ESA COLLABORATIVE COUNCIL TEMPORARY WORKING GROUP ON COMMUNICATION OF INFORMATION

REPORT TO THE 1990 COMMITTEE

VOLUME 2
ANALYSIS OF INFORMATION ISSUES

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The analyses which follow were developed by the TWG-INFO, initially during its meeting in Geneva on 6-8 February 1989, and subsequently at the Group's final meeting in The Hague on 11-13 April, 1989.

1. PUBLIC INFORMATION AND PROMOTION (PIP)

1.1 Definition

Public information (PI) aims to raise the profile of the water and sanitation sector at the national and international levels, and promote with decision-makers and the wider public the importance of sustainable water supply and sanitation services.

Specific objectives of PI include:

- raising additional resources for the sector;
- promoting more effective use of sector resources;
- achieving a higher priority for the sector among donors and governments;
- increasing public awareness in donor countries;
- increasing public awareness by recipients in developing countries, in particular to increase demand for sector improvements in order to promote self-reliance and participation.

1.2 Target groups

The prime audiences for PI activities in both donor and developing countries are:

- Opinion leaders and policy makers - people who are able to influence other people and international and national policies. These include politicians, business communities, educators, selected journalists from the mass media, celebrities, lobby groups, international and non-governmental organizations (NGOs);
- Bureaucrats and technocrats - people who handle the implementation of national and local policies and often have a large amount of influence on the policy-makers. These include chiefs of ESAs, implementors in donor aid agencies, government officials, foundations and universities, NGOs and consultants;

- Public opinion - The popular will can be be mobilized in both developed and developing countries. In developed countries, this will primarily be for increasing the flow of aid and resources into development projects from governments and NGOs;
- public opinion - in developing countries, people need to be informed both as influencers of government policy and as beneficiaries regarding such issues as the value of water, the role the communities, especially women can play etc.

1.3 Problems and needs

The lack of public awareness of the achievements of the International Drinking Water Supply & Sanitation Decade was caused partly by an almost complete lack of any systematic approach to PI matters. Among many mistakes in global promotion of the IDWSSD, the following were thought to be crucial:

- The name was too complex;
- The message was too complex;
- The promotion involved too much negativity - there were too many people lacking the basic facilities for the public to perceive a realistic chance of success and too much money was required to help them;
- There was little or no emphasis on the chance for achieving the goals;
- There was no lead agency and no cohesion between agencies;
- There was no follow-up after the launch of the Decade - there is a need for periodic "launches" to maintain the desired momentum.
- The IDWSSD promotion was impersonal - there were no easily identified individuals associated with it;
- There were no easily identified needs groups;
- The public in developed countries is becoming very resistant to calls for more aid.
- The failure to convince policy-makers, both national and international, of the centrality of water and sanitation, and its economic costs and benefits.

The immediate need is to raise the level of public awareness of the sector to coincide with the start of the next decade, avoiding the mistakes listed above, and to maintain this level of awareness on a continuing basis.

The necessary work would require well defined guidelines, specifications, policy and directions. Innovative mechanisms are needed to achieve this aim.

A further need was for continuous promotion of the sector at the highest political level, thereby giving substantial weight to sector activities.

1.4 Ongoing Activities

Despite the deficiencies listed above, a great number of materials have been produced during the IDWSSD to raise public awareness at country and international levels. The following efforts at

international level were noted:

- The UNDP Unit for Decade Information within the Division of Information has produced hundreds of feature articles (for its own publications and for the Inter Press Service Third World monthly bulletins), case studies, posters and Decade kits.
- With WHO, regional media encounters were organized and, with UNICEF and WHO, a mobile photo exhibit was organized.
- UNDP has started and continued with *Decade Watch*; has produced the brochure *Water and Sanitation for Health* on Decade progress and the link with the 1990s Health for All action; and published features on water and sanitation in the new colour magazine *World Development* from UNDP's Division of Information, which also distributes *Community Water Supply: The Handpump Option* produced by the UNDP/World Bank Programme.
- Other existing magazines and newsletters with relevance to public information include *Waterlines*, the IRC Newsletter, the DTCD Newsletter, the ESCAP *Water Resources Journal*, *World Water* and *Water & Wastewater International*, all specializing in water. On health, WHO publishes Decade material in *World Health Forum*, the EHE Newsletter and the PEEM Newsletter. Each of these periodicals has a different audience.
- UNDP has arrangements with various news services for sector features: Gemini News Service (UK), Inter-Press Service (USA), Pacific News Service (USA) and Depthnews (Philippines).
- In audio-visuals, the early Decade film *Journey for Survival* has been followed by training and promotional films. UNICEF has produced the *Water Means Life* film from Imo State Nigeria. *O Poco* (The Dugwell), the UNICEF-assisted film/video from Mozambique won the 1988 First Prize in the African Film Festival. IDRC produced the *Prescription for Health* film/video (already in nearly 20 languages) with a users' guide.
- Shell produced *For Want of Water*. USAID/UNDP/Peace Corps produced *The Water of Ayole*, a film/video from Togo and, with the Centre for Disease Control/Carter Centre, UNDP produced *The Fiery Serpent*, a film and video on the prevention of Guinea worm disease (Nigeria).
- In the World Bank ITN Training Network, apart from the project-related slide/sound modules, three videos have been produced, aimed at wider audiences. The ILO/INSTRAW training modules also contain some general slide shows.

