

# REPORT ON IDWSSD ACTIVITIES IN TECHNICAL INFORMATION EXCHANGE



**INTERNATIONAL  
DRINKING  
WATER SUPPLY  
AND SANITATION  
DECADE**



1981-1990

**STEERING COMMITTEE FOR  
COOPERATIVE ACTION**

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# **INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE**

**STEERING COMMITTEE FOR COOPERATIVE ACTION**

## **REPORT ON IDWSSD ACTIVITIES IN TECHNICAL INFORMATION EXCHANGE**

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*TCDC,  
Consultations,  
Coordination*

## 1. The Mar del Plata Action Plan

In setting the goals for the IDWSSD, the UN Water Conference attached great importance to the sharing of information and experiences among developing countries and their advisors. The clauses from the Mar del Plata Action Plan quoted in the box called for a coordinated approach to the production and dissemination of information which is of practical application in water supply and sanitation project planning, implementation, operation and maintenance.

Emphasis was placed on strengthening existing mechanisms at national, regional and international levels to communicate selected information, and on the exchange of experts and information through technical cooperation among developing countries (TCDC). The Action Plan also urged that regular consultations should be held among all agencies active in the area of rural water supply and sanitation. In addition to the global and regional activities, developing countries were asked to coordinate the efforts of all agencies active in rural areas, to achieve socially acceptable sanitary facilities.

## 2. The Response of the International Community

The Mar del Plata Action Plan stressed the need for "an effective clearing-house mechanism" to be developed for the dissemination of appropriate technical information. The Steering Committee for Cooperative Action for

### Clauses from the Mar del Plata Action Plan

- B5f Coordinate the efforts of all sectors active in rural areas, utilizing the manpower and other resources available, to ensure the provision of technically and socially acceptable sanitary facilities in rural areas.
- C9 Developing countries should foster cooperation among themselves, inter alia, in the establishment of intercountry training facilities; the development of appropriate technologies and of methodologies for training and management, and the exchange of experts and information, so that experience available elsewhere can be adapted to local conditions.
- C10 An effective clearing-house mechanism should be developed through international cooperation, by strengthening existing mechanisms if available, at the national, regional and international levels, to provide for the communication of selected information concerning all elements of community water supply and sanitation projects.
- C11 Regular consultations should be held among Governments, international organizations, the international scientific community and relevant non-governmental organizations to ensure coordinated and accelerated action in the area of rural water supply and sanitation.



*Task Force*

the IDWSSD established a Task Force on Information Exchange, to help promote and monitor collaborative actions to achieve the Mar del Plata goals. This Task Force held two international meetings — in 1981 in The Hague and in 1983 in Geneva, during which the main activities in the area of technical information exchange were reviewed and follow-up plans were developed.

*POETRI initiative*

An early initiative, supported by the Dutch Government and by WHO was POETRI — The Programme on Exchange and Transfer of Information. Executed by the International Reference Centre for Community Water Supply and Sanitation (IRC), POETRI was aimed at building up national capacities to absorb and utilize technical information, strengthening information systems and services through the development of tools, and providing a framework for pooling resources for exchange and transfer among national, regional and international organizations.

*UNDP/World Bank  
Programme*

Preparatory actions for the Decade also included the launch of the UNDP/World Bank programme aimed at developing technologies and delivery systems appropriate to the needs of the IDWSSD. This programme has subsequently developed and distributed Information and Training Materials for Low-Cost Water Supply and Sanitation, and published many books and manuals on the same theme. It has also established centres in India, Indonesia and Kenya, to form part of an International Training Network for Water Supply and Waste Management (ITN), with additional centres planned for Zimbabwe, Burkina Faso, Ghana, Brazil, China, the Philippines, and Central America:

*Sector coordination*

At the country level, WHO and the World Bank helped with the preparation of Rapid Assessment Reports in more than 100 countries, identifying constraints to be overcome in achieving accelerated progress in water supply and sanitation. WHO encouraged governments to establish National Action Committees (NACs) for coordinating sector activities in their countries, and the UNDP Resident Representatives set up Technical Support Teams (TSTs) to act as focal points for technical coordination in countries. Each of these activities contributed to an improved sharing of technical information within and among developing countries and supporting agencies.

*Donor  
collaboration*

Support agencies too developed innovative approaches to sharing information. The German technical cooperation agency GTZ convened a meeting of European donors in Königswinter, FRG, in 1984, following which all major donors active in IDWSSD support have shared information and experiences and developed global approaches to accelerate the provision of sustainable and replicable water supply and sanitation programmes in



developing countries. Further donor consultations were convened by the OECD Development Assistance Committee (DAC) in Paris, France, in 1985, by the Swiss Development Corporation (SDC) in Interlaken, Switzerland, in 1987, and by the Dutch Directorate-General for International Cooperation (DGIS) in the Hague, The Netherlands, in 1988. A major outcome of these meetings, which were supplemented by regional consultations in Abidjan, Côte d'Ivoire, Manila, The Philippines, and Washington DC, USA (for the Americas), has been the development of a proposal for collaborative efforts among UN agencies and donors in support of country programmes beyond 1990. The proposals identify provision for technical information exchange as a key element of all water supply and sanitation projects.

### *The CESI system*

Also in response to the donor collaboration activities, and with the support of UNDP and GTZ, WHO developed the CESI (Country External Support Information) System, a computer-based system which keeps all participating agencies (55 so far) informed about the projects of all agencies in their countries of interest. A modified version of CESI, known as CESI-PROFILE is being developed as an information management system suitable for installation in developing countries.

