in French, Spanish & Portuguese). Targeted distribution will take place in October (i.e., regional World Bank offices, via CINARA, CEPIS, CREPA etc.)
- SANDEC have generously agreed to finance the cost of translating GARNET's Working Papers 1-4 into French. The papers will appear on GARNET's WWW site in coming months and relevant publicity will be planned to coincide with the targeted distribution mentioned above.
- The newly established Water Quality Monitoring network, run by IDRC in Canada, will operate in both English and French.

3. Networking activity

Referrals to GNC

See Appendix I for detailed breakdown. Although the trend is upwards since publication of the last newsletter (July), absolute numbers are still disappointingly low. It is difficult to know whether this implies lack of interest in GARNET or simply a passive readership. Either way, it may be appropriate to consider altering the format and content of the newsletter in an attempt to make the newsletter more meaningful to the practitioners, funders and users of research. Possible alterations could include moving the format to A4, and including more

distinct sections that appeal to a distinct readership. For example, brief summaries of individual pieces of research, in addition to the overview of network activities; more case study information; surveys of research demands and needs by region/country etc.

Internet/electronic networking

The number of requests to the website seem to have settled to a monthly average of about 1,200. Developing the site has been slower than anticipated given the cumbersome editing process involved through using current software. WEDC is currently evaluating new Internet editing package, which I hope may quicken this procedure. Feedback from the committee on the content of the website and ways in which it could be improved would be welcomed.

		May	June	July	Aug.
WWW site *	No. requests	1102	1235	1441	1110
Mailing list	Messages exchanged	15	13	22	31

* (As with the last update, these figures must be interpreted with caution, since they do not imply individual, separate users).

Membership of the electronic mailing list stands at 281 subscribers, with messages posted (on average) once every 2 days. A brief review of subscribers' e-mail addresses (which could be identified) indicates that 59 possess e-mail accounts in developing nations and 76 are working within a higher education institutions. The remainder are unidentifiable, typically possessing numeric accounts.

Following some difficulties in April, messages posted to the list now fall more clearly within its stated ToR. I am planning to ask subscribers to evaluate the list in October, so that more meaningful feedback can be provided at the next advisory committee meeting. Examples of issues discussed in July / August include:

- Bio chemical emptying of pit latrines
- Tubewell maintenance
- Fertiliser usage
- Annotated bibliography on wetlands for wastewater treatment
- UV irradiation of faecal matter
- Water quantities for clothes washing

If you wish to review archives of the mailing list and have access to the Internet, you can do so at:
<http://info.lboro.ac.uk/departments/cv/wedc/garnet/actiele1.html>

The GNC is considering the possibility of staging electronic conferences of the type which are increasingly common on the Internet. If any committee members have experiences with such conferences I would like to hear from them.

Topic Networks

Due to time constraints, I have not been able to provide a comprehensive update to this section since the July newsletter, excepting the following networks:

Water quality monitoring

Giles Forget and Andres Sanchez at IDRC have established the water quality monitoring network, with an interface on the Internet. Although currently undergoing further development work (which should be completed before November), the range of network services will include: on-line subscription to the network; archives of waterQ (an e-mail listserver); papers and articles generated through the network; and a listing of all network members and their addresses. The website will have a French language parallel. The monthly archives will form the basis of a periodic paper-based newsletter which will be sent out to all non-Internet subscribers. Current membership stands at 46.

Pit latrines

Darren Saywell at WEDC has issued the second pit latrine network newsletter, to the network's current membership of 85. The September issue carries details of members queries; recent research work on infiltration of pit latrine effluent into groundwater and microbiological examination of composting latrines; notification of several new publications in the field and two workshops (collection of human excreta in low income urban neighbourhoods and appropriate sanitation in small islands). The newsletter also carries a full listing of all network members.

Low cost sewerage

Duncan Mara has established an electronic mail listserver on low cost sewerage.