The meeting took note of the earlier Core Group discussion on the situation regarding periodicals in the sector; of an earlier proposal for a new ESA-funded magazine, circulated at the November consultation meeting in The Hague; and of UNDP's announcement this year of a new magazine which will be published by the Division of Information on behalf of the Collaborative Council.

The TWG-INFO was informed that the UNDP magazine would be appearing in June 1989, replacing *Decade Watch*. Published quarterly, the full colour magazine would contain opinion, field features, hardware/software innovations and country profile activities, and will be translated into 3 or 4 languages. It would provide coverage of UN, bilateral, non-governmental and private sector activities in developing countries. Target groups would include politicians and the general public. It would be distributed free of charge through the UNDP system and the UNDP/WB mailing list, with a broader readership envisaged.

The meeting noted the Core Group's opinion that *Waterlines*, which concentrates on serving technocrats in developing countries, can and should continue next to the new magazine. There was a feeling expressed that editors of newsletters and magazines in the sector should be encouraged to cooperate to avoid duplication of effort.

Discussions are under way for a developing country water exhibit at La Villette Cité de Sciences et de l'Industrie in Paris, involving support from the French government, the UNDP/World Bank Programme and possibly other donors. The exhibit would cover the low-cost technologies evolved during the IDWSSD and could later tour European capitals.

Other recent activities with a PI impact include the Solidarité Eau initiative of the European Commission, which has started in various European countries; the ongoing work of WaterAid in the UK; and, in Canada, the recently started WaterCan effort. These are all drumming up support (awareness and funding) for the sector.

1.5 Constraints

Probably the greatest problem to be faced in public information/promotion for the sector is that the task is vast and can never be done completely. A major challenge is to convince the media that long-term development activities - in particular water and sanitation - deserve space and attention.

Another constraint is that only a few agencies concentrate exclusively on water supply and sanitation. The large majority of ESAs, and Information Divisions within ESAs, also have a much wider mandate, with the water supply and sanitation sector taking only a small proportion of their attention. In general, ESAs do not have large budgets for promotion. The exception to this rule is UNICEF, which normally assigns 1-1/2% of project budgets to promotion, 3-1/2% to education, and 5% to social mobilization.

Collaboration among agencies on public information work in this sector seems to have been particularly difficult, perhaps because both collaboration and the sector itself have been low priorities.

Comprehensive professional campaigns are generally costly and so require comparatively high budgetary commitments on the part of participating ESAs.

Very little research seems to have been done on the attitudes of the intended recipients of the messages, be they local communities, technicians, bureaucrats or central organizations.

The general scarcity of a regular and reliable supply of case material has always been a PI constraint.

Dissemination also remains a perennial problem for PI (as for all information activities).

2. TECHNICAL INFORMATION EXCHANGE (TIE)

2.1 Definition

The term "technical information" is used to denote practical information of use to planners, designers, project staff, community workers, and others in the field of water supply and sanitation. This may be distinguished from management, public, sector or project information. Under this heading may come information about appropriate technology, hygiene education, community participation, human resources development, capacity building, financial resources, evaluation and a variety of other issues that are of practical application in water supply and sanitation project planning, implementation, operation or maintenance.

The growing environmental problems affecting rural and peri-urban fringe areas also require technical information on sanitation in the widest possible sense within the concept of "Health for All by the Year 2000" and sustainable development.

2.2 Target groups

Target groups for TIE in water supply and sanitation may come from any or all of the following:

In developing countries:

Individuals such as:
- community development workers
- community members
- engineers
- field technicians
- policy decision makers
- programme planners
- sanitarians
- school teachers
- social workers
- trainers
- village health workers

Institutions such as:
- bilateral donors/development agencies
- consulting firms
- libraries and documentation centres
- ministries of water/works
- multilateral/regional development banks national planning offices
- non-governmental organizations
- research institutions

specialized UN agencies
technical university libraries
UN agencies
universities and schools

The types of information needed are as diverse as the different target groups, although in some cases there may be overlapping needs. The diagram on page 7, taken from the INFO-IMPACT meeting report, attempts to delineate approximately the various levels between which information should flow in both directions. The Group used this model to provide a framework for its consideration of information needs and inputs.

2.3 Problems and needs

It was generally accepted by the group that the Local Level was the hardest to reach and also the most difficult from which to get feedback, therefore much of the thrust of the group's recommendations was aimed at remedying this deficiency. Crucially, it was decided that the Intermediate Level, which includes district health workers, sanitarians, etc. was the key to achieving this.

