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The WASH Project is managed by Camp Dresser & McKee Incorporated. Principal Cooperating Institutions and subcontractors are: International Science and Technology Institute; Research Triangle Institute; University of North Carolina at Chapel Hill; Georgia Institute of Technology—Engineering Experiment Station.

COORDINATION OF WASH INFORMATION ACTIVITIES AND EXCHANGE WITH INTERNATIONAL INFORMATION CENTERS

HOLLAND AND ENGLAND
APRIL 5 - APRIL 17, 1981

FIELD REPORT NO. 18

Prepared For:
USAID, DS/HEA
Order of Technical Direction No. 32
Trip Report No. 1

Contract No. AID/DSPE-C-0080 Project No. 931-1178

KP 3948

April 23, 1981

TRIP REPORT #1 OTD - 32

The attached pages summarize the first trip made by WASH Project Information Director, James E. Beverly, under OTD 32.

The purpose of this trip was to establish sound, long term working relationships on WS&S matters concerning information exchange and various modes of collaboration in information development, acquisition, analysis and dissemination. The general approach used was to explain the WASH Project and its operational procedures, to obtain verbal and written descriptions of the organization visited's structure and programs, and then to discuss possibilities of information exchange and collaboration.

The trip started on Sunday, April 5, 1981 and ended Friday, April 17. Organizations visited were:

1. International Reference Centre for Community Water Supply and Sanitation; Rijswijk (The Hague), Netherlands: April 6-9.
2. TOOL - "Technical Development with Developing Countries" and its SATIS Program (Socially Appropriate Technology Information System); Mauritskade 61a, 1092 AD, Amsterdam, Netherlands: April 10.
3. Intermediate Technology Development Group (ITDG), London and Reading, England: April 13-16.
4. Appropriate Health Resources & Technologies Group, Ltd. (AHRTAG), 85 Marylebone High Street, London W1M 3DE, U.K.: April 14.
5. Water Research Center, Stevenage Laboratory, Elder Way, Stevenage, Herts, SG1 1TH, U.K.: April 15.
6. National Water Council, 1 Queen Anne's Gate, London SW1H 9BT, U.K.: April 16.
7. Ross Institute, London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, London WC1E 7HT, U.K.: April 16.

Due to the absence of John Pickford, on Easter Vacation, the University of Technology, Loughborough, Leicestershire, and its Water and Waste Engineering for Developing Countries (WEDC) Program were not visited as intended on this trip. Each visit is summarized in one of the seven numbered sections below.

1. International Reference Centre for Community Water Supply and Sanitation; April 6-9.

The following nine professionals were interviewed at the IRC: J.M.G. van Damme, Manager; J. Haijkens, Deputy Manager/Programme Coordinator; E.L.P. Hessing, Public Standposts/Project Evaluation; H.A. Heijnen, Slow Sand Filtration/Sanitation; E.H.A. Hofkes, Handpumps/Technology Manuals and Seminars; W.K. Hoogendoorn, Information Services/Decade Media/Newsletter; G.L. Howell, Manpower Programmes; P. Kerkhoven, Information Programme POETRI/Community Participation; T.K. Tjiook, Standardization and Type designs/Technology Manuals and Seminars. A general description of the IRC and its five program areas - information; technology; manpower development and training; community education and participation; and evaluation and planning - as summarized by the IRC, are on the next seven pages. Specific comments of interest to WASH by the IRC staff follow. The next page is a flow chart of a presentation/discussion by the writer with the nine men in a meeting called by Dr. van Damme on April 8: "KKT - Knowledge and Know-How Transfer: A Modular Problem-Solving Model." The model served as a basis for comparing the operational styles of the WASH Project and the IRC. It was concluded that WASH and IRC were not competitive, but complementary with many opportunities for information exchange and collaboration. This section ends with a three page summary (by IRC) of its proposed POETRI Programme - Programme on Exchange and Transfer of Information.

International Reference Centre for Community Water Supply/Sanitation

1. *SCOPE AND INSTITUTIONAL ARRANGEMENTS*

IRC was established in 1968 and is based on an agreement between the World Health Organisation and the Netherlands Government. The objective is to underpin information and technology support programmes in the developing countries in the field of Community Water Supply and Sanitation with an emphasis on rural and urban fringe areas, and to promote international cooperation therein. Acting as a catalyst, IRC operates through a worldwide network of national and regional institutions both in developing and industrialized countries. It cooperates closely with the WHO and other UN agencies participating in the Steering Committee, as well as other international organizations, bilateral donors and non-governmental organizations.

IRC is an information oriented organization. Its programmes concern the development and application of relevant knowledge, expertise, technology and methodology, related to water supply and sanitation. The activities are carried out in the spirit of T.C.D.C. (Technical Cooperation among Developing Countries). They are directed towards support to programmes within the developing countries. They include cooperation in information programme development at the national level, as well as the delivery of input to national support programmes, in the field of appropriate technology, manpower development and training, community education and participation, and project evaluation. Support is provided by means of guidance and training material, seminars and courses, research and demonstration projects, as well as general support to the development of national facilities.

Thus the IRC programme is composed of five main programme areas:

a. Information;
b. Technology;
c. Manpower Development and Training;
d. Community Education and Participation;
e. Evaluation and Planning.

In the ten years of its existence IRC has become an established organization, specifically working in the above fields, and has developed three assets, which will enable it to carry outwork in the context of the International Drinking Water Supply and Sanitation Decade, viz:

- an extensive network of contacts;
- an overview of avaliable information and information sources;
- access to expertise in the specific fields in which it has worked (see publications).

The total budget of IRC includes an annual core budget of US $ 700.000,-- and a varying programme budget, which at present amounts to approx. US $ 3.000.000,--.
The present total staff amounts to 19 persons.

IRC is being transformed into an independent foundation. This will enable it to be more international in its outlook and to be better equiped for work with the developing countries and for cooperation with UN agencies and bilateral donors.

2. *PROGRAMMES AND PROJECTS*

The IRC is currently implementing or planning a number of programme and project activities, which can be grouped under the programme area headings as mentioned in paragraph 1.

Information

In order to strengthen national capacities to use available information on appropriate technology, manpower training, community participation, and other relevant topics for water supply and sanitation, activities are initiated along two main lines.

* - The development and implementation of a programme on exchange and transfer of information (POETRI) in close cooperation with developing countries, giving emphasis to action at the national level and, in this context;

- The development of information services by integrating and extending existing services of several organizations and to focus the resulting "information dissemination package" on the immediate information needs of developing countries for the Decade.

Since 1970 about 100 newsletters of IRC have been published in English, French and Spanish. This monthly Newsletter, whose distribution has grown to 20.000 copies, provides information on new developments in the sector, data on new publications and forthcoming courses, conferences, symposia, exhibitions as well as IRC news.

Technology

The collection, analysis, synthesis and dissemination of knowledge and experience on appropriate methods and techniques in the field of water supply and sanitation is concentrated in various general and also in more subject-specific, sometimes country-based activities. These includes:

- The development of a reference document presenting innovative practical solutions in water supply and sanitation for developing countries, collected through mail surveys and field visits;

- The compilation of a handbook on technologies for small community water supplies;

* - The organization of a series of regional and national seminars on planning, project management and technology of cummunity water supply and sanitation, composing the seminar programme by combining subject modules according to the specific requirements;

* - The development and implementation of information generating, testing and demonstration projects on e.g. handpumps, public standposts, slow sand filtration, and sanitation systems, using the technical subject as a "vehicle" for studying and demonstrating the relations between and importance of various project development components, such as the technical, organizational and social aspects;

* - The collection and development of typical and standard designs, and studies on and promotion of standardization of water supply and sanitation components.

Manpower Development and Training

To assist developing countries to establish a national capability for the development and training of manpower needed for the water supply and sanitation sector, the main activities include:

- The compilation of a guidance manual for the development of national training delivery systems for the sector;
* - The development and implementation of a manpower development and training programme, aiming at establishing national training delivery systems in a number of developing countries and using the methodology as presented in the guidance manual.

Community Education and Participation

To have appropriate types of education and participation components included in national water supply and sanitation programmes, the following activities are or will be undertaken, next to literature studies and reviews and the preparation of bibliographies and monographs on the subject:

- An appraisal study on the relevance, need and feasibility of an action plan on community education and participation in water supply and sanitation in developing countries;
- The preparation of guidance documents, such as guidelines for planning and evaluation of community education and participation components of national programmes, and checklists for national inventories on this subject;
* - The development and implementation of pilot projects on community education and participation as part of national water supply and sanitation programmes to test and evaluate various methodologies.

Evaluation and Planning

There is an increasing need for evaluating past and present experiences with a view to learning from it for better planning of future projects and programmes. Assistance was provided to the Ross Institute for Tropical Hygiene in London on the methodological approach towards evaluation which resulted in a co-publication, entitled: *"Evaluation for Village Water Supply Planning"*.
Other activities on this subject will include:

* - The initation and support of a series of evaluation studies in a number of selected countries, to provide baseline data for planning of national water supply and sanitation programmes and projects;

- The promotion of the establishment of a permanent mechanism for international agencies regarding the promotion and the sharing of knowledge on evaluation and planning.

Please note:

The * marks projects and programmes that include major activities in developing countries. Countries involved are indicated in the following table(I). In all of the programmes T.C.D.C. (Technical Cooperation among Developing Countries) is an established principle.

Current and planned involvement of IRC in country-based projects on Information and Technology support.

Table (I)

COUNTRIES	Info exch progr. POETRI	Manpower Developm.	Handpumps	Public Standposts	Slow Sand Filtration	Sanitation Systems	Standar-dization	Roving Seminars	Community Partic.	Evaluation+ Planning
(SEARO)										
Bangladesh			.						.	
India	O		O	O	X	.			O	
Indonesia	O	X	.	.		X	.			
Sri Lanka		X	.	.				.		
Thailand	O		O	.	X	.		.		O
(WPRO)										
Malaysia						.				
Philippines	O		O	.		.			.	O
(AFRO)										
Mali	O									
Cameroon			.						O	
Ghana			O		X					
Guinea Bissau									.	
Kenya				.	X					O
Malawi			.	.					.	
Niger	O									
Senegal	O									
Tanzania	.	O	.	.					.	
Upper Volta	O							.		
Zambia			.	.						
(AMRO)										
Argentina	O									
Caribbean (Eastern)		X								
Colombia	O		.		X				O	
Costa Rica			.			O		.		
Equador	O							.		
Jamaica	O				X					
Nicaragua									.	
Peru	O								.	
(EMRO)										
Egypt				.						
Sudan	.				X					

Explanation of signs:

X = Currently involved in country project

O = Working contracts established

. = Planned involvement

Contact for Latin America:

Centro Pan Americano de Ingenieria Sanitaria
Ciencias del Ambiente
Casilla Postal 4337
Lima 100
Peru
Cable : CEPIS Lima
Telex : 36 21 052
Teleph. : 35 41 35

Contact for South Asia :

National Environmental Engineering Research
Institute (Neeri)
Nehru Marg
Nagpur - 440020
India
Cable : Neeri Nagpur
Telex : 013 233
Teleph. : 23 893

Contact for West Africa:

Centre Interafricain d'Etudes Hydrauliques (CIEH)
Boîte Postale 369
Ouagadougou
Upper Volta
Telex : (eier) 5266 uv
Teleph. : 33 518 / 33 476

Karel Hoogendorn, Head Information Services, was designated by Dr. van Damme to serve as my host and was most helpful. Karel has a Masters in Information Science and joined the IRC in 1977. His section handles the library and information requests.

The IRC receives 40-50 queries per month, mostly in English and from developing countries. The accession rate is 25-40 documents per week plus journals. Karel gave me a copy of their 450 word "descriptor list which is the product of their working experience with WS&S documentation. Each word has a McBee punched card which is used for optical (manual "peek-a-boo") screening to select desired documents. No key words have been added since December 1980 as they are awaiting funding for an HP-3000 computer to implement the IDRC of Canada's MINISIS information System to incorporate their holdings of some 10,000 books and documents. This is in conjunction with an IBM System 6 word processor.

During the next year, through the services of a conscientious objector to Dutch military service, they expect to produce abstracts of several hundred items on 20 reference lists. These will be available to us. They will not do retrospective abstracting of their library holdings. The new librarian they expect to hire will also do abstracting.

(JEB: this is an area where WASH and IRC could "collaborate" to avoid duplication and expedite abstract preparation on an exchange basis. Details have not been discussed. We could also probably get WASH "announcements" or other material inserted into the IRC monthly newsletter, but this was not discussed explicitly.)

Up to now, the IRC has not circulated its accession list because it "creates demand" that it is not presently set-up to satisfy. This would change if the POETRI program is funded - "Programme on Exchange and Transfer of Information." (see POETRI Draft Summary at the of the IRC section).

The subject of consultant list came up. I said WASH could exchange lists with IRC. However, IRC lists may not be prepared in usable from until later in 1981.

Karel is to send WASH one copy of each IRC Technical Report, Bulletin, Reference List, and other papers.

Jan Haijkens, Deputy Manager, Programme Coordinator.

Jan briefed me on the five Programme Areas of the IRC (discussed above) and their respective managers. He has a good grasp of the broad scope and perspective of the IRC. I am including his remarks on each programme area under the respective manager for simplicity of presentation.

Ebbo Hofkes, Project Manager; Handpumps, Technology Manuals, Seminars and Small Community Water Supplies.

Ebbo has just completed the final draft of what will be IRC Technical Paper No. 18 "Small Community Water Supplies in Developing Countries." A copy of this final draft was not made available to me. Ebbo said Gene McJunkin had an earlier version. Van Damme later said he "would try to get a copy from Ebbo" for me.

