POETRI, Programme on Exchange and Transfer of Information on Community Water Supply and Sanitation in Developing Countries

WHO
International Reference Centre
for
Community Water Supply

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INTRODUCTION

According to a statistical report of the World Health Organization, in 1975, approximately 1,100 million people living in rural or urban fringe areas did not have reasonable access to safe drinking water. The prospects for the future are even more serious, as the rate at which access to safer water is being provided is too slow to hold pace with population growth. In many countries, waterborne or water-related diseases are among the three major causes of sickness and death. The strongly held opinion of public health experts is that the provision of safe water is of prime importance to public health. The World Health Organization (WHO), in particular considers the provision of a safe and convenient water supply to be the single most important activity that could be undertaken to improve the health of people living in rural areas. The Ad Hoc Working Group on Rural Potable Water Supply and Sanitation*) once stated, that "the absence of water supply and of sanitation services also contributes to the general failure in the social and economic advances being achieved in developing countries".

It is against this background, that community water supply and sanitation, especially in the rural areas of developing countries, has become a growing concern of governments and international organizations.

In 1961 one of the first international actions was undertaken: the governments of Latin America established for themselves, in the "Charter of Punta del Este", goals for water supply and sewage disposal, which were specific, namely, within the Alliance for Progress Decade from 1961-1971 to provide adequate water supply and sewage disposal to 70 per cent of the urban and 50 per cent of the rural population.

The United Nations Habitat Conference (Canada, 1976) accepted

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*) Participants: WHO, UNDP, IBRD, UNICEF, IDRC, UN, FAO, UNEP, OECD; see list of abbreviations attached.

the Clean Water Goal; one of its main elements is the availability of an adequate supply of water for all by 1990 (Recommendation C12). The United Nations Water Conference (Argentina, 1977) underlined this recommendation and furthermore it recommended, that the decade 1980-1990 be designated the International Drinking Water Supply and Sanitation Decade and be devoted to implement the national plans for drinking water supply and sanitation. The Water Conference added to this recommendation that "... this implementation will require a concerted effort by countries and the international community to ensure a reliable drinking water supply and provide basic sanitary facilities to all urban and rural communities ...".

In common with most programmes in developing countries, the major problem in rural water programmes are those of: lack of awareness of the problem, lack of commitment of national governments, too limited an allocation of funds to the sector, manpower shortage, inadequacies in institutions and organization, lack of appropriate and cost-effective technology, lack of public health education (resulting in inadequate appreciation of the advantages of safe water supply) and difficulties in communication between widely dispersed rural systems and their support agencies.

In order to avoid (or solve) these problems "support programmes" are needed in order to enlarge the efficiency and effectiveness of the projects that are directed towards the construction and maintenance of water supply and sanitation facilities. These support programmes should include elements as: promotional activities at various levels, manpower training, creation or strengthening of national institutions, development and application of appropriate technologies, education and involvement of local population, etc.

An important element of such support programmes, that are indispensable to underpin the development of water supply and sanitation programmes, is the availability of relevant

information.*)

It has been stated time and again that most of the information needed in the water supply and sanitation field, is available somewhere. However, a large gap exists between this available information and its adaptation and use. In spite of availability, engineers have lacked technical information, operators have not been instructed in maintenance, governments have based priorities on incomplete data, "experts" have not been aware of important local factors. The right information has not been available to the right people at the right place, at the right time, at the right intellectual level and in the right form.

One of the main problems is that potential users are not able to identify existing sources of knowledge and information. Other factors that hinder a good flow of information include:

- in most developing countries no coordinated approach exists to provide potential users in those countries with relevant knowledge;
- much of the available information is too "western-orientated" and not appropriate for developing countries;
- research reports are often too long, jargons cannot be easily understood, there are too many reports and few of the reports discuss the relevance of findings for action;
- more than half of the available relevant information is not readily accesible, invisible material, which is made up of unpublished working papers, feasibility or pre-investment studies, theses, research and development reports and documents of governments or international organizations, which are not widely disseminated.