### **3. Achievements of Developing Countries during the Decade**

Attempts to establish national information networks have been successful in only a few countries. These include Indonesia, Sri Lanka and Thailand, as a result of the POETRI programme with the support of IDRC and in collaboration with IRC, and a number of Latin American Countries through REPIDISCA. In other countries, the time proved not yet ripe for the establishment of National Focal Points exchanging information with Regional Centres and local outlets. Governments and donors generally preferred to focus attention on projects to deliver water and sanitation services, or to improve the implementation capabilities of sector agencies.

This experience has led to a new approach, elaborated later, of developing technical information exchange (TIE) activities incrementally, through the introduction of TIE components in individual water supply and sanitation projects.

Specific countries in which technical information exchange has become an important element of IDWSSD activities include:

### *National activities*

#### **Indonesia**

Activities on information exchange in water supply and sanitation began in 1982, when establishment of a national focal point for documentation and referral services was discussed between the Directorate General of Public Works (Cipta Karya) and IRC. Since 1983, IDRC has been assisting



### *National activities*

the Government of Indonesia in the evolution of a national information system for water supply and sanitation. The project involves cooperation among eight major national agencies active in the sector and includes a strengthening of professional and technical information resources in Cipta Karya and the Directorate General of Communicable Diseases Control and Environmental Sanitation. Plans include a national information network, with regular distribution of bibliographies, newsletters, search services, and a computerized data base.

Under the UNDP/World Bank-supported project, Indonesia has established two training centres as part of the ITN network. The centres, located in the Environmental Engineering Department of the the Institute of Technology Bandung (ITB) and Bidang Diklat of Cipta Karya, will have strong technical information components, including a comprehensive library of appropriate water supply and sanitation books and journals.

The *Interwater Thesaurus*, developed by IRC with support from IDRC, is being translated into Bahasa Indonesia, to help standardize national terminology usage in water supply and sanitation, and facilitate the storage, retrieval and exchange of technical information. Translation of the *Interwater Glossary of Terms* is planned for the next project phase of the ITN-ITB, which is proposed for Dutch funding.

#### **Thailand**

The Provincial Waterworks Authority (PWA) is coordinating a project to create a National Water Supply and Sanitation Information Centre (NWSIC). Governmental support comes from the National Economic and Social Development Board of Thailand, and external support from IDRC. The proposal sprang from an early POETRI initiative to establish a national focal point for technical information exchange.

The NWSIC project was developed with the assistance of national consultancy services from the UNISEARCH team at Chulalongkorn University. It includes central facilities for documentation, and will require further donor support in the critical field of translation. Information cells are planned down to grass roots level, using existing links in the Department of Health. Training in information handling also features in the project, and the ITN low-cost technology training packages will be the basis of a training programme.

Another product of the POETRI programme was the publication of an Annotated Bibliography on Water Supply and Sanitation by Mahidol University and the Library and Regional Documentation Center of the Asian Institute of Technology, with UNDP support.

#### **Sri Lanka**

Plans for a national Water Supply and Sanitation Documentation Centre (WASSDOC) developed from a 1983 national workshop to review the



### *National activities*

country's national action plan for the IDWSSD. Envisaged then as a national focal point for the POETRI programme, the proposal has since been developed by the National Water Supply and Drainage Board (NWSDB), with support from IDRC, into a national information network linking library services of government departments, non-governmental organizations and other institutions involved in water supply and sanitation activities in Sri Lanka. WASSDOC is establishing a national report depository, and will stock periodicals and books on water supply and sanitation, with a microfiche collection of abstracts. The national NGO, Water and Sanitation Decade Service, publishes a quarterly newsletter *Links*, in English, Sinhalese and Tamil, and WASSDOC has arranged to contribute regular news items drawing attention to information available. WASSDOC users will also be sent copies of contents pages of appropriate journals available in the Documentation Centre.

### **India**

The extensive water supply and sanitation programme initiated by the Government of India in response to the launch of the IDWSSD has spawned a number of technical information exchange initiatives. Within the country, at least seven journals are devoted exclusively to water supply and sanitation issues. The National Environmental Engineering Research Institute (NEERI) provides an information link between the State Public Health Engineering Departments and Water Boards. In addition to its Research and Development activities, NEERI disseminates technical information in the form of a newsletter, technical digests and manuals, including versions in Hindi. A monthly *Guide to Current Literature in Environmental Health and Science* is supplemented by an express information service circulating the contents pages of selected journals. NEERI also publishes bibliographic reviews on water and sanitation technologies, and has an *Information Kit for Water Supply and Sanitation*, which includes a design package, a buyer's guide, and Indian Standards.

### **Philippines**

A good example of information exchange at the operational level is provided by the Philippines' Local Water Utilities Administration (LWUA). Under LWUA's control, more than 350 Water Districts serve about 7% of the Philippines' population. Sharing of information on technical, financial and institutional issues is achieved through a newsletter and library services. Direct contact between the Districts, however, is also seen as important. LWUA has a core of Management Advisors, who review operational data collected on standard monthly reports, provide technical advice to the Water District Managers, and help to transfer successful technologies, cost recovery techniques and other operational lessons from District to District.





*National activities*

**Zimbabwe**

Four ministries involved in water supply and sanitation activities participate in a National Action Committee (NAC) for the IDWSSD chaired by the Ministry of Local Government, Rural and Urban Development (MLGRUD). NAC subcommittees have been given specific information roles. Though several planned initiatives have been held up by lack of funds, the various subcommittees are achieving standardization in handpumps, preparation of training materials and maintenance manuals, and coordination of planning and budgeting, to prevent duplication. Lists of locally developed technical information are circulated to as wide an audience as possible, and there are plans for a water supply and sanitation newsletter.

**Argentina, Guatemala, Nicaragua and Peru**

Based on the successful development of the REPIDISCA network in Latin America, IDRC is supporting national projects to disseminate bibliographic information on water supply and sanitation in these four countries.