Paul Kerkhoven, Manager POETRI Programme and Community Participation.

The IRC has made contacts with 20 developing countries to participate in POETRI and has 5 countries "signed-up" - all in Latin America. He expects POETRI to get underway formally by January 1982 (assuming funding is available).

IRC work on Community Education and Participation (CEP) is accelerating. CEP work recently began in Tanzania and new guidelines are nearing completion. Christine Van Wijk is revising her Technical Paper No. 12, "Participation and Education in Community Water Supply and Sanitation Programmes - A Literature Review" of 1979.

Ann Whyte of the University of Toronto is annotating the English translation of a Colombian Rural Sanitation Program sponsored by INS - Institute Nacional de Salud - under Carlos Peralta, Jefe, Basic Rural Sanitation Program, Avenida El Dorado, Carrera 50, Bogota, Colombia. The IRC thinks much of this work (JEB: check with Dave Donaldson, PAHO).

Paul is setting up an advisory group in community development for WS&S, similar to the World Bank's TAG. (Mary Elmendorf is probably familiar with this. There should be a role for WASH in this). Paul is anxious to discuss joint-participation with WASH on CEP (This may be a good subject to discuss with Van Damme, who is intending to be in New York on May 13 for the Water Decade Day of the Annual ASCE Meeting at the Hilton). He would appreciate receiving copies of our CEP papers on the Cameroons and Malawi (prepared under CICs).

The IRC is sponsoring a national workshop on CEP in WS&S under BRAULOP in Tanzania in early July and will welcome joint efforts with WASH.

Han Heijnen, Manager, Slow Sand Filtration Project (also works in community participation).

Han expects his report on slow sand filtration in India to be ready by June. He gave me a copy of a nine page "Briefing Note" on slow sand filtration, dated 15 July 1980, which is on file in the WASH Library.

Enric Hessing, Project Manager, Public Standposts, Water Supply Systems and Evaluation.

Enric's main concern now is evaluation and planning of WS&S programs and projects. He mentioned that a Klas Ringskog of the World Bank has a draft "book" called "Pragmatic Water Planning" that the IRC apparently considered publishing at one time, but the book needs re-writing.

Enric's evaluation tasks for the future include:

- preparation of a bibliography (apparently already contracted out.)
- preparation of a compilation of "selected readings" on planning and evaluation in WS&S (JEB: possible WASH collaboration?)
- preparation of guidelines for program evaluation of WS&S in LDCs.
- guidelines for planning of WS&S programs in LDCs.
- workshops on planning and management of community WS&S at national level in LDCs.

- possible establishment of an international clearinghouse on evaluation information and activities in WS&S - as proposed by Feachem in a memo dated 13 February 1980 and circulated to the international WS&S community - WHO, OECD, EED, IDRB, IDRC, donors, etc.
- preparation of a proposal for donor funding.

Enric had a comment on the problem of coordination of WS&S in LDC's, specifically in Kenya, where 16 countries are supplying an average of 3 different water pumps for a total of 48 pumps for which the maintenance and spare parts problem presents a logistical and training nightmare. Supposedly, the World Bank and other donors are involved in a consortium of sorts that is trying to get the situation under control.

Gareth Howell, Manpower Development Programmes.

Gareth was most interested in learning when John Austin was coming to the IRC. I was surprised to learn that Gareth will be leaving the IRC in 2-3 months to return to consulting in the U.K. He gave me a brief run-down on IRC training activities in the Caribbean (with Carefoot), the Tanzanian Project to begin later this year, and work in Sri Lanka and Indonesia. IRC is preparing a manpower development program (for donor solicitation) for Sri Lanka. I expect that John Austin will obtain complete information on these projects and potential AID/WASH collaboration on his visit. The IRC has been funding people who have been producing training materials.

Gareth gave me a copy of the January 1981 IRC Report "Manpower Development Programme for Community Water Supply in the Republic of Indonesia". This report was prepared by a consultant on assignment to IRC from the U.K. National Water Council, Mr. A. Milburn.

Kien Tjiook, Project Manager - Standardization and Disinfection.

Kien is an Indonesian and so spoke quite knowledgeably on the IRC work on water treatment plant design standardization for Indonesia - some 150 small towns are involved. The report on the October 1980 seminar on this project, which

Gene McJunkin attended, is to be distributed next month and WASH is to receive a copy. Further work on some 1700 small communities in Indonesia is also being considered.

Kien has started collecting material for a reference manual on water treatment plants (JEB: possible WASH collaboration?). He is also revising the 1977 IRC Report "Contributions to a Mail Survey on Practical Solutions in Drinking Water Supply and Wastes Disposal for Developing Countries." I received a copy of this for WASH. (1977 edition)

Kien is also preparing a proposal for funding in early 1982 for workshops on recently installed/used water supply technologies and methodologies that are "novel" and may be suitable for replication in other developing countries. He remarked that "standardization is useful to lower the quality level requirements of engineers and construction people in developing countries." This has interesting engineering design, as well as training, implications.

Kien is interested in receiving a copy of our report on Indonesia - OTD 25. I said I would oblige.

Hans van Damme, Director, IRC.

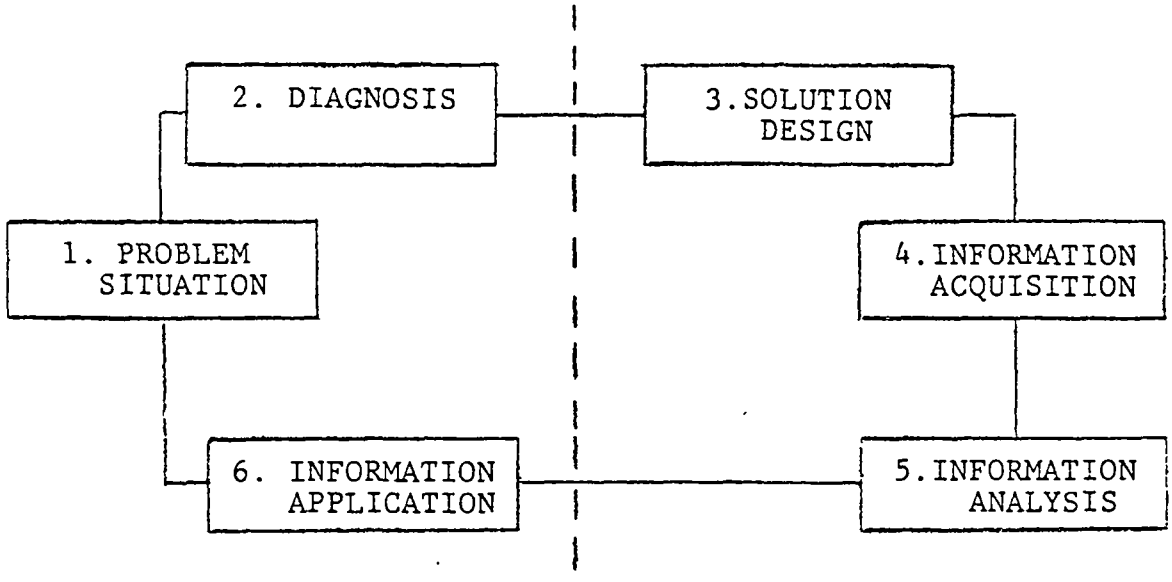
In summarizing my meetings and interactions with the IRC staff, Hans concluded that WASH was not "competitive" with the IRC. He said that the IRC takes a longer term view in its projects and publications, as compared to the short term, pragmatic, mission responsive mode of WASH operations. He emphasized the "a-political" international NGO status of the IRC, and its need for funds.

It appears that there is plenty of room for active collaboration between WASH and IRC in all five areas of IRC activities: information; technology; manpower development and training; community education and participation; and in evaluation and planning. What remains is to work out the specifics.

Hans may be in New York and Washington in mid-May (for the ASCE meeting on May 13 - "Water Decade Day".at the New York Hilton). Hans stated that until other arrangements appear more feasible, that WASH should direct all letters

to him, or through him, to ensure appropriate responses and follow-up actions (he is still breaking-in a new secretary and other administrative staff).

KKT - KNOWLEDGE AND KNOW-HOW TRANSFER: A MODULAR PROBLEM SOLVING MODEL



This problem solving model is modular in that it can be used at any level or by any unit in an organization.

The action between boxes initially proceeds from 1 through 6, but feedback and re-iteration mean that information travels in both directions between boxes.

The dotted vertical line represents a possible boundary between an organization, or its units, and potential outside sources of expertise and information. Larger organizations may include all 6 boxes, smaller ones may include only boxes 1,2, and 6.

James Beverly
4-8-81

SUMMARY

In response to specific recommendations of the United Nations Water Conference concerning information support, the present project is designed to promote the exchange and transfer of information in direct support of national planning and implementation of water supply and sanitation facilities. Therefore, the following immediate objectives will be pursued simultaneously by the project:

(1) immediate delivery service of selected key documentation to all countries involved in the Decade;

(2) strengthening the national capacities for information support initially in 20 countries;

(3) improve the exchange of information between countries and regions.

The need for the present project as an extension of a first phase of POETRI was discussed by the Steering Committee for Cooperative Action, the Second Consultative Meeting on the IDWSS Decade (16 June, 1980) and the Task Force on Information Exchange (The Hague, January 1981). The latter also discussed and agreed upon modifications needed. Thus the present project is a logical, but modified, follow-up of the first phase of the Programme on Exchange and Transfer of Information (POETRI) as initiated by the IRC in 1979 with financial help of the Dutch Government.

The project embraces the following activities for implementation by National Focal Points, Regional Focal Points, IRC, and other resource centres as appropriate:

1. Immediate services, throughout the project to the majority of developing countres.

   A. Selective Dissemination of key Decade documentation and a Standard Source Library for community water supply and sanitation with external financial support of U.S. $900.000 over three years.

B. Decade Newsletter, coupled with a Special Review and Abstracting Service with external financial support of U.S. $300.000 over three years.

C. Clearing House and Reference Services with external financial support of U.S. $200.000 over two years.

D. Community Water Supply and Sanitation Journal with external financial support still to be determined.

E. Publication Service on an ad hoc basis at cost price.

2. Strengthening national capacities throughout the project in 20 countries through National Focal Points (NFPs).

A. Preparation of plans and projects in all 20 countries with external financial support of U.S. $20.000 per country over one year.

B. Strengthening the national information infrastructure and service operation as a direct follow up to the preparation of plans and projects. This will be done with external financial support of U.S. $30.000 per country per year over two years.

3. Technical Cooperation form the Regional level throughout the project by Regional Focal Points (RFPs) in initially 3 regions; during the second project year a fourth RFP will be designated and developed.

A. Technical Cooperation to countries for the preparation of plans and projects.

B. Support to strengthening of the information infrastructure and service operations in the countries.

C. Regional project development and information networking function.

This will be done with external financial support of U.S. $120.000 per RFP per year over three years *.

* External financial support required for a fourth RFP in the 2nd year is U.S. $70.000,- instead of U.S. $120.000,-.

4. Technical Cooperation from the Global level throughout the project by IRC to support designated NFPs and RFPs.

   A. Technical Cooperation to countries where Regional Focal Points are not yet fully operational.

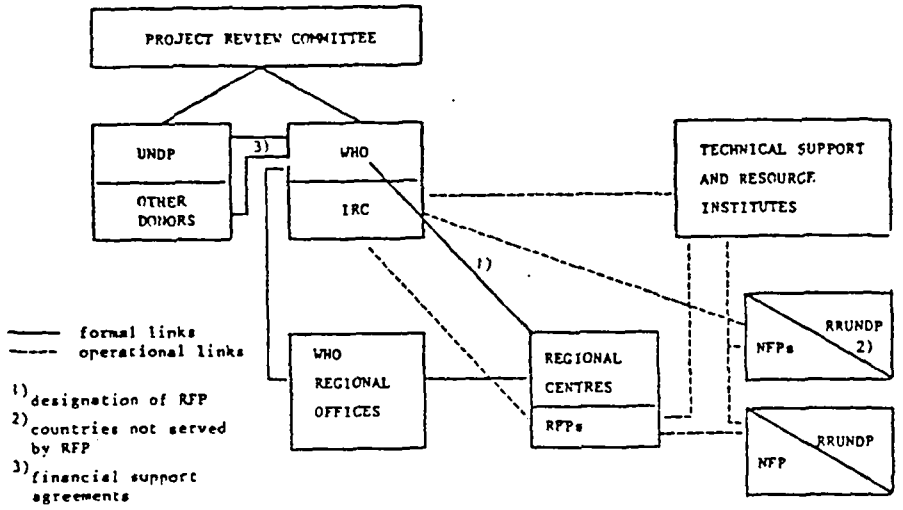
   B. Technical Cooperation to Regional Focal Points to strengthen their support to countries and their regional project development and information networking functions.

   C. Project development and information networking function at global level.

   This will be done with an external financial support of U.S. $600.000 over three years.

Summarizing, the total external support to countries for the project is U.S. $1.150.000 *. The external financial support to regional ** activities will be U.S. $1.270.000 and for support activities at global level U.S. $600.000. The external financial support for the immediate information services will be U.S. $1.400.000 ***. The inputs required for the project are expected to come from a variety of donors including UN agencies, ODAs and NGOs.

The organization and management structure for the project will be as follows:



* The preparation of plans and projects will be carried out in 10 countries during the first project year, in 5 countries during the second project year and in 5 countries during the third project year. The subsequent strengthening of the information infrastructure and service operations will be carried out for 10 countries in the second year and for 15 countries in the third year.

** The support from the regional level will be carried out by three Regional Focal Points throughout the project while a fourth RFP will become operational from mid second year.