Presently, the general opinion is that these stagnations in the information flow are among the most serious constraints, holding back progress in the community water supply and sanitation field. It is therefore not surprising, that it is frequently recommended, both in developing countries and in the international

*) In the broadest sense of the word: facts and data, knowledge and experience (social, administrative, management, technological and organizational), both publicly available and unpublished, relevant to and appropriate for developing countries .

community, to give more emphasis to the promotion of an unhampered and appropriate flow of information. Unfortunately, the existing information systems and mechanism do not cover or only partially cover the field of community water supply and sanitation. In as far as the scope of these systems does include this field, the related outputs usually do not reach those who are in need of them.

The symposium on Community Water Supply and Development Cooperation*) (Amsterdam, February 1977) therefore recommended, inter alia, that "at the national level, information services should be organized to promote management of community water supply and sanitation programmes, and to foster the communication of information about projects, programmes, local materials, locally manufactured equipment and indigenous techniques".

The United Nations Water Conference recommended that "developing countries should foster cooperation among themselves, inter alia, in the establishment of intercountry training facilities; the devlopment 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".

Furthermore, the Conference stressed the importance of the development of a clearing house mechanism, recommending, among other things, that "an effective clearing house[2] mechanism, should be developed through international cooperation, by strengthening existing mechanism if available, at national, regional and international levels, to provide for the communication of selected information concerning all elements of community water supply and sanitation. An interrelated communication function should be included at every stage in all community water supply and sanitation projects".

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*) Organized under the auspices of the Minster for Development Cooperation of the Netherlands; report available from the IRC.

2) A summary of clearing house functions is given in Annex A.

As a contribution to the possible solution of the afore-indicated problem, the International Reference Centre for Community Water Supply (IRC) started in 1976 to develop an information programme, based on earlier experiences with information collection, analysis and dissemination of information and even more contacts with numerous national and international organizations in the water supply and sanitation field.

In 1977, a full-dressed programme - then named POETRI (Programme on Exchange and TRansfer of Information) - was designated, of which the first development phase started in 1978.

OBJECTIVES AND STRATEGY

The main objective of POETRI is to provide for the communication of information on community water supply and sanitation to and among developing countries. The mechanism should ensure that knowledge and experiences in the water and sanitation field become accessible to and appropriate for each potential user.

Related objectives are:

- to develop and/or improve the infrastructure (facilities and capabilities) needed in developing countries for the exchange and transfer of information;
- to develop appropriate procedures and tools for the collection, screening, analysis, evaluation, storage, retrieval and dissemination of information on water supply and sanitation;
- to facilitate the transfer among developing countries of various types of knowledge and experiences (social, administrative, management, technological, organizational) and the quality thereof (relevance, appropriateness);
- to underpin training, advisory, extension and promotional services and activities and to identify areas requiring further investigations.

In general, the establishment of the clearing house mechanism as described on the following pages, is expected to make an important and indispensable contribution to the improvement of the overall situation in the water supply and sanitation field in developing countries. Experiences like those of CEPIS in Peru (a regional centre of the Pan American Health Organization) teach, that these mechanisms, when they succeed in making knowledge in this field freely available (in an appropriate way and at the right time) to each potential user, will:

- contribute to the improvement of national capacities to plan and carry out water supply and sanitation programmes in developing countries and of international cooperation in this field;
- make governments and other users more aware of the important

role, that relevant information can play.
A direct consequence of the availability of relevant information will be an improvement and an acceleration in the construction of water supply and sanitation facilities in developing countries. This will especially be the case in the poorest countries, as they will be the first to be approached to participate in the mechanism and therefore, to profit from it.

As such, the POETRI-mechanism will support the preparations for the Water Supply and Sanitation Decade and can be expected to contribute to the success of the Decade itself.

In the programme to be carried out through the mechanism, three main functions can be distinguished:
- generation and collection of knowledge, experiences, etc. both published and unpublished;
- analysis, evaluation and storage of the information at various levels and in various bodies and institutions;
- dissemination, transfer and application in national and local programmes and projects concerned.

For the clearing house mechanism to be successful, direct input from developing countries in the implementation of POETRI is regarded of vital importance. In addition, the major part of the necessary development activities will have to be carried out in the developing countries. These two pre-requisites will have a strong motivating influence and will also ensure the appropriateness of the resulting mechanism.