*Regional  
Exchanges*

In general, the IDWSSD has resulted in many new and expanded sources of valuable technical information on sustainable technologies and approaches. At the regional level, these include:

- **ENSIC** — The Environmental Sanitation Information Centre, based at the Asian Institute of Technology (AIT) in Bangkok, Thailand. ENSIC collects and disseminates water supply and sanitation information through abstracts, a newsletter, and specific searches requested by subscribers, half of whom are from 20 countries in the Asia and Pacific region. Translation services can be provided for a number of languages, and, through AIT's Library and Regional Documentation Centre, of which ENSIC is a part, training facilities are provided in information management. A recent development is the establishment of National Environmental Sanitation Information Centres in Asia. This project, funded by the Asian Development Bank, has already identified focal points in Indonesia, the Philippines, Vietnam, China and Pakistan. ENSIC participated in the POETRI initiative, and has received support from IDRC, CIDA and the Government of Australia.
- **CIEH** — Centre Interfricain d'Etudes Hydrauliques, based in Ouagadougou, Burkina Faso. CIEH helps to organize information exchange on water resources and sanitation issues among 13 member countries in Francophone Africa. Though the members and CIEH share common constraints of limited resources in general, and inadequate funds for translation of documents into French in particular, CIEH has established links with functioning sector libraries in several countries and a subregional documentation centre



*Regional  
exchanges*

(RESADOC) in Mali. Plans for enhancing information exchange activities are generally held up through shortage of support. In the past, CIEH has received support from IRC through the POETRI programme, from the French Fonds d'Aide et de Coopération (FAC), and, more recently from IDRC.

**AMREF** — The African Medical and Research Foundation in Nairobi, Kenya, established a Regional Network Centre (RNC) for Water and Waste Management in 1986, with support from the Swiss Development Cooperation Agency (SDC) and the German Agency for Technical Cooperation (GTZ). Initially the Centre covered Kenya, Tanzania and Uganda, but is extending its scope to include Sudan, Ethiopia and Somalia. Regional workshops for water and environmental health institution personnel have reviewed available learning materials and developed priority lists for the training of agency staff at different levels. Purchase of appropriate books and journal subscriptions is a high priority with limited funds, and the centre has produced several bulletins of its own on such subjects as *latrines, wells, and rainwater*. Frequent small workshops are held in member countries, to provide training for staff of health and water ministries. As a regional network centre under the umbrella of the International Training Network for Water and Waste Management (ITN), the AMREF RNC distributes copies of the ITN slide/sound modules and appropriate audio visual equipment to water and sanitation institutions in the region. In addition to SDC and GTZ, AMREF is receiving support and technical assistance from IDRC, DANIDA, SIDA and CIDA, and is collaborating with IRC on technical information exchange initiatives. The Centre is also collaborating with the regional CARE organization, the Kenya Water for Health Organization (KWAHO), and Aguasan (Switzerland).

Regional information centres in developing countries also include **CEPIS/REPIDISCA** (Centro Panamericano de Ingenieria Sanitaria y Ciencias del Ambiente/Red Panamericana de Informacion y Documentacion en Ingenieria Sanitaria y Ciencias del Ambiente) in Peru, **CEHA** (Centre for Environmental Health Activities) in Jordan, and **PEPAS** (Western Pacific Regional Centre for the Promotion of Environmental Planning and Advanced Studies) in Malaysia. These centres, operated by World Health Organization Regional Offices, are described in section 4 of this report.



#### 4. Review of Global and Regional Activities

##### *Global Concepts*

As already noted, a major accomplishment of the IDWSSD has been the development of agreed concepts and approaches for the planning and implementation of sustainable and replicable water supply and sanitation projects in developing countries. The Mar del Plata Action Plan rightly emphasized the need for special attention to be given to appropriate solutions for rural areas. In developing suitable approaches for rural communities, the international community has also recognized the growing problems of developing countries in coping with accelerating urban growth. The common approaches now being implemented through cooperative action therefore focus on meeting basic needs for water supply and sanitation services of communities in both rural and peri-urban areas.

##### *Information Products*

Activities in support of technical information exchange at the global and regional levels, in addition to those already mentioned, include the production of books, pamphlets, newsletters, training guides, and manuals, and also measures for ensuring that the appropriate information is made available to those who need it in a convenient and affordable way. In reviewing the activities carried out by international agencies during the IDWSSD, it is clear that a great deal has been achieved on the production side, but that delivery of information in a usable form to those most in need of it remains a significant problem in many countries.



*The documentation centre of the Kenyan Water for Health Organization (KWAHO) in Nairobi, Kenya. Such facilities need initial support and technical assistance.*

##### *Information Tools*

A general impression of the volume of material generated during the IDWSSD may be gained from the fact that a recent IRC Technical Publication on *The Participation of Women in Water Supply and Sanitation* contained abstracts from some 45 documents regarded as directly relevant to the subject and a further 775 references to related documents. This demonstrates the challenge of synthesizing and disseminating relevant information to meet specific user needs. The POETRI programme resulted in the development of the *Interwater* tools, which consist of: a *Thesaurus* for cataloguing and indexing water supply and sanitation information (now available in English, French and Spanish, with translations into Bahasa Indonesia and Arabic under way); a *Glossary of Terms*; a *Directory of Sources of Information and Documentation on Community Water Supply and Sanitation*; a *Reference Manual on Setting up*



*Information Services; a Glossary of Terms, and a Standard Basic Library* for any documentation centre.

In this paper it is possible only to refer briefly to some of the highlights of activities carried out by individual agencies; IRC has compiled a fuller digest of known information exchange activities during the IDWSSD, which can be made available to those seeking more details. The summary which follows describes just a few activities of major agencies in the technical information exchange field.