*** Excluding the journal and the publication service.

The SATIS Library at TOOL contains some at 7,000 documents and subscribes to 170 journals.

Consideration is being given to computerizing SATIS but funding is a problem. The Control Data Corporation of Minneapolis is currently in discussion with SATIS.

SATIS is working with WHO-Geneva on Appropriate Technology for Health (ATH) and a Dr. Torffs there, with the assistance of a Dutchwoman, Ms. Marian Krings, have been developing a classification system for ATH information.

(JEB: will follow-up for possible use in the WASH Library.)

Dr. Torffs has recently completed an ATH project in Manila. The WHO ATH material will be inserted into SATIS with the next revision of the WS&S portion of the SATIS catalog of cards due out in June 1981.

This **May** SATIS will have its annual meeting in Amsterdam where, among other items, the possibility of "outside organizations", like WASH, participating in SATIS will be discussed. As of today, SATIS cannot supply its card catalog to non-participants. A copy of the letter of intent for SATIS participants is included below.

A complete description of SATIS may be found in the WASH CIC organization files.

List of SATIS participants

AATP
Arusha Appropriate Technology Project
P.O. Box 764, Arusha, Tanzania

Allahabad Polytechnic
P.O. Box 53589, Allahabad-211002, U.P., India

ASTRA
Cell for the Application of Science and Technology to Rural Areas
Bangalore 560 012, India

ATDA
Appropriate Technology Development Association
P.O. Box 311, Gandhi Bhawan, Lucknow-226001, U.P., India

ATH/WHO
Appropriate Technology for Health/World Health Organisation
1211 Geneva 27, Switzerland

ATOL
Aangepaste Technologie Ontwikkelingslanden
Blijde Inkomststraat 9, B-3000 Leuven, Belgium

BRACE Research Institute
Ste. Anne de Bellevue, Quebec, Canada H9X 1C0

CCPD/Technical Services
Commission on the Churches' Participation in Development/World Council of Churches
B.P. 66, 1211 Geneva 20, Switzerland

CEESTEM
Centro de Estudios Economicos y Sociales del Tercer Mundo
Corl. Porfirio Diaz no. 50, San Jeronimo Lidice, Mexico-20, D.F., Mexico

CEMAT
Centro Mesoamericano de Estudios Sobre Tecnologia Apropiada
Apartado Postal 1160, Guatemala, Guatemala, C.A.

CESTA
Centro Salvadoreno de Tecnologia Apropiada
Apartado Postal 1892, San Salvador, El Salvador, C.A.

COTA
Collectif d'Echanges pour la Technologie Appropriée
Rue de la Sablonière 18, B-1000 Brussel, Belgium

2. TOOL - "Technical Developments with Developing Countries," and SATIS - Socially Appropriate Technology Information System, Amsterdam, April 10, 1981.

The contact for SATIS is its Manager, Mr. Rene Mevis.

Both the TOOL Foundation and SATIS are described in some detail on the following pages. In brief, TOOL is a Dutch non-profit Foundation composed of universities, government agencies and a consulting engineering firm dedicated to the application of appropriate technology for development especially in LDCS. TOOL type activities began some 46 years ago in Holland but TOOL itself was only formally organized in 1974.

The SATIS program began in 1975 and now consists of 25 participants of which 14 are LDC institutions. (see list below).

VITA is the U.S. member of SATIS. SATIS is an information sharing system in which participants send "SATIS cards" (samples follow) to Amsterdam where they are reproduced and distributed to the other participants. Each card is about an item of appropriate technology. The SATIS card has a "central function in the registration indexing, retrieval, exchange and storage of appropriate technology information." All participants in SATIS are obliged, within stated limits, to supply a copy of documents which have been entered and circulated on the SATIS card, upon request from other participants.

(JEB: WASH documents could be entered into SATIS by supplying them to VITA, if desired. There is also a possibility that WASH itself could become a participant in SATIS.)

As of March 1, 1981, 5,332 SATIS cards have been submitted by 14 SATIS participants (see breakdown on following page). 1,027 cards deal with Water and Sanitation "Appropriate Technology" and are on file at VITA, Mt, Rainer, Maryland. Supplement I also include many additional WS&S items.

Dian Desa
Jl. Kaliurang KM 7, P.O. Box 9, Bulaksumur, Yogjakarta, Indonesia

DTC/ITB, Development Technology Center, Institut Teknologi Bandung
P.O. Box 276, Bandung, Indonesia

EES Polytechnique
B.P. 1500, Tananarive, Madagascar

ENDA
Environmental Training Programme
B.P. 3370, Dakar, Sénégal

GATE
German Appropriate Technology Exchange
Dag Hammersjköld-weg 1, D-6236 Eschborn 1, West Germany

GRET
Groupe de Recherche et d'Echanges Technologiques
34, Rue Dumont d'Urville, Paris 75116, France

IFOAM
International Federation of Organic Agriculture Movements
chez Les Quatre Saisons, 6 Rue Saulnier, 75009 Paris, France

SKAT
Schweizerische Kontaktstelle für Angepasste Technik
Varnbüelstrasse 14, CH-9000 St. Gallen, Switzerland

SPATF
South Pacific Appropriate Technology Foundation
P.O. Box 6938, Boroko, Papua New Guinea

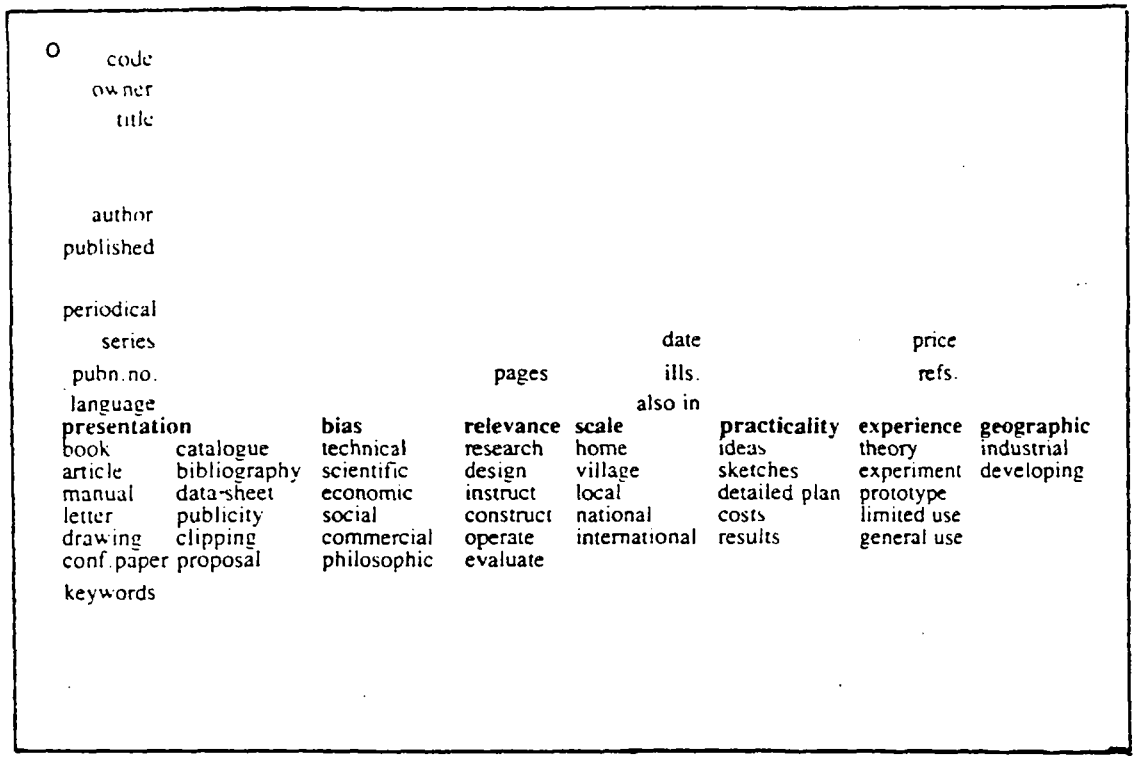
TALPUY
Grupo de Investigacion y Extension de Tecnologia Popular
Apartado Postal 222, Huancayo, Peru

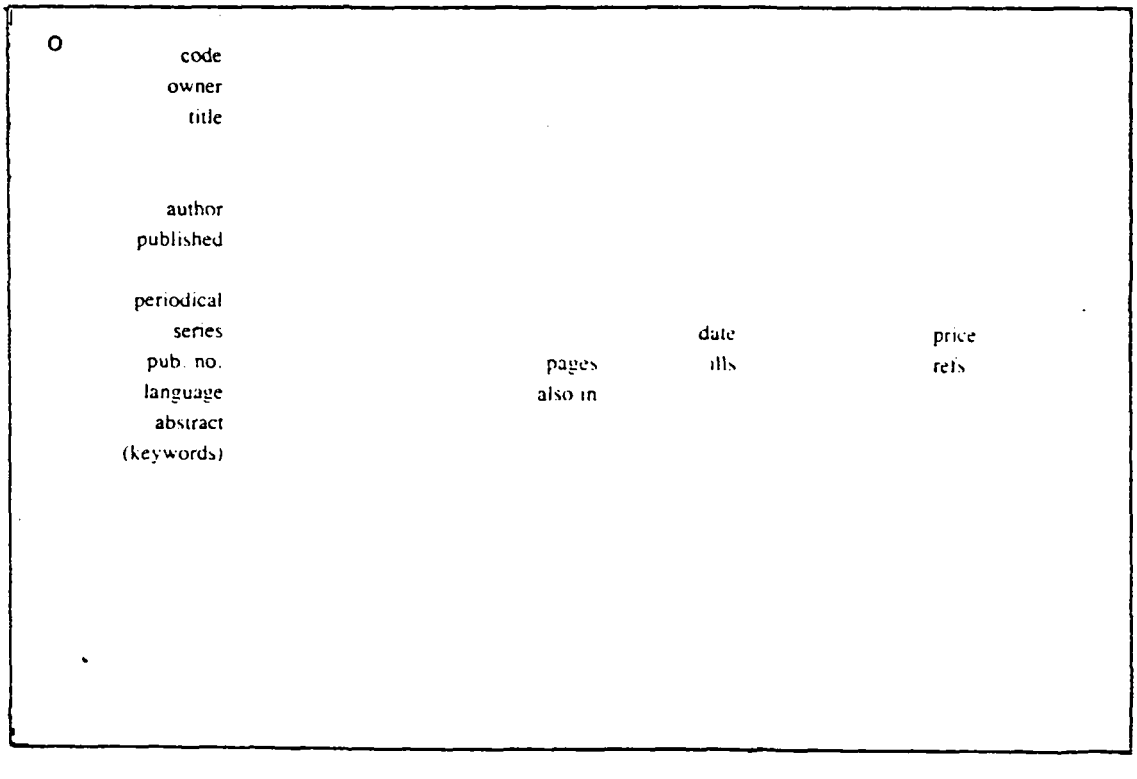
TCC
Technology Consultancy Centre
University of Science and Technology, Kumasi, Ghana

TOOL
Technische Ontwikkeling Ontwikkelingslanden
Mauritskade 61a, 1092 AD Amsterdam, Netherlands

VITA
Volunteers in Technical Assistance
3706 Rhode Island Avenue, Mount Rainier, Maryland 20822, U.S.A.

The two types of SATIS Cards





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aquisition copy date 1973 owner VITA
title La Purification de l'Eau par Quantites Limitees

SC 2228

author
published WHO-IRC ,P.O.box 140, 2260 AC Leidschendam,
~~periodical~~ Netherlands
series Technical Papers no.3 March date 1973 price
publication no pages 22 illustrations 7 references
language French also in

presentation	bias	relevance	scale	practicality	experience	geographic
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Water Filters

code XVI-AD-3 Water Treatment /350
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code XVI-AD-3 Water Treatment /350
aquisition orig. date 1975 owner VITA
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author National Commodities, Inc.
published VITA; Mt. Rainier, Maryland
periodical
series date 1975 price
publication no pages 2 illustrations references
language English also in

presentation	bias	relevance	scale	practicality	experience	geographic
book	catalogue	technical	research	home	ideas	theory	industrial
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letter	publicity	social	construct	national	costs	limited use	
drawing	clipping	commercial	operate	international	results	general use	
conf.paper	proposal	philosophic	evaluate				

keywords

Examples of filled out SATIS Cards

2-6

TOOL Foundation, Amsterdam, The Netherlands: SATIS - Socially Appropriate Information System

Number of processed and published titles per participant and subject, October 1979 - March 1981

organisations	Water and Sanitation Oct. 1979		Manufacture and services May 1980		Supplement I Sept. 1980		Energy and Power Dec. 1980		Buildings and Construction works		total	
ATDA, India	--		--		5		--		--		5	
ATU/APA, India	4		--		--		--		--		4	
ATOL, Belgium	74		89		--		--		--		163	
BRACE, Canada	11		--		--		31		--		42	
CEESTEM, Mexico	33		--		--		2		--		35	
CEMAT, Guatemala	--		--		77		13		1		91	
COTA, Belgium	--		--		--		41		28		69	
GATE, West-Germany	195		76		33		280		49		633	
GRET, France	110		--		3		1		--		114	
SKAT, Switzerland	55		85		10		164		61		375	
TOOL, Netherlands	415		537		192		363		214		1721	
VITA, U.S.A.	--		--		1064		584		299		1947	
WCC/CCPD, Switzerland	130		--		--		2		--		132	
CESTA, El Salvador	--		--		--		--		1		1	
	(*)	(**)	(*)	(**)	(*)	(**)	(*)	(**)	(*)	(**)	(*)	(**)
	1027	849	787	704	1384	1210	1481	1212	653	570	5332	4545

*) processed; (**) published

LETTER OF INTENT

(on your letterhead paper)

to: SATIS Communications Secretariat, at TOOL, Mauritskade 61a,
1092 AD Amsterdam, Netherlands

.....(name of organisation) wishes to become a member of the network of SATIS, the Socially Appropriate Technology Information System. We indicate hereby our intention to participate in the network, and understand that receipt of this letter by the secretariat will be evidence of our membership.