Increased emphasis of the IDWSSD on the sector has led to an increased demand for both published and unpublished information on developments and country experiences in other countries and sectors.

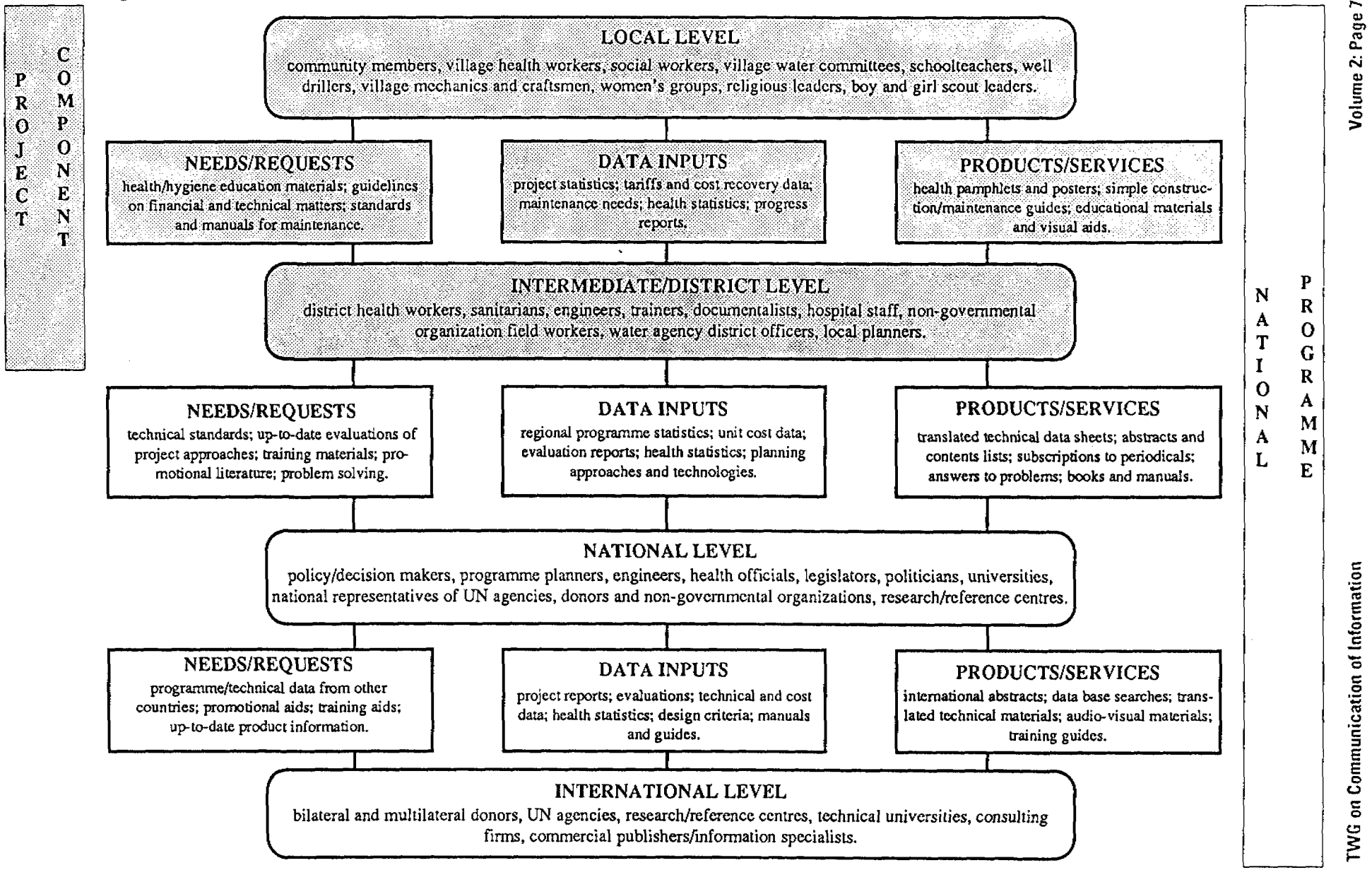
The Group noted with interest the examples of needs assessment results contained in the INFO-IMPACT TIE strategy developed by IRC in collaboration with others for support activities.

Based on such a needs assessment, gaps need to be identified and information products developed, using indigenous producers and materials where possible, with the emphasis particularly on local development. A delivery system and associated manpower, organizational and financial commitments should allow for the delivery of these products to the target users and intended beneficiaries. The challenge is to identify the types of products (books, journals, manuals, inventories, state-of-the-art reports, evaluations, abstracts etc) that are appropriate and responsive to specific demands.