It is envisaged to develop systems of communication between national institutions in the various developing countries. This system will form the structure through which POETRI will further develop and operate. Where necessary, the institutions concerned will be strengthened as needed. In addition it will be striven after to build information communication functions in the national and local water and sanitation projects. The system will be supported - in particularly in the start-up phase - by existing regional entities which will act as

stimulator in the various regions, form the link with other regions and perform regional functions as appropriate. The IRC will assist in developing the overall mechanism, maintain links with international agencies and other information systems, and provide for assistance where needed.

It should be mentioned here, that - since a number of years - the World Health Organization has so-called "collaborating centres" in operation in the field of community water supply and sanitation.

POETRI has been planned in such a way, that maximum use can and will be made of this network of collaborating centres.

PLAN OF ACTION

In general, the following elements can be discerned during the programme development:

a) development of facilities and know-how at a number of existing institutes, which are already active in the water supply and sanitation field. These centres will have to be able (or enabled) to support mechanism developments in a number of countries within their region and should therefore have a strategic (and accepted) position within a region. In the initial stage the programme will concentrate on drinking water and sanitation problems in rural and fringe urban areas;

b) development of working relations with water supply and sanitation projects in developing countries, mainly through the regional and/or national centres, building in clearing house elements into those projects and ensuring feed-back from them;

c) further development of the mechanism, by selection of centres in the various countries, starting with the poorest countries; where possible, links will be made with the network which exists under the umbrella of the World Health Organization;

d) when a regional mechanism is fully operational, possibilities can be considered to broaden the user scope of the programme by enclosing urban water supply and sanitation in developing countries and in a later stage, water supply and sanitation in industrialized countries;

e) in a later phase the possibilities of a further broadening of POETRI's subject scope (water resources, environment) will have to be considered.

The implementation of POETRI will start on a rather modest level, building the necessary foundations for the envisaged mechanism through the development and strengthening of regional and national centres. Together with the regional centres, the International Reference Centre will organize the design of mechanism procedures for the generation/collection, analysis/

evaluation and dissemination/transfer functions of Focal Points; these procedures will have to be flexible, adaptable to specific situations, but compatible with other components of the mechanism. Furthermore, the International Reference Centre will establish contacts with relevant sources of information that are not yet covered through national or regional centres and it will stimulate regional activities (e.g. coordination meetings at regional level).

Other initial activities of POETRI include:

- the compilation - in close collaboration with the already participating centres and other pertinent bodies - of a "standard library". This library will consist of a number of selected, highly relevant documents on specific aspects of community water supply and sanitation, such as planning, design, construction, management, administration, operation and management;
- the compilation of a multi-lingual thesaurus of water supply and sanitation terms, to facilitate information handling in the context of POETRI;
- survey (per region) of journal holdings at participating and other centres, in order to facilitate acquisition of relevant journal articles;
- the compilation of a manual with guidelines on referral services (indirect request handling by referral to pertinent, selected sources of information) and request handling (direct answering of questions); this manual will later be part of an "operations manual", containing guidelines for all mechanism functions;
- per region, the gaps in existing information sources will be identified. Links will then be established with sources in other regions to fill these gaps.

INITIAL OPERATIONAL RELATIONS

The responsibility to take the initial step in the development of the programme will be with the WHO International Reference Centre for Community Water Supply (IRC), which carries out a programme for the advancement and transfer of knowledge and methods under the broad objectives of WHO's programme of assistance to Member States in the field of community water supply, with particular reference to the needs of developing countries.