Solid waste management (recycling)

Mansoor Ali at WEDC has published his fourth topic network newsletter. The August 1996 edition details information on the Urban Waste Bulletin, micro-enterprises in SWM, waste management for economically developing countries, and the international source book on municipal solid waste. Two short case studies are included with the newsletter (detailing community based solid waste management in Metro Manila, and four Indonesian cities). Current network membership has expanded rapidly since the last update and now stands at 134.

Rainwater harvesting

Confirmation has been received from Dr G K Bramah (Secretary General, International Rainwater Catchment Systems Association) that a Rainwater Harvesting Information Service (RHIS) was officially launched on 28th August (funding by SIDA), with the purpose of providing efficient, reliable and timely information on rainwater catchment systems, technologies and activities worldwide. RHIS is housed in the office complex of Africa Water Network (an umbrella organisation of African NGOs in the WSS field). RHIS network membership is drawn from 82 countries internationally with 1400 individuals and/or organisations (it is not yet known how many are active in research). The network receives at least five enquiries per week either through direct membership or via the GNC.

New network!

Rosario Villaluna, Network Centre Co-ordinator, ITN (Philippines) has expressed her willingness to co-ordinate a Philippines based country network under GARNET's auspices. ITN's country level network has been recently defined in a strategic planning workshop in August and it is anticipated that the network will function on similar grounds to the Bangladesh example.

4. Miscellaneous

- Articles on GARNET accepted for inclusion in ODA WATER (issue 3, November 1996); NETWAS News and the newsletter of ITN Philippines.
- Poster display and paper presented at WEDC's New Delhi conference. 20 new subscribers joined GARNET from the Conference. Further dialogue relating to GARNET in the sub-region planned with Mr B.B. Samanta, Project Co-ordinator, Sanitation and Communication, UNICEF, New Delhi.
- Half page advertisement on GARNET to appear in October issue of *Waterlines*.

5. Next advisory committee meeting

A quick reminder that the next meeting will be held on **Monday 11th - Tuesday 12th November 1996** at the School of Hygiene and Tropical Medicine in London. The meeting will start at 10:00am on the 11th and is planned to finish at lunchtime on the 12th.

Please find attached the provisional agenda for the meeting - if you would like to make any additions or amendments let me have them as soon as possible, and not later than October 25th. I shall be in contact closer to the date with regard to accommodation in London for those who require it.

If there are any comments on this update, or any further information you wish to communicate, please do not hesitate to contact me on the usual fax or telephone numbers. I shall circulate another update to committee members in January 1997.

Appendix I - Breakdown of referrals to GNC

	AUG94-MAR96		MAR96 - SEPT96		SEPT96- JUL96		JUL96-		TOTAL	
TOTAL NUMBER OF REQUESTS	91		142		88		138		469	
POSITION										
Director	8		16		13		23		60	14%
Management	14		16		10		26		66	15%
Engineer	14		24		12		17		67	15%
Officer (Technical/admin)	23		28		9		33		93	21%
Lecturer	14		29		11		8		62	14%
Researcher	8		8		14		7		37	8%
Other	8		8		18		24		58	13%
ORGANISATION										
NGO	37	41%	42	30%	21	33%	48		148	34%
Consultancy / private sector	6	7%	19	13%	11	17%	21		57	13%
Government dept. / ministry	26	29%	44	31%	8	13%	34		112	26%
International Organisations	0	0%	0	0%	2	3%	15		17	4%
Higher education	22	24%	37	26%	21	33%	20		100	23%
LOCATION										
Africa	29		48		13		53		143	35%
West	12	38%	21	30%	4	31%	12		49	29%
East	14	44%	33	47%	6	46%	24		77	46%
Southern	4	13%	12	17%	3	23%	16		35	21%
North	2	6%	4	6%	0	0%	1		7	4%
Asia	41		38		11		52		142	35%
India	27	66%	23	61%	6	55%	34		90	63%
Pakistan	5	12%	4	11%	0	0%	3		12	8%
Bangladesh	2	5%	2	5%	1	9%	4		9	6%
Indonesia	3	7%	1	3%	1	9%	2		7	5%
Philippines	0	0%	2	5%	1	9%	4		7	5%
Thailand	1	2%	5	13%	0	0%	3		9	6%
Sri Lanka	1	2%	1	3%	2	18%	1		5	4%
Nepal	2	5%	0	0%	0	0%	1		3	2%
Europe	10		18		19		18		65	16%
North America	0		7		3		3		13	3%
South America	3		6		0		6		15	4%
Colombia	1	33%	2	33%	0		1		4	27%
Peru	2	67%	4	67%	0		0		6	40%
Brazil	0		0		0		2		2	13%
Argentina	0		0		0		1		1	7%
Chile	0		0		0		2		2	13%
Other	2		0		17		6		25	6%
REQUEST										
Working paper 1	57	16%	20	5%	1	1%	2		80	8%
Working paper 2	57	16%	23	6%	1	1%	2		83	8%
Working paper 3	57	16%	22	5%	2	2%	2		83	8%
Working paper 4	53	15%	22	5%	1	1%	2		78	8%
Directory of research 86-92	68	19%	24	6%	2	2%	1		95	10%
Applied research fact sheets	57	16%	22	5%	1	1%	1		81	8%
Council WG output	0	0%	68	17%	5	4%	0		73	7%
Research advocacy projects	0	0%	73	18%	5	4%	0		78	8%
Electronic listserver	0	0%	22	5%	6	5%	32		60	6%

Cairo workshop	0	0%	49	12%	19	16%	28		96	10%
Directory of research 92-95	0	0%	56	14%	29	24%	43		128	13%
GARNET's 3rd GF submission	0		0		21	18%	1		22	2%
Directory of Donor Agencies	0		0		27	23%	3		30	3%
Inst. D newsletter	0		0		0		80		80	
Hyg B newsletter	0		0		0		51		51	
Low cost S newsletter	0		0		0		60		60	
PR Latrine newsletter	0		0		0		64		64	
SVM newsletter	0		0		0		58		58	
WSSCC 3rd Forum report	0		0		0		37		37	
Guide to AR	0		0		0		71		71	
Information re: TNC	23		37		28		105		193	
Information re: GARNET	8		23		15		4		50	
Supplied research related information	26		68		20		79		193	



GARNET

Global Applied Research Network in Water Supply and Sanitation

GARNET advisory committee: Update of activities No. VIII, October 1996 - February 1997

Once again, this update is longer than normal due to significant developments following the last advisory committee meeting. I have placed information in Appendices so that committee members have the option as to whether to refer to these items or not, however, I hope you will see the need for continued guidance at this time. Please let me have your comments on any of the points raised and forward them to me at WEDC - Fax: 00 44 1509 211079 or E-mail: d.l.saywell@lboro.ac.uk

The main developments during this period can be summarised in the following points:

1. Funding

Ranjith Wirasinha at the Collaborative Council reports that representatives from FINNIDA have now been provided with detailed information about GARNET and its activities within the Council's framework.

2. Decentralisation / Operating Languages

Decentralisation:

- As requested following the last advisory committee meeting, each of the prospective LNC's have returned terms of references and indicative budgets for their activities. Arrangements are currently being made to transfer the seed fund to each of the collaborating agencies. A summary of objectives and anticipated activities is listed below:

CINARA	CREPA	ICDDR,B
Objectives	Objectives	Objectives
<ul style="list-style-type: none"> Establishment of network centres in Colombia / L America Identify AR needs Information dissemination 	<ul style="list-style-type: none"> Objectives as agreed at last advisory committee meeting. 	<ul style="list-style-type: none"> Identify AR needs Facilitate dissemination of AR activities Enable use of research in solving everyday problems Identify guidelines for strengthening AR
Activities	Activities	Activities
<ul style="list-style-type: none"> Inventory of AR institutions Summary document identifying needs and gaps in sector Library awareness service (monthly) Quarterly GARNET newsletter Translation of TNC newsletters 	<ul style="list-style-type: none"> Identification of AR needs and target groups Develop local mailing list Collate research project listing Monitor / respond to local queries Local meetings and workshops Translation of TNC newsletters Regional newsletter already in place - Info Crepa 	<ul style="list-style-type: none"> Survey of member needs GARNET workshops Regional newsletter Inventory of research institutions Collection of dissemination materials Training meetings/workshops on specific activities Development of website Organise/support monitoring and evaluation of NGO projects to improve AR capacity
Funding	Funding	Funding
<ul style="list-style-type: none"> Seed fund targeted on purchase of hardware for documentation centre 	<ul style="list-style-type: none"> Seed fund to cover communication costs and contribute to Secretary costs 	<ul style="list-style-type: none"> Used to print newsletter, organise workshops/seminars

Each LNC has been made aware that the seed fund needs to be viewed as a platform for consolidating further activities within the centre and to base efforts on lobbying for funding in the region.

- A dialogue has been established with Environmentek (CSIR) in RSA regarding a Southern African LNC (arising from publicity given to GARNET in WATER newsletter). Standardised terms and conditions for potential LNC's have been sent and the GNC is currently awaiting a reply;
- NETWAS have forwarded a copy of Water Supply and Sanitation: a Directory of Sources of Information and Documentation in Kenya. It is suggested that this be used as a means for furthering contact through a targeted mailshot and publicity campaign.
- Progress is being made towards assessing applied research networking needs in the Middle Eastern region. With the assistance of Pat Hotchkiss-Bakir (ex-WEDC student) a contact letter has been sent out to GARNET's middle east members. This attempts to assess the level of interest in applied research networking and the type of network that would be desired if one were to be established. Further report in the next update.

Operating languages:

- The Water Quality Monitoring website is now operational, and Samiha El-Katsha has finished the Arabic language version of the current publicity material. The GNC to publish and make available this information over the coming months.
- The main focus on this item is via the LNC's, so indirectly further steps are being taken towards multi-lingual operation.

3. Networking activity

Referrals to GNC

See Appendix I for breakdown.

Internet/electronic networking

Website

Website access figures have remained constant, as seen from the table below. Above average figures for November may reflect publicity arising from an article in the ODA's WATER magazine and from a half page advertisement in Waterlines. The website was updated in November with the addition of the following:

- French and Spanish language introductions;
- For selected networks, consolidation and expansion of topic related information;
- Publication of checklists on how to establish networks; factsheets on types of networking activity and conditions applied to prospective topic network co-ordinators under GARNET;
- Links to the newly launched IRC and INTERWATER sites (reciprocal links have been established);
- 'Archive' section carrying links to newsletters, journals and glossaries on-line;
- There is now a 'feedback' page that allows browsers to comment on the contents of the website.

It is proposed that the GARNET homepage be added to OneWorld Online's website as a means of raising awareness of the site.

Listserver

Membership of the listserver stands at 315 subscribers, with messages posted (on average) once every 2 days. If you wish to review archives of the mailing list and have access to the Internet, you can do so at:

<http://info.lboro.ac.uk/departments/cv/wedc/garnet/actiele1.html>

Table indicating responses to website and listserver

		Sep	Oct	Nov	Dec	Jan
Website *	No. requests	817	1140	1582	1041	1124
Listserver	Messages exchanged	50	37	28	12	21

Topic Networks - reported activities

Participatory approaches

After a dormant period, the RWSG-EA office has agreed to take on co-ordination of the network for a trial six month period starting 1st March. During that period, Nilanjana Mukherjee (a hygiene education specialist) and Priya Tuli (a regional communications specialist) will share the duties involved in co-ordination. The GNC will provide support and advice on developing the network over the coming months. Current membership: 108

Hygiene behaviour

In early January, Valerie Curtis (who took over responsibility of co-ordination from Astier Almedom) and Caroline Smart circulated a contact letter and questionnaire to all existing network members in order to establish how members wanted the network to develop in the future. A network output is planned for March/April 1997. Current membership: 150

Urban environmental health

Dan Campbell reports that the Urban Environmental Health network produced its seventh *Voices from the City* newsletter in September 1996. The focus of the newsletter was on vector-borne diseases and included articles on the world-wide Rotary Against Malaria (RAM) project, a pilot project to help sewer workers in Ahmedabad, India receive health care; an NGO in the Philippines tackling the problems of solid waste in Metropolitan Manila; and the twinning of neighbourhoods to improve infrastructure in Tetouan, Morocco. In addition to the newsletter, three informal e-mail bulletins are distributed weekly covering topics such as malaria, acute respiratory infection and environmental health. Current network membership stands at 984 of which 15-20 per cent are estimated to be involved in research. On average the network receives between 20-30 information requests per month from members. Future plans include increasing the publication of *Voices* from a biannual to a quarterly newsletter and editing the network's membership to ensure a more active network rather than an ever growing mailing list.

Rainwater harvesting

The Rainwater Harvesting Information Service (RHIS) was launched in August 1996. Its objective is to provide efficient, reliable and timely information on rainwater catchment systems, technologies and activities world-wide. RHIS is a project of the International Rainwater Catchment Systems Association (IRCSA) and is physically housed at the offices of the Africa Water Network (AWN), an umbrella organisation of African NGO's in the water and sanitation sector. The Information Service maintains two databases: one of members and the second of bibliographic sources. The network currently has members in 82 countries; comprising 1400 individuals and organisations, with an average of about 5 enquires per week. A newsletter dedicated to the topic, *Raindrop*, is released twice a year.

Water quality monitoring

Recently created during the Summer of 1996, Gilles Forget at IDRC reports that much of the network's recent activity has concentrated on establishing and organising the Internet site which will serve as the network's main interface. The site contains a number of features including full text versions of technical papers, links to other sites on water quality monitoring and an electronic listserv on the topic. Gilles Forget and Andres Sanchez will shortly conduct a registration campaign with the 60 sector professionals who have already expressed an interest in the topic. If you wish to register, please do so at the website: <http://www.idrc.ca/garnet>.

Handpumps

Eric Baumman at SKAT reports that a workshop is planned for March 1997 where an intense exchange of information and experience is planned. The workshop, to be held between 17-21 March in Malawi has as its theme 'Partnerships, Roles and Responsibilities'. It is anticipated that more than 100 specialists will participate and the proceedings will be published on the SKAT homepage <http://www.skat.ch/>. The specifications for the Malda pump will be issued in March 1997, whilst the Afridiv and India MarkII/III specifications are currently being revised and publication is expected in June 1997. There are currently 150 network members, of which approximately 15 per cent are active in research projects. The co-ordinator receives about 3-4 enquiries each week.

Pit latrines

Darren Saywell at WEDC plans to contact all network members to assess current activities, and on-going research projects. Future plans for the network include expanding the existing website and issuing a third newsletter in April. Current membership: 119.

Nightsoil/sludge treatment

Martin Strauss at SANDEC reports that there are currently 100 network members, of which approximately 15 are directly involved in research on faecal sludge treatment. Future plans include the issuing of a topic based newsletter; a project update in SANDEC News No.3 and the publication of the first of three discussion/guideline papers on faecal sludge treatment by solids-liquid separation and stabilisation ponds.

Low cost sewerage

Duncan Mara at the University of Leeds reports that there are 125 network members with an estimated 10 per cent actively involved in research. The network is operating exclusively by e-mail and in recent months discussions have covered topics such as settled sewage in Namibia, pit latrine linings and the problem of sand in sewers. Future plans include an International Conference in 1999 and the creation of a website.

Solid waste management (recycling)

Mansoor Ali at WEDC published his fourth topic network newsletter in September 1996. This edition covered features on: Urban Waste Expertise Programme Bulletin No. 1; references to the International Sourcebook for Municipal Solid Waste; and members' queries. The newsletter also included two short case studies supplied by members on community based solid waste management in Metro Manila and four Indonesian cities. A fifth newsletter is planned for distribution in March 1997. Current network membership: 156

Country networks

Bangladesh

Bilqis Hoque reports that the first meeting of the local advisory committee was held on February 6th. This finalised the contents of a questionnaire sent to all national members to identify research needs, and to decide on the theme of the next national workshop.

Philippines

Rory Villaluna at ITN Philippines in Manila has formally established the country based network. No further news available.

New Networks!!

A **Gender Issues** network (originally co-ordinated by Wendy Wakeman and now managed by Christine van Wijk at IRC) has been established. The network has issued two newsletters - September 1996 and January 1997. The network originally began life as one of the WSSCC's working groups.

4. Miscellaneous

- As of 7th February, the WG co-ordinators have a dedicated listserver, which has been set up through GARNET at Loughborough University. It is hoped that this will increase communication between working groups in the run up to the 4th Global Forum in Manila.
- The next Global Network Newsletter is currently being drafted and should be distributed by end March.
- Tony Brand, Programme Officer, Regional Water and Sanitation Network of Central America. UNICEF plans to reprint and translate a recent article on networking produced by the GARNET Secretary. The reprinted article will appear in UNICEF's local bulletin, the Source.

5. Next advisory committee meeting

The GNC feels that given the importance of the next advisory committee meeting (the last before the Manila Forum, decision on content of GARNET's submission to the Forum, and the need to ensure wide participation), that the next meeting should be held in London. It is proposed that the meeting be held at ODA's offices in June. Proposed dates of the meeting will be circulated shortly.

The next advisory committee update is planned for May 1997.

Appendix I - Breakdown of referrals to GNC

	AUG94-MAR95		MAR95 - SEPT95		SEPT95-JUL96		JUL96-		TOTAL	
TOTAL NUMBER OF REQUESTS	91		142		88		240		561	
POSITION										
Director	8		16		13		32		69	13%
Management	14		16		10		44		84	15%
Engineer	14		24		12		28		78	14%
Officer (Technical/admin)	23		28		9		42		102	19%
Lecturer	14		29		11		22		76	14%
Researcher	8		8		14		16		46	8%
Other	8		8		18		55		89	16%
ORGANISATION										
NGO	37	41%	42	30%	21	33%	93		193	36%
Consultancy / private sector	6	7%	19	13%	11	17%	36		72	13%
Government dept. / ministry	26	29%	44	31%	8	13%	53		131	24%
International Organisations	0	0%	0	0%	2	3%	17		19	4%
Higher education	22	24%	37	26%	21	33%	40		120	22%
LOCATION										
Africa	29		48		13		80		170	34%
West	12	38%	21	30%	4	31%	21		58	30%
East	14	44%	33	47%	6	46%	33		86	44%
Southern	4	13%	12	17%	3	23%	23		42	22%
North	2	6%	4	6%	0	0%	3		9	5%
Asia	41		38		11		91		181	36%
India	27	66%	23	61%	6	55%	60		116	64%
Pakistan	5	12%	4	11%	0	0%	7		16	9%
Bangladesh	2	5%	2	5%	1	9%	5		10	6%
Indonesia	3	7%	1	3%	1	9%	2		7	4%
Philippines	0	0%	2	5%	1	9%	6		9	5%
Thailand	1	2%	5	13%	0	0%	5		11	6%
Sri Lanka	1	2%	1	3%	2	18%	3		7	4%
Nepal	2	5%	0	0%	0	0%	3		5	3%
Europe	10		18		19		38		85	17%
North America	0		7		3		5		15	3%
South America	3		6		0		10		19	4%
Colombia	1	33%	2	33%	0		2		5	26%
Peru	2	67%	4	67%	0		1		7	37%
Brazil	0		0		0		3		3	16%
Argentina	0		0		0		2		2	11%
Chile	0		0		0		2		2	11%
Other	2		0		17		15		34	7%
REQUEST										
Working paper 1	57	16%	20	5%	1	1%	5		83	8%
Working paper 2	57	16%	23	6%	1	1%	4		85	8%
Working paper 3	57	16%	22	5%	2	2%	6		87	8%
Working paper 4	53	15%	22	5%	1	1%	4		80	8%

Directory of research 86-92	68	19%	24	6%	2	2%	4	98	9%
Applied research fact sheets	57	16%	22	5%	1	1%	2	82	8%
Council WG output	0	0%	68	17%	5	4%	0	73	7%
Research advocacy projects	0	0%	73	18%	5	4%	1	79	7%
Electronic listserv	0	0%	22	5%	6	5%	47	75	7%
Cairo workshop	0	0%	49	12%	19	16%	36	104	10%
Directory of research 92-95	0	0%	56	14%	29	24%	70	155	15%
GARNET's 3rd GF submission	0		0		21	18%	2	23	2%
Directory of Donor Agencies	0		0		27	23%	8	35	3%
Inst. D newsletter	0		0		0		100	100	
Hyg B newsletter	0		0		0		66	66	
Low cost S newsletter	0		0		0		74	74	
Pit Latrine newsletter	0		0		0		79	79	
SWM newsletter	0		0		0		70	70	
WSSCC 3rd Forum report	0		0		0		54	54	
Guide to AR	0		0		0		109	109	
Information re: TNC	23		37		28		174	262	
Information re: GARNET	8		23		15		17	63	
Supplied research related information	26		68		20		101	215	

Appendix II - Results of listserver evaluation

In general, how would you describe this listserver?

	%
Very poor	0
Poor	0
Neither good nor poor	14
Good	59
Very good	23
No response	4

How would you describe the value of the listserver to your work?

	%
Completely irrelevant	0
Irrelevant	4
Neither irrelevant or relevant	14
Relevant	73
Highly relevant	9

How would you describe any outputs (i.e., files such as newsletters, working papers which can be accessed remotely) received through this listserver?

	%
Very poor	0
Poor	0
Neither good nor poor	18
Good	41
Very good	5
Not received any outputs	32
No response	4

If you have received outputs through the listserver, how have you used them?

	%
Improve general knowledge	24
Apply lessons learnt to own discipline	17
Learn more about the topic	22
Make contact with professionals	25
Other	12

In the future, what would you like to see this listserver focus on?

	%
Research related output	15
Newsletters	12
Workshop notices	12
Funding	10
Case studies	12
Research methodologies	13
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Please complete the following in your own words.

NB -The typed summary is too long to reproduce here. I have paraphrased the responses and grouped them into the following sub-headings:

One good thing about the listserv is that...

- It is available
- Provides contact with others
- It gives access to information (notification of new projects, ideas etc.; rapid response to questions)

One poor thing about the listserv is that...

- Irrelevance of some postings;
- Participation (low levels, especially from developing countries)
- Focus (can be too narrow)

Please use this section to add any further comments that you may have about the listserv.

- Participation (little representation from the 'establishment' (World Bank, UNDP, UNICEF)

What do the results indicate (generally)...

- That more than 80% describe the listserv as good or very good;
- That more than 80% describe the outputs from the listserv as relevant to their work;
- That only 45% feel that outputs offered through the list are good or very good. Just under a third have not received these outputs;
- There is a relatively even split of how outputs have been used.
- Unsurprisingly, most use outputs to improve general knowledge or to make contact with other professionals;
- That general information exchange is as popular as research related items.
- That research methodologies are a priority.

What can be learnt from the evaluation...?

- There is a need to publicise outputs which are available as standing files and how to access them;
- There is a need to circulate messages which restate the purpose of the listserv more frequently to remove irrelevant postings;
- Encourage greater developing country participation;
- Encourage participation from the 'establishment' (i.e., World Bank, UNICEF etc.);
- Post information relating to research methodologies;