Capacity building is crucial to any well functioning information-exchange operation. Skilled staff and proper facilities are needed to collect, store, produce and disseminate information. Linkages to a wider network of water supply and sanitation institutions and databases enhances the capacity of policy-makers, project and planning staff to have speedy access to the resources of others. Technical information from outside sources is often in an unsuitable form for use at the local level and there is an obvious need for some form of "repackaging" of information materials to make them more adaptable for local needs.

Too often information from ESAs or other external sources arrives in the country and stops at the national level without being passed further down the line because of the lack of personnel capacity and systems to make use of it. Similarly, there is normally no well defined channel through which

Figure 2. Examples of Information Flow



valuable project information is passed upwards to regional or national sector institutions, who could then reapply the lessons learned to other projects.

Most developed country information originates in a language unsuitable for use at local level, but the facilities for and expense of translation often inhibit its passage down to fieldworkers and users at the grassroots level.

There is also a lack of effective networks for information exchange between users on the same level, either electronically, in document form or by people-to-people exchange. Frequently, projects in the same country initiated by different donors are run in isolation from each other preventing the exchange of valuable technical information.

Proper training of staff in both manual and automated systems for information transfer encourages compatibility of working methods and facilitates future exchanges with information centres elsewhere in the sector. Specialized "tools" that can be employed for this purpose include: the IDRC MINISIS and ILO/UNESCO Micro-CDS/ISIS bibliographic software packages; the Interwater thesaurus, glossary and classification system; and the UNDP/World Bank International Training Network (ITN) training modules on technical information. Use of new technologies such as CD-ROM, electronic mail, and fax should be encouraged.

A need also exists for standardization of information tools (information systems, formats for information handling, thesauri etc.) and the provision of means for their production at country level.

An inventory is also required of information centres and clearing houses, both within countries and at international level, to avoid duplication and to devise cost-effective methods for making mutual information exchanges easier.

Once the capacity to collect, generate and disseminate information is established, there is a need actively to promote the information products and services as well as the awareness of the use and value of technical information. Potential users and beneficiaries need to recognize that costs are associated with information processing, production and dissemination. Project plans should allow for a budget line to ensure that this capacity can be sustained to provide continuous and qualitative information services.

2.4 Ongoing activities

A Donor Consultation at Interlaken, Switzerland, in 1987, identified as one of four essential elements of water and sanitation projects: Provision of technical information exchange, to ensure appropriate project design and support, and to provide data for future projects.

That same year, two international meetings on information exchange in water supply and sanitation under the acronym INFO-IMPACT and hosted by IRC through the auspices of the Decade Steering Committee, concluded that:

- A phased approach, beginning with the introduction of TIE components to individual water supply and sanitation projects, is the most cost-effective way of initiating activities;

- Investment from TIE components can be readily justified by benefits from improved performance and capacity building, thus improving the chance of funding support from donor agencies;
- TIE is the key element of the Global Sector Concepts agreed by ESAs as crucial to the success of water supply and sanitation programmes in developing countries.

The INFO-IMPACT meetings resulted in the development of a "Framework for Technical Information Exchange", which was endorsed by the Decade Steering Committee and major donors as an effective way of implementing information exchange activities in developing countries. It consists of four elements:

- assessment of needs and resources;
- product development;
- capacity building; and
- promotion.

The framework allows for project-related information activities to be designed in such a way that they enable the information products and communication channels to be planned and implemented to suit the project, national, regional or global application envisaged.

One of the international agencies with a long-standing history of building national capacities for the effective management and improvement of technical information systems is the International Development Research Centre (IDRC) in Canada. It has been instrumental in the development of information systems and services for REPIDISCA in Peru, ENSIC in Thailand, CEHANET in Jordan, and CIEH in Burkina Faso, among others.

The UNDP/World Bank International Training Network (ITN) has also been actively involved in dissemination of technical information on low-cost water supply technologies and approaches through its centres in India, Indonesia, Kenya and other countries.

Several regional and international agencies provide reference services in the water and sanitation sector. Among them are the libraries and documentation centres of WHO/CWS, IDRC, IRC/WD, WASH and IRC. The regional libraries of ENSIC/AIT in Thailand, PAHO/CEPIS in Peru, CIEH in Burkina Faso, AMREF in Kenya, WHO/PEPAS in Malaysia, WHO/CEHA in Jordan, the UNDP/World Bank ITN Centres, the World Bank Regional Water & Sanitation Support Groups (RWSGs) and other regional and headquarters office libraries of the UN and donor agencies also provide valuable information support.

At the request of the Decade Steering Committee Secretariat, IRC has prepared an assessment of the contribution of TIE to the achievements made during the Decade in the field of water supply and sanitation. The Core Group recommended that this become the starting point for a more comprehensive inventory of the TIE activities being undertaken by ESAs, developing countries, and information, training and research centres at country, regional and international levels.

2.5 Constraints

The problem of finance is a universal constraint that hinders the processing, storage and retrieval, translation, production and dissemination of vital information. In particular, foreign exchange problems provide a considerable barrier to the flow of information materials from developed to developing countries and even between developing countries themselves.