In July 1977 the IRC organized a Workshop on global information exchanges on water and sanitation as a preparation for the present programme in the development of an information clearing house mechanism. In this workshop participated representatives of the Pan-American Centre for Sanitary Engineering and Environmental Sciences (CEPIS, Peru), Comité Inter-africain d'Etudes Hydrauliques (CIEH, Upper Volta), National Environmental Engineering Research Institute (NEERI), Companhia Estadual de Tecnologia de Saneamento Bàsico e de Defensa do Meio Ambiente (CETESB, Brazil), Water Research Centre(WRC, United Kingdom), International Development Research Centre (IDRC, Canada) and various individual experts. One of the results of the meeting was an agreement between CEPIS and IDRC, IDRC financially supports CEPIS which is developing a regional information system on sanitary engineering and environmental sciences, with an emphasis on rural water supply and sanitation (REPIDISCA). Resulting form this agreement, CEPIS has requested IRC for cooperation in this project. CEPIS also agreed with the IRC to exchange views on their experiences with REPEDISCA, to act as a regional centre in the water supply and sanitation information programme, and to participate actively in various specific activites (e.g. the development of a multi-lingual thesaurus of water supply and sanitation terms).
CIEH, NEERI and CETESB also agreed during the Workshop to serve as a Focal Point for POETRI.

In accordance with its tasks, CIEH is planning an inventory of

existing sources of information within its region and is furthermore very interested in participation in the development of the thesaurus, especially in adapting/translating in into the French language.

NEERI is developing its functions as a regional information centre in the environmental engineering field; therefore, the Institute is carrying out an inventory of potential users and their needs, and one on information sources. A study will also be made by NEERI of organizational patterns, expertise and skills available and appropriate systems for the collection, storage, retrieval and dissemination of information.

CETESB cooperates closely with CEPIS in the context of REPIDISCA and concentrates on the Portuguese language.
The experience of CEPIS, CETESB, CIEH and NEERI will be of great importance for the development of the water supply and sanitation programme and their sincere willingness to participate in the programme development will ensure, from the beginning, the before-mentioned direct input from developing countries into the programme.

Another potential Regional Focal Point is the reference centre which will be established by the WHO in the Far East, probably in Kuala Lumpur.

Further investigations will have to be carried out to identify centres in other regions, amongst others the anglophone Caribbean region, East Africa, the Middle East and Middle Asia (9 regional and sub-regional centres in total). In some cases, direct relations with the national level will be necessary (for instance when no regional centre is available or acceptable to a certain country).

Preliminary contacts have also been established with potential focal points in a number of European countries, as well as with the Commission of the European Communities. Here, focal points will act mainly as (coordinators of) information sources.

Contacts have also been established with organizations, such as the Intermediate Technology Development Group (U.K.) and the TOOL Foundation (the Netherlands), who have numerous valuable contacts with universities, etc. in developing countries.

Possible ways of collaboration are also being discussed with UNEP's International Referral System (IRS). IRS's activites are mainly directed towards developing countries and include referral services in the field of community water supply and sanitation.

Furthermore, contacts have been established with UNICEF (Project Support Communication Services).

It should be mentioned here explicitly, that the above listing cannot be exhaustive, as contacts with national and international entities are constantly increasing in the context of POETRI's further development.

ANNEX A

Description of clearing house and information channelers functions

UNISIST, the general information programme, defines clearing houses as: institutions entrusted with the procurement and dissemination of special categories of information.

Within the concept of POETRI, National and Regional Focal Points will act as clearing houses at their respective levels.
In more detail, their functions will include:

(a) collection of materials including publications, maps, films, tapes, etc., which are of importance to research workers, decision makers and educators;
(b) survey of the institutions dealing with research and training and demonstration;
(c) providing access to publications;
(d) calling attention to new ideas and stimulating interest and action by judiciously providing materials to research workers, decision makers, field engineers and others;
(e) carry out publication activities including bibliographies, directories, newsletters, current periodicals and technical papers;
(f) promote exchange of information between organizations, active in the community water supply and sanitation field.

For a more detailed description of the functions of National Focal Points and Regional Focal Points, reference is made to the paper "Focal Points for POETRI, a functional description", available from the IRC.

ANNEX B

List of abbreviations used

CEPIS - Centro Panamericano de Ingenieria Sanitaria y Ciencias del Ambiente
(Pan-American Centre for Sanitary Engineering and Environmental Sciences)
Lima, Peru

CETESB - Companhia Estadual de Tecnologia de Saneamento Bàsico e de Defensa do Meio Ambiente
(Technological Study Centre for Public Health and Environmental Protection)
Sao Paulo, Brazil

CIEH - Comité Inter-africain d'Etudes Hydrauliques
(Interafrican Committee for Hydrological Studies)
Ouagoudougou, Upper Volta

FAO - Food and Agricultural Organization (FAO)
Rome, Italy

IBRD - International Bank for Reconstruction and Development (World Bank)
Washington, U.S.A.