We intend to participate actively in the execution and fulfillment of the SATIS work programme, as described in the report of the SATIS meeting, held in Amsterdam, May 29 - 30 1980.

To this end, we intend to undertake the following:

- to contributecompleted SATIS registration cards regularly to the SATIS Communications Secretariat, for networking among all participants.
- to make the registered information available to other participants, following the guidelines agreed upon for exchange procedures.
- to support and cooperate with other network participants in the most appropriate ways, with particular emphasis on information exchange and information handling and dissemination.
- to participate actively in the overall operational and policy development of the SATIS network.
- to keep other members, directly and/or through the regular communications of the secretariat, informed of any developments affecting our participation.

We understand that all participants in the network have similarly indicated their intention to participate.

We understand that, as a member of the SATIS network, we shall regularly receive copies of the SATIS Card Catalogues and regular supplements from the secretariat, and that the secretariat will keep us informed of all developments in the network.

We understand further that we remain free to unconditionally review our participation at any time, and that out membership involves no legal obligation to other members or to the secretariat. We agree, nonetheless, that the network can only function with the active cooperation of participants on the lines described above and we intend, within our resources, to play a full part in the network.

name: signature:

position:

date:

N.B. A copy of this letter will be made available to all other participants, whose letters of intent you will therefore also receive.

'. . . outsiders can only remove obstacles and provide access to resources and information that people can use to develop themselves . . .'
(AT Sourcebook)

June 1980

tool

TOOL is a Dutch foundation participating in the global process of renewal, development and application of socially appropriate technologies.

Our broad objective is to promote greater freedom for groups which are deprived of full opportunities for local, self-programmed and self-sustained development.

Our strategy is to provide and support information resource links among the practitioners, users and generators of appropriate technology for development.

Our operations - described on the following pages - are designed to match need and resource:

technical advice and support
research and development
publications
documentation systems and services
application projects
education and training
organisational linkages

The information available through TOOL is, generally, freely available, to all. However, administrative preference is given to requestors, as individuals or organisations, involved in (the preparation of) concrete local-level activities.

The organisation

TOOL is a cooperative organisation, registered as a non-profit foundation, composed of groups with several hundred members in universities, technical colleges and a consulting engineering firm. The oldest established group started 45 years ago, in response to requests for technical advice from Africa and Asia. In 1974, the groups linked themselves through a national body, TOOL, for greater efficiency, impact and coordination.

Since then, the central servicing and linking role has been fulfilled by a professional TOOL secretariat, currently using the facilities of the Royal Tropical Institute in Amsterdam. TOOL staff also work in several of the member groups, providing, amongst other tasks, support for the integration of group activities in their base institutions. At the beginning of 1980, the groups are:

- Agromisa, Wageningen University of Agriculture
- Centre for Appropriate Technology, Delft University of Technology
- Development Action Group, Zwolle Technical College
- Development Technology Workgroup, Twente University of Technology
- Medical Development Workgroup, Nijmegen University
- Microprojects Committee, Eindhoven University of Technology
- Technical Development Workgroup, DHV, Consulting Engineers, Amersfoort
- Tropical Agricultural Information, State
- College of Agriculture, Deventer

Through these groups, access to inter-disciplinary knowledge and experience, of use for TOOL work, is facilitated.

The policy of the TOOL Foundation is defined by a board composed of cooperative groups and other experts.
Specialised sub-committees, with active representation from outside bodies and counterpart agencies, are responsible for the supervision of specific sectoral programmes and projects

The major funding source for TOOL, both for 'home-based' and field projects, is the Netherlands Minister for Development Cooperation. The 1979 budget balanced at 1.3 mn Dutch florins ($US 650.000). This excludes, however, the value of manpower and resources invested in TOOL activities by the base institutions of the cooperative groups. Other recent funders have included the three Netherlands Universities of Technology, Dutch private development agencies, the Rabo cooperative bank, and international sources such as the Federal German Technical Cooperation Agency and the World Council of Churches

As part of a general movement, TOOL participates actively with other organisations both on the practical partner level, and on the development of development policies. In the Netherlands, TOOL works with the National Policy Group for Appropriate Technology; the coordinating body for personnel NGOs; the National Commission for Science and Technology and its successor body.
Internationally, in addition to the coordinating role for a documentation network, TOOL works within TRANET, the Transnational Network for Appropriate Technologies.

Further information:
Policy Programme, Highlights for the 1980s, (Dutch, English)
Annual reports and accounts, Dutch, with English/ french summaries.

the information services

Below is a list of the subject listing handled by TOOL. Please note that, while we do our best to cover all subjects, we cannot claim to be able to fully handle every information request made, either through a technical enquiry, or publications, or access to documentation. When necessary, we shall refer requests to other capable organisations.

Man and Society: technology, development, ecology, environment and resources, culture and society, human settlement, transportation and distribution, communication and information, education, and health.

Energy and Power: fossil and bio-mass fuels, solar energy, wind energy, water power, other renewable energy sources and their applications, muscle power, and transformation, distribution and storage of energy.

Water and Sanitation: surface water, groundwater, water lifting, water supply, water treatment, and sanitation.

Agriculture, Forestry and Fisheries: general farm equipment, soil management, agricultural techniques and equipment per operation, cultivation of crops (per crop), animal husbandry, forestry, and agriculture and fisheries.

Food Production: food science, food technology, food processing per product, and packing, storage and transport of food products.

Manufacture and Services: mining and quarrying, textile, wearing apparel and leather industries, (manufacture of) wood and wood products, paper and paper products, chemicals and chemical products, non-metallic mineral products, metal products, and services.

Buildings and Construction Works: building design and techniques, construction materials, building elements, technical services and building protection, and construction works.

documentation

In agreement with major appropriate technology groupings, TOOL has coordinated the development of the Socially Appropriate Technology Information System (SATIS) since 1975. The SATIS objective is to strengthen the information capacity of local AT organisations, by providing access to the experiential information of partner organisations, and by providing a range of systems for information handling within organisations, so that technical and organisational problems can be better solved at source.

The current cooperative work programme involves 22 organisations, jointly developing the capability to access and share information. In outline, this comprises the registration (on card) of in-house documentation about technologies, technologists and resources, the development of retrieval tools and the sharing of documentation. A major feature of the work programme is that the development of the network is defined by the practical and policy inputs of the participants, thus ensuring that the shape and tools of the network relate to the needs and resources of participants.
The materials and procedures developed in this work programme, coordinated by the SATIS Communications Secretariat based at TOOL, are widely used by other organisations, for registering, classifying, retrieving and distributing documentation.

TOOL's own library contribution to SATIS is a collection of more than 6.000 documents, often containing experiential information on technology application.

Further information:
SATIS, Explanatory Information (English, French)
(this brochure also lists the materials and procedures developed in the SATIS network, and available on request)
SATIS News, for network development news.

I SATIS EXPLANATORY INFORMATION

1. SATIS at TOOL

SATIS is the abbreviation for Socially Appropriate Technology Information System.

TOOL is the Dutch appropriate technology agency concerned with the provision of technical support services to development workers and organisations.
TOOL was established in 1974 on the initiative of eight student-staff groups in Technical and Agricultural Universities comprising today 300 volunteers and a 10 man professional staff at the TOOL secretariat in Amsterdam.
TOOL's area's of activities are:

- a technical question and answer service for development workers
- development projects (India, Indonesia)
- documentation and information services, including publishing

Under its information services TOOL is project holder of the SATIS programme and is the SATIS Communications Secretariat (S.C.S.) for the SATIS network.

2. SATIS: the idea

As ever growing attention is being paid to the development of appropriate technology and to the collection and dissimination of A.T. information, many A.T. practitioners have for some time, promoted the feeling that a priority activity should be the strengthening of the information capacity of local A.T. centers and agencies, by offering them a range of available technological information, geared to the work and needs of the practitioners
In general the need for appropriate technical information is being emphasized more and more strongly within the international development cooperation. Many efforts are being undertaken by governmental institutions, NGO's and international organisations to create information networks and data bases (see annex 2).
A number of European and North American A.T. organisations together with their partners in some developing countries, which have been engaged at least since the early seventies in technical development, have since been creating an international network for the coordination of the development, dissimination, implementation and feedback of A.T. information within this network
and the transfer of technical information to A.T. organisations and centers in the developing countries.

As the concept of A.T. has evolved, from a narrowly economically defined term to a much broader definition (comprising nearly all human/technical activities), the subject area of an A.T. registration and documentation system covers nearly all categories in a fairly large library (where "A.T." is usually treated as a minor category, placed somewhere at the margin of the documentation system). See attached list of main groups of the classification scheme, see annex 1.

A starting point of SATIS is that much of the useful practical information on appropriate technologies is not accessible in traditional libraries.

SATIS therefore is designed to access the (unpublished) A.T. information that exists for example in the technical enquiry services of VITA, TOOL, ITDG, etc. and in the direct experiences of local A.T. agencies in Africa, Asia and Latin America, in addition to the information more regularly published by government agencies, universities and inter-governmental organisations. It is estimated that the five organisations which took the initiative for SATIS (ITDG, U.K.; GRET, France; TOOL, Netherlands; VITA, U.S.A.; BRACE, Canada) alone possess ± 45.000 pieces of relevant A.T. information, including technical enquiries.
SATIS also reverses the trend of the collection and storage of A.T. information within institutes mostly located in the Northern hemisphere. The control and maintenance of the system is an essential task of each participant at every level, as SATIS is only able to deliver its output when each participant delivers its input to the system. This means that there is not only a flow of information to and between the local A.T. centers in Africa, Asia and Latin America, but also from them. SATIS therefore, using its information activities as a first platform, is designed to a much wider range of technical cooperation activities between a number of organisations, whether located in the North or the South.
SATIS only transfers information on request of the user, and leaves the choice and the decision making on the application of technologies entirely to the user, by offering him a wide range of possible solutions.

Besides transfering technical information the SATIS programme makes available "information on how to handle information" and undertakes training of (new) participants in A.T. information handling:

- index and retrieval system for fieldworkers.
- information collection, storage and dissimination.
- basic procedures and equipment for small A.T. information centers/groups.

Characteristics of the SATIS documentation and information exchange system:

- a structure allowing for local control and realisation of needs and wishes of each A.T. center.
- ensuring the necessary amount of uniformity, without eliminating individual initiatives.
- open for inclusion of new groups and organisations, both as "clients" and as deliverers of information into the network.
- procedurally clear and flexible, enabling each participant to communicate with others by the same documentary language, at the same time absorbing new developments.
- fairly precise in the indexing and retrieval system.
- containing not only standard written material, but also pamphlets, addresses of experts and organisations, and audio-visuals.

Thus the overall structure of the network is an informal one. Within this frame, working relationships and arrangements are formally organised between participants for the fulfilment of the workprogramme.
The SATIS network comprises voluntary groups, university departments, government agencies, and development organisations, which: a) have a proven record with information handling activities, b) are prepared and able to deliver a regular input of SATIS cards into the network, c) play an active role in the exchange of information and development of the network.

3. History

Initially five A.T. organisations started looking for possible forms of cooperation: ITDG, U.K. ; GRET, France, TOOL, Netherlands; VITA, U.S.A., BRACE, Canada.
During 1975 TOOL started its cooperation in the field of documentation matters with other organisations. As it was VITA which had spent much thinking and work on devising documentation instruments for A.T. information -in particular with regard to classifications- many of their ideas have been incorporated into the set-up of the network.
In October 1976 a meeting was held in Paris with 18 A.T. organisations to discuss various forms of cooperation. A multy-agency workplan was initated, resulting in a survey of 141 libraries, containing A.T. material. (Classification Re-arrangement for Appropriate Technology, Report and Proposals, L.M. Giertz and R.J. Congdon, TOOL, Amsterdam, 1977).
During subsequent meetings in Amsterdam, Paris, Frankfurt and St. Gallen, a registration card was designed, the classification scheme was finalised, exchange procedures were established and try outs were conducted.

Although several A.T. organisations will use the same classification, no participant is obliged to use this scheme, as inclusion of different classification schemes has been made possible. In order to gain more direct experience in international cooperation, it was agreed to compile a series of A.T. catalogues, containing the A.T. holdings of the participating organisations on specific subjects.
The TOOL foundation was requested to coordinate the work as the SATIS Communications Secretariat.
From the initial 18 organisations which expressed their interest in the network the number has grown by now to 26. (see annex 3)

4. SATIS components

SATIS is essentially a system for the sharing of technical information, using for its functioning conventional, basic documentation techniques and equipment (e.g. cards, files, classification schemes), but adapted to their specific purpose and local situation.
Although it is not designed to solve all internal documentation problems for A.T. libraries and centers all over the world, components of the system may be used by the participants for their own "in-house" use. The several parts of the system are intentionally developed to do so.

The card

The pivot of the system is the card. It has a central function in the registration, indexing, retrieval, exchange and storage of A.T. information. See annex 4.
A completed SATIS card describes information which:
- is A.T. according to the experience of the practioner who fills in the card; as there is no universal definition of A.T. imposed on the participants, the SATIS project is an elaborate, and often painstaking exercise in international thinking on development cooperation.
- is of a practical value to the receiver of the card: registration is done with a critical eye.
- one is prepared to share with other known participating A.T. organisations and, unknown, fieldworkers.