In addition, a low priority is attached to information and its dissemination by decision-makers and practitioners. Information workers do not attach enough importance to active dissemination activities and tend to concentrate on collection and storage of information.

Inexperience in writing up project experiences is a common problem in developing countries. Lack of awareness of the importance of documenting these experiences is also another constraint.

Many information products are developed that do not meet the demand of a particular market. An analysis of user needs should be fed back to those developing the know-how and monitoring the research, so that information projects and products can be modified accordingly. This feedback mechanism is indispensable to a process of bridging the gap between "what is needed" and "what is available".

Many potential users are neither trained to use nor aware of the value of using information to solve field problems. Much training and education is didactic and does not teach the techniques of problem-solving.

Another in-country problem is the general lack of awareness of the information resources that already exist within agencies, developing country institutions and reference centres dealing with water supply and sanitation. Lack of trained staff who can process, analyze and package the information to suit different audiences, was also identified as a constraint.

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3. PROJECT AND SECTOR INFORMATION (PSI)

3.1. Definition

Project information concerning the sector in a given country may be defined as information regarding all urban and rural water and sanitation projects, their status and their funding. These include all sets of sector support activities, as well as activities on solid waste, environmental health and education going as far as seminars and meetings. They include both past and current projects as well as projects in the pipeline. These projects may be financed by the national government, by government institutions at district or local level, or by non-governmental organizations (NGOs) at any of these levels. They also include partly or fully externally-supported projects by External Support Agencies (ESAs), or other entities.

Sector information is directly linked to project information, but is broader in nature. It includes general country information, sector statistics, planning information, and addresses of ministries and institutions. The example of a CESI Sector Profile in Volume 3 gives a good impression of the scope of sector information. This type of information will be of interest primarily to external support agencies. In addition to CESI, WASH has also developed sector profiles for USAID that can be used as models.

The TWG noted that there was a serious problem among ESAs of defining the sector. For instance, the European Economic Community does not divide its development into sectors, preferring to adopt an integrated approach. Caisse Centrale de Coopération Economique, on the other hand, divides its development support between four geographical regions each of which has a different definition of what constitutes a water project.

3.2 Target groups

Possible uses of Project Information in developing countries (DCs) are linked to the planning of water supply and sanitation (WSS) programmes. In particular, appropriate information about WSS projects in a country might help planners to consider:

- Financial plans
- Human resources development (HRD) needs
- Research needs
- Project implementation, operation and maintenance
- Emergency operations
- Community development needs

Categories of user at the national level who would be served by sector information include:

- Project managers and staff in water-related projects
- Decision-makers in ministries
- ESAs' representatives in countries
- National consultants
- Training and documentation centres

ESAs share an interest in the country-specific information needed for national planningpurposes. They may also have a need for project information for comparison purposes, to help dialogue with DC partners and other ESAs, and to provide leads to sources of evaluations or reports on particular approaches. The Core Group noted the clear link here between project information and technical information.

For the ESA Collaborative Council, project information may assist with the monitoring of WSS progress on a regional and global level. It may also help to indicate the scope for ESA collaboration in particular developing countries.

3.3 Problems and needs

There is a great need for much more project and sector information, both at country level and internationally. Allied to this is an equal need for greatly increased capacity to produce, record and manage information.

The WHO-operated Country External Support Information (CESI) system for sharing project information among ESAs has been designed to meet the needs of the donor community. However, there is a great need for continued financial support of the CESI system from the ESAs. In addition, there is a need to address long-term country-based data collection, allowing exchange in and out. Particular attention needs to be paid to development of PSI systems at country level, which could provide a service, if possible, down to the grass-roots level. Training in database handling and information systems must also be considered.

Sector information requires linkages at country level and a monitoring system to check on its effectiveness. Most developing countries have no single source, either at national or district level where such information could be stored, and some governments would be disinclined to provide such information.

However, the TWG felt that, generally, ministries would welcome the opportunity for a coordinated overview of country activities. The TWG was impressed by a report that US AID had decided to invest $40 million in water supply and sanitation in El Salvador helped by a WASH sector profile, which contained the right information.

The above analysis came from the Geneva meeting, the meeting in The Hague divided needs as follows:

<u>Country level needs</u>

At country level information is needed for the following purposes.

- resource allocations among different sectors
- preparing requests for donor agencies consideration
- strategy development within the sector

- project design
- project implementation

International level needs

- statistic global analysis, including trends anaysis
- information sharing between countries to share experiences

Possible uses of project information in developing countries (DC's) are linked with the planning of water supply and sanitation (WSS) programmes. In particular, appropriate information about WSS project in a country might help planners to consider:

- financial planning needs
- human resources development (HRD) needs
- research needs
- project implementation (operation and maintenance) and monitoring needs
- emercency operations
- community development needs.