IDRC - International Development and Research Centre, Ottawa, Canada

NEERI - National Environmental Engineering Research Institute
Nagpur, India

NFP - National Focal Point

PAHO - Pan-American Health Organization
Washington, U.S.A.

PSCS - Project Support Communication Services (of UNICEF)

RFP	- Regional Focal Point
TOOL	- Foundation for Technical Development of developing countries
UNDP	- United Nations Development Programme, Washington, U.S.A.
UNEP	- United Nations Environment Programme Nairobi, Kenya
UNESCO	- United Nations Educational, Scientific and Cultural Organization Paris, France
UNICEF	- United Nations Children's Fund New York, U.S.A.
UNISIST	- United Nations International System for Information on Science and Technology (of UNESCO)
WHO	- World Health Organization Geneva, Switzerland
WRC	- Water Research Centre Henley-on-Thames, United Kingdom

BIBLIOGRAPHY (including references)

1. *An integrated international programme to accelerate the provision of water supply and sanitation in rural areas of developing countries*, by the Ad Hoc Working Group on Rural Potable Water Supply and Sanitation (WHO, IDRC, FAO, UN, UNDP, UNEP and OECD)
(unpublished, 1975)

2. *Report of the United Nations Water Conference*, by the United Nations, New York (1977)

3. *DEVSIS, preliminary design of an international information system for the development sciences*, by the DEVSIS Study Team, on behalf of IDRC, ILO, OECD, UNDESA, UNDP and UNESCO, Ottawa, Canada (1976)

4. *Symposium on community water supply in development cooperation*, by the WHO/IRC, Voorburg (the Hague), the Netherlands (1977)

5. *Towards a global information programme*, by the International Development Research Centre, Ottawa, Canada (1976)

6. *Rural potable water supply and sanitation*, by K.A. Pisharotti, Tamil Nadu, India (unpublished paper to the Ad Hoc Working Group, 1974)

7. *Community water supply and sewage dispsal programs in Latin America and the Caribbean countries*, by the Pan American Health Organization, Washington, D.C., U.S.A. (1969)

8. *The main elements of a program of technology adaptation and testing*, by D.J. Stanislawski, Warsaw, Poland
(unpublished paper to the Ad Hoc Working Group, 1974)

9. *UNISIST, study report on the feasibility of a world science information system*, by UNESCO, Paris, France (1971)

10. *Development support communication in country programming, project formulation and implementation, monitoring and evaluation*, by the Development Support Communication Service, UNESCO, New York, U.S.A.
(unpublished paper, 1973)

11. *Water supply support programmes*, a paper to the UN Water Conference by the WHO/IRC, Voorburg (the Hague), the Netherlands (1977)

12. *Function and organization of a national documentation centre in a developing country*, by a FID/DC Working Group, UNESCO, Paris, France (1975)

13. *Guidelines for the acquistion of foreign technology in developing countries*, by UNIDO, New York, U.S.A. (1973)

14. *Some thoughts on a world information service related to rural water supply and sanitation in developing countries*, by J.E. Woolston and M. Brandreth, IDRC, Ottawa, Canada (unpublished, 1975)

15. *An overview of water programs for improving life quality in rural areas*, by D. Donaldson, PAHO, Washington, D.C., U.S.A. (unpublished, 1977)

16. *World Health Organization: Water Information Services. Views and activities on information services for water supply and sanitation*, by J.M.G. van Damme, IRC, Voorburg (the Hague), the Netherlands (1977)

17. *Towards an improvement of international transfer and exchange of information on water supply and sanitation*, by W.-K. Hoogendoorn, IRC, Voorburg (the Hague), the Netherlands (1977)

18. *An international system for the exchange of information on science and technology for policy-making, management and development (SPINES)*, prepared for the UNESCO General Conference, Nairobi, Kenya