Type of information

The SATIS card describes:
- bibliographic data
- utility of the described information
- its availability
- type of document/information
- contents

It informs a searcher fully about a document, thereby eliminating the need for obtaining the document until it is really needed. At the same time it enables a library/center to hold a store of information about A.T. documents which it does not possess itself. The physical properties of a card system gives the fieldworker the opportunity to built up a relevant file, completely according to his own needs and wishes.

Shape of information

- written: published books/reports, leaflets, brochures, catalogues and unpublished reports, letters, sketches.
- audio-visuals: sound and/or vision tapes, video, films, photographs.
- people: It is also possible to provide a sketch, not only of technologies, but also of technologists, people, and their organisations.

Indexing and storage equipment

Once a document is fully registered on a SATIS card it may be filed under any heading which appears relevant to the documentalist, according to the needs and activities of his center or organisation. Indexing on subject, country, author or location of the original document is possible.
Subject indexing may be done either by a generic classification, or by a list of authorized keywords -to be developed into a systematically arranged thesaurus- or by both.
For the storage of documents some of the agencies involved in the development of SATIS use a "packet system": a filing box containing all the documents on one subject. These packets are arranged on shelves in subject order.
In combination with the classification this package system enables a documentalist, or a user, to find all the relevant information on one subject on one shelf, without having to refer to a catalogue. In this way TOOL stores its Directories, descriptions of organisations/ institutes, bibliographies, manufacturers' catalogues, journals and audio-visuals on any one specific subject on the same shelf in its library. The address file is linked to this sequence. Acquisition is fairly easy done, by filling up the gap, literally. Packets, boxes may be made of any kind of material and size. A flexible construction set has been developed, which consists of a wooden rack with fitting wooden boxes in two sizes, enabling the storage of documents and the storage and display of journals. The rack may be coupled in all kinds of rooms or corners by their calculated dimensions. See annex 5.

Retrieval

Depending on the size of the library, the chosen indexing system, the requirements of the users and the resources of the A.T. organisation, several devices for retrieval of a document may be used.

Documents may be searched for manually -leafing through the card-files or just looking along the packets on the shelves-, mechanically -when for instance a optical coincidence card system is used-, or using a computerised catalogue print out (alphabetically and/or systematically arranged).
Existing -perhaps specialised- collections may be fitted into the system.

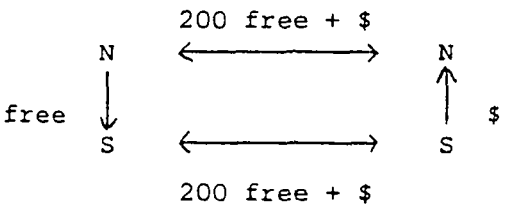
5. Information exchange

By making available all the processed titles to each participant -or any selection of subjects which they may choose- participating organisations are able to keep a file of documents held by all others.
Fieldworkers and practitioners may build up their file of "who has what" according to their own special range of interests.

Documents may be exchanged between participants on the following agreements (SATIS meeting, May 1980, Amsterdam):

- Between participants in the Northern hemisphere (in OECD and COMECON member countries):
  * 200 pages of copies per year: free.
  * above this number: the requester may be charged (not obligatory).
- Between participants in the Southern hemisphere:
  * 200 pages per year: free
  * above this number: the requester may be charged (not obligatory).
- Requesters in the Southern hemisphere receive all copies free from "Northern" participants.
- Requesters in the Northern hemisphere may be charged for all copies from the "Southern" participants.

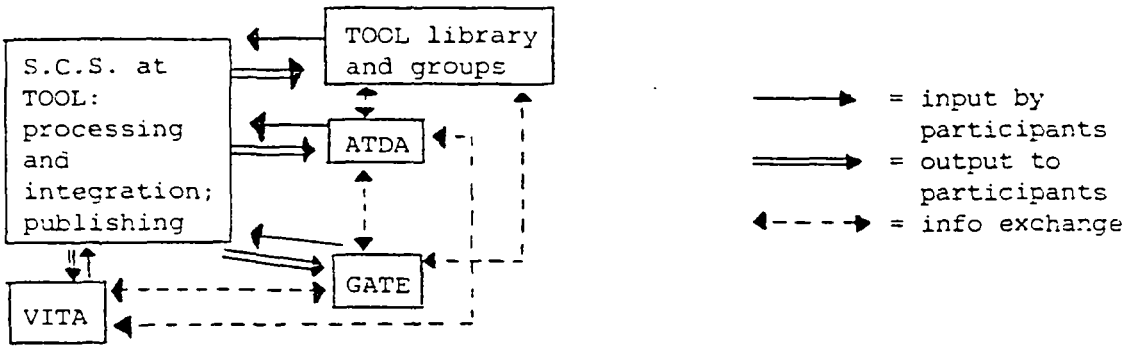
Schematically:



Financial arrangements between organisations may be made to cover the costs for sending copies (of documents) and/or paying for receiving them.
In this procedure information is only sent on request. Receivers of a request for information should calculate whether copies of a book are cheaper than the original.
The 200 pages include the sending of copies and of originals (for example book-pages).
These arrangements are applicable on the moment that the Secretariat receives the signed Letter of Intent from a participant.

Of course SATIS provides information to organisations outside the network. However, during the last meeting it was agreed not to send copies of cards of other participants to people outside the network.

Input, output and information exchange within the SATIS network:



The processing procedure includes the following steps:

- registration, check on errors, omissions and doubles, selection of received cards.
- typing.
- comparison of the received cards against the already processed titles (e.g. for the Buildings and Construction Works Catalogue: 653 received cards against 3975 processed titles).
- editing, ordening, classifying and reproduction of the final selection.

The processing of one card -all procedures included- takes now 45 minutes; that is 350 cards can be processed per month.

Even more time consuming is the compilation of an index per catalogue and a cumulative index.
Moreover, it is impossible to compile sufficiently detailed indexes of the processed cards, in order to be able to deliver an adequate information service to customers.

Therefore S.C.S. on this moment is investigating the possibilities of a computerisation of the card processing procedures, so that still the same end product -a completed SATIS card- will be the result.

Preliminary results indicate the following possibilities of computerisation:

- processing 500-600 cards and more per month (reduction of processing time per card to 30 minutes).
- less errors, less tedious work and a faster integration procedure.
- greater feasibility: possibility of integration of different types of cards without extra work; and a possibility of producing a more varied output.
- more retrieval possibilities: subject literature lists, bibliographies and detailed indexes; this improves the information service greatly
- output in various forms: cards, micro-fiches, computer tapes; this in itself give SATIS a greater opportunity for linkage with other information networks

3. ITDG- Intermediate Technology Development Group, London and Reading, U.K.: April 13-16.

From Monday through Thursday, April 13-16, I had one or more conversations with the following staff of ITDG:

Warren Adams, Senior Economist (an American citizen, whom I had conversed with by phone from Washington, served as my "host". He coordinates the 13 ITDG Technical Panels and is a good contact point.)

George McRobie, Chairman ITDG

Nicholas Dolphin, Administrator, Consultancies

Marilyn Carr, Economist

John Collett, Water Development Officer, (located at the Shinfield Road site of the University of Reading, near Reading).

David Collins, Assistant Information Officer (Steve Bonnist, Information Officer, was on leave. He is an American citizen).

Frank Solomon, Editor, Intermediate Technology Publications, Ltd.

John Elford, Publications Manager.

The organization, panel structure and water development projects of ITDG, and its subsidiary, Intermediate Technology Industrial Services (ITIS), are described on the next seven pages. My summary notes of interviews with ITDG staff then follow.

The ITDG 1980 Annual Report and other descriptive material on ITDG projects may be found in the WASH CIC Organization Files.

Intermediate Technology Development Group Ltd
9 King Street, London, WC2E 8HN, UK. Telephone 01-836 9434

SUMMARY OF FIELD EXPERIENCE AND CAPABILITY

The Intermediate Technology Development Group Limited was established in 1965 to investigate and provide information on ways and means of maximising the use of local resources in developing countries through the application of appropriate, capital-saving, employment-generating technologies in the intermediate range.

One of the Group's major activities has been to advise and assist governments, development aid agencies and other organisations in the establishment of institutional field programmes using intermediate technologies.

The Group employs a nucleus of specialist staff in the fields of agricultural engineering, water development, construction and building materials, power, small industries and transport. In addition to their normal programmes, staff members are available for overseas consultancies and field projects.

In addition to its staff, the Group is advised by a variety of technical panels and it has access to a wide range of associate consultants through its panel members, its specialist units and its subsidiary company, Intermediate Technology Consultants Ltd., who, in addition to their professional expertise, have special experience in the application of appropriate small-scale technologies. Panel members, who serve in a voluntary capacity, number nearly 300 and are drawn from universities and colleges of technology, business, industries, consultancy companies and research institutions. Overleaf is a list of the panels currently operated by the Group.

There follows a listing of services the Group has provided to overseas governments and agencies in the form of consultancies and field projects. This does not include the very large number of projects undertaken by Intermediate Technology Industrial Services, established in 1978, nor current hardware research and development programmes undertaken by ITDG's specialist units.

The majority of reports of these assignments are not available from ITDG but may be obtained from the commissioning agency.

TECHNICAL PANELS

	Chairman
AGRICULTURE	Prof. Peter Payne: Consultant
BUILDING AND BUILDING MATERIALS	John Parry, MBE J.P.M. Parry and Associates
CEMENTITOUS MATERIALS	Dr. Robin Spence: Cambridge University
MINING AND PROCESSING	Frank Almond: Intermediate Technology Industrial Services
CHEMISTRY AND CHEMICAL ENGINEERING	Iris Pape: Polytechnic of the South Bank, London
COOPERATIVES	Peter Yeo: International Cooperative Training Centre
DEAFNESS	Dr. W. Edmondson: Imperial College of Science and Technology
FERRO CEMENT	(Chair Vacant)
FORESTRY AND FOREST INDUSTRIES	Dr. Alastair Fraser: International Forest Science Consultancy
NUTRITION	Dr. Colin Leakey: Consultant
POWER	Prof. Peter Dunn: University of Reading
BIOMASS SUB-PANEL	Dr. Leo Pyle: Imperial College of Science and Technology
ENGINES SUB-PANEL	Dr. Graham Rice: University of Reading
HYDRO-ELECTRIC SUB-PANEL	Rupert Armstrong Evans: Evans Engineering
SOLAR SUB-PANEL	(Being Elected)
WIND SUB-PANEL	Dr. Peter Musgrove: University of Reading
PRINTING	Henry Larken: Consultant
TRANSPORT	Terry Thomas: Warwick University
WATER	(Being Elected)

THE APPROPRIATE HEALTH RESOURCES AND TECHNOLOGIES ACTION GROUP (AHRTAG), developed from the Group's Rural Health Panel, is now an independent, non-profit organisation, but maintains a close relationship with ITDG. AHRTAG's Honorary Director is Dr. Kathrine Elliott of the Ciba Foundation.

WATER DEVELOPMENT

Botswana 1967-68

A pilot project carried out at the request of the Central District Council and the Department of Education, Botswana to research into and introduce rainwater catchment tanks and micro-irrigation systems.

Swaziland 1970-73

At the request of the Government of Swaziland the establishment of rainwater catchment tanks in rural areas, on a self-help basis, as an extension of the pilot project undertaken in Botswana.

Ethiopia 1971

Recommendations for the introduction of village water supplies and small-scale conservation works in Tigrai Province.

Jamaica 1971-73

A techno-economic survey carried out at the request of the Department of Geological Surveys, Jamaica and the Ministry of Overseas Development, London of the feasibility of establishing rainwater catchment tanks in the limestone regions of Jamaica; followed by the construction of a prototype installation.

Kenya 1973

Secondment of an engineer to the Kenyan National Christian Council for small-scale irrigation development; on behalf of Christian Aid.

Brazil 1973-74

A project to introduce and develop low-cost methods of rainwater conservation in the Fundacao Ruralista project, N.E. Brazil; undertaken at the request of the Brazilian Government on behalf of the Ministry of Overseas Development.

Ethiopia 1973

Advise and report on rainfall catchment to the Radio Voice of the Gospel transmitting station, Gedja.

Ethiopia 1973-74

The identification of sites and construction of prototype

surface water retention and spreading systems for irrigation of fodder crops in the N.E. Rangelands of Wollo Province; undertaken at the request of the Ethiopian Government's Livestock and Meat Board as part of its relief programme, on behalf of the Ministry of Overseas Development.

Ethiopia 1974

Advice to Oxfam (Oxford) on water projects in Ethiopia including assistance in the establishment of a Low Cost Water Development Unit in the Tigre region.

Ethiopia 1974-76

Provision of a senior consultant to the National Water Resources Authority to advise and assist in the planning and establishment of low-cost rural water supplies; undertaken on behalf of the Ministry of Overseas Development.

Ethiopia 1975-77

A two-year pilot project to establish village water supplies through self-help programmes; undertaken on behalf of Oxfam, Quebec.

Ethiopia 1975

Advice on the adoption and upgrading of locally manufactured windmills for irrigation. Report published "Food From Windmills" 1975, available from IT Publications Ltd. undertaken on behalf of Oxfam, UK.

Ethiopia 1976-77

Establishment and management of the Water Development Support Unit on behalf of Oxfam, UK.

Water and Sanitation - 1977

A feasibility study of the need and potential for a new journal devoted to the subject of water supplies and sanitation in developing countries; undertaken on behalf of International Development Research Centre.

Honduras 1978

To advise on water project identification and development; undertaken on behalf of Save the Children Federation, USA.