3.4 Ongoing activities

All governments in the developing countries have project information available, be it, in many cases, not yet in a systemized form. The CESI system concentrates on projects which are partly or fully externally funded: it is a computerized data base of drinking water supply and sanitation projects in developing countries which have received, or are seeking, external support. CESI collects information about ongoing and completed projects from external support agencies (bilateral and multilateral funding institutions, UN agencies and non-governmental organizations). Extra data on projects under preparation comes both from the agencies and from developing country governments.

CESI helps developing countries in providing a check on aid flows and requests in the sector, covering several ministries and numerous aid agencies. The data can be used to adjust programme priorities and track progress towards Decade goals. External support agencies benefit from CESI through acquiring access to a complete picture of water supply and sanitation projects in any particular country. Information on projects funded or co-funded by other agencies is particularly valuable in preparing new programmes or evaluating ongoing ones.

WHO is preparing a proposal for participating ESAs to pay regular subscriptions, as a means of guaranteeing the minimum core funding necessary to keep CESI operating. This will take account of any additional contribution WHO itself may be able to make, such as absorbing some CESI costs into the regular budget. At present, CESI has funds to cover 1989 and a little beyond. The TWG was informed that if the present 40 participants contributed an average of $10,000 per year, this would be sufficient to ensure the system's continuance.

Sector information is directly linked to project information, and a proposal exists to include Sector Profiles with the distribution of CESI country information. The UNDP/World Bank Programme

has also offered to make available sector analyses and other data to those preparing Sector Profiles.

Through Development Cooperation Reports (DCRs), UNDP Resident Representatives collect and present information at the country level covering assistance in all sectors. This includes project information, and CESI is already working to ensure compatibility with the DCR system.

A national monitoring system for the WSS sector (GLOBALMON) is already in operation in over 100 countries and reports, on a biennial basis, its results to WHO, Geneva, for the compilation of global sector statistics for the Decade and beyond.

WASH has also produced sector profiles covering 26 countries and is making them widely available.

The Hague meeting summarized these ongoing activities thus:

- national planning bodies
- RWSGs; UNDP/WB sector approach and strategies
- the CESI system
- WHO global monitoring information through GLOBALMON
- WASH sector profiles
- DCR reports of UNDP
- CEPIS

Out of these CESI and GLOBALMON are the only global systems for the sector.

3.5 Constraints

As with the difference between ESA definitions previously noted, each of the 150-plus developing countries has a different way of registering and administering projects, resulting in a multitude of different subject headings, sources, semantics etc. This makes the idea of standardization most difficult. Nevertheless, if a minimum level of standardization could be attained, the costs of linking information systems could be dramatically reduced.

Regarding CESI, the Group noted a number of possible discussion points:

- CESI information comes almost entirely from the existing records of participating ESAs (40 of them so far). It therefore contains onlyexternally-supported projects.
- In most cases, the CESI data is provided by the headquarters of the ESAs, not by field offices.
- Few ESAs presently store information in such a way that the CESI Secretariat can readily extract all of the information needed on any particular project.
- CESI does not contain evaluative information on projects, though it does indicate in the project description if reports have been produced.
- The emphasis on HRD which the 1990 Committee sees as desirable could be better reflected in CESI Project Profiles if specific indicators were suggested for noting the HRD component

of technical projects.

- Although the CESI system is extremely useful to ESAs, it does not contain all project-related information required by some donor agencies.

The Group identified a number of constraints which will impede improvement of sector information. The constraints were identified as:

- Lack of capacity of personnel in the coordinating agency and the contributing agencies to record, produce and manage information;
- Lack of adequate training systems and training budget for personnel;
- Lack of administrative facilities and equipment;
- Lack of reliable information due to political reasons;
- Negative reactions from the government to providing the information;
- Lack of information on the operation of certain projects carried out jointly between the government and ESAs;
- Lack of support from ESAs working at country level in providing information on support to sector and ESA profiles (see below).

The Hague meeting categorized the constraints thus:

National level

- inadequate system for collecting information, lack of international back-up, lack of training in data collection and data handling, lack of facilities and equipment
- information is of a low political priority consequently no funds are provided
- negative reactions and lack of sharing of reliable information due to political reasons
- the role of information for improving sector information is not recognized.

International level

- lack of standardization of data among countries and external support agencies smantics, definitions and compatibility of system and structures
- lack of quality of data
- multiple systems for information exchange
- formats and systems are still not user friendly enough although improvements have been made.

4 MANAGEMENT INFORMATION SYSTEMS (MIS)

4.1 Definition

MIS is traditionally defined as a "formal method of making available to management, through internal sources, relevant information necessary to facilitate the decision-making process and to enable the organization's planning, control and operational functions to be carried out effectively". MIS is recognized as an essential tool for effective and economic management and so should always be employed at local as well as at national level to enhance WSS implementation and sustainability.