### ***The UN Role***

Technical information exchange initiatives implemented by UN agencies during the IDWSSD include:

#### **The UNDP/World Bank IDWSSD Programme**

Since it began in 1978, the UNDP/World Bank Water and Sanitation Programme has produced many important documents on low-cost water supply and sanitation technologies and approaches. The programme distributes its publications to a wide audience of sector professionals and field workers who have registered their interest in receiving them.

Major research and development projects on community water supply handpumps, low-cost sanitation, and resource recovery have yielded comprehensive manuals and technical guides. The programme is involved in demonstration projects in approximately 15 developing countries, and is examining ways of disseminating the results of these projects quickly to the right audiences.

A growing number of training centres, formed under the umbrella of the programme's International Training Network for Water and Waste Management (ITN) will provide additional focal points for the collection and dissemination of technical information. With the support of the Netherlands government, IRC is helping to strengthen the technical information exchange capacity of the ITN through the provision of basic library packages, dissemination of news on ITN activities through inserts in the IRC Newsletter, and development of information tools such as guidelines for setting up basic documentation services at the district/local level.

#### **World Health Organization (WHO)**

As Secretariat for the Inter-Agency Steering Committee for the IDWSSD, WHO has been closely involved in technical information exchange activities from the start of the Decade and was instrumental in development and support of the POETRI programme. More recently, WHO also took on the role of Secretariat for the newly formed Collaborative Council of External Support Agencies (ESAs) active in the water supply and sanitation sector.

In direct response to Mar del Plata and the proclamation of the



### *The UN Role*

IDWSSD, WHO has extended its range of publications on water supply and sanitation issues, and developed new avenues for disseminating technical information to a wide audience. The extensive list of IDWSSD-related publications includes a regularly updated *Catalogue of External Support*, and *IDWSSD Directory*, which provide developing countries and donor agencies with up-to-date information on each others' policies and progress. Other publications available from WHO's Community Water Supply and Sanitation (CWS) Unit cover human resources and institutional development, evaluation and monitoring of water supply and sanitation projects, and cost recovery issues, in addition to health-related aspects of water supply and sanitation development. In joint-venture with NORAD, CWS has produced job guides for field personnel. It has held training workshops using the "dual-focus" approach, and published case studies on human resources development with the support of SIDA and USAID.

A direct result of donor collaboration in the IDWSSD has been WHO's development of the *Country External Support Information (CESI) system* for sharing project and sector information among major ESAs active in water supply and sanitation sector development. The computerized data base is updated continuously, to maintain as complete a record as possible of all water supply and sanitation projects receiving donor support in all developing countries.

WHO's regional offices too are playing an active part in IDWSSD technical information exchange. In the Americas, the Centro Panamericano de Ingenieria Sanitaria y Ciencias del Ambiente (CEPIS) established the bibliographic data base on water supply and sanitation REPIDISCA, with support from IDRC, ahead of the IDWSSD. This has continued to develop and to disseminate abstracts and answer queries from most countries in Spanish-speaking Latin America. A Caribbean Environmental Health Information system (CEHI) is envisaged for the region, and is currently proposed by PAHO and CARICOM for GTZ funding.

The recently established Centre for Environmental Health (CEHA) in Amman, Jordan, is also collaborating with IDRC and with IRC in the establishment of a water supply and sanitation information network CEHANET covering the Eastern Mediterranean region. With support from IDRC, CEHA is undertaking the Arabic translation of the Interwater Thesaurus in collaboration with IRC.

In the Western Pacific Region, the Regional Centre for the Promotion of Environmental Planning and Applied Studies (PEPAS) recently completed a study in collaboration with the University of Agriculture, Malaysia, to categorize water supply and sanitation information for retrieval by practitioners in developing countries. Five information retrieval handbooks were produced. With support from DANIDA and the Chinese Government, PEPAS conducted a national workshop on water supply and sanitation information systems in China in November 1988.



### *The UN Role*

#### **UNICEF**

With its concentration on field-level operations, UNICEF provides a wealth of technical information on low-cost water supply and sanitation technology and project implementation. Examples of recent publications include *UNICEF Guidelines Volume 3, on Water Supply, Sanitation and Hygiene*, the *Aqua-Plus* guidelist on appropriate technology for water supply and sanitation in developing countries, and *Priming the Pump* a review of national experiences in reaching the goals of "water for all", published with the World Bank.

The newsletter *From the UNICEF Waterfront* has proved extremely popular among water supply and sanitation professionals and field workers, with its informal style of mixing technical information and friendly gossip.

UNICEF has organized workshops and seminars in specific countries to promote appropriate approaches to water supply and sanitation development. Recent examples of technical cooperation among developing countries include water supply and sanitation study tours involving Benin, Liberia and Nigeria on water development technologies, Somalia and Egypt on linkages of water supply, sanitation and communicable diseases, Liberia and Ghana on promotion of sanitation components, India and Bangladesh on handpumps.

Training and education films and videos are produced regularly and made available for national or international gatherings promoting IDWSSD concepts and approaches.

#### **UNEP**

The UNEP-managed information system INFOTERRA, which deals with all environmental issues, provides an international referral system for sources of environmental information. In the year 1987, INFOTERRA processed a total of 950 queries on water-related issues.

In collaboration with WHO, UNEP has three specific projects related to the sharing of information on water supply and sanitation issues. One relates to rural drinking water quality control and aims to establish surveillance services through training courses for local staff. Pilot projects have been conducted in five countries. Epidemiological studies in three countries are the basis of joint WHO/UNEP guidelines on health hazards of wastewater reuse. And an international workshop on hygiene aspects of water quality control is scheduled to be held in 1989 in the USSR.