Irrigation Manual 1978

Preparation of a manual on irrigation techniques. Published

1979, IT Publications/IIC, available from IT Publications Ltd; on behalf of the International Irrigation Information Centre.

Mauritania 1978

To recommend appropriate water lifting and irrigation technologies for a project in the Guidimaka region; undertaken on behalf of War on Want.

Yemen 1978

Advice to Save the Children Federation Project Team on their water development programme; undertaken on behalf of Save the Children Federation (USA).

Ethiopia 1979

Advice to Oxfam UK on the future role and development of the Water Development Support Unit, and participation, on behalf of Oxfam, in a planning seminar of the Ministry of Education.

Upper Volta 1979

Advice on a programme for improved water supplies for Save the Children Federation (USA).

Water Lifting Devices 1979, 1980

Preparation and presentation of papers on State-of-the-art of hydro powered and solar powered, water lifting devices undertaken on behalf of FAO.

Small Scale Solar Irrigation Pumps 1979-81

Preparation of State-of-the-art report on small scale solar powered pumps for irrigation, field testing of selected sytems in Philippines, Sudan and Mali and laboratory testing of components in the UK; in association with Sir William Halcrow and Partners on behalf of World Bank/UNDP.

ITDG Windpump Programme 1980

Preparation of a case study of the ITDG International Windpump Programme, with special reference to Kenya, for UNERG 1981; undertaken on behalf of the UN.

To whom?

The services of ITIS are available not only to Government departments and development agencies but also to private voluntary organisations and individuals. ITIS can assist anyone who is concerned with the establishment of small industries in developing countries.

How does *ITIS* operate?

The first point of contact for all enquiries and requests for assistance is one of the unit's Industrial Advisers. Each Adviser is responsible for a specific group of countries to which he makes regular visits to establish direct contact with those requiring our services. It is also the role of the Advisers to define the need for any new technologies, especially those of common interest to several countries.

When such needs have been defined, it is the responsibility of our Industrial Advisers to organise the development of the appropriate technical solutions. The Advisers are further responsible for the testing and demonstration of new technologies, and, together with ITIS' Commercial Adviser, for the delivery and installation of the relevant hardware.

What is the cost?

The services of ITIS are normally provided without charge. This is possible because ITIS is funded by a grant to the Intermediate Technology Development Group from the U.K. Overseas Development Administration. The Group itself is a non-profit organisation registered in the UK as a charity. It was founded in 1965 by the late Dr E.F. Schumacher.

Why 'Intermediate Technology'?

The phrase 'intermediate technology' is frequently misunderstood. Essentially, it is a technology where the equipment cost per workplace is intermediate between that of the traditional technology in a developing country and the capital intensive technology of an industrialised country.

It is not necessarily labour intensive or small-scale. Nor does it mean by definition an 'inferior' product or an outdated process. It may be 'modern' in both design and operation. What it is, however, is the appropriate technical solution to a specific problem.

Where is *ITIS*?

The ITIS office is located at Rugby, between London and the major industrial centres of England. Personal visits to our office are most welcome. London is 55 minutes by hourly train. Birmingham airport is 45 minutes by road.

Postal address:
Intermediate Technology Industrial Services
Myson House
Railway Terrace
Rugby CV21 3HT

Cable Address:
ITIS RUGBY

Telephone:
Rugby (0788) 70126

Intermediate Technology Industrial Services

3-7

"The chance to work is the greatest of all needs ... the primary need is workplaces, literally millions of workplaces."

E. F. Schumacher, ***Small is Beautiful***

What is *ITIS*?

Intermediate Technology Industrial Services is a unit of the Intermediate Technology Development Group. It has been set up to provide technical and financial assistance to meet the needs of developing countries for unfamiliar or new technologies, primarily in the small industry sector.

What is the goal of *ITIS*?

Our objective is to assist in creating more places of work in developing countries through the establishment of production facilities using local resources to meet local needs. To achieve this goal, ITIS provides information about existing technologies and carries out studies to determine which technologies may be most appropriate. More importantly, we also provide funds to field test new technologies in developing countries and assist in the installation of new equipment.

What services are available?

ITIS can:

- answer enquiries about existing technologies for specific small-scale industrial activities.
- recommend sources of supply for machinery and equipment.
- identify the requirements for new products or processes through field visits by technical experts and market studies.
- assist with the adaptation of existing technologies and the development of new technologies.
- provide funds to field test and demonstrate new technologies in developing countries.

For example, ITIS is currently financing these types of projects in various countries:

Feasibility studies and market surveys

- Small-scale paper making (in the range 1-30 tons per day) has been identified as a need in many developing countries. India operates a thriving paper industry at this production level and ITIS has commissioned a Delhi-based consultant to investigate the technologies in use. During the course of the study, opportunities for modernising the equipment have been identified. These will improve the profitability of the small-scale units, thereby enhancing the potential for transfer to other developing countries.

- Widespread interest in small-scale glassware manufacture has led ITIS to fund study visits to Kenya, Tanzania and Sri Lanka. In Kenya a mission has investigated the market for glassware products, evaluated the local availability of raw materials and recommended appropriate equipment for a number of small-scale plants (2½-7½ tons per day) in different parts of the country. Plans to set up the first pilot plant are nearing completion.

Development of new technologies

- The production and distribution of electricity for remote rural communities is another area of common interest. ITIS is funding two related projects to develop low cost equipment for micro hydro-electric installations of 5-50kW capacity. An electronic load controller is being developed to replace the costly mechanical flow controller conventionally used in hydro-electric plants. In Nepal ITIS is supporting a rural electrification project involving, amongst other innovations, a new design of locally manufactured cross flow turbine.

- ITIS has financed the development of a new design of wool spinning device following a study visit to Northern India. A single spindle version of this hand operated machine has been made and demonstrated in Uttar Pradesh and will shortly be produced in quantity for extended field testing. This will prepare the ground for the introduction of a multi-spindle version which will enable cottage spinners substantially to upgrade both product quality and output.

Field testing existing and new technologies

- ITIS is funding a programme in Sri Lanka to test the suitability of a boat building system, for the local production of fishing dories. The boats are constructed from marine plywood using the "stitch and glue" technique and can be sailed or powered by lightweight diesel engine. Trials will be conducted with a local fishing cooperative to prove the viability of both the construction method and the boat design as a replacement for the traditional dug-out or catamaran.

Pilot industrial projects

- A small mobile engine powered thresher has been developed and field tested by the Tropical Products Institute in Botswana. ITIS is helping to initiate local manufacture of the thresher on a commercial basis.

- In Ghana, ITIS is funding a project to set up a pilot small-scale foundry at the Technology Consultancy Centre, Kumasi. The pilot foundry, in part using standard UK equipment, will be utilised to demonstrate casting techniques and train local entrepreneurs. The Centre will also adapt the equipment, specifically the melting furnace and burner, to develop designs suitable for local manufacture.

Summary Comments on ITDG

ITDG is most anxious to work with WASH in whatever manner is most appropriate and effective. (JEB: The fact that ITDG now has a U.S. subsidiary in New York City may minimize the problem of using developed country nationals by WASH???)

Unfortunately, John Pickford has resigned as Chairman of the Water Technical Panel and has not yet been replaced. Apparently his work load at the University of Loughborough with the WEDC Program (Water and Waste Engineering for Developing Countries) interfered too much. As a partial result of this, the Waste Panel of ITDG is in the process of sorting out its program for 1981 and the Water Decade.

John Collett, ITDG's Water Development Officer at Shinfield, summed up the situation nicely and indicated many possible areas of water activity and projects to be carried out by ITDG itself and/or with others, in a memorandum to the ITDG Water Panel dated 19 March 1981. His three page memo follows and offers numerous potential opportunities for collaboration with WASH on bases yet to be considered.

In the WS&S field, he indicated that ITDG prefers to plug into, or provides inputs to, existing projects underway in LDCs. ITDG has rarely water initiated projects on its own. One example is the development and introduction of low-cost prefabricated irrigation channels in Oman. These could possibly be used in community water supply systems, although they are uncovered.

Collett is just starting a low-cost rainwater catchment system project for small community water supply and/or irrigation schemes. This work may parallel UNEP work on rainwater catchment for "supplementary" purposes. He is thinking of preparing a rainwater catchment manual which would include appropriate guidelines.

Frank Solomon, ITDG Editor, has a mailing list of 4,000 names of those interested in appropriate technology, many in LDCs. He is interested in joint publications should the opportunity arise. Some publications in his production pipeline are on foundry methods and sanitation. He may send me drafts of them. He also mentioned that NTIS has been translating some ITDG publications into Spanish. The contact he has is John Hounsell, Foreign Affairs Analyst, Office of International Affairs, U.S. Department of Commerce. A Paul Bunick may be the contact in NTIS (JEB will track this down).

Nick Dolphin said that ITDG handles about 25 consulting projects a year. An on going project of interest under UNDP/World Bank sponsorship is on small scale solar pumping systems in LDCs. He said the Intermidiate Technology Industrial Services at Rugby, was started and continues under a three year grant from ODA (the U.K. AID). It handles small industry development in LDCs. Thus the function's of ITIS parallel closely WASH local manufacturing efforts in LDCs.

I purchased 43 books and reports, worth about $350, from ITDG that have been mailed to WASH. WASH is firmly in place on the ITDG mailing list.

I.T.D.G. Water Development Unit
ARS Shinfield
University of Reading
Reading, Berks RG6 2AH

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868.

MEMORANDUM

From: John Collett

To: All Panel Members

19th March 1981

Ad Hoc Working Groups

I have spoken to a number of Water Panel members recently on the subject of how ITDG, with the collective support of the Panel, might best make a useful contribution to the efforts of the UN Water and Sanitation Decade. This topic was first raised by Dennis Frost at our meeting on February 8th 1980 when it was recommended to defer making plans until the various International Agencies had made some firm project decisions. A year has passed and I am not sure if the position is all that much clearer, but what is evident, judging from recent seminars and conferences announcing the Decade, is that there is no shortage of enthusiasm. There is a difficulty however of how to translate this enthusiasm into practical activities; the global scale of the problem is so vast that individuals and small groups probably find it hard to see what they can possibly do.

In order to help us focus on what we should do, to set priorities and to fix realistic targets to aim for, it has been suggested that this matter be made the main business item for a discussion meeting of Panel members. To help us prepare for such a meeting your views are earnestly requested so that we can put them together in a discussion paper for advance distribution and study. The issues which we would like you to consider are, putting it plainly:

- where are we now?
- what is our collective expertise and resource?
- what can we do best?

whwhat do we want to do?

- what are we going to do?
- how are we going to do it?

Some ideas have already materialized from discussions which I have had with individual members and hopefully I will have a chance to meet a few more of you personally before we call the proposed meeting. In the meantime, in order to give you an outline of suggestions put forward for consideration so far, I am attaching a note on the Water Programme Development Work which I hope will be thought provoking. Your ideas to me by the end of the month please.

Water Programme Development Work

As the plans for the UN International Drinking Water Supply and Sanitation Decade are beginning to take shape, the Water Development officer, with the assistance of the Water Panel members is currently exploring ways in which they might collectively support some aspect(s) of the Decade efforts. Upon the forthcoming election of a new Chairman it has been recommended that a Water Panel Executive Committee comprised of three to six Panel Members and a similar number of ITDG personnel, be established to advise ITDG and set up temporary working groups to undertake specific projects. Although it has not yet been decided exactly what tasks might best be done, the following suggestions are being considered for a discussion meeting to help focus attention and set priorities:

- concentrate on a particular country or area. For example:
  - India, where OXFAM and CHRISTIAN AID have the majority of their water projects and where the 8th WEDC Conference is scheduled to take place in 1982.
  - Somalia or other draught afflicted area where voluntary agencies are involved with longterm relief programmes and where water is frequently the critical factor.
  - Kampuchea or similar countries where there is a continuing need for essential assistance projects.
  - Nepal, where VSO have a concentration of water engineers working on rural water development projects. A questionnaire is currently being prepared to help elicit from field workers exactly what their biggest problems are and what kind of support they would find most useful.
  - Island communities. Some of the smaller, newly independent communities, for example Tuvalu, Espiritu Santo whose water problems are on a scale more easily related to than the staggering proportions of large national, international and global programmes.
  - Countries with governments committed to promoting decentralized equitable rural development where the concept of AT is attractive. For example, Mozambique and Nicaragua.

- concentrate on a particular issue. For example:
  - development of training courses for rural water supply and sanitation engineers with particular emphasis on organisation and management and skills training for supporting staff. Bearing in mind the high cost and other disadvantages of conventional training for urban engineers in industrialized countries, consideration could be given to imaginative in-country courses, both on and off the job. The establishment of training centres to serve particular regions is suggested.
  - development of orientation and training 'packages' for water engineers going overseas: socio-economic, political, cultural and technical differences; co-ordinating/activating; special skills.
  - support for Christian Aid Week which this year is focussing on water or mobilization of other concerned U.K. groups willing to be involved with the Decade
  - production of a series of expertly written, well illustrated (perhaps cartoon style), cheap to produce booklets for use by subprofessional workers. These might be produced along the lines of the joint OXFAM IT Publications titles. Topics that could be covered are for example: Flow through pipes; Filtration; Disinfection; Pit Latrines; Water Sampling and Monitoring; Pumps: etc.

- compilation of case studies to assist learning and transfer of existing experiences in the sector of small-scale rural water supply, sanitation and irrigation. This might be progressed by careful surveys of selected water and sanitation programmes thought to be relevant and examination of their potential for 'twinning', transfer or adaptation to other countries.
- organisation or support of national seminars to give an opportunity for project holders/practitioners to meet specialists and air their views of where support is most needed.