In the central planning ministry (which includes the water supply and sanitation sector), MIS should be designed to make available the following information at country level:

- Project design information
- Construction information
- Operational information
- Health data
- Performance data
- Financial and accounting information
- Institutional and administrative information
- General sector information

MIS also has the following important functions:

- To ensure adequate sector planning and strategies;
- To monitor the use of funds;
- To motivate sector staff, who will participate more if they are better informed;
- To provide community or user groups with information for planning, building and operating systems;
- To monitor sector needs and the progress made towards meeting them;
- To monitor in
- country activities
- work in countries is often driven by ESAs and no
- one is in a position to monitor work at country level;
- To monitor the usage, operation, maintenance and sustainability of water supply and sanitation systems;
- To provide evidence to measure the success of strategies, the adequacy of resources, the suitability of systems used and the necessity for changes;
- To monitor customer/user needs and examine how installed MIS systems meet these;
- To monitor social, health and economic impacts.

The Group enunciated the following principles for development and use of a system. It should:

- Maximize access to information
- the aim should be autonomy and access at all levels;
- Be easily used and locally supportable;
- Collect only relevant information;
- Meet users' needs
- which must be identified;
- Provide timely information;
- Be continuous/dynamic
- the flow of information should adapt to needs and their evolution;
- Allow for assessment of results, directions and strategies
- and coming up with new ways of assessing progress;
- Encourage decision
- making and action.

It should be emphasized that MIS is only a tool to help meet objectives and that its design needs to draw from previous MIS experience on user needs and satisfaction.

4.2 Target groups

The Group identified the following groups to implement MIS:

1. The central planning organization in the country
2. Decentralized national operational institutions (managers, municipalities, utilities at community, district, provincial and state level).
3. ESAs, NGOs, private water companies, education & training agencies

All have important needs and information inputs that should be addressed in the design of any MIS. As a consequence, the TWG emphasized the flexibility that was necessary if an MIS system was to cope adequately with the many levels within a formal level.

4.3 Problems and needs

The TWG felt that management information systems should be developed and adequately funded in the context of the project development programmes they are to serve. There is a need for on the ground support for self development of MIS rather than the superimposition of the techniques from outside.

The development of MIS has to take place in the context of and with input from the programme or institution within which it will be used. The TWG saw this as a most important concept. In fact, the successful design and implementation of an MIS is likely to require changes in management practices and styles.

It emerged during discussions that, although nearly every developing country has some form of MIS support currently in progress, there is very little information in ESA files on the topic. The TWG therefore felt the need for an examination of existing models to find out how they worked and why they were implemented. An inventory was required of good examples. This would aid the development of a better understanding of MIS, its components and practical applications. It was felt important that systems should be developed in modular form and implemented at different levels at different times. For example, initially, the district level MIS would not need to be tied into the national level, although this could be done at a later date.

A need was seen for promotion and information of MIS among potential users to explain why having such a system was important and also to explain how to go about setting up such a system. MIS needs education and marketing. This led on to identification of a need for an inventory of training resources (institutions and individuals) prior to development of additional resources and the expansion of existing training materials and courses to include MIS as a subject. Capacity needed to be developed for national/regional training. Qualified consultants in the field also needed to be identified.

Encouragement is needed too for technical cooperation between developing countries with exchange programmes such as those already operated by SANEPAR in Brazil.

Standardization of evidence of WSS performance and impact and the indicators which provide that evidence is also needed. Though items will differ in levels of importance, the areas covered will tend to be the same. The system used must meet the day to day needs of the country and institutions concerned as well as provide information for overall sector planning.

The Hague meeting added the following points:

No formal standard can be used, as there will always be differences in terms of the specific design needed for MIS in each country, each level, and each individual project. Almost every developing country has some form of MIS in operation. These need to be improved as part of the development process within the countries. Funding must be made available for the training of managers at every level, including the community level. There is a strong need for promotion and information about MIS among potential users at every level. Guidelines, manuals and basic indicators will have to be developed.

4.4 Ongoing activities

Very little work is documented at international level about MIS development, but the TWG was able to provide several individual examples of existing MIS systems which would be worth studying. Prominent among these was that operated in Penang, Malaysia, and the previously mentioned SANEPAR system in Brazil, both of which have received worldwide recognition. Also listed were the systems operated by the Local Water Utilities Administration (LWUA) Water Districts in the Philippines, a community-based system in Bali, Indonesia, the National Water Supply and Drainage Board system in Sri Lanka and many Indian examples including some UNICEF projects and the large water supply and sanitation sector. Although the authorities and programmes mentioned are successful, it is not certain what role the MIS played in their success.

4.5 Constraints

There is no inclusion of MIS as an item under current project development. There is also a lack of long-term commitment, a lack of appreciation of what can be achieved with MIS and a lack of attention to this area in educational institutions.

Not enough investment is being made in the examination of the effects of the introduction of MIS systems on the people who have to use them. More effort is needed in managing the changes that MIS brings about rather than MIS design. There is a need for considerable effort in training and education to change habits and attitudes.