Through its Zambesi Action Plan, UNEP is conducting a complete survey of water sources management in the whole Zambesi catchment, and is seeking to coordinate all new water-related projects supported by UN agencies in the Zambesi countries, to ensure development in harmony with its objectives.



### The UN Role

#### UNESCO

The International Hydrological Programme (IHP) has provided an important avenue for technical information exchange among rural water supply specialists in Africa, Asia and Latin America. Major Regional Projects on Rural Water Supply Technology and Approaches have encouraged direct transfer of knowledge and information through workshops and travel grants. The IHP is also preparing a report on the actual situation of national and internationally available Water-Related Information Systems. UNESCO has developed and widely distributed computer programmes for bibliographic storage and retrieval. It co-sponsors training courses on the use of CDS/ISIS software for library and information staff using micro- or mini-computers in both developed and developing countries.

#### FAO

Specific FAO publications related to water supply include sections of the publication on *Irrigation Lifting Devices* which cover small capacity devices suitable for community water supply, a publication on *Women in Irrigated Agriculture*, and guidelines and manuals dealing with operation and maintenance of handpumps, waste management, and the involvement of women in water supply. FAO seeks continually to ensure the inclusion of water supply and sanitation components in rural development/irrigation programmes.

#### INSTRAW

Training and public information are important activities for INSTRAW. In collaboration with the ILO Turin Centre, INSTRAW has developed two prototype multi-media training packages on the theme "Women, Water Supply and Sanitation". National and regional training seminars on the same theme have been held in a number of developing countries. In collaboration with the French NGO Fondation de l'Eau, training materials are being developed which will be of practical use to illiterate grass-roots workers.

#### ILO

In its Vocational Training and Management Development Programmes, ILO has expanded its water supply and sanitation related activities, developing numerous training modules on associated themes. Among relevant publications is *Community Water Supply: A Manual for User Education*. A French version is being prepared.

Since January 1988, ILO has operated an *Information Service on Technological Alternatives for Development (INSTEAD)*, which provides guidance on appropriate technology to all levels of users, from village artisans to financial institutions. Where possible, queries on water and sanitation related technologies are provided with bibliographic references and referred to known information centres.



### *The UN Role*

#### **UNCHS (Habitat)**

Through its research and development programme, technical cooperation and, more specifically, information and training, UNCHS (Habitat) has emphasized key IDWSSD concepts such as enhancement of the role of women, improved operation and maintenance, and choice of appropriate, cost-effective technology. Recent publications include *Water Supply and Waste Disposal Management: Impact Evaluation Guidelines*, Training modules on *Water Supply in Low Income Housing Projects: The scope for Community Participation*. Regional training seminars have been organized in Indonesia, Tunisia, and St Vincent, and information and training materials field tested in Bolivia are also being used in Zambia and Sri Lanka.

#### **Regional Commissions**

Monitoring and support of country activities to implement the Mar del Plata Action Plan has been one task of the Economic Commissions. In Latin America and the Caribbean, *ECLAC* has prepared regular reviews of water resource planning and management. At the start of the IDWSSD, *ECLAC* organized two seminars on Horizontal Cooperation for the IDWSSD. Following the seminars, *ECLAC* maintained a network of cooperating agencies throughout the region, but financial restraints have led to these activities lapsing. Two recent publications, resulting from *ECLAC* studies are: *Procesamiento de Información sobre Recursos Hídricos en Instituciones de América Latina y el Caribe*; and *Resúmenes de Documentos sobre Recursos Hídricos*.

In Asia and the Pacific, *ESCAP* has published its quarterly *Water Resources Journal* since 1949. Specifically in response to Mar del Plata, *ESCAP* launched its own Water Information Exchange System. The main medium of exchange is *Confluence*, a twice-yearly publication distributed to government agencies in the region and including feature articles on water resources developments by participating agencies, and news of other projects and events of interest. Direct exchange of information among participating agencies is also encouraged.

### **International Agencies**

The UN agency initiatives have been complemented by activities supported by many international agencies. Special mention should be made of:

#### **IDRC** — International Development Research Centre, Canada.

A specific mandate to strengthen the information infrastructures of developing countries makes IDRC unique among aid agencies, and this is reflected in the large number of information-related projects which have benefited from IDRC support. Many of the regional and national activities already listed have received financial and technical support from IDRC.

Water supply and sanitation has been an important subject area since before the IDWSSD began, as IDRC was asked to take a leading role in





*International  
Agencies*

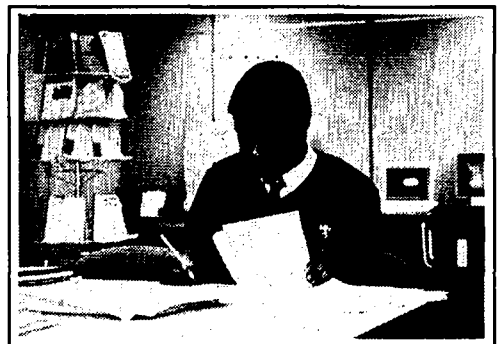
examining information activities in the sector in 1974 by the Ad Hoc Working Group on Rural Potable Water Supply and Sanitation (World Bank, UNDP, UNICEF, WHO).

In addition to its support for national and regional information networks, IDRC provided support for the launch of the publication *Waterlines* by the Intermediate Technology Development Group (ITDG). This publication seeks to disseminate information on appropriate water supply and sanitation technology and approaches to field workers in developing countries. IDRC is committed to continue support until the end of the Decade, and additional support is being provided through the UNDP/World Bank Programme.

IDRC has also supported IRC in the production of the *Interwater Thesaurus* and a number of other technical publications, has produced numerous publications of its own on water supply and sanitation issues and has financed many consultations and working meetings on the theme of water supply and sanitation information.

**IRC** — The IRC International Water and Sanitation Centre (formerly International Reference Centre for Community Water Supply and Sanitation) IRC was established, with Dutch Government support, to promote improved exchange of information on water supply and sanitation issues between developed and developing countries. The POETRI programme, already described, was the basis of early IDWSSD information exchange activities in several developing countries and helped to build contacts with the regional centres.

In addition, IRC has produced a comprehensive series of Technical Papers on specific water supply and sanitation topics. Some 4,500 copies of IRC's technical publications are distributed each year. The IRC Newsletter disseminates latest news of developments in the sector to English- and French-speaking audiences. A major contribution, supported by IDRC, has been production of the *Interwater Thesaurus*, and other *Interwater*



*The IRC library contains a wide range of publications related to water supply and sanitation.*

tools. IRC's Library and Documentation Unit issues a quarterly Current Awareness Bulletin to subscribers worldwide, and responds to numerous requests for information on a variety of topics.

IRC has been asked by the IDWSSD Steering Committee to take a leading role in the development of a future strategy for technical information



**International  
Agencies**

exchange, and, in collaboration with several other agencies, organized a technical workshop and a working meeting on the subject in 1987. The result has been a Framework for Technical Information Exchange, endorsed by the Steering Committee and major donors, and based on an incremental build up of information exchange capabilities in developing countries, starting at the project level.

**WASH** — The Water and Sanitation for Health Project, USA.

Funded by the US Agency for International Development, and operated under a renewable consultancy arrangement, the WASH Project has made a major contribution to technical information exchange in the IDWSSD. A total of 250 Field Reports and 50 Technical Reports on water supply and sanitation related topics are distributed free of charge on request. The WASH information centre contains 6,000 documents on water and sanitation topics, and WASH distributes 300 to 500 reports and articles a month in response to information requests.

Special information exchange activities, including newsletters and information networks have been initiated on guinea worm disease and on rainwater catchments. WASH has helped with the establishment of guidelines for a Primary Health Care Documentation Centre supported by USAID in Zaïre, and is cooperating with the NGO World Vision to develop a library for Africa field staff.

For IDRC and WASH, technical information exchange is a major component of bilateral assistance. Other bilateral aid agencies have also undertaken important information exchange initiatives as part of their general support for IDWSSD programmes. Space does not permit a full listing, but noteworthy national and international activities include:

**Bilateral Support**

**CIDA** — Canadian International Development Agency

Published a special issue of *Development* on the theme of water supply and sanitation in 1985. Produced a video for engineers and technicians on the assembly, installation and maintenance of handpumps.

**DANIDA** — Danish International Development Agency

Produced a series of monographs on water supply, sanitation and environmental issues, including most recently *Environmental Issues in Water Resources Management*.

**DGIS** – Directorate General of International Cooperation, The Netherlands.

In addition to support for IRC activities in technical information exchange and documentation, the ITN programme is supported, e.g. in Indonesia, where the IHE, Delft has a supporting role. The Netherlands hosted a major sector consultation in November 1988 in the Hague.



**Bilateral Support**

**GTZ** — German Agency for Technical Cooperation

Supports many UNDP/World Bank and WHO activities to strengthen information exchange. Initiated the first IDWSSD donor consultation in 1984 and supported publication of *Global Sector Concepts for Water Supply and Sanitation*. GTZ also supports technical information activities of AMREF in Kenya, CEPIS/REPIDISCA in Peru and other PAHO initiatives in the Latin American and Caribbean region.

**NORAD** — Norwegian Agency for International Development

Sponsored several workshops and seminars on appropriate rural water supply and sanitation in Tanzania. Supported preparation of job guides in collaboration with WHO.

**SIDA** — Swedish International Development Authority

Includes education, training and information exchange in IDWSSD programmes in six countries (Botswana, Ethiopia, India, Kenya, Tanzania and Zimbabwe). The Botswana programme for example includes assistance for professionals to obtain university education required in other African countries.

**NGOs**

A considerable contribution to technical information exchange during the IDWSSD has come from the efforts of non-governmental organizations (NGOs), international research institutions, and private organizations. The development of regional information centres has already been described. In addition, significant technical information exchange activities have been initiated by:

**Approtech Asia, Philippines**

With a grant from IDRC, Approtech Asia, a Philippines-based NGO, is developing a new information system on water supply and sanitation, with the participation of six more NGOs from Sri Lanka, Bangladesh, India, Thailand, Indonesia, and the Philippines. The *Diviner* system will handle queries relating to water supply and sanitation in the Southeast and South Asia region. The country focal points are being provided with compatible computers and storage and retrieval systems based on the Micro CDS/ISIS system, to permit linkages with regional and international data bases such as those at ENSIC and IRC. Initial outputs include a bibliography on literature generated by Asian NGOs, a directory of community-based water supply and sanitation projects, and a register of water and sanitation experts.

**IRCWD** — International Reference Centre for Waste Disposal

A WHO Collaborating Centre, IRCWD has produced many technical papers dealing with water supply and sanitation in developing countries.



## NGOs

IDWSSD related articles feature regularly in IRCWD News, which is published once or twice a year, and IRCWD is involved in organizing and sponsoring regional workshops on low-cost sanitation in Central America.

IRCWD collaborates with and supports universities and NGOs in developing countries to implement research projects concerned with the development of water supply and sanitation technologies.

### **ITDG** — Intermediate Technology Development Group

Specialising in the promotion of small-scale low-cost technologies with application in developing countries, ITDG produces many technical data sheets and publications on the subject of water supply and sanitation, and has a distribution list which concentrates on field workers in government agencies and NGOs. ITDG publishes the journal *Waterlines*, with support from IDRC and the UNDP/World Bank Programme.

### **IWSA** — International Water Supply Association

For many years, IWSA activities concentrated on exchange of information among water supply practitioners in mainly developed countries. The IDWSSD brought an increasing spread to developing countries, and IWSA has included Decade themes at its biennial congresses, covered Decade issues in its magazine *Aqua*, and sought innovative ways of transferring knowledge and experience between developed and developing countries. These include the recent establishment of an IWSA Foundation for the Transfer of Knowledge.

### **SKAT** — Swiss Centre for Appropriate Technology

SKAT produces and disseminates numerous books, reports and working papers on the theme of water supply and sanitation. The centre's *Manual for Rural Water Supply* covers 15 years of activities in drinking water project implementation. It is published in English, French and Spanish. SKAT offers a query handling service in the field of water supply and sanitation. Annual workshops are organized for Swiss engineers working in the sector in developing countries. SKAT initiated and supports an annual meeting of a network bringing together institutions and individuals working on alternative sanitation technologies in Latin America — RETA Red Latinoamericana de Tecnologia Ambiental Alternativa.

## Additional Support Activities

### **CEFIGRE** — Centre de Formation Internationale à la Gestion des Ressources en Eau, France

CEFIGRE makes an important contribution to technical information exchange among francophone countries and across the language barrier. The Centre runs training courses and seminars on water, health and sanitation in developing countries — primarily French-speaking African and Arab countries. The Documentation Unit includes a comprehensive data base. A newsletter is produced twice a year.



**WRc — Water Research Centre, UK**

Publishes *Aqualine Abstracts*, a bi-weekly service that provides worldwide coverage of scientific and technical literature on water, wastewater, associated engineering services and the aquatic environment. The *AQUALINE* database dates back to 1960 and holds 110,000 records, which are accessible through online searching.

In this short review, it has been possible to outline only a selection of the many activities in technical information exchange carried out by NGOs, research institutions and private sector organizations. Others whose contribution needs to be acknowledged, but cannot be detailed through lack of space include: **GATE**, Federal Republic of Germany; **GRET**, France; **IHE**, **SATIS**, and **TOOL**, The Netherlands; **AHRTAG**, UK; **APICA**, Cameroun; **VITA**, USA; **AWWA**, USA; **WEDC/Loughborough University**, UK; **World Water**, UK.

**5. Beyond the Decade**

***Growing demand***

The IDWSSD has seen the introduction of a range of new approaches, technologies and methodologies, and new knowledge on institutional and support aspects of water supply and sanitation development. Increased national-level interest in the promotion and implementation of Decade approaches means an increased demand for published information on developments and experience from neighbouring countries and from other sectors.

For decision makers, planners, research and development staff, engineers and operational staff involved in water supply and sanitation, technical information is a valuable tool to achieve more rapid and effective implementation of sustainable programmes. Access to the right information contributes enormously to the optimum use of scarce resources. Yet many of those involved in water supply and sanitation programmes in developing countries do not yet have access to this essential information.

***Constraints remain***

Practitioners complain that information does not reach them, or that it comes at the wrong time or in unusable form. In many cases, potential users are not even aware of the existence of the information. Organizations do not have the staff to screen and synthesize the information which does reach them. Universally, funding is reported to be a constraint in the recording, translation, printing and dissemination of information.

***Planned  
Dissemination***

It is not enough simply to distribute available information in large quantities, in English, to head offices in capital cities of developing countries. Country experiences show that effective information exchange requires



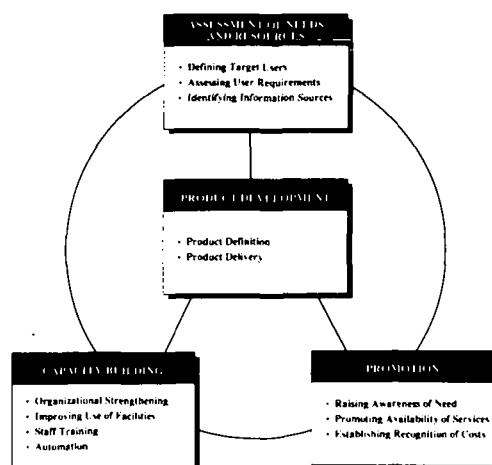
that users clearly perceive the benefit of the information needed, find out whether the required information is available and where and how it can be obtained, and arrange for the ways (communication channels) and means (funding) to obtain it. It requires too that information producers know exactly what information is needed, develop appropriate products in substance, format and language, ensure that potential users become aware of their availability, and develop a mechanism to deliver the information. In all this, it must be recognized that information has a cost which must eventually be carried by the beneficiaries, either directly or indirectly. Another aspect of information exchange often overlooked by both users and producers, is that the user must be able to apply the information received. Information producers or others may have to provide backup services or training in information handling

### ***POETRI Constraints***

An evaluation of the POETRI programme, carried out jointly by WHO and DGIS in 1984, identified a number of constraints hampering establishment of the proposed network of National Focal Points (NFPs). In essence, the conclusion was that many developing countries were reluctant to allocate priority to national information activities. This inhibited support for NFPs from developing country governments and funding from donors.

### ***TIE Framework***

In 1985, after reviewing progress in technical information exchange, the Steering Committee for Cooperative Action for the IDWSSD asked IRC to take a fresh look at the approaches being taken, and to develop a new strategy for technical information exchange beyond the Decade. IRC sought collaboration with many agencies and organized two workshops in 1987 under the title INFO-IMPACT. The major outcome of this collaborative effort was a new "Framework for Technical Information Exchange", which was subsequently endorsed by the Steering Committee major donors. The Framework is based on an incremental build up of technical information exchange in developing countries, beginning with a TIE component in individual water supply and sanitation projects implemented by one sector agency. It has four interconnected elements: Assessment of Needs and Resources; Product Development; Capacity Building; and Promotion. It provides the opportunity for countries and donors to sample the benefits of successful technical information exchange for comparatively little cost. The successful pilot projects then act as both demonstration





**Implementation  
Strategy**

projects and promotional tools, to spread activities throughout the country concerned.

Following acceptance of the Framework, IRC began to develop model project components to meet differing country situations, and has produced a strategy for implementing the TIE Framework in the rest of the Decade and beyond. At their 1987 Interlaken Consultation, the donors included technical information exchange as one of the key components to be incorporated in future water supply and sanitation projects. The 1988 Hague Consultation took this recommendation a stage further, by including Communication of Information as a major component of the Work Programme for the Collaborative Council of External Support Agencies established at the Consultation. A Temporary Working Group (TWG) was established under the leadership of IRC and with a Core Group consisting of UNDP, WHO, CEFIGRE and IRC. The TWG was charged with developing a strategy for "communicating information in the sector, making optimum use of existing information resources and opportunities." The task covered four headings (public, technical, project, and management information), and individual elements of the strategy included measures to:

- a) promote with decision makers and the wider public the importance of sustainable water supply and sanitation services (nationally and internationally)
- b) assist developing countries in building up their capacity to deal with and to take maximum advantage of available experience in sector projects and programmes, with an emphasis on human resources development
- c) support improved coordination and collaboration among ESAs at the national and international level
- d) promote an increasing responsiveness of sector programmes to overall environmental considerations
- e) promote the activities of the Collaborative Council.

Experience with many technical information exchange initiatives in the IDWSSD has produced a wealth of material and a number of pointers for future strategies. It is now recognized that information networks will evolve best from small beginnings, and that the introduction of technical information exchange at the project level offers the best chance of success. A major challenge remains that of ensuring that information needs are met with relevant products, and that users are not swamped with irrelevant material. The new TIE Framework provides a methodology for overcoming this obstacle.



### *Language Barrier*

Another issue on which little progress has yet been made is that of the language barrier hampering exchange of information between regions. The Interwater Thesaurus is a useful tool to help library and documentation centres or project staff to identify relevant literature, but high translation costs frequently inhibit transfer of

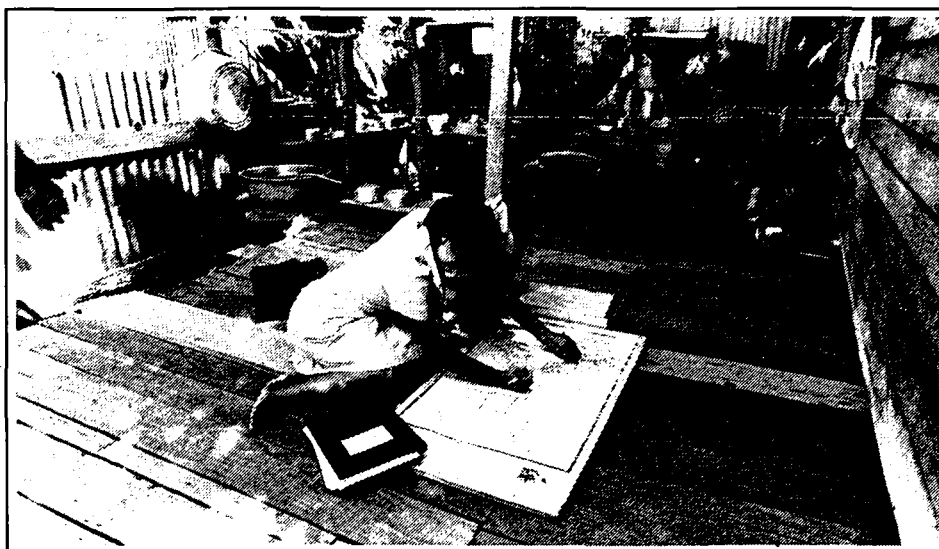


*Information exchange must seek to overcome language barriers.*

appropriate technology or approaches, particularly to staff in the field and institutions in developing countries. Some proposed initiatives include multi-lingual titling of key documents, and more local adaptation of information materials for better accessibility to workers at the grassroots level, but more fundamental developments are needed before widespread exchanges can be anticipated across the language barrier.

### *Opportunities Ahead*

The Decade has shown that technical information exchange will take time to establish itself as a fully international operation. The key to eventual success will be the increasing incorporation of TIE components in new water supply and sanitation programmes, and sharing of experiences from those countries where TIE is already comparatively advanced, such as Indonesia, Thailand and Sri Lanka. At the international level, external support agencies have now established a unique coordinating process in the water supply and sanitation sector. Continuing donor collaboration beyond the Decade, to which TIE and the CESI-PROFILE project reporting system can make a valuable contribution, provide excellent opportunities for making sector development assistance increasingly more effective and projects more sustainable.





This document is one of a series of booklets prepared on behalf of the Steering Committee for Cooperative Action for the International Drinking Water Supply and Sanitation Decade. Titles in the series are:

- 1. Report on IDWSSD impact on Diarrheal Disease**
- 2. The IDWSSD and Women's Involvement**
- 3. Human Resources Development in the IDWSSD**
- 4. IDWSSD activities in Technical Information Exchange**
- 5. Report on IDWSSD impact on Dracunculiasis**
- 6. Report on IDWSSD impact on Schistosomiasis**

Copies of the documents are available from the CWS Unit, World Health Organization, 1211 Geneva 27, Switzerland.