- concentrate on a particular topic which could have a hardware component. For example an aspect of the current work programme such as:
  - low-cost water storage structures.
  - on-farm irrigation and sullage drainage channels.

or a new project area such as:

- technologies for small-scale water pumping e.g. pedal-power, animal power
- technologies for small-scale water treatment
- manual techniques for tubewell construction
- small-scale water conservation and irrigation practices
- small dams

In order to make progress in any of these or other possible project areas, it is envisaged that a temporary working group consisting of one or more people from the Panel would undertake the task endorsed by the Water Panel Executive Committee. The working group(s) would have a leader who would be responsible for selecting co-workers and for liaising with ITDG and the Committee. Provision has been made within the Agriculture and Water Development Programme budget for preliminary project investigations and minor projects but separate funding would be needed for any subsequent substantial work. A possible source of funding which could be considered is the ODA fifty-fifty matching grant system whereby every pound raised by a supporting individual or group is matched by another pound from ODA. This could perhaps provide a means of encouraging and enabling concerned groups in the UK such as the National Federation of Womens Institutes, National Union of Townswomens Guild, National Council for Women of Great Britain, Rotary Clubs etc. to relate in a practical way to the efforts of the UN Water and Sanitation Decade.

4. Appropriate Health Resources and Technologies Group Ltd. (AHRTAG), London, April 14.

Dr. Katherine Elliott, Chairman of AHRTAG, was able to give me only half an hour to up-date her on WASH activities, as she was enroute to India. AHRTAG is a Spin-off from the ITDG.

She indicated that the AHRTAG quarterly newsletter "Diarrhoea Dialogue" has a circulation list of 14-15,000 names, is under WHO sponsorship, and could be a vehicle for WASH announcements or other matters. AHRTAG work in oral rehydration therapies and packages and primary health care is closely related to WASH activities and Dr. Elliott will collaborate with WASH in any suitable fashion.

The aims and scope of AHRTAG activities are summarized on the next three pages. Copies of the 1979 and 1980 Annual Reports of AHRTAG are in the WASH CIC Organization Files.

AHRTAG's aims

The area of appropriate technology for health is potentially vast. Almost all technologies capable of affecting the quality of human life have health implications. However, many existing health-related technologies are not entirely satisfactory, especially in circumstances where funds and facilities are limited.

AHRTAG, founded in 1977, is concerned with technologies and techniques that offer alternatives to high cost medical practice. This by no means excludes all complex technology or sophisticated research, which is often necessary for the design and production of robust, reliable equipment. Where primary health care programmes are being introduced, they need the support of appropriate health technologies. AHRTAG is, therefore, most concerned with minimal-maintenance equipment and other resources for primary health care services, district hospitals and health-related community development programmes, especially in less industrialized countries.

Information centre

AHRTAG acts as a clearing house for information to and from developing countries on equipment and other resources for primary health care programmes. It offers an accessible and practical service to both local and international organizations and takes a particular interest in small groups that are developing their own information resources. AHRTAG has an expanding publications list and a special library of material on primary health care and related appropriate technologies.

Photo by Dr William Cutting

Special projects

Working with the WHO Expanded Programme on Immunization (EPI), AHRTAG has established an information centre for the 'cold chain' — *the safe cold storage and transport* of vaccines in tropical conditions. The basis of the information service is a collection of cold chain documents classified into three main sections: consultancy reports, reviews and descriptions of cold chain systems; educational and training materials; and equipment useful to the cold chain. A simple handbook on the care and preventive maintenance of refrigerators is being published during 1980. Other special project areas include disability prevention and rehabilitation, primary health care training materials and dental health. AHRTAG also produces Diarrhoea Dialogue, a quarterly newsletter on all aspects of diarrhoeal disease control. One important concern of the group is the development of inexpensive equipment for primary health care services, such as portable baby weighing scales.

Enquiry and referral service

AHRTAG deals with a large number of personal and postal enquiries, prepares basic information sheets and organizes discussions and briefings on appropriate technology for health. It also links individuals and groups interested in health technologies and recommends technical consultants.

Community involvement

The concept of appropriate technology rests on the local involvement of people in identifying and solving problems as well as in the transfer and use of technologies. From the beginning, AHRTAG has been making contact with overseas groups with similar interests and is part of an informal world network which links individuals and institutions interested in the exchange of ideas about health care at community level.

Photo by Dr Michael Reinhardt

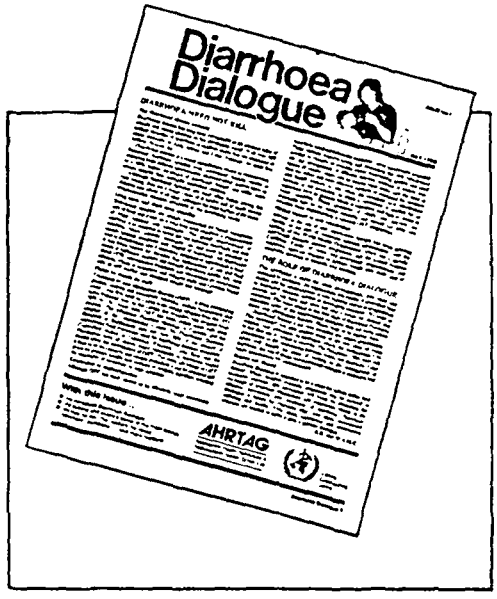
Origins

The Appropriate Health Resources and Technologies Action Group (AHRTAG) evolved from the rural health panel of the Intermediate Technology Development Group (ITDG) begun in 1966 by the late Dr E. F. Schumacher. In early 1975, Dr Katherine Elliott, a founder member of ITDG, chairman of its health panel and assistant director of the Ciba Foundation, became involved in an International Hospital Federation project to examine health auxiliary practice in different parts of the world. Dr Elliott seized the opportunity to organize the large amount of information she had collected on the use of health auxiliaries and began this work with the collaboration of Mrs Arna Blum. Throughout 1976, visitors arrived to consult the growing collection of literature. A gap clearly existed which could usefully be filled and the idea was conceived for a special health group. Meanwhile, the World Health Organization began to plan a special programme for Appropriate Technology for Health and the embryo London group was invited to become the programme's first collaborating centre. The group was incorporated as a non-profit charitable organization in July 1977. It was first directly sponsored by WHO and indirectly supported through the Leverhulme Trust funding for the IHF project. Subsequently, it has also been funded by the UK Overseas Development Administration and other international organizations interested in health aspects of development. AHRTAG has taken over the functions of the health panel of the ITDG and works closely with ITDG as an independent sister organization.

AHRTAG publications

Free information sheets are available on:

- Cold chain equipment
- Baby weighing scales designs
- Oral rehydration
- Pretesting of health education materials for village health workers
- Appropriate technology periodicals
- Better use of refrigerators for storing vaccines



Diarrhoea Dialogue — a free quarterly newsletter on all aspects of the prevention and control of diarrhoeal diseases.

Auxiliaries in Primary Health Care. An annotated bibliography 1979. Edited by Katherine Elliott. Published by Intermediate Technology Publications Ltd., 9 King Street, London WC2E 8HN.

A handbook on the preventive maintenance of refrigerators (in press).

5. Water Research Center, Stevenage Laboratory, Stevenage, U.K., April 15.

The Water Research Centre (WRC) of the U.K. is the national R&D institution for water supply and water quality. It operates several laboratories, has over 500 employees and an annual budget of about $20,000,000. These funds came from contributions by the Ten Regional Water Authorities in the U.K., The Ministry of Water and the Department of the Environment. Copies of its 1979/80 Annual Report and its 1980/81 Research Programme are in the WASH CIC Organization Files.

The WRC is primarily "First World" oriented but, in conjunction with other U.K. organizations, has become increasingly involved with Third World water problems.

Of major interest to the WASH Project is the information services of the WRC and Peter Russell, Technical Information Officer of WRC, was interviewed on April 15. In addition to publishing WRC originated technical reports, articles and bulletins, the WRC publishes AQUALINE Abstracts. Over 400 periodicals plus books, reports, conference proceedings and related materials from all over the world are scanned and significant articles are abstracted. The abstracts are available in printed form, on microfiche and recently became available on-line through the Lockheed DIALOG computer data bank service. The on-line AQUALINE data base only goes back to 1974. The WRC Water Pollution Abstracts in hard copy go back to 1927. The periodical and institutional resources used in AQUALINE follow at the end of this section.

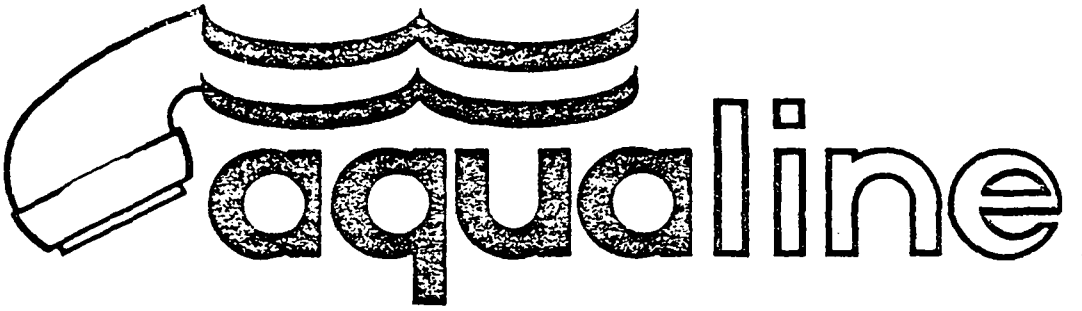
The WRC, is presently installing a DEC computer system, similar to the ones used by CDM and WASH, and I mentioned that we would be pleased to give them the benefit of our experience with DEC equipment and software if they so desired.

Another computerized water related data base is scheduled to go on-line this year is "WATERLIT" from the South African Water In-

formation Center. This is to be available from the System Development Corporation's ORBIT service.

Peter prepared a package of WRC materials, including their new AQUALINE Thesaurus, and is sending it to WASH. He has also added WASH to his mailing list to receive abstracts, newsletters, announcements, etc., gratis.

An outline of the WRC 1980/81 Research Program follows the AQUALINE material below.



AQUALINE abstracts are selected from literature published throughout the world. Over 400 periodicals, as well as books, reports, conference proceedings and other publications from water-related institutions worldwide are regularly scanned.

Source periodicals used for selection of AQUALINE abstracts

A

Abwassertech
Acqua
Acta Hydrobiol
Agua
Ambio
Amer Fish Soc Trans
Amer J Public Health
Amer Lab
Analyst
Anal Chim Acta
Anal Chem
Anal Letters
Ann Appl Biol
Ann Dell Inst Sup De Sanit
Ann Nat Inst Publ Health (Norway)
Anseau Navewa Bull D'Inf
Appl Env Microbiol
Appl Math Model
Appropriate Tech
Aqua (Iwsa)
Aqua (Victoria)
Aqua Fennica
Aquat Microbiol Newslett
Arch Fischereiwiss
Arch Environ Contam Toxicol
Arch Environ Health
Arch Hydrobiol
Atom
Atom News
Atomic Energ Rev
Aust Trading News

B

Bacillaria
Bacteriol Rev
Bibliog Ital Idraul
Bibliog Ind Fisheries
Biodet Res Titles
Biol Conserv
Biomed Mass Spec
Biometrics
Biometrika
Biotechnol Bioeng
Brit J Photog
Brit Leather Manuf Res Assoc J
Brit Med J
Brit Phycol J
Brit Stand Inst News
Building
Building Res Est News
Bull Environ Contam Toxic
Bull Franc Piscicult
Bus Monit Water Supply

C

Calif Fish Game
Calif Univ News
Can J Pub Health
Cebedeau Tribune
Cent Elec Gen Board Dig
Chem Eng (London)
Chem Eng J
Chem Eng Prog
Chem Eng Sci
Chem Geol
Chem Soc Quart Rev
Chem Soc Rev
Chem Ind (London)
Chemosphere
Chem SA
Chesapeake Sci
Chromatographia
Composites
Compost Sci
Comput Manag
Conseil Perm Expl Mer
Consult Engineer
Contrib Mar Sci
Cost Engineer
Crit Rev Environ Control

D

Deut Gewasserkund Mitt
Dupont Mag

E

Eau
Eau Quebec
Eau Indust
Eawag News
Ecochem
Ecol Model
Ecologist
Ecologist Quart
Effluent Water Treat J
Electrolyte Sol Bull
Electron Eng
Electronics
Elektor
Endeavour
Eng Geol
Eng Mater Des
Eng Process Econ
Engineering
Environ Biol Fishes
Environ Conserv.
Environ Health (India)
Environ Health (U.K.)
Environ Health Pollut Control
Environ Health Perspect
Environ Pollut
Environ Pollut Manag
Environ Protect Eng
Environ Res
Environ Sci Tech
EPA Rep Bibliog Quart
Ese Notes
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Eur Econ Comm Off Bull
Eur Environ
Eur J Appl Microbiol
Eur Plast News
Euroforum

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FAO Docum
Farmers Weekly
Field Studies
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Water Research Centre

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Herts. SG1 1TH
Tel: 0438 2444

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Freshwater Biol

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Geophys Prospect
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Hydrobiol Bull
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Int J Appl Radiat Isotop
Int J Env Studies
Int J Heat Fluid Flow
Int J System Bacteriol
Int Lab
Int Org Stand Bull
Int Ref Cent Wastes Disposal News
Int Rev Gesamten Hydrobiol
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Johnson Drillers J
J Amer Water Works Assoc
J Animal Ecol
J Appl Bacteriol
J Appl Chem Biotech
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J Chem Tech Biotech
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J Gen Microbiol
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J Hazard Mater
J Hydrol (U.K.)
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J Inst Munic Eng
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J Mar Biol Assoc
J Mar Res
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J Phys Chem
J Plankton Res
J Royal Soc Health
J Royal Statist Soc A
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J Sci Tech
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J Soc Petrol Eng
J Soil Sci Amer
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Plumbing Heating Equip News
Plumbing Trade J
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Pollut Equip News
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Proc Amer Soc Civil Eng Env Eng Div J
Proc Amer Soc Civil Eng Hyd Div J
Proc Amer Soc Civil Eng Irrig Drain Div J
Proc Amer Soc Civil Eng Water Resourc Plan Manag Div J
Proc Amer Soc Civil Eng Waterways Harb Coast Eng Div J
Proc Chem Soc Anal Div
Proc Inst Civil Eng
Proc Int Assoc Theor Appl Limnol
Proc Soc Gen Microbiol
Proc Soil Sci Soc Amer
Process Biochem
Process Eng
Progr Water Technol
Progr Fish Cult
Public Health (South Africa)
Public Health Eng
Public Health Rep
Public Works

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Quart J Royal Meteorolog Soc

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Rev Int Oceanog Med
Revista Dae
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Sane Amento
Schweiz Zeit Hydrol
Sci Total Envir
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Soil Sci
Soil Water
Solid Waste Manag

Spectrochim Acta B
Stainless Steel Ind
Statist News
Sulzer Tech Rev
Surveyor
Swimming Pool Rev

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Trans Inst Chem Eng

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Wasser Boden
Wasser Luft Betrieb
Waste Manag Info Bull
Waste Mater Biodeg
Wastes Eng
Water (NWC)
Water Air Soil Pollut
Water News
Water Pollut Contr
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Water Qual Bull
Water Res
Water Resourc Bull
Water Resourc Newsl
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Water SA
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Water Sewage Works
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Water Waste Treatm
Water Wastes Eng
Water Well J
Weather
Well Log
World Health Org Chron
World Meteorolog Bull

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Collaborating institutes from which the Water Research Centre regularly receives reports and other publications, many of which are selected for abstracting in AQUALINE

Australia
Commonweath Scientific and Industrial Research Organisation (CSIRO)
Water Resources Council

Belgium
Centre Belge d'Etude et de Documentation de l'Eau, de l'Air et de l'Environment (CEBEDEAU) (Centre for Environmental Study and Documentation)

Brazil
Companhia de Tecnologia de Saneamento Ambiental (CETESB) (Company for Environmental Health Technology)

Canada
Environment Canada, Environmental Protection Service
Environment Canada, Canada Center for Inland Waters, Wastewater Technology Center

Denmark
Hydraulic Institute
Miljøstyrelsens Ferskvandslaboratorium (National Agency of Environmental Protection, Freshwater Laboratory)
Technical University, Dept of Sanitary Engineering Vandkvalitetsinst (VKI) (Water Quality Institute)

Finland
Vesihallitus (Water Research Institute)

France
Association Francaise pour l'Etude des Eaux (AFEE) (Association for Water Studies)
Centre d'Études Nucléaires de Cadarache, Commissariat à l'Energie Atomique (CEA) (Nuclear Research Centre, Cadarache, Atomic Energy Commission)
Centre Technique du Génie Rural des Eaux et des forêts (CTGREF) (Agricultural Engineering Technical Centre for Water and Forestry)

India
National Environmental Engineering Research Institute (NEERI)

Italy
Istituto di Ricerca Sielle Acque (Institute of Water Research)

Japan
Japan Waterworks Association
National Institute for Environmental Studies

Netherlands
Delft Hydraulics Laboratory
Keuringsinstituut voor Waterleidingartikelen (KIWA) (Institute for Testing Waterworks Materials)
Rijksinstituut voor Drinkwatervoorziening (RID) (Government Institute for Water Supply)
WHO International Reference Centre for Community Water Supply.

Norway
Universitetet I Trondheim Norges Tekniske Høgskole Institutt for Vassbygging (The University of Trondheim The Norwegian Institute of Technology, Division of Hydraulic and Sanitary Engineering)
Norsk Institutt for Vannforskning (NIVA) (Norwegian Institute for Water Research)

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

South Africa
South Africa Council for Scientific and Industrial Research, National Institute for Water Research (NIWR)
South African Water Information Centre

Sweden
Institutet for Vatten-och Luftvårdsforskning (IVL) (Water and Air Pollution Research Institute)
Statens Naturvårdsverk (The National Swedish Environment Protection Board)
Svenska Vatten-och Avloppsverks föreningen (VAV) (Swedish Water and Waste Water Works Association)

Switzerland
Eidgenossische Anstalt für Wasserversorgung Abwasserreinigung und Gewässerschutz (EAWAG) (Swiss Federal Institute for Water Resources and Water Pollution Control)

Thailand
Asian Institute of Technology

United Kingdom
British Hydromechanics Research Association
Building Research Establishment
Freshwater Biological Association
Hydraulics Research Station
Institute of Hydrology
Marine Biological Association of the U.K.
National Water Council

United States of America
American Waterworks Association
Environmental Protection Agency

West Germany
Institut für Wasser-, Boden- und Luft-Hygiene (WABOLU) (Institute for Water, Soil and Air Hygiene)
Institut für Wasserforschung, Dortmund (Water Research Institute, Dortmund)
Technical University of Munich, Institute of Water Chemistry
Umweltbundesamt (UBA) (Federal Environmental Agency)
University of Karlsruhe, Engler-Bunte Institut

Additions
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J High Resol Chrom Chrom Commun
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J Ecol
J Hyg
Public Health (South Africa)
Taste Odor Contr

WRC Water Research Centre

Research Programme 1980/81

Chief Executive:	Mr. J. L. van der Post
Director, Medmenham Laboratory:	Dr. S. C. Warren
Director, Stevenage Laboratory:	Dr. J. Cuthbert
Director, Engineering:	Mr. M. J. Rouse
Director, Planning:	Mr. V. K. Collinge
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Contents

Foreword

The Centre is passing through the early stages of a period of substantial changes. In 1979 plans were formulated for a restructuring which anticipated a 50% rise in real costs over 5 years, but because of economic stringency the 1979/80 budget was cut by 8% and the number of staff fell from 537 to 522. The budget for 1980/81 is being kept at the same level in real terms. Despite these cuts, the main features of the 1979 plans are still being implemented.

The main elements of restructuring are now beginning to emerge. The most important decision has been to set up an Engineering Group at Swindon, where the first 59 staff are now in rented offices. Tenders are being invited for the construction of Phase I of the permanent laboratory. The sectors which will be studied there are Distribution Systems, Sewerage Systems, and Instrumentation.

A strategy has been developed for the Centre's computing activities, and current obsolete equipment is being replaced by a DEC VAX 11/780 system, with linked computers in each of the three laboratories.

Research Planning has undergone major changes, and a small team has now started an in-depth review of the industry's research needs, in conjunction with the National Water Council and the Standing Technical Committees. The first 5-Year Plan has been produced, for 1980-85, and is being up-dated.

In addition to its research activities the Centre also operates a comprehensive range of information systems, including a computerised information service (Aqualine), which are widely used by its Members. To ensure more effective application in Scotland of the Centre's expertise a new office has been opened in Stirling.

With the increasing emphasis on the need to obtain the best value for money from research and to further the better integration of the total effort expended on water research in the United Kingdom, the Centre is bringing up to date its Register of Research in the Water Industry, first produced in November, 1978. It is expected that the new edition will be published in Autumn 1980.

The Centre's programme of research for the year April 1980 to March 1981 is divided into twelve sectors with further division into areas. The allocation of effort to these sectors and the forecast expenditure (including work for DOE) are as follows:

	SCIENTIFIC COMPLEMENT (man years)	EXPENDITURE (£000s) General	DOE	Total
Resource Development & Management	13	453	0	453
Drinking Water Quality	33 5	555	597	1152
Water Treatment	20	772	6	778
Distribution Systems	22	722	27	749
Sewerage Systems	15	597	0	597
Waste Water Treatment	55 5	1516	318	1834
Sludge Utilisation	8.5	230	47	277
Groundwater Pollution	18	328	233	561
River Management	16 5	419	129	548
Tidal Waters	15 5	482	0	482
Instrumentation	18 5	631	0	631
Sampling and Analysis	7	175	63	238
Services	26	752	0	752
TOTAL	269	7632	1420	9052

6. National Water Council (U.K.), London, April 16.

The National Water Council is a policy advisory group to British government, The Water Research Centre, and the ten Regional Water Authorities. It is financed by the U.K. water industry, but is an independent body.

My contact at the NWC was David Kinnersly, Senior Economic Advisor, who is a member of the ITDG Water Panel and very much interested in LDC water problems. He is also a long time friend of Dan Okun, who had sent him a copy of our WASH Brochure. Mr. Kinnersly is active in the NWCInternational Advisory Service (see excerpt below) and has been asked by the Overseas Development Administration to identify U.K. water-related firms to help LDCs.

Mr. Kinnersly organized the NWC Conference to support the U.N. Water Decade, which was held 27 January 1981. It was attended by U.K. government and water industry, plus officials of the UN and WHO (Peter Bourne,etc.), World Bank (John Kelbermatten, etc.), Richard Feachem (Ross Institute) and other luminaries from the press, peerage and PVO's. A copy of the conference report "Thirsty Third World" is in the WRC folder in the WASH CIC Organization File.

A major result of this conference has been the preliminary organization of a new U.K. PVO, supported by charitable and other donations , to do WS&S work in LDCs on a non-commercial basis to supplement formal government (ODA) activities. This new PVO is expected to be formed in June 1981 and Kinnersly will no doubt play an active role in it. One area of emphasis for this PVO will be training, which has been a long term program of the National Water Council (see training excerpt below). John Austin will learn more about this on his April trip to the NWC.

Mr. Kinnersly expects to be in New York and Washington next month and may visit WASH to discuss possible modes of collaboration.

NWC International Advisory Service

THROUGH its International Advisory Service (IAS), the National Water Council makes available overseas, on normal commercial terms, the expertise of staff employed in water authorities and water companies.

This service can be arranged directly with the Council or through consulting engineers or other British companies engaged in work related to water, or through British embassies overseas. The IAS will gladly take part of an assignment in which it has a strong capability, such as operational or maintenance skills, or training advice, while others undertake other parts of the assignment such as the design and construction of new facilities.

Senior staff can undertake short visits to client countries, or teams stay there for longer periods. Combinations of on-the-spot advice and services with continuing support from UK can be arranged to fit particular needs.

The water authorities in England and Wales are organised on an integrated basis for regions defined by watershed boundaries. They deal with water supply, sewage disposal and the whole range of river basin management tasks - resource development, pollution control, fisheries, land drainage and flood alleviation.

Advice can thus be made available on all these fields of activity, as to operations or planning, and in relation to all aspects of organisation and management including public administration and advice to governments at central or local levels, economic and financial policies and tariffs, and manpower development and training.

NWC IAS, 1 Queen Anne's Gate, London SW1H 9BT.
Telephone: 01-222 8111. Telex: 918518.
Personnel: David Kinnersley, Alan Round or Alan Porter.

National Water Council Training facilities

IN ITS Overseas Manpower Development Group, the National Water Council combines staff who have professional skills in training at home and overseas with access to the facilities of the UK water industry for residential courses or on-the-job experience with water authorities, consulting engineers and manufacturers.

This service, which is offered on commercial terms, includes:

Residential training: NWC centres have some 250 residential training places and offer at various times 150 different courses spanning all disciplines and levels.

Work experience programmes at UK installations: Suitable overseas personnel can be given practical experience of operating and maintaining plant and processes not yet operational in their own countries.

Local training advice and supervision: Members of OMDG staff will advise on local training programmes overseas and provide a continuing oversight of their implementation.

Consultancy on manpower use: Most OMDG staff have a background of technical experience and will undertake short assignments covering the wider context in which training programmes are to be made effective.

OMDG also has detailed information on courses in many aspects of water management provided at universities and polytechnics in UK.

Enquiries: Robin Turrell, National Water Council, James House, 27/35 London Road, Newbury, Berkshire. Telephone: 0635-30777

7. Ross Institute, London School of Hygeine and Tropical Medicine, London: April 16.

My contact at the Ross Institute was Richard Feachem, who has been with Ross for five years.

He was most pleased to learn about the on-going work of the WASH Project and saw many areas of mutual interest and of possible collaboration. In reviewing Ross Institute organization and activities, he indicated that the expertise of Ross staff is in the fields of: public health epide miology; micro-biology at both the laboratory and policy level; low-cost appropriate technology engineering; social sciences; and the economics of rural water development.

Current areas of research include: diarrhoea diseases (Ross is one of twenty DD centers in the world); epide miology of water supply and sanitation; sanitation entomology, especially of low-cost latrines; and non-sewered excreta disposal.

A ten page summary of Ross Institute programs may be found in the "1979-80 Report On The Work of The School" in the London School of Hygiene and Tropical Medicine folder in the WASH CIC Organization File.

In his five years at the Ross Institute, Feachem has built up a unique and valuable collection of several thousand documents and books on the environmental, cultural, engineering and health aspects of WS&S in developing countries. He has about 40 lineal feet of books and perhaps 150 lineal feet of documents in country and subject file boxes. Neither the books, subject boxes, nor their contents have been listed, indexed or cross-referenced. Such an effort, preferably computerized, would make this significant collection more readily accessible to interested users, particulary outsiders. Feachem welcomes WASH staff and consultants to use these materials whenever they pass through London.

Since his department (Environmental Health Engineering) does not publish a newsletter or bulletin, Feachem said the way to keep track of his final reports are through the World Bank and the Technical Assistance Group, and personal contact with him.