It is essential that the application of MIS should be mandatory for each individual programme and project, as a prime management tool both for the countries and for the ESAs.

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5. LINKAGES

The TWG identified many linkages both between different information areas defined in this report and between these areas and other sector activity. Some of these are as follows:

MIS linkage with PSI/TIE

Management Information needed in a country for developing a strategy and taking strategic decisions to a large extent overlaps country information covered by PSI, while that for taking technical decisions overlaps TIE. The TWG was clear that the information collection and reporting under the proposed Sector Directories system would also have to form part of any Management Information System and be built into the MIS system as it was evolved.

Sector Information linkage with CDR system

The offices of the UNDP Resident Representatives as well as the WHO and Representations of UNICEF and the UNDP/World Bank RWSGs should be instrumental in providing contacts with the government and advocate the use of the Directory system as the most complete and authoritative

information source for the sector. The UNDP offices, in compiling the Country Development Reports (CDRs) in cooperation with government, should seek ways of using the pilot project to appeal for an improved country reporting system for externally supported projects. The CDR system, which will be operated on microcomputer equipment at the earliest by the end of 1989, could be combined with a modified CESI version as described below.

Sector Directories Linkage with Global Monitoring

The information collected nationally by the ongoing national monitoring system operated by WHO will be used as the basis for the sector information provided under the first 14 headings in the Directory. The changes will constitute an improvement of the national capacity to collect and analyze information at more frequent intervals. The production of the sector information to be compiled in the Directories will remain entirely within the country. WHO EHE/CWS will continue to compile information from the different sector information systems to prepare global statistical analyses.

Linkage with PSI
(Suggestions from Public Information Group)

The group suggested that country profiles of information and communication for water and sanitation programmes and projects should be included as an integral part of water and sanitation information systems. The guidelines for assessing institutional and organizational aspects of communications should include:

- traditional media including alternative communication;
- radio, television, cinema, press and professional associations and unions;
- analysis of national communication policies with view to include launching of communication campaigns on water supply and sanitation programmes and projects;
- content selection to suit selected target audience (e.g. women, children at school, etc) including the use of vernacular languages;
- community participation in water supply and sanitation projects with particular reference to women by using interactive communication means.

CESI linkage with Sector Directories

The CESI System will be used as a departure point to build up a standardized project information system. This would result eventually in a system for sharing information between governments. For each one of the pilot countries, the CESI listing will be used under the last heading in the Directory (Project Listings). The information will be presented in the following formats:

1. Financial summary of all projects sorted by government agency;
2. Planning projects and activities in the country;
3. Human resources development projects and activities;
4. Research;
5. Implementation summary of all construction projects, whether proposed, ongoing, completed

or discontinued.

6. Summary of emergency operations.

This will be followed by the list of all projects, sorted by ESA.

The pilot study should identify to what extent the information thus far collected from the central operation of ESAs could meaningfully be collected from sources within the country. This would signify that the present CESI operation would continue in its present form to support the setting-up of national project information systems as long as it is required. The long-term aim would be to provide a global project information-sharing system based in countries using a standard format.

In setting up the Directory and the information-support systems required to provide the information, CESI support staff will be made available under the pilot project. In addition, CESI will offer complete versions of the menu-driven database system to interested governments modifying the structure to correspond to the needs of individual governments, ministries or other reporting agencies, including projects if needed.

Global, inter-regional, regional and inter-country projects with interest to the government will be provided as a service from the CESI Secretariat in Geneva. These projects will be included under the project listing in the Directory.

Directory linkage with Sector Studies

Some TWG members felt that installation of the Directory system within countries would provide an ideal opportunity for a sector study to be carried out alongside. There was, however, no general consensus on this proposal.

Linkage with NGOs

Delegates from Non-Governmental Organizations emphasized the need for closer links with NGOs to reinforce user interest, because NGOs were often closer to user groups and often possessed considerable in-country information. WHO work in this direction has already started.

Linkage with TIE on Applied Research

The linkage of TIE case studies with those promoted in country by the TWG on Applied Research was discussed by the TWG on Communication of Information.

Linkage with MIS and TIE (suggestion from Public Information Group)

<u>Specific Communication Support to Water and Sanitation Programmes and Projects</u>

The supportive role of communication should be an integral part of water supply programmes and projects in all stages of their planning and implementation usually:

- in planning stages

-in pre-investment stages

- in implementation stages
- in operation and maintenance stages
- in evaluation stages

Special multi-media strategies should be designed and applied at different levels of implementation in order to secure better motivation, community participation and support to water supply programmes, including interactive communication systems for possible improvements of programmes and projects. Communication support targetted to specific groups such as women, children, elderly, etc. should be also stimulated.

This report is comprised of three separate volumes:

Volume 1: Recommendations
Volume 2: Analysis of Information Issues
Volume 3: